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Regular Article

Prevalence, nature and impacts of non-sexual online harassment in Sri Lanka: A quantitative analysis

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ABSTRACT

The objective of this study is to examine the prevalence, nature and impacts of nonsexual online harassment among the youth population in Sri Lanka. Data was collected through a countrywide survey from a cross-sectional sample of 4805 young people. Data was analysed using SPSS software package. Results of this study indicate that 11.7 % of the youth population surveyed had experienced non-sexual forms of harassment in the cyberspace. The analysis also revealed the most common types of harassment experienced, the platform where harassment was committed the most, the most common types of victims and perpetrators, and the impacts of non-sexual online harassment on victims. The findings of this study suggest that Sri Lanka needs to devise targeted policies for combatting non-sexual online harassment, and that it may need to tailor its responses to the needs of each sector.

1. Introduction

The term “cyber harassment" or “cyber-bullying” generally describes any sort of unwelcome, harassing or harmful conduct that takes place online, generally via electronic communication channels like email, social media, or websites (Blackwell et al., 2017; Lai and Tsai, 2016; Watts et al., 2017). The literature abounds with different definitions of these terms and in an effort to clarify the concept, after an analysis of a significant number of definitions, Peter and Peterman have identified 5 attributes of the concept of ‘cyberbullying’ and have defined cyber bullying as ‘using information and communication technologies (ICT) to repeatedly and intentionally harm, harass, hurt and/or embarrass a target.’ (Peter & Petermann, 2018). Although, these definitions in the literature provide conceptual clarity about cyber harassment or cyber-bullying broadly, they fail to recognise the distinction between sexual and non-sexual forms of online harassment/cyberbullying (Lewis et al., 2017),and consider both categories in tandem (Hinduja & Patchin, 2008; Mishna et al., 2012).

In this context, the term non-sexual harassment has not been clearly defined in the literature on cyber harassment and violence. In some of the existing literature, however, the term ‘cyberbullying’ appears to be used synonymously to non-sexual online harassment (Copp et al., 2021) although in some studies this distinction is blurred (Watts et al., 2017; Hellsten et al., 2021). Even studies such as that of Copp et al., which make a clear distinction between online sexual harassment and non-sexual online harassment fail to provide a clear definition of the concept. In the literature on workplace harassment bullying or non-sexual harassment is referred to as ‘all situations where one or more persons feel subjected to negative behaviour from others over a period of time in a situation where they for different reasons are unable to defend themselves. Typically, a victim is constantly teased, badgered and insulted and perceives that he or she has little recourse to retaliate in kind.’ (Enarsen 2000) It is further observed that non-sexual harassment includes social isolation and exclusion, exposure to teasing, insulting remarks and ridicule (Enarsen 2000). Forms of harassment which do not focus on the sexual behaviours, orientation, sexual life etc of a person or which are not intended cause sexual annoyance are found in abundance in virtual spaces. These include exclusion of a person from online forums

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or chat groups, publication of embarrassing but non-sexual personal information/images/videos, making rude or humiliating comments about a person's appearance, beliefs, religion etc, spreading rumours on social networking sites and chat groups, online threats insinuating harm to the physical safety, property or reputation of a person. Taking onto consideration the above discussed definition of cyber harassment or cyberbullying and the non-involvement and lack of focus on sexual behaviours etc, non-sexual online harassment can be defined as follows: any form of conduct committed via digital media for the purpose of embarrassing, humiliating, distressing or damaging another person but which does not involve or is not intended to cause sexual harassment or annoyance.

While considering both types of online harassment together in research may have its advantages, not clearly distinguishing the two types, makes it difficult to precisely identify the prevalence rates, offender and victim profiles and consequences of each type of harassment (Copp et al., 2021) thus making it more difficult to identify the specific interventions needed to address them. While non-sexual online harassment can have impacts just as serious as online sexual harassment, affecting victims' mental health, well-being, and sense of security as revealed through some existing studies (Stahel & Baier, 2023; Chui, 2023), the specific interventions needed to address non-sexual harassment may differ from those needed for addressing online sexual harassment. Furthermore, while a large number of studies have been done worldwide on online sexual harassment, non-sexual online harassment remains a largely under-studied phenomenon. Therefore, there is a need for studies that clearly distinguishes between the two types of online harassment and focus on non-sexual online harassment.

Despite there being evidence of non-sexual online harassment happening in Sri Lanka, there is a lack of comprehensive studies on the issue, thus, leading to a gap in the understanding about the true extent, nature and impacts of non-sexual online harassment in the country. In this context, the present study seeks to fill this research gap by carrying out a comprehensive investigation on the prevalence, nature, and impacts of non-sexual harassment among a cross-section of the youth population in Sri Lanka. This study was carried out as a part of a larger 3-year project titled "An Investigation of Online Harassment among Young Population in Sri Lanka: Development of a National Strategy to Combat Online Harassment" funded by the World Bank under the Accelerating Higher Education Expansion and Development (AHEAD) program. The said larger project focused both on online sexual harassment as well as non-sexual harassment among Sri Lankan youth as it was recognized that focusing only on online sexual harassment, would leave a critical gap in understanding the full spectrum of online abuse.

This study contributes to the existing body of knowledge in several ways; Firstly, it provides a comprehensive understanding of the nature, prevalence and impacts of non-sexual online harassment among youth in Sri Lanka thus helping to fill the gap in the existing literature; Secondly, through its findings, the study assists Sri Lanka to benchmark itself in terms of non-sexual online harassment against the prevalence rates etc of other countries; Most research in this area has been done in the US, UK and Europe, and this research contributes to understanding trends of non-sexual harassment in non-western countries Finally, the findings of this study can facilitate not only Sri Lanka but other countries experiencing similar trends, in devising custom-made policies and strategies for effectively combatting this issue.

The rest of this paper is organized as follows: Part 2 presents the literature review which is used as a guide for formulating and framing the survey questions in this study. Part 3 on the research methodology discusses the research approach, sampling strategy, tools and methods of data collection and data analysis. The research findings are then discussed in Part 4 followed by a discussion of the implications and recommendations in the concluding section.

2. Literature review

In the recent times, a significant number of empirical research has been done worldwide exploring various aspects of online harassment including its prevalence, nature and impacts in different parts of the world. For instance, a survey conducted by Pew Research Centre in 2021, reveals the rate of online harassment among US adults to be 41 % (Vogels, 2021). In 2020, a research conducted by the Cyberbullying Research Centre indicates that 34 % of pupils in the age range 12–18 in the United States had experienced cyberbullying (Patchin & Hinduja, 2020).

In addition to disclosing the prevalence rates of online harassment, many of these studies have also enabled researchers to uncover other information such as the most common types of online harassment occurring on online platforms, the online platforms (social media sites, chat rooms etc) where harassment is mostly committed, the sex breakdown of the victims, and the impacts on victims. Accordingly, Pew Research Centers' survey on online harassment among American adults reveals offensive name calling and purposeful embarrassment to be the most common forms of harassing behaviour experienced online (Vogels, 2021). The same survey also reveals social media to be the venue on which online harassment mostly occurs (Vogels, 2021).

In terms of the online platforms on which harassment mostly occurs, Existing research indicate social media as the most common vehicle for cyberbullying victimization (Kowalski et al., 2020; Giumetti & Kowalski, 2022) and have revealed high prevalence rates of cyberbullying on social media sites (Craig et al., 2020; Niklová et al., 2019; Sampasa--Kanyinga & Hamilton, 2015).For instance, a study by Pew Research in 2021 reveals that 75 % of the respondents had experienced cyber harassment on social media sites while 25 % experienced harassment on online forums or discussion sites, 24 % on texting or messaging apps and 16 % on gaming sites(Vogels, 2021).

Existing studies also reveal the various impacts that online harassment has on the psychological, physical and social well-being of victims. Thus, lower self-esteem (Görzig & Frumkin, 2013), solitude, disillusionment, wariness of people (Šléglová & Cerna, 2011), increased stress, loneliness, and dependence on alcohol (Kowalski et al., 2014) have been revealed as some of the negative psychological impacts of cyber harassment (Garett et al., 2016; Görzig & Frumkin, 2013; Hamm et al., 2015; Machimbarrena et al., 2018, léglová & Cerna, 2011). In a research conducted by Security.org team 2/3 of tween (pre-teens) victims of cyberbullying reported that it had a negative impact on how they felt about themselves (Security.org Team, 2022) and nearly a 1/3 of tween cyberbullying victims said the incidents affected their friendships, while 13 % said it affected their physical health (Security.org, 2022). Many studies such as those by Hinduja and Patchin (Hinduja & Patchin, 2019a, 2019b), the Pew Research Centre (Duggan, 2017), and the National Network to End Domestic Violence (National Network to End Domestic Violence, 2018) indicate that significant percentages of victims of online harassment (19 %, 27 % and 27 % respectively) felt physically unsafe even in their own homes.

Online harassment can, in some cases, lead to health and safety issues in the form of self-harm and suicide. Research exploring the health-related effects of cyberbullying reveals that as many as 2 % of young victims have engaged in self-harmed after being bullied online (Hamm et al., 2015). Hinduja and Patchin note that "there have been several high-profile cases involving teenagers taking their own lives in part because of being harassed and mistreated over the Internet, a phenomenon we have termed cyberbullied – suicide indirectly or directly influenced by experiences with online aggression" (Hinduja & Patchin, 2010). In addition, research also reveals that harassment on cyberspace can lead to self-censorship on cyberspace as victims often either completely refrain from engaging in online activities or withdraw from the platform/s on which they were subject to harassment (Duggan, 2017; Lewis, Marwick, & Lacour, 2017). Thus, the United Nations warns that cyberbullying might endanger democratic norms and limit people's

ability to express themselves freely (United Nations, 2018).

Despite revealing important insights about online harassment in various parts of the world among various sectors of the society, there are certain limitations in the existing research on this area. Now, we turn to a discussion of those limitation in the existing research. Firstly, as noted in the introduction most of the studies in this area focus on online harassment without making a clear distinction between sexual and non-sexual forms of online harassment (Lewis et al., 2017). For instance, in their studies on cyberbullying, Hinduja and Patchin explore respondents' victimization to not only non-sexual forms of cyber-bullying such as bothering someone, saying mean things but also saying unwanted sexually related things (Hinduja & Patchin, 2008). Mishna et al. who explore the involvement of youth in cyberbullying as victims, bullies or victim-bullies in their study, also define cyber-bullying as involving sexual harassment such as receiving/sending unwanted sexual text or photos, being asked to do something sexual (Mishna et al., 2012). Conversely, a limited number of research recognizes this distinction between sexual and non-sexual forms of harassment such as Copp and others (Copp et al., 2021). However, the study of Copp et al. fails to capture all forms of non-sexual harassment and only refers to three types such as making mean/rude comments, spreading rumours and making aggressive or threatening remarks (Copp et al., 2021). However, in addition to the three forms of harassment identified by Copp et al., non-sexual online harassment, which is often termed as 'cyberbullying' in the literature (Copp et al., 2021) encompasses a broad range of behaviour including posting fake/embarrassing images/videos about a person on online platforms, excluding persons from chat groups/WhatsApp groups etc, and impersonation. A comprehensive study on non-sexual online harassment needs to take into consideration the range of behaviour falling under the umbrella of this term.

The second limitation of the existing research is that most of the studies done in this area are narrowly focussed on one segment of youth population – either on school children, adolescents or college students or youth in employment. For instance, the cyberbullying research centre since 2002 collect data on cyberbullying among middle and high school children in the United States (Patchin, 2022). Kowalski and Limber in their study examine electronic bullying among middle school children (Kowalski & Limber, 2007). Similarly, many of the other studies conducted in this area focus on school children and adolescents (Callaghan et al., 2015; Nixon, 2014; Patchin & Hinduja, 2010; Schneider et al., 2012; Wang et al., 2009; Šléglová & Cerna, 2011). A number of studies have also been done on online harassment or cyber-bullying among college or university students including those of Washington (Washington, 2015), Paullet and Jamie (Paullet & Jamie, 2014), and Rivituso (Rivituso, 2014). The youth population in a country is generally spread across schools, colleges, universities, professional training institutions as well as in employment. However, there is a dearth of studies which focus on such a cross section of the youth population ranging from school children to youth in employment.

Thirdly, most of the existing research have been conducted in the USA, Europe and UK and there is limited literature on the other regions of the world, especially South Asia (Sheikh et al., 2023). For instance, in a review study of the existing research on social networking site bullying reveal that majority of the bullying studies were conducted in the USA followed by Europe and UK (Chan et al., 2021). The number of studies conducted on online harassment in the South Asian region is quite limited with a few exceptions such as the study by Md. Mamunur Rashid Sheikha and others (Sheikh et al., 2023; Park et al., 2021; Chudal et al., 2021).

Looking at the Sri Lankan context, there is ample evidence indicating the prevalence of online harassment in the country, and with the onset of Covid-19 pandemic a marked increase in the reported cases has also been noted (Hapuarachchi, 2021). Accordingly, over 8000 social media related incidents had been reported to Sri Lanka CERT in the first half of 2021 alone as opposed to the total of 15,000 cases reported in 2020 (Hapuarachchi, 2021). Despite the above, there is limited Sri Lankan studies looking at online harassment in the country thus leaving the true extent of the problem mostly a matter of speculation. The few recent studies which have been done on the topic suffer from some of the limitations noted above relating to international literature on the subject or focus on different aspects of online harassment. For instance, the study conducted by Vadisinghe and others on the prevalence and determinants of cyber-bullying and the impact of Covid-19 pandemic focuses on school children between the ages of 14–17 in one province of Sri Lanka, and also does not make a distinction between sexual and non-sexual forms of harassment (Vadysinghe et al., 2022). The study by Chamuddika explores the relationship between the privacy awareness and cyber victimization among state university students in Sri Lanka rather than on identifying the prevalence rates, nature and impacts of online harassment in Sri Lanka (Chamuddika, 2022). The study of Gunathillake and Perera (Gunathillake & Perera, 2020) too has a different focus and aims to determine the influence of depression and social anxiety on the perpetration of cyber-bullying among a sample of Sri Lankan adults (Liyanage et al., 2021). Furthermore, due to their limited scope in terms of the target population and the sample size, the existing studies on online harassment in Sri Lanka are not able to provide an overall picture of the nature, prevalence and impacts of online harassment among the youth population in the country.

In terms of the theoretical literature on cyber-harassment and cyber-bullying, a number of theories ranging from, criminological theories such as the Routine Activities Theory (Cohen & Felson, 1979) and Lifestyle Routine Activities theory (LRAT) (Cohen, Kluegel, & Land, 1981), general psychological theories such as the Theory of Reasoned Action (Ajzen & Fishbein, 1977), and identity theories such as the Theory of Social Identity (Tajfel, 1982), Personal Reputation Theory (Emler and Reicher, 1995) and Bronfenbrenner's Social Ecology Model on human development (1979) are used in cyberbullying literature to study and understand what drives and influences cyberbullying perpetration and victimization (i.e. who are bullies, what are their characteristics, what drives them towards bullying behaviour, who are victims, what makes them vulnerable to bullying etc).Furthermore, theories such as Shattered Assumptions theory (Janoff-Bulman & Frieze, 1983) have been used in the literature to theorize about the impacts of cyber-crime victimization. The present study uses the findings of existing literature and draws on the above-mentioned theories to derive certain hypotheses related to victimization and perpetration of non-sexual online harassment as well as to construct the questions of survey instrument.

Criminological theories that explain incidence of crimes such as the Routine Activities Theory (RAT) (Cohen and Felson, 1979) and Lifestyle Routine Activities Theory (LRAT) (Cohen, Kluegel, & Land, 1981) have been used in the existing literature to explain the incidence of cyber crimes including cyber harassment. LRAT combines the ideas in 'routine activity theory' and lifestyle exposure theory (Hindelang, Gottfredson, & Garofalo, 1978) and posits that differential risk of criminal victimization is based on the differences in victim's lifestyles and identifies four elements that determine risk of victimization, namely, exposure to risk, proximity to offenders, target attractiveness, and absence of capable guardianship (Vakhitova et al., 2019). This theory posits that 'those who are more exposed to risk, are in closer proximity to offenders, are more attractive as targets and are not protected by capable guardians are more likely to experience victimization (Vakhitova et al., 2019).' Applying RAT and LRAT to cyber violence, exposure to risk element has been measured through online risky behaviours of internet users such as sharing personal information, passwords, excessive time spent online while the element of target attractiveness is viewed in the cyberspaces as referring to characteristics such as being female, non-white (Bossler et al., 2012; Bossler & Holt, 2009; Holt et al., 2012; Hutchings, 2014; Kowalski et al., 2014; Lenhart et al., 2011; Marcum et al., 2010; Reyns, 2013), having a high academic standing and high grade point average (GPA) (Bossler et al., 2012), or relationship status and sexual orientation (Reyns et al., 2011). The physical and social guardianship in the context of cyber space is construed respectively as protective software programs

(such as firewalls, anti-malware etc) and the presence of individuals by virtue of their presence or conduct contribute to preventing the occurrence of cyber harassment (Ngo & Paternoster, 2011; Reyns, 2013; Spano & Nagy, 2005).

Bronfenbrenner's Social Ecology Model (1979) on human development and studies which have adopted it in the context of cyberbullying were also used to develop a few more hypotheses about the potential perpetrators and vcitms of non-sexual online harassment. Bronfenbrenner's Social Ecology Model (1979) identifies four environmental systems (Microsystem, Mesosystem, Exosystem, Macrosystem) which are believed to influence the development of a person. In the context of cyberbullying, it is argued that these environmental systems, for example, one's microsystem comprising of one's family, school, peers and mesosystem comprising of the interactions between the different components of the microsystem such as the interactions between family and peer groups, home and school, can either enhance or inhibit cyberbullying (Harasgama & Jayathilaka, 2023). Thus, studies have found (Pendergrass & Wright, 2016) that peers perpetrated acts of cyberbullying and/or helped escalate the problem by spreading information across peer groups. It is also argued that one's education in terms of knowing how to use digital technologies responsibly and the seriousness of cyberbullying as well as awareness about the risks associated with use of digital technologies and ways of protecting oneself can respectively impact perpetration of cyberbullying as well as victimization (Pendergrass and Wright, 2016).

Theories such as reasoned action theory, and social identity theory, personal reputation theory were used in this research in deriving certain hypotheses about potential perpetrators of online non-sexual harassment. The Theory of Reasoned Action (TRA) (Ajzen & Fishbein, 1977) suggests that individuals' actions are driven by their intentions, which are shaped by their attitudes toward a particular behavior and their beliefs about what important others think. In the context of cyberbullying, these beliefs include subjective norms perceptions of approval or disapproval from others like family and friends and descriptive norms, or beliefs about how common cyberbullying is within their peer group. Additionally, moral norms reflect the individual's belief about whether cyberbullying is morally right or wrong. These factors collectively influence whether an individual intends to engage in cyberbullying (Hellsten et al., 2021).

Social Identity Theory (SIT) (Tajfel, 1982) posits that an individual's social identity is a part of an individual's self-concept and that self-concept is influenced by membership in social groups and the value one attached to such membership. In the context of cyberbullying, it has been observed that an individual may cast themselves in a favourable light to attract peer approval by participating in deviance or crime (Hinduja & Patchin, 2010). Another identity theory, Personal Reputation Theory (PRT) (Emler & Reicher, 1995) posits that 'adolescents behave in a transgressive way simply to communicate something about themselves to the public' or in other words, in order to build and maintain a particular social reputation. Thus, breaking rules is a way of managing their reputation and strengthening their identity within a social group(Hellsten et al., 2021).

Existing literature identifies four types of impacts of cybercrime victimization, namely, physical, financial/material, psychological, and social/behavioral (Borwell et al., 2022). As discussed earlier in this section, many studies have revealed the various impacts of victimization to online harassment such as depression, PTSD, self-harm tendencies, suicidal ideation negative impacts on family and social relationships, impacts on health and physical safety, loss of employment, self-censorship on cyberspace etc (Security.org, 2022; Hinduja & Patchin, 2019a, 2019b; Duggan, 2017; Hamm et al., 2015, Marwick, & Lacour, 2017). In addition, the Shattered Assumptions theory (SAT) (Janoff-Bulman & Frieze, 1983) holds all individuals have certain fundamental assumptions about themselves, the world, control and safety such as 'the belief in personal vulnerability, the perception of world as meaningful and comprehensible, and the view of ourselves in positive light' (Borwell et al., 2022). SAT posits that becoming a victim of a crime shatters these fundamental assumptions and thereby leads to negative psychological states ranging from shock, helplessness, anxiety and depression to PTSD, feelings of detachment, and phobias. (Janoff-Bulman & Frieze, 1983).

Based on the above theories and the relevant literature the following basic hypotheses about non-sexual online harassment are designed in this exploratory study with the aim of finding out to what extent these hypotheses can explain the prevalence, nature and impacts of non-sexual online harassment in Sri Lanka. Thus, it is hypothized that.

H1. Those who engage in risky online behaviours such as spending more time online are more likely to be subject to non-sexual online harassment

H2. Females are more likely to be subject to non-sexual online harassment than males

H3. People from low socio-economic backgrounds and low education levels are more likely to be subject to non-sexual online harassment

H4. Types of harassment experienced differ based on demographic factors such as gender, socio-economic background and education

H5. Non-sexual online harassment is mostly perpetrated by peers

H6. The most common reason for perpetration of non-sexual online harassment is to gain social validation or in other words, to gain peer approval and popularity

H7. The most common impacts of non-sexual online harassment are psychological impacts

3. Research approach and methodology

As there are very few studies which have explored the true nature, extent and impacts of non-sexual online harassment in Sri Lanka, the current study adopts the exploratory research approach which is used by researchers to obtain information about an issue on which there is very little or no earlier studies (Habib et al., 2014, pp. 7–8). Exploratory research, similar to confirmatory research, begins with a clearly formulated theory or precise hypotheses. However, exploratory research does not seek to test these hypotheses but rather seeks to find out how well these theories or hypotheses explain phenomena, In addition, exploratory research also helps to uncover new trends, patterns and generate new insights while situating findings within the broad social context (Reiter, 2013). Epistemologically, the approach is anchored in a post-positivist framework, allowing for structured inquiry and hypothesis generation while acknowledging the context-bound nature of social phenomena.

Furthermore, in order to fulfil the objectives of this study, the quantitative methodology is utilized. In research, quantitative methodology offers numerous benefits. Firstly, it promotes objectivity both at the data collection and data analysis stages by using structured data collection instruments and by employing numerical data, allowing researchers to avoid subjectivity and bias in data collection and in interpreting results. Second, quantitative studies frequently employ standardised procedures and measures, making it easier for other researchers to replicate the study and confirm its findings. Furthermore, quantitative research employs statistical techniques to generalise its findings to a larger population, thereby enhancing the external validity of the study. Quantitative research can employ cross-sectional studies to capture a sampling of a population at a particular time and longitudinal studies to assess changes over time, thereby providing valuable insights into trends and developments.

In the context of online harassment, which is extensive and affecting larger number of individuals, using quantitative methodology would allow this research to measure the prevalence, frequency and patterns of such harassment by collecting numerical data and to identify what types

of online spaces or behaviours are most associated with harassment while highlighting the differences present across various demographics such as gender, age etc within different types of platforms. Needless to say that, with a larger sample size, the quantitative method can provide generalizable findings in the context of a wide population of online users by offering insights as to how common non-sexual harassment is across different groups. Moreover, considering the larger sample size and diversity of the groups with the sample itself, survey was chosen as the data collecting method as it could be easily distributed among the respondents allowing efficiency of data collection. Closed-ended quantitative survey was chosen as it could provide a more structured and focused approach to data collection which might otherwise result in respondents reporting too detailed descriptions of their related experiences. Moreover, survey was also chosen as it could make the respondents more comfortable and allowing them to better formulate their answers leading to accurate responses. This was also employed in the hope of comparing the experiences of different subgroups (e.g., age groups, online platforms, or communities) to identify if certain groups are more vulnerable to harassment or if certain behaviours, psychological and social impacts of harassment are more likely to occur in specific settings. Given the above reasons, quantitative methodology was identified as the most suitable methodology for the present study.

In the study, the sample size of 4495 was predetermined based upon a maximum expected sampling error of 2.5 % at the .05 significance level. Stratified sampling methodology was used in selecting the sample for the study. First, clusters representing Sri Lankan youth as schools, state and non-state universities, vocational training centers, teacher training colleges, taxi-drivers (who drive tuk tuks in Sri Lanka which are also referred to as three-wheelers) and factory workers were identified to represent a cross-section of the Sri Lankan youth population. The sample chosen for the purpose of this research was between the ages of 17–30 years mainly since the research objective was understanding the prevalence, nature and impacts of online harassment within the youth populations in Sri Lanka. Moreover, this group was chosen as the target sample because online platforms (such as social media) are more commonly used by this segment of the population than by any other group (Marciano et al., 2022), making them more susceptible to the harm caused by online harassment. This observation was made during the literature review also in connection with the research conducted by other jurisdictions.

Furthermore, the specifics sub-groups within the sample were chosen to represent distinct sectors of youth in Sri Lanka. School children in the age group of 17–19 are expected to bring in the perspective of specific vulnerabilities that they may have due to later stages of adolescence, school environment and peer pressure in their online behaviour, while still being subjected to parental authority. On the other hand, state and non-state university student representing the age group between 20 and 25 were selected to study how the breakaway from school and more free thinking, independence, comparatively broader knowledge on the society as possessed by the university students could make a difference in the experiences and their behaviours in online platforms. Moreover, it is expected that difference in social and economic backgrounds between university students, students of teacher training colleges, and vocational training centers could also bring in different experiences to light. While vocational training colleges are male dominated, teacher training colleges are more female dominated. Moving away from educational or vocational training set up, three-wheeler drivers and factory workers sub-sets (between ages 20–30) were chosen due to different socio-economic sectors they represent. They generally represent low-income sectors in the society with comparatively low education levels and low social statuses. Moreover, the three-wheel drivers' subgroup is predominately populated by males with little to no females while factory workers are more females and less males. They are more likely to be susceptible to online harassment stemming from class-based discrimination and adverse stereotypes.

As regards selecting geographical representation of the sample, purposive sampling methodology was used, and after identifying the relevant area, random sampling methodology was used to select the institutions from which data was to be collected. Thus, for example, when selecting participants from the school cluster, purposively 16 major districts were selected to ensure coverage of the entire country. Within each district the research team randomly selected 1 girls' only school and 1 boys' only school. In addition, 4 mixed schools from four key cities such as Colombo, Kandy, Galle and Kurunegala were also randomly selected.

A pilot survey was designed based on a thorough analysis of the literature and the relevant theoretical concepts, and to ensure content validity feedback on the survey was obtained from the experts in the field. Content validity ensures that the 'items in an instrument reflect the content universe to which the instrument will be generalized" (Straub et al., 2004) Furthermore, the pilot survey was administered to a small sample of the target population and feedback was obtained to ensure face validity which evaluates the feasibility, readability, clarity and relevance of the items from the perspective of non-experts and test-takers.(Taherdoost, 2016).

Feedback from this pilot phase informed the refinement of several questions to enhance respondent understanding and eliminate ambiguity. To assess the reliability of the instrument, internal consistency testing was conducted using Chi-Square Tests, which demonstrated acceptable reliability scores across key sections of the questionnaire. These tests confirmed that the instrument consistently captured the intended constructs and was suitable for large-scale administration.

The final survey questionnaire contained five parts respectively containing questions relating to demographic data, online behaviour, experiences of online sexual harassment, experiences of non-sexual online harassment of the respondents, and their perceptions about online harassment. This study was reviewed and approved by the Ethical Clearance Committee of the Faculty of Graduate Studies and Research, Sri Lanka Institute of Information Technology (SLIIT), with the approval number: SLIIT/ERC/FHS/02/2020, dated 11th February 2020. Prior to participation in the survey, all respondents were informed of the study's objectives, that participation was voluntary and that they had the option of not answering any question and withdrawing from participation at any point, and were assured that the information collected would only be used for the educational purposes of this study. Written informed consent was obtained from all participants, and in the case of participants under the age of majority (18 years in Sri Lanka), written informed consent was obtained from their parent or legal guardian, and written assent was obtained from the minor participant. Enumerators received specialized training on ethical conduct and sensitivity in dealing with topics related to harassment. Furthermore, to ensure confidentiality, no personally identifying information was collected and all data was entered directly into a secure database which was accessible only by the research team.

Data was collected both online and physically between July 2021 and February 2022 from a total sample of 4805 respondents using questionnaires administered through enumerators. The predetermined sample size was 4,495; however, a slightly larger sample was obtained to accommodate potentially incomplete responses. As 4,805 responses obtained were complete, all were included for the purpose of the analysis. The questionnaire was administered in a language chosen by the respondent, either in Sinhala, Tamil or English.

The respondents were given the choice to enter the responses on their own if they felt uncomfortable filling it in the presence of the enumerator, or with the assistance of the enumerator. The enumerators were given several trainings on how to administer the survey without making the respondents feeling pressured or uncomfortable, and the enumerators were strictly instructed to not collect any personal data from the respondents and the enumerators were overseen by members of the research team to ensure that the set guidelines are adhered to. Where the respondents chose to record the responses in the presence of the enumerators, one enumerator spent roughly about 15 min per respondent in

completing the questionnaire. The presence of the enumerator in filling the questionnaire as opposed to a self-administered questionnaire, was to ensure that the respondents fully understood the purpose of the question and the responses given, and thereby the accuracy of the responses.

Collected data was analysed using the SPSS software (IBM Corp, 2020) and univariate analyses were conducted to determine the prevalence, nature and impacts of both online sexual harassment and non-sexual online harassment in the total sample as well as in each sector of the youth population surveyed. Bivirate and multivirate analyses were conducted to determine the relationship between factors such as the sex and victimization, online behaviour and victimization etc. Standard error was calculated to ensure the reliability of the findings.

Despite the promising findings discussed in this paper, the researchers acknowledge certain limitation inherent in this research. In terms of sampling, the research may not have captured the segment of the public who is within the chosen age group but not in school/or any other educational or vocational training and unemployed, who may be largely susceptible to online harassment. Furthermore, within the age group of 25-30, there is another segment of young people who have obtained a tertiary education and are employed at executive positions. This segment is also not represented in the sample and thus, their perspectives are not reflected in the data collected. Furthermore, some subgroups like threewheeler drivers are essentially dominated by one gender. Thus, this paper and its analysis based purely on quantitative data can suffer from certain drawbacks due to the methodological challenges of studying youth experiences online which is diverse and broad.

Furthermore, this study has limitations, including potential response biases inherent in self-reported data and the restrictions imposed by a closed-ended survey format. These factors may have influenced the depth, accuracy, and nuance of the data collected. For instance, the absence of open-ended responses limits the ability to capture the subjective complexity of participants' experiences, while social desirability bias may have led to underreporting or selective disclosure of harassment incidents. However, the use of closed-ended questions in this study was a deliberate methodological choice, as discussed above justified primarily by the large sample size of 4,495 participants. Given the scale of the dataset, closed-ended formats were essential for ensuring consistency in responses, facilitating efficient data processing, and enabling reliable statistical comparisons across different sectors and demographic groups. This approach allowed for the identification of clear prevalence patterns and statistically significant associations.

It may also be argued that the reliance on descriptive rather than inferential statistics constitutes a limitation of the study. However, inferential methods are generally more appropriate for confirmatory research, whereas descriptive statistics are particularly suited to exploratory studies such as this one, where the primary aim is to generate an understanding of a phenomenon about which relatively little is currently known.

While open-ended questions could have offered richer qualitative insights, they would have posed significant challenges in terms of coding, interpretation, and time-bound analysis at this scale. Moreover, the structured nature of closed-ended items helped minimize respondent burden and improve completion rates, which is critical in large-scale surveys. Although this format may have limited the ability to capture the full complexity of participants' experiences, it was a necessary trade-off to ensure data standardization and analytical feasibility in a nationwide study of this magnitude.

Furthermore, the quantitative methodology also falls short in providing a more nuanced and in depth understanding of the phenomenon which could otherwise be obtained through a qualitative study, especially in relation to sociological and psychological impacts. However, the researchers also wish to point out that this paper is a part of a much boarder research on online harassment which used both quantitative and qualitative approaches to gain a better understanding of online harassment experiences of Sri Lankan youth. It is acknowledged that due to the sensitive nature of the issue studied in this research, and the cultural influences against discussing such experiences in public, some respondents may not have provided accurate and honest answers to some of the questions. The next section of the paper presents the findings relating to non-sexual online harassment in Sri Lanka.

4. Results

4.1. Participants

55.4 % of the total sample were female while 44.6 % were male, and participants hailing from all nine provinces of the country were represented in the sample. In terms of the age range of the participants, 49 % were between 17-19 years, 32 % between 20 and 23 years, 14 % between 24 and 26 years and 4.2 % between 27 and 30 years. The sex distribution and the residential provinces of the participants are provided in Table I.

4.2. Online behavioural data

Findings of the study reveal that 39.4 % of the participants spend 1–3 h online while 37 % spend 4–6 h online. In addition, 14.1 % of the participants revealed that they spend more than 6 h online. Only 9.5 % spend less than 1 h online.

As for the reasons for going online, keeping in touch with friends (85 %), education (78 %) and entertainment such as listening to songs/watching videos/gaming (75.3 %) are revealed to be the most common reasons for going online in the total sample. Cross tabulation of time spent online and reasons for going online reveal that among those who spend 1–3 h online, the most common reasons for going online are keeping in touch with friends (94 %), entertainment (84 %) and sharing photos/videos with friends (80 %). The same pattern can be seen among those who spend 4–6 h online. Among those who spend more than 6 h per day online, the most common reason for going online is entertainment (93.7 %) closely followed by keeping in touch with friend (91 %). These findings suggest that the more time one spends online, the more one engages in socializing activities rather than engaging in other activities such as education and commercial activities.

The data analysis also reveals that the platform that is used most frequently by the participants is WhatsApp with 97.2 % participants claiming to use it. Facebook is revealed to be the second most commonly used online platform with 62.9 % claiming to use it when online.

4.3. Prevalence rates

Data analysis revealed that 11.7 % of the total participants have experienced some form of non-sexual online harassment. Analysis of the prevalence rates of non-sexual online harassment among different sections of the youth population revealed differing rates among the

Table 1
Demographics.

Demographics	Count	Table N %
Sex		
Female	2663	55.4 %
Male	2142	44.6 %
Province		
Central	599	12.5 %
Eastern	363	7.6 %
North Central	184	3.8 %
Northwestern	498	10.4 %
Northern	213	4.4 %
Sabaragamuwa	241	5.0 %
Southern	723	15.0 %
Uva	207	4.3 %
Western	1777	37.0 %

different sectors with the harassment percentages in the all sectors except schools and Teacher training centers exceeding the percentage of the total sample. Non-sexual harassment among three-wheeler drivers appears to be the highest with a prevalence rate of 40.8 % (see Table 2).

The susceptibility of gig economy workers, especially taxi and tuk-tuk drivers, to online harassment could be intricately linked to their low socio-economic status and associated systemic inequities. For example, a significant number of drivers possess insufficient formal education, which is associated with a limited understanding of digital threats (such as phishing and impersonation) and avenues for redress (Ruvishani & Kariyapperuma, 2021). Although they may proficiently use ride-hailing applications, they frequently lack the competencies necessary to safeguard themselves against cyber harassment or to report abuses effectively (Ferrari, 2022).Thus, the high rates of harassment among three-wheeler drivers provides support to the hypothesis that people from low socio-economic backgrounds and low education levels are more likely to be subject to non-sexual online harassment.

4.4. The most common types of harassment

Data analysis further reveals that in the total sample the most common types of non-sexual online harassment experienced are impersonation through fake accounts (37.7 %), sharing fake/embarrassing videos/photos of victim on social media (25.7 %), spreading rumours about the victim (23.4 %) and posting rude/humiliating comments about the victim (18.4 %). The analysis of the sectors reveals impersonation through fake accounts to be the most common type among all sectors except the vocational training sector where sharing of fake/embarrassing videos/photos on social media (46 %) was identified as the most common type of non-sexual online harassment experienced. As the most common type of harassment experienced by almost all the sectors is the same, these statistics fail to support the hypothesis that the type of harassment experienced differs based on the socio-economic background and education of a person. However, significant differences can be observed between the types of non-sexual harassment experienced by males and female participants. Thus, publication of fake or embarrassing non-sexual videos/photos (81.4 %) is the most common harassment type experienced by males while spreading of rumours about oneself (62.9 %) is the most common type of harassment experienced by females. These statistics provide partial support to the hypothesis 4 that the types of harassment experienced differ based on demographic factors such as sex, socio-economic background and education.

The statistics on the most common types of harassment in the total sample and each sector are presented in Table 3 below while Table 4 presents the types of harassment by sex.

4.5. The platforms

The study also reveals Facebook as the platform on which non-sexual harassment happened the most, with 72.2 % of all cases of victimization having happened on it. This is followed by WhatsApp with a 41.3 % of victims experiencing non-sexual harassment on it. Less than 1 % victimization rate was observed on platforms such as Snapchat, Viber, Gaming sites, Blogs and others. Diagram I presents the statistics related to the platforms on which the harassment happens the most.

Table 2
Sector-wise distribution of individuals experiencing non- sexual online harassment.

Sector	Sample Size	Non-Sexually Harassed Count	Non-Sexually Harassed Percentage
Industries	579	72	12.4 %
Schools	2281	236	10.3 %
Universities	1058	127	12.0 %
Vocational Training Centers	377	57	15.1 %
Teacher Training Colleges	390	23	5.9 %
Taxi Drivers	120	49	40.8 %

4.6. Sex of victims

In terms of the sex of the victims, the study reveals that males were more likely than women to experience online non-sexual harassment, with 57.8 % of all victims being male, and 42.2 % being female. When looking at the sex breakdown of the victims in each sector, it is revealed that a higher percentage of males are subject to non-sexual online harassment in the schools (67.4 %) and vocational training sectors (70.2 %) while in the university (67 %) and industries (56 %) sectors a higher percentage of victimization is evidenced among females. Sex distribution of by the sectors is indicated in Table 5 below.

The sex distribution in relation to the types of non-sexual harassment reveals (Table 4 above) that almost in the case of all types of harassment, a larger percentage of males have been victimized except in the case of 'spreading of rumours' which was experienced more by female victims (63 %, n = 83) than by male victims (37 %, n = 49). Based on existing research and criminological theories, this study hypothized that females are more likely to be victims of online non-sexual harassment. However, this hypothesis is unsupported by the findings of this study and a pattern contrary to the one hypothesised is revealed.

4.7. Perpetrator profile

Data analysis further reveals that most of the perpetrators – 47.2 % - are males while only 17 % are females. In 12.1 % of cases sex of the perpetrator is not known to the respondent. Details of perpetrator sex are depicted in diagram II below.

When investigating the relationship between the perpetrator and the victim in the entire sample, in 41.5 % (n = 234) cases of victimization, batchmate/schoolmate/friend (Peer) is mentioned as the perpetrator while in 30 % of cases (n = 168), the victim does not know the identity of the perpetrator. In 19 % of cases (n = 110), the perpetrator was identified as a stranger not known to the victim. Similarly, in the schools (53 %), vocational training centers (47 %) and taxi drivers (55 %) sectors my school mate/batch mate or friend is the most commonly mentioned perpetrator type. However, in the universities (35 %), teacher training colleges (70 %) and industries sectors (21 %), "I don' t know who did this' was the most frequently selected answer. These findings support the hypothesis that non-sexual online harassment is mostly perpetrated by peers.

4.8. Impacts on victims

The study reveals psychological and social impacts to be the most common impacts experienced by those who have faced non-sexual online harassment. In 74 % (n = 338) of cases, victims reported that they 'felt angry' as a result of the harassment experienced while 36.8 % reported that they 'felt depressed'(n = 167). Furthermore, 21 % of victims (n = 96) 'felt scared and insecure' while 20 % (n = 94) 'felt self-blame'. Out of the different social impacts experienced by the victims, damage to good name was the most common with 52 % (n = 237) victims claiming to have experienced it. Problems with relationships was experienced by 24 % of victims (n = 108).

The sector-wise analysis of the impacts of non-sexual online harassment reveals that in all the sectors, 'felt angry', 'felt depressed' and 'good name was' damaged are the most commonly experienced impacts except in the teacher training colleges sector and taxi-drivers sector. In teacher training colleges sector, the most common impacts are 'felt angry' (73 %), 'felt scared and insecure' (47 %) and good name was damaged (47 %). In the taxi drivers sector, the most common impacts are felt angry (79 %), good name was damaged' (55 %) and negative impact on friends (44 %). These descriptive statistics provide

Table 3
Common forms of non-sexual online harassment by sector.

NSH Type - Did you experience the following forms of conduct in cyberspace?	Other Employed	Schools	Universities	Teacher Training Colleges	VT Centers	Total
Fake or embarrassing (non-sexual) videos/photos about me were shared on social media	26.4 %	29.2 %	11.8 %	13.0 %	45.6 %	25.7 %
Threats to physically hurt me/my family, threats to damage my good name were made	3.3 %	4.2 %	4.7 %	8.7 %	8.8 %	4.8 %
I was excluded from a chat group/from a group on a social media platform	13.2 %	7.6 %	7.9 %	17.4 %	8.8 %	9.4 %
Someone spread rumours about me	21.5 %	22.0 %	29.1 %	21.7 %	21.1 %	23.4 %
Someone impersonated me (e.g., fake profile) and posted comments/did activities which damaged my good name	42.1 %	30.1 %	41.7 %	56.5 %	40.4 %	37.4 %
Posted rude/humiliating comments about me	26.4 %	15.7 %	18.9 %	13.0 %	14.0 %	18.4 %
Other	5.0 %	8.5 %	14.2 %	8.7 %	3.5 %	8.5 %

Table 4
Types of non-sexual online harassment by sex of victim.

Type of Non-Sexual Harassment	Female (%)	Male (%)
Fake or embarrassing (non-sexual) videos/photos about me were shared on social media	18.6	81.4
Threats to physically hurt me/my family, threats to damage my good name were made	44.4	55.6
I was excluded from a chat group/from a group on a social media platform	32.1	67.9
Someone spread rumours about me	62.9	37.1
Someone impersonated me (e.g., fake profile) and posted comments/did activities which damaged my good name	41.2	58.8
Posted rude/humiliating comments about me	48.1	51.9
Other	52.1	47.9

support to hypothesis that the most common impacts felt by victims are psychological impacts.

Analysis of the relationship between sex of the victims and impacts experienced reveal that the most common social impacts were experienced mostly by male victims rather than female victims. For instance, out of those who experienced damage to good name as a result of non-sexual online harassment, 64 % are male and 36 % are female. Out of those who experienced problems with relationships 66 % are male and 34 % female. In relation to the psychological impacts, more men reported to having 'felt angry' being 61 % as opposed to 39 % females. In relation to the impact 'felt scared and insecure', female victims experienced this more than male victims with 67 % females claiming to experience this as opposed to 33 % males. In relation to the psychological impact 'felt depressed', again a higher percentage of females (52 %) experienced this as opposed to 48 % of males. However, it must be noted that, the difference between the percentage of males and females who felt depressed is not significant (See Table 6).

5. Discussion

The objective of the present study is to examine the prevalence, nature and impacts of non-sexual online harassment through an exploratory approach. Drawing on existing literature and theories such as LRAT, several general hypotheses were drawn some of which derive support from the findings of this study. However, as the study is exploratory by nature, the hypotheses are not tested but are used to analyse how well they can explain the prevalence, nature and impacts of non-sexual online harassment in Sri Lanka. This exploratory study reveals some hitherto unclear facts about this problem shedding light on its prevalence, nature and impacts not only in the Sri Lankan youth population generally but also in different sectors such as schools, universities etc. The findings enables Sri Lanka to benchmark itself against the global prevalence rates of non-sexual harassment or cyberbullying but also facilitates its authorities to design tailor made solutions for this issue in the country. Although an exact comparison of the prevalence rate of non-sexual online harassment with other global studies is

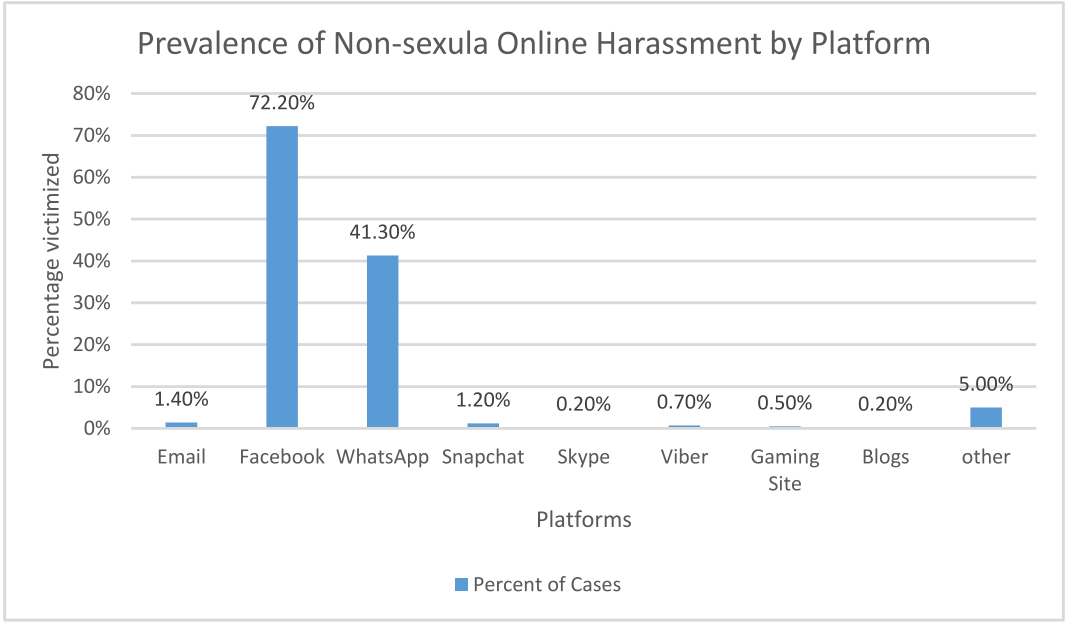

Diagram I. Prevalence of non-sexual online harassment by platform.

Table 5
Sex distribution of non-sexual online harassment victims by sector.

Have you experienced any type of non-sexual harassment in cyberspace?	Sex	Taxi drivers and factory workers	Schools	Universities	Teacher Training Colleges	VT Centers	Total
No	**Female**	261 (45.2 %)	1167 (57.1 %)	547 (58.8 %)	289 (78.7 %)	161 (50.3 %)	2425 (57.2 %)
	Male	317 (54.8 %)	878 (42.9 %)	384 (41.2 %)	78 (21.3 %)	159 (49.7 %)	1816 (42.8 %)
Yes	**Female**	40 (33.1 %)	77 (32.6 %)	85 (66.9 %)	19 (82.6 %)	17 (29.8 %)	238 (42.2 %)
	Male	81 (66.9 %)	159 (67.4 %)	42 (33.1 %)	4 (17.4 %)	40 (70.2 %)	326 (57.8 %)

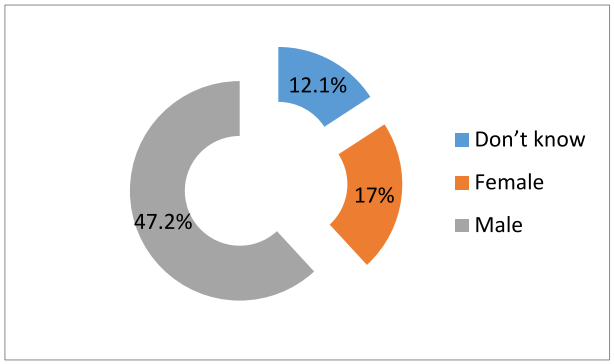

Diagram II. Details of perpetrator.

Table 6
Impacts of non-sexual online harassment by sex of victim.

Category	Impact	Female (%)	Male (%)
Socio-cultural Impact	Rejected by family	75.0	25.0
	Punished by the family	50.0	50.0
	Humiliated by peers	14.7	85.3
	Lost friends	23.5	76.5
	Good name was damaged	35.9	64.1
	Problems with relationships	34.3	65.7
Psychological Impact	Felt depressed	51.5	48.5
	Felt scared and insecure	66.7	33.3
	Had self-harm and suicidal thoughts	50.0	50.0
	Felt self-blame	30.9	69.1
	Felt angry	38.8	61.2
Threats to Security	Followed by strangers	51.9	48.1
	Received online threats	48.9	51.1
	Physical threats from wrongdoer	37.5	62.5
Changes to Learning/ Work	Moved to a new neighbourhood	88.9	11.1
	Changed school/college	33.3	66.7
	Stopped going to school/ university	16.7	83.3
	Lost the job	0.0	100.0

somewhat difficult due to the difference in the scope of this study and previous research, broad comparisons of findings are possible. As per this study, the overall prevalence rate of non-sexual harassment among Sri Lankan youth is 11.7 %, and in all sectors (such as schools, universities etc), it is less than 16 % except in the taxi-drivers sector where the prevalence rate is 40.8 %. The prevalence rate revealed in this study is different to the prevalence rates reported in previous studies conducted in Sri Lanka such as the Unicef Study done in 2020 which reported a prevalence rate of 4 % (Unicef, 2020), the study of Vadisinghe and others which revealed a prevalence rate of 3.5 % (Vadysinghe et al., 2022) and the study of Nazeer & Pathmeswaran, which revealed a prevalence rate of 18 % (Nazeer & Pathmeswaran, 2017). However, it must be noted that these previous Sri Lankan studies are limited in terms of the sample and also in terms of the age range of the target population. Thus, most studies focus on assessing online harassment among children. However, as the current study focuses on a broader section of the youth population and consists of a far larger sample than the samples in the previous studies, it is arguable that the prevalence rate revealed in this study may be more accurate than those revealed in previous Sri Lankan studies. This study also reveals the prevalence rates of non-sexual online harassment among youth in Sri Lanka to be significantly lower than the prevalence rates in other countries. According to most studies on online harassment among adolescents and youth conducted in countries such as the US, UK and Europe, the prevalence rates of harassment often range between 24 % and 60 % (Copp et al., 2021; Patchin & Hinduja, 2020). It must, however, be recognized that such figures are shaped by cross-cultural and structural differences including variations in legal frameworks, levels of internet access, reporting practices, and social norms which should be taken into account when comparing them with the Sri Lankan context.

On the other hand, the prevalence rates in Sri Lanka appear to be comparable to those in other South Asian Countries such as Bangladesh. For instance, a study by Md. Mamunur Rashid Sheikha and others reveal the prevalence rate of cyberbullying among university students in Bangladesh to be 13.6 % (Sheikh et al., 2023). Although comparatively low, the prevalence rate of online harassment among Sri Lankan youth, especially the high rate among taxi drivers, highlight the need for Sri Lanka to take serious measures to prevent non-sexual online harassment which is not addressed through the country's existing legal framework. The different prevalence rates in different sectors underscore the need to take sector specific measures to reduce victimization such as raising awareness and increasing IT literacy related to areas such as cyber security and online safety.

The varying prevalence rates in different sectors suggest that sector-specific factors, such as online engagement patterns, power dynamics, and social perceptions of harassment, contribute to differing experiences. Disparities in harassment rates, especially the increased susceptibility of women in academic and industrial settings, may arise from systemic inequities, including male-dominated institutional hierarchies and insufficient grievance procedures. In academic institutions, disparities in power and the threat of retaliation may inhibit reporting, whereas industrial environments frequently lack protective measures for women in subordinate positions. Cultural norms intensify these dynamics; societal trivialisation of harassment and gendered stereotypes depicting women as "less authoritative" normalise abuse and stigmatise victims (De Silva, B, 2022).

This study further reveals impersonation through fake accounts (40.5 %), sharing fake/embarrassing videos/photos of victim on social media (27.8 %), spreading rumours about the victim (25.3 %) and posting rude/humiliating comments about victims (20 %) to be the most common types of non-sexual harassment experienced. When comparing these findings with other Sri Lankan studies on cyber harassment, the findings appear to be in line with the findings of certain studies such as that of Suriyabandara (Vishaka, 2017) while being inconsistent with those of other studies such as that of Vadysinghe and others (Vadysinghe

et al., 2022). A number of US, UK and European studies find name-calling/insults, spreading rumours, exclusion and threatening/offensive messages, to be the most common forms of online harassment experienced by youth (National Centre for Social Research, 2017). Thus, when compared with other countries both within the Asian region and outside, the most common forms of online harassment that Sri Lankan youth seem to be exposed tend to be of a more serious kind (impersonation and publishing embarrassing photos etc) than those most commonly experienced in other countries (verbal abuse, spreading of rumours). Thee types of harassment experienced are important in designing laws to address the issue, for example, having specific laws targeting behaviors such as impersonation).

Furthermore, the gender breakdown in different types of non-sexual cyber harassment reveals distinct patterns that may be influenced by cultural and social factors in Sri Lanka. Women experience a higher prevalence of rumor-spreading (62.9 %) compared to men (37.1 %), which could be linked to societal norms that place a significant emphasis on a woman's reputation. In Sri Lankan culture, a woman's social standing is often closely tied to perceptions of morality and honor, making rumor-mongering a particularly harmful and effective form of harassment against them (Gunaratne & Abeysiriwardana, 2023).

Conversely, men are more frequently targeted with fake or embarrassing videos and photos (81.4 %) and impersonation that damages their good name (58.8 %). These forms of harassment may be more common among men due to expectations of masculinity, where public image, credibility, and dominance in social or professional spheres are highly valued (Williams, 2023). Attacks on their reputation might be designed to undermine their authority or question their competence, particularly in competitive environments. Additionally, men are slightly more likely to experience threats to their good name (55.6 %) and exclusion from online groups (67.9 %), which reflects a different form of online aggression that challenges their influence and social standing rather than targeting personal morality. However, it was not evident from the dataset itself why these gendered differences in the forms of harassment emerged. These patterns could be influenced by specific cultural dynamics within the country and therefore warrant further investigation.

In terms of the online platforms used for harassment, consistent with previous studies, this study too finds Facebook to be the platform on which most of the harassment takes place. In 2017, the Pew Research Center showed that 41 % of American adults have been the target of online harassment, with 66 % of those incidents occurring on social media (Pew Research Center, 2017). 79 % of those who had encountered online abuse claimed it occurred on Facebook (Pew Research Center, 2017). Also, 59.7 % of the respondents to a 2019 poll of teens conducted by the Cyberbullying Research Center reported having experienced harassment on Facebook (Hinduja & Patchin, 2019a, 2019b). This consistency indicates structural vulnerabilities intrinsic to Facebook's infrastructure, including its extensive user base, algorithmic promotion of contentious content, and dependence on user-reported moderation, which may insufficiently tackle harassment in multilingual or non-Western contexts such as Sri Lanka (Hossain, 2023). Furthermore, the platform's design elements, such as public comment sections, group functionalities, and the simplicity of establishing anonymous or pseudonymous accounts, likely promote harassment by allowing offenders to escape accountability (Kuo, 2023). This finding highlights the need for Sri Lanka to focus on protecting youth on social media and also closely coordinating with social media companies in order to remove offending content as speedily as possible. This study reveals that males are more likely than females to be subject to non-sexual online harassment, with similar trends being seen in most of the sectors surveyed except the universities and industries sectors. These results too are consistent with previous studies such as the study of Pew Research centre in 2021 according to which more males had been subject to harassing conduct such as offensive name calling (Vogels, 2021). A study by Vashistha and others which reveals that "92 % of the threatening posts were recorded by men only 19 % of these posts were directed at women" too highlights how males are more likely to experience non-sexual online harassment than women (Vashistha et al., 2019, pp. 1–13).

The study of Pew research centre highlights that 'the sex plays a role in the types of harassment that people are likely to encounter (Vogels, 2021). Accordingly, the present study also reveals that a higher percentage of males experienced harassing conduct such as non-consensual sharing of fake/embarrassing (non-sexual) photos/images, threats of physical/reputational damage, exclusion from chat/social media groups, impersonation while a significantly higher percentage of females experienced spreading of rumours.

Consistent with previous studies, the present study too finds that the most common perpetrators on non-sexual online harassment are school/batch mates or friends of the victims. For instance, according to research conducted on cyberbullying among Australian youth, the majority of bullies are other students (61.9 %)(Campbell et al., 2012). Hinduja and Patchin's research on cyberbullying among middle and high school students in the US, also reveals that 58 % of occurrences happened between current or former friends (Patchin & Hinduja, 2010). A study by Paulette and Jamie reveals that 47 % of the victims knew the perpetrator from school (Paullet & Jamie, 2014).

The present study further reveals males to be the most common perpetrators of nonsexual online harassment. This aligns with the findings in the existing research such as those of studies by Patchin and Hinduja which found that, males are disproportionately responsible for non-sexual forms of cyberbullying (Patchin & Hinduja, 2018).

In terms of the impacts of non-sexual online harassment, the results of the present study reveal feeling angry to be the most common psychological impact followed by feeling depressed, while damage to good name is revealed to be the most common social impact. Many studies from around the world reveal that online harassment can have negative impacts on the mental health and well-being of victims (O'Malley, R. L, 2023; Przybylski, A. K., & Bowes, L. 2017). In our study too, feeling depressed is revealed as the second most commonly felt psychological impact of non-sexual online harassment. The fact that damage to good name featured as the second most common impact highlights the role a good reputation plays in the Sri Lankan culture. This could be taken into account in designing a legal framework for addressing this issue as well as in designing victim support strategies. Furthermore, the findings of our study in relation to the sex distribution of the impacts reveal that more males experienced anger as a result of their experience of non-sexual online harassment while more females reported feeling scared and insecure. Similar to our findings, Zsila et al. too reveal that men are more likely to express anger in reaction to cyberbullying victimization, and as a consequence, were more prone to engage in self-blame (Zsila et al., 2018). These findings highlight the need to make victim support strategies (including counselling support etc) an important aspect of any policy that Sri Lanka may introduce to combat the problem of online harassment.

It can be noted that Sri Lanka faces significant shortcomings in its legal and policy responses to cyber harassment, while countries like Singapore, India, the UK, and Australia have adopted proactive measures to address the issue. Singapore's Protection from Harassment Act (POHA) criminalizes cyber harassment, including doxing and AI-generated deepfakes, and provides expedited protection orders. Additionally, Singapore integrates cyber wellness education into its national curriculum and supports victims through initiatives like the HELP123 helpline and the Alliance for Action (AfA) to Combat Online Harms. India's approach is centred on the Information Technology Act (2000) and the Digital Personal Data Protection Act (2023), supported by institutional frameworks such as the Indian Cyber Crime Coordination Centre (I4C) and initiatives like Digital Shakti, a women's cybersecurity training program (Abhishek, A, 2023). The UK's Online Safety Act (2023) imposes a duty of care on tech platforms to remove harmful content, while Ofcom enforces compliance through penalties and legal action. Victim support is strengthened through services such as the

Revenge Porn Helpline and the National Centre for Cyberstalking Research (Begum, 2024). Australia's eSafety Commissioner enforces content takedown requirements and promotes "Safety by Design" principles to ensure digital platforms integrate built-in safety features (Paech & Martin, 2021).

To strengthen Sri Lanka's response, the Online Safety Act (2024) should be amended to provide clearer legal definitions to prevent misuse and establish specific cyberbullying laws. Specialized cyber courts, similar to India's fast-track courts for cybercrimes, would expedite case resolution, ensuring that victims receive timely justice (Sharma, Bhilare, & Singh, 2011). Law enforcement training in digital forensics, including metadata verification and VPN tracing, would enhance investigative capabilities. A 24/7 national helpline, modelled after Australia's eSafety Commissioner portal, could provide immediate reporting and counselling support Public awareness campaigns akin to India's Cyber Jagrukta Diwas, conducted in collaboration with media and influencers, should be implemented, with educational resources translated into Tamil and Sinhala to ensure accessibility (Begum, 2024). Furthermore, social media platforms should be required to appoint local grievance officers, as mandated by India's IT Rules (2021), to expedite content takedowns (Abhishek, 2023). By adopting a rights-based, multi-stakeholder approach drawing from Singapore's legal precision, India's institutional coordination, Australia's victim-centric model, and the UK's tech accountability, Sri Lanka can develop a more effective framework to combat cyber harassment.

6. Conclusion

The purpose of this study was to engage in an exploratory analysis of the present state of non-sexual online harassment among the youth population in Sri Lanka as there is a dearth of studies on this area. To date, the present study is the only study of its kind in Sri Lanka to have analysed data from a countrywide cross section of the youth population. The study revealed that 11.7 % of Sri Lankan youth between the ages of 17–30 have experienced online non-sexual harassment with this rate somewhat varying across different sectors such as the school sector, university sector etc. When compared with global prevalence rates of non-sexual online harassment, the prevalence rate in Sri Lanka appears to be lower than that in most countries while being similar to that in certain South Asian countries such as Bangladesh. Furthermore, according to the present study the most common forms of non-sexual online harassment experienced by Sri Lankan youth are of a more serious kind such as impersonation and publishing of private photos than in most other countries. Consistent with studies from other countries, this study too revealed Facebook to be platform on which most of the harassment took place, males to be the most common victims and the most common perpetrators, and batchmates/school mates of the victim to be the most common perpetrators. In addition, psychological impacts (anger, depression) were revealed to be the most common impacts experienced by victims followed by the social impact of damage to the good name/reputation. The findings of this study highlight not only the need for Sri Lanka to devise a comprehensive strategy to combat online harassment but also provides important insights as to the areas that need to be addressed by such strategy. For instance, the findings stress the need to come up with adequate mechanisms to tackle and respond to harassment happening via social media, in particular, through Facebook, the importance of making victim support strategies an important aspect of any national strategy to combat online harassment, the need for a legal framework addressing specific types of behaviour etc.

Given the above, although Sri Lanka has initiated efforts to combat cyber harassment, its legal and policy framework is insufficient when compared to the more extensive measures implemented by countries such as Singapore, India, the UK, and Australia. Sri Lanka must enhance its Online Safety Act (2024) by incorporating clearer legal definitions, establishing specialized cyber courts, improving law enforcement training, and implementing a dedicated victim support system.

Furthermore, this research holds strong interdisciplinary value, bridging the domains of law, digital sociology, psychology, gender studies, and youth policy. The empirical findings not only advance academic understanding of non-sexual online harassment among Sri Lankan youth but also provide actionable insights for policymakers, educators, law enforcement agencies, mental health professionals, and technology regulators. The detailed breakdown of platform-specific harassment patterns, sectoral vulnerabilities, gendered experiences, and psychological impacts provides a robust evidence base that can inform the development of nuanced legal reforms, sector-specific educational interventions, and digital safety protocols. For instance, the findings regarding impersonation and reputational harm suggest the need for legislative attention to emerging forms of identity-based harassment, while the documentation of emotional impacts highlights the importance of integrating victim support into digital governance. Furthermore, this study's identification of demographic and institutional disparities can support targeted policy responses, including safer digital environments in educational settings and protective frameworks for vulnerable gig economy workers. Therefore, the manuscript contributes meaningfully to the design of informed, context-specific policy instruments, and would benefit from more explicitly positioning itself as a tool for shaping national strategies and interdisciplinary dialogues on online safety.

CRediT authorship contribution statement

Kushanthi S. Harasgama: Writing – review & editing, Writing – original draft, Visualization, Supervision, Resources, Project administration, Methodology, Investigation, Funding acquisition, Conceptualization. **Kanishka Karunasena:** Validation, Methodology, Investigation, Data curation. **Sankha Senarath:** Validation, Formal analysis, Data curation. **Samurdhi Jayamaha:** Writing – review & editing, Resources, Project administration. **Chaga Bihari Mahingoda:** Writing – review & editing. **Wasantha Deshapriya:** Software, Resources, Methodology.

Data availability statement

The data are not publicly available due to privacy restrictions.

Ethical statement

This study was reviewed and approved by the Ethical Clearance Committee of the Faculty of Graduate Studies and Research, Sri Lanka Institute of Information Technology (SLIIT), with the approval number: SLIIT/ERC/FHS/02/2020, dated 11th February 2020. Prior to participation in the survey, all respondents were informed of the study's objectives, that participation was voluntary and that they had the option of not answering any question and withdrawing from participation at any point, and were assured that the information collected would only be used for the educational purposes of this study. Written informed consent was obtained from all participants, and in the case of participants under the age of majority (18 years in Sri Lanka), written informed consent was obtained from their parent or legal guardian, and written assent was obtained from the minor participant.

Declaration of the use of AI assisted technologies

During the preparation of this work the authors used Generative AI to improve the readability of the manuscript in a few places. The authors reviewed and edited the content as needed and take full responsibility for the content of the publication.

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Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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