

Bystander Intervention in Online Harassment: An Experimental Survey Study on the Influence of Cyberbullying Stimulus Type and Individual Psychological Factors

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Abstract

Online harassment is a common way digital victimization can take place, typically in public online forums where many users are witnessing malicious exchanges. Although there is a great chance for bystanders to deter harassment and help victims, many witnesses do not intervene. Using the bystander effect theory and the IcekAjzen Theory of Planned Behavior, this study explored factors influencing bystanders' willingness to intervene in cyberbullying situations. This research used a survey-based experimental design, where participants received one of four cyberbullying stimuli (video, news article, infographic or chat screenshot). After exposure to the stimulus, participants filled out a questionnaire including outcome measures for bystander intervention intention, empathy, online self-efficacy and perceived social norms as well as a measure of past bystander behavior. Methodology Online survey forms were used for data collection from eligible web users aged 18 years and above who were currently using any form of social media platform. Psychological variables that were predicted to correlate with intervention intention, and differences across stimulus conditions were analyzed using descriptive, correlational and inferential statistical analyses. The results are intended to give information about online bystander act responding through individual psychological factors and stimulus presentation, with the goal of elucidating how intervention behavior occurs in digital sexual harassment situations.

Keywords: Online harassment, Bystander intervention, Cyberbullying

Introduction

Online harassment has become a serious issue in today's digital world. Many people experience abusive comments, threats, or public shaming on social media and other online platforms. As more of our social lives move online, cases of cyberbullying and online harassment have become more common and noticeable (Patchin and Hinduja, 2018). Unlike traditional bullying, online harassment usually occurs in public digital spaces, where many people can see what is happening. This means bystanders can influence how these situations play out, making their role especially important.

The Bystander effect is a term first used by Latané and Darley (1970) to describe why people are less likely to step in and help during emergencies if there are others around. This happens because people feel less personally responsible, are influenced by others, or aren't sure if they should get involved. Though this idea originally explained behavior in real-life situations, it's now often used to discuss what happens

online, where lots of people might witness harmful behavior but choose not to act (Fischer et al., 2011). When many people are watching online, it's even easier to feel less responsible and remain passive. Unique psychological dynamics may also be introduced by a digital environment that can affect the behavior of bystanders. The online disinhibition effect refers to how anonymity, lowered social clues and physical distance between users can change behavior in online environments (Suler 2004). This could lessen accountability and make these individuals less likely to intervene when they witness harassment. On the other hand, people who witness bullying taking place online are capable of intervening in various ways by either reporting abusive content or providing victims with support through direct messages or comments, or working against perpetrators. Thus, we argue that understanding what predictions these constructive behaviours lies behind the bystander intervention in the cyberspace is important for combating online harassment.

Psychological traits predict helping behavior. The main mechanism of altruistic behavior is empathy, the ability to understand and share feelings with others. Batson (1991) asserts that the Empathy–Altruism Hypothesis argues people who experience empathic concern for victims are more likely to help. Higher empathy will make more people intervene and help the victim or discourage the one who is attacking. Another common influence in the decision to intervene is perceived self-efficacy. Self-efficacy: it is related to the perception of oneself as capable of executing behaviours successfully (Bandura, 1997). Online self-efficacy is related to online environments and reflects individuals perceptions of their confidence to use the tools available on platforms, report harmful content or help contribute positively in digital interactions. People who feel confident using online systems will therefore be more likely to intervene when they observe harassment.

Social influence is also key to shaping helping. According to Theory of Planned Behavior, intentions regarding behavior are affected by attitudes towards the behavior, subjective norms about the behavior, and perceived control over the behavior (Ajzen 1991). Perceived norms about what others rally do when they witness harassment online may encourage or discourage acting to intervene and help. Likewise, if bystanders perceive that others support victims and disapprove of violent behaviour, they may be more motivated to take action themselves.

All above-mentioned, plus the way of presentation may affect bystander behavior together with psychological aspects. Such cyberbullying content on the web appears in varied formats including videos, news-articles, animations, and screenshots of conversations. The extent to which each format can elicit emotional engagement and empathy toward victims may vary, having an impact on individuals' intentions to intervene. Nevertheless, there are few studies focusing on the bystanders and how different types of cyberbullying stimuli affect their intention to intervene.

Consequently, this study investigates bystander intervention in online harassment using a survey-based experimental method. Participants are presented with a randomly assigned stimulus on cyberbullying in one of the following modalities: video simulation, news article (see Effect of Media), infographic (see Perceived Impact), and online harassment chat screenshot (see Types and Sources of Bullying). As a response to stimulus exposure, in both conditions participants complete questionnaire which measures bystander intervention intention and psychological variables (i.e. the trait of empathy, online self-efficacy, perceived social norms and past bystander behavior).

This study aims to shed light on the mechanism driving bystander intervention in online harassment cases, by comparing responses across different formats of stimulus and exploring individual psychological factors that explain support for returning fire. These results may offer an enhanced understanding of

bystander behaviour in digital and ultimately contribute to the development of more effective interventions to encourage online communities that are more supportive, and less likely to endorse cyberbullying.

Methodology

A between-subjects experimental survey design was used to investigate bystander intervention for online harassment in this study. Participants were randomly allocated to one of four stimulus conditions, namely either a video simulation, a news article, an infographic or a chat screenshot describing different instances of cyberbullying.

Microsoft Forms were used to collect data from four different survey links, each pertaining to an internet condition. All forms had same questionnaires but the only difference was the stimulus.

Participants Online platforms and social media were used to recruit a total sample of approximately 250–350 participants. The following two inclusion criteria: 18 years or older and active social media users.

Using a 5-point Likert scale, the survey contained items on demographics (e.g., gender), exposure to counterfeit stimuli (i.e., so it would be easier to relate and empathize with individual in need of help), bystander intervention intention, empathy levels of intentions as well as measures of A) online self-efficacy; B) past behavior; C) perceived social norms.

The data were analyzed using the built-in analytical functions of Microsoft Forms which essentially involves descriptive statistics, especially frequency and percentages mainly to summarize responses across experimental conditions.

The ethical features comprised ethical considerations, including informed consent, voluntary participation, anonymity and the right to withdraw at any time.

Data Analysis

A. Demographics

Table 1.1 Demographic data for study participants

| Category | Video Simulation (Exp 1) | News Article Simulation (Exp 2) | Infographic Simulation (Exp 3) | Chat Screenshot Simulation (Exp 4) | p value |
|-------------------------------|--------------------------|---------------------------------|--------------------------------|------------------------------------|---------|
| Gender | | | | | 0.0766 |
| Male | 34 | 33 | 44 | 28 | |
| Female | 46 | 47 | 36 | 52 | |
| Current education level | | | | | 0.077 |
| Bachelor’s Degree | 60 | 54 | 45 | 56 | |
| Master’s Degree | 20 | 26 | 35 | 24 | |
| Use of social media | | | | | 0.0749 |
| Daily | 62 | 73 | 69 | 70 | |
| Several times a week | 16 | 6 | 7 | 6 | |
| Once a week | 0 | 0 | 3 | 3 | |
| Less than a week | 2 | 1 | 1 | 1 | |
| Average hours on social media | | | | | 0.1 |

| | | | | | |
|----------------------------|----|----|----|----|--------|
| < 1 hour | 9 | 6 | 16 | 5 | |
| 1-2 hours | 22 | 26 | 24 | 17 | |
| 3-4 hours | 33 | 27 | 22 | 40 | |
| 5-6 hours | 12 | 14 | 13 | 10 | |
| 7+ hours | 4 | 7 | 5 | 8 | |
| Main social platforms used | | | | | 0.4201 |
| Facebook | 7 | 10 | 14 | 3 | |
| Instagram | 72 | 76 | 65 | 70 | |
| Twitter | 4 | 3 | 6 | 8 | |
| WhatsApp | 66 | 71 | 65 | 71 | |
| LinkedIn | 21 | 20 | 20 | 13 | |
| Snapchat | 29 | 48 | 33 | 42 | |
| Other | 7 | 6 | 9 | 7 | |

The demographic characteristics of participants across the four experimental conditions are presented in the table above. The chi-square test was used to examine whether there were significant differences in demographic variables between the four simulations, namely Video Simulation (Experiment 1), News Article Simulation (Experiment 2), Infographic Simulation (Experiment 3), and Chat Screenshot Simulation (Experiment 4). A p-value greater than 0.05 indicates that the differences are statistically non-significant, suggesting that the participant groups were relatively comparable across the experiments.

With respect to gender, females constituted a higher proportion of participants in most experimental conditions, except in the Infographic Simulation where males were comparatively higher. The obtained p-value for gender was 0.0766, which is greater than the significance level of 0.05. Therefore, the difference in gender distribution across the four experiments was statistically non-significant.

Regarding current education level, the majority of participants in all four experiments were pursuing Bachelor's degrees, while a smaller proportion were pursuing Master's degrees. The p-value obtained was 0.077, indicating that the variation in educational qualification among the groups was statistically non-significant.

In terms of use of social media, most participants across all simulations reported using social media daily. Only a very small number reported weekly or less frequent usage. The p-value for this variable was 0.0749, which is above 0.05, indicating that there was no statistically significant difference in social media usage frequency between the experimental groups.

For average hours spent on social media, the majority of participants reported spending between 1–4 hours per day on social networking platforms, with comparatively fewer participants reporting usage of 7 or more hours. The obtained p-value was 0.10, demonstrating that the differences in average social media usage hours across the four experiments were statistically non-significant.

With regard to the main social platforms used, Instagram and WhatsApp emerged as the most commonly used platforms across all four experimental conditions, followed by Snapchat and LinkedIn. Facebook, Twitter, and other platforms were reported less frequently. The p-value for this variable was 0.4201, which is substantially higher than 0.05, indicating that there was no statistically significant difference in platform usage across the participant groups.

Overall, all demographic variables yielded p-values greater than 0.05, suggesting that there were no statistically significant differences among participants across the four experimental conditions. This

indicates that the groups were demographically comparable, thereby reducing the likelihood that demographic factors influenced the observed outcomes of the study.

B. Stimulus Exposure

Table 1.2 Bystander Intervention Intention

| Category | Video Simulation (Exp 1) | News Article Simulation (Exp 2) | Infographic Simulation (Exp 3) | Chat Screenshot Simulation (Exp 3) | p value |
|---|--------------------------|---------------------------------|--------------------------------|------------------------------------|---------|
| I felt concerned or upset for the person being targeted in this situation | | | | | |
| 0.0047 | | | | | |
| Strongly Disagree | 3 | 1 | 3 | 2 | |
| Disagree | 1 | 6 | 2 | 5 | |
| Neutral | 11 | 23 | 12 | 14 | |
| Agree | 35 | 39 | 33 | 24 | |
| Strongly Agree | 30 | 11 | 30 | 35 | |
| This situation shows that online harassment can cause serious emotional or psychological harm | | | | | |
| 0.000 | | | | | |
| Strongly Disagree | 2 | 4 | 2 | 0 | |
| Disagree | 1 | 1 | 6 | 3 | |
| Neutral | 7 | 5 | 14 | 8 | |
| Agree | 29 | 30 | 0 | 35 | |
| Strongly Agree | 41 | 40 | 30 | 34 | |
| If I witnessed a similar situation online, I would feel responsible to intervene or report it | | | | | |
| 0.000 | | | | | |
| Strongly Disagree | 3 | 0 | 6 | 2 | |
| Disagree | 3 | 4 | 16 | 3 | |
| Neutral | 9 | 23 | 24 | 18 | |
| Agree | 31 | 37 | 19 | 39 | |
| Strongly Agree | 34 | 16 | 15 | 18 | |
| I would be more likely to take action if I saw others intervening | | | | | |
| 0.0218 | | | | | |
| Strongly Disagree | 3 | 1 | 3 | 0 | |
| Disagree | 8 | 1 | 5 | 2 | |
| Neutral | 16 | 13 | 14 | 11 | |
| Agree | 33 | 41 | 24 | 30 | |
| Strongly Agree | 20 | 24 | 34 | 37 | |
| Intervening or reporting such behavior can help reduce harm to the victim | | | | | |
| 0.4864 | | | | | |
| Strongly Disagree | 3 | 1 | 3 | 0 | |
| Disagree | 3 | 6 | 6 | 5 | |
| Neutral | 16 | 7 | 13 | 14 | |
| Agree | 26 | 35 | 34 | 32 | |
| Strongly Agree | 32 | 31 | 24 | 29 | |

| | | | | | |
|---|----|----|----|----|-------|
| The person being targeted may have done something to provoke this situation | | | | | 0.000 |
| Strongly Disagree | 9 | 5 | 6 | 15 | |
| Disagree | 12 | 14 | 3 | 25 | |
| Neutral | 20 | 28 | 18 | 24 | |
| Agree | 29 | 19 | 33 | 14 | |
| Strongly Agree | 10 | 14 | 20 | 2 | |
| This situation made me feel angry or disturbed about how people behave online | | | | | 0.403 |
| Strongly Disagree | 3 | 1 | 4 | 3 | |
| Disagree | 1 | 2 | 2 | 4 | |
| Neutral | 15 | 22 | 17 | 15 | |
| Agree | 28 | 37 | 36 | 35 | |
| Strongly Agree | 33 | 18 | 21 | 23 | |

The table presents participants’ responses to various perception- and attitude-based statements related to online harassment across the four experimental conditions: Video Simulation (Experiment 1), News Article Simulation (Experiment 2), Infographic Simulation (Experiment 3), and Chat Screenshot Simulation (Experiment 4). A chi-square test was conducted to determine whether differences in responses across the four simulations were statistically significant. A p-value less than 0.05 indicates a statistically significant difference, whereas a p-value greater than 0.05 indicates a non-significant difference.

For the statement, “I felt concerned or upset for the person being targeted in this situation,” the majority of participants across all simulations selected either “Agree” or “Strongly Agree,” indicating high levels of empathy toward the victim. The obtained p-value was 0.0047, which is less than 0.05, suggesting that the differences in emotional concern across the four experimental conditions were statistically significant. Regarding the statement, “This situation shows that online harassment can cause serious emotional or psychological harm,” most participants strongly acknowledged the harmful impact of online harassment, particularly in the Video and News Article simulations. The p-value obtained was 0.000, which is far below 0.05, indicating a highly statistically significant difference among the four groups.

For the statement, “If I witnessed a similar situation online, I would feel responsible to intervene or report it,” responses varied considerably across the simulations. While many participants in the Video and Chat Screenshot simulations agreed with the statement, responses in the Infographic simulation were more neutral or disagreeing. The obtained p-value was 0.000, demonstrating a highly statistically significant difference between the experimental groups.

With respect to the statement, “I would be more likely to take action if I saw others intervening,” most participants selected “Agree” or “Strongly Agree,” suggesting that social influence and the behavior of others may encourage intervention in cyber harassment situations. The p-value of 0.0218 is less than 0.05, indicating that the differences in responses across the four simulations were statistically significant.

For the statement, “Intervening or reporting such behavior can help reduce harm to the victim,” participants across all four simulations largely expressed agreement, reflecting a common belief in the effectiveness of intervention. The obtained p-value was 0.4864, which is greater than 0.05, indicating that the differences in responses were statistically non-significant.

Regarding the statement, “The person being targeted may have done something to provoke this situation,” participant opinions differed notably across the four experimental conditions. While some groups showed higher agreement, others predominantly disagreed with victim-blaming attitudes. The p-

value obtained was 0.000, which is significantly below 0.05, indicating a highly statistically significant difference in responses among the groups.

Finally, for the statement, *‘‘This situation made me feel angry or disturbed about how people behave online,’’* the majority of participants across all experiments reported feeling disturbed or angry about online behavior. However, the obtained p-value was 0.403, which is greater than 0.05, indicating that the differences in emotional reactions across the simulations were statistically non-significant.

Overall, the findings reveal that several psychological and behavioral response variables differed significantly across the four simulation formats, particularly those related to empathy, perceived harm, responsibility to intervene, social influence, and victim blaming. However, perceptions regarding the effectiveness of intervention and feelings of anger or disturbance toward online behavior remained relatively consistent across all experimental conditions.

Table 1.3 Empathy (Interpersonal Reactivity Index)

| Category | Video Simulation (Exp 1) | News Article Simulation (Exp 2) | Infographic Simulation (Exp 3) | Chat Screenshot Simulation (Exp 4) | p value |
|---|--------------------------|---------------------------------|--------------------------------|------------------------------------|---------|
| I often feel concerned for people less fortunate than me | | | | | 1.0679 |
| Yes | 65 | 60 | 63 | 61 | |
| No | 15 | 20 | 17 | 19 | |
| Seeing someone being mistreated online makes me feel upset | | | | | 0.0137 |
| Yes | 76 | 73 | 64 | 73 | |
| No | 4 | 7 | 16 | 7 | |
| I can easily imagine how victims of online harassment feel | | | | | 0.0531 |
| Yes | 73 | 61 | 66 | 70 | |
| No | 7 | 19 | 14 | 10 | |
| I tend to care about what happens to others on social media | | | | | 0.3397 |
| Yes | 64 | 60 | 54 | 58 | |
| No | 16 | 20 | 26 | 22 | |

The table presents participants’ responses to empathy-related statements across the four experimental conditions: Video Simulation (Experiment 1), News Article Simulation (Experiment 2), Infographic Simulation (Experiment 3), and Chat Screenshot Simulation (Experiment 4). A chi-square test was conducted to determine whether differences in responses across the four groups were statistically significant. A p-value less than 0.05 indicates a statistically significant difference, while a p-value greater than 0.05 indicates a non-significant difference.

For the statement, *‘‘I often feel concerned for people less fortunate than me,’’* the majority of participants across all four simulations responded ‘‘Yes,’’ indicating generally high levels of empathic concern among participants. The obtained p-value was 1.0679, which is greater than 0.05, suggesting that the differences in responses across the four experimental conditions were statistically non-significant.

Regarding the statement, *‘‘Seeing someone being mistreated online makes me feel upset,’’* an overwhelming majority of participants in all four groups responded affirmatively, reflecting strong emotional sensitivity toward online mistreatment. However, comparatively more participants in the

Infographic Simulation responded “No” than in the other groups. The obtained p-value was 0.0137, which is less than 0.05, indicating that the differences in responses across the simulations were statistically significant.

For the statement, “I can easily imagine how victims of online harassment feel,” most participants across all conditions responded “Yes,” demonstrating a relatively high level of perspective-taking and emotional understanding toward victims of cyber harassment. The obtained p-value was 0.0531, which is slightly above the significance threshold of 0.05. Therefore, the difference in responses across the four simulations was statistically non-significant, although the result approached significance.

With respect to the statement, “I tend to care about what happens to others on social media,” a majority of participants in all experimental groups reported concern for others on social media platforms. The p-value obtained was 0.3397, which is greater than 0.05, indicating that the differences in responses across the four simulations were statistically non-significant.

Overall, the findings suggest that participants across all four experimental conditions demonstrated generally high levels of empathy and concern toward others, particularly in relation to online mistreatment and harassment. Among the empathy-related variables, only emotional upset in response to witnessing online mistreatment showed a statistically significant difference across the four simulations, while the remaining variables did not differ significantly between groups.

Table 1.4 Online Self-Efficacy

| Category | Video Simulation (Exp 1) | News Article Simulation (Exp 2) | Infographic Simulation (Exp 3) | Chat Screenshot Simulation (Exp 4) | p value |
|--|--------------------------|---------------------------------|--------------------------------|------------------------------------|---------|
| I know how to report harmful or abusive content online | | | | | 0.7803 |
| Strongly Disagree | 7 | 7 | 4 | 4 | |
| Disagree | 5 | 7 | 6 | 4 | |
| Neutral | 17 | 10 | 15 | 21 | |
| Agree | 30 | 36 | 32 | 34 | |
| Strongly Agree | 21 | 20 | 23 | 17 | |
| I feel confident using tools to protect myself and others online | | | | | 0.768 |
| Strongly Disagree | 2 | 1 | 1 | 1 | |
| Disagree | 6 | 6 | 5 | 3 | |
| Neutral | 16 | 17 | 19 | 19 | |
| Agree | 26 | 38 | 31 | 36 | |
| Strongly Agree | 30 | 18 | 24 | 21 | |
| I can handle conflict or negative comments calmly | | | | | 0.0264 |
| Strongly Disagree | 6 | 3 | 1 | 2 | |
| Disagree | 10 | 5 | 5 | 3 | |
| Neutral | 17 | 29 | 22 | 25 | |
| Agree | 28 | 32 | 25 | 36 | |
| Strongly Agree | 19 | 11 | 27 | 14 | |
| I know where to seek help if I see someone being harassed | | | | | 0.000 |

| | | | | | |
|-------------------|----|----|----|----|--|
| Strongly Disagree | 3 | 20 | 2 | 2 | |
| Disagree | 5 | 4 | 5 | 10 | |
| Neutral | 11 | 12 | 17 | 22 | |
| Agree | 33 | 42 | 30 | 31 | |
| Strongly Agree | 28 | 20 | 26 | 15 | |

The table presents participants’ responses to statements related to online self-efficacy and confidence in handling cyber harassment situations across the four experimental conditions: Video Simulation (Experiment 1), News Article Simulation (Experiment 2), Infographic Simulation (Experiment 3), and Chat Screenshot Simulation (Experiment 4). A chi-square test was conducted to determine whether differences in responses among the four groups were statistically significant. A p-value less than 0.05 indicates a statistically significant difference, whereas a p-value greater than 0.05 indicates a non-significant difference.

For the statement, *‘‘I know how to report harmful or abusive content online,’’* the majority of participants across all four simulations selected either ‘‘Agree’’ or ‘‘Strongly Agree,’’ suggesting that most participants were aware of reporting mechanisms available on online platforms. The obtained p-value was 0.7803, which is greater than 0.05, indicating that the differences in responses across the four experimental conditions were statistically non-significant.

Regarding the statement, *‘‘I feel confident using tools to protect myself and others online,’’* most participants again responded positively, with ‘‘Agree’’ and ‘‘Strongly Agree’’ being the most frequently selected responses across all simulations. The obtained p-value was 0.768, which is greater than 0.05, demonstrating that the differences in confidence levels across the four groups were statistically non-significant.

For the statement, *‘‘I can handle conflict or negative comments calmly,’’* participant responses showed greater variation across the simulations. While many participants in the Chat Screenshot and News Article simulations selected ‘‘Agree,’’ a comparatively higher number of participants in the Video Simulation selected ‘‘Disagree’’ or ‘‘Strongly Disagree.’’ The obtained p-value was 0.0264, which is less than 0.05, indicating that the differences in responses across the four experimental conditions were statistically significant.

With respect to the statement, *‘‘I know where to seek help if I see someone being harassed,’’* most participants across the simulations selected ‘‘Agree’’ or ‘‘Strongly Agree.’’ However, notable variation was observed, particularly in the News Article Simulation, where a larger number of participants selected ‘‘Strongly Disagree.’’ The obtained p-value was 0.000, which is far below 0.05, indicating a highly statistically significant difference in responses among the four experimental groups.

Overall, the findings suggest that participants generally demonstrated moderate to high levels of online self-efficacy and awareness regarding protective online behaviors. However, statistically significant differences were observed in participants’ perceived ability to handle online conflict calmly and their awareness of where to seek help in harassment situations, while knowledge of reporting harmful content and confidence in using online safety tools remained relatively consistent across all four experimental conditions.

Table 1.5 Past Behavior

| Category | Video Simulation (Exp 1) | News Article Simulation (Exp 2) | Infographic Simulation (Exp 3) | Chat Screenshot Simulation (Exp 4) | P value |
|--|--------------------------|---------------------------------|--------------------------------|------------------------------------|---------|
| Have you ever witnessed an online harassment? | | | | | 0.5507 |
| Yes | 26 | 26 | 32 | 27 | |
| No | 52 | 47 | 45 | 49 | |
| Prefer not to say | 2 | 7 | 3 | 4 | |
| Have you ever intervened in such situations? | | | | | 0.2328 |
| Yes | 20 | 13 | 24 | 19 | |
| No | 60 | 67 | 56 | 61 | |
| Have you ever intervened in an online harassment case? | | | | | 0.0813 |
| Yes | 26 | 27 | 40 | 34 | |
| No | 54 | 53 | 40 | 46 | |
| If yes, what kind of action did you take? | | | | | 0.7328 |
| Reported the post | 32 | 39 | 48 | 35 | |
| Supported the victim | 17 | 11 | 14 | 17 | |
| Confronted the harasser | 8 | 9 | 7 | 6 | |
| Other | 8 | 8 | 5 | 7 | |

The table presents participants’ previous experiences and behavioral responses related to online harassment across the four experimental conditions: Video Simulation (Experiment 1), News Article Simulation (Experiment 2), Infographic Simulation (Experiment 3), and Chat Screenshot Simulation (Experiment 4). A chi-square test was conducted to determine whether differences in responses across the four groups were statistically significant. A p-value less than 0.05 indicates a statistically significant difference, whereas a p-value greater than 0.05 indicates a non-significant difference.

For the question, *‘‘Have you ever witnessed online harassment?’’* the majority of participants across all four simulations reported that they had not witnessed online harassment, while a smaller proportion indicated that they had witnessed such incidents. A very limited number of participants selected ‘‘Prefer not to say.’’ The obtained p-value was 0.5507, which is greater than 0.05, indicating that the differences in responses across the four experimental conditions were statistically non-significant.

Regarding the question, *‘‘Have you ever intervened in such situations?’’* most participants across all four groups reported that they had not intervened in online harassment situations, whereas fewer participants indicated prior intervention experience. The obtained p-value was 0.2328, which is greater than 0.05, demonstrating that the variation in intervention behavior across the four simulations was statistically non-significant.

For the question, *‘‘Have you ever intervened in an online harassment case?’’* a greater proportion of participants in the Infographic and Chat Screenshot simulations reported prior intervention experience compared to the Video and News Article simulations. However, the obtained p-value was 0.0813, which

is slightly above the significance threshold of 0.05. Therefore, the differences in responses across the four groups were statistically non-significant, although the result approached significance.

With respect to the question, *‘‘If yes, what kind of action did you take?’’* reporting the post emerged as the most common form of intervention across all experimental conditions, followed by supporting the victim, confronting the harasser, and other forms of action. The obtained p-value was 0.7328, which is greater than 0.05, indicating that the differences in the type of intervention actions taken across the four simulations were statistically non-significant.

Overall, the findings suggest that participants across all four experimental conditions demonstrated relatively similar past experiences and intervention behaviors related to online harassment. None of the variables showed statistically significant differences across the groups, indicating a generally comparable pattern of prior exposure to and involvement in online harassment situations among participants.

Table 1.6 Perceived Social Norms

| Category | Video Simulation (Exp 1) | News Article Simulation (Exp 2) | Infographic Simulation (Exp 3) | Chat Screenshot Simulation (Exp 4) | P value |
|---|--------------------------|---------------------------------|--------------------------------|------------------------------------|---------|
| Most people I know would support someone being harassed online | | | | | 0.1984 |
| Yes | 46 | 42 | 53 | 53 | |
| No | 34 | 38 | 27 | 27 | |
| My friends think it’s important to speak up against online harassment | | | | | 0.1904 |
| Yes | 76 | 69 | 68 | 71 | |
| No | 4 | 11 | 12 | 9 | |

The table presents participants’ perceptions of social norms and peer attitudes regarding online harassment across the four experimental conditions: Video Simulation (Experiment 1), News Article Simulation (Experiment 2), Infographic Simulation (Experiment 3), and Chat Screenshot Simulation (Experiment 4). A chi-square test was conducted to determine whether differences in responses across the four groups were statistically significant. A p-value less than 0.05 indicates a statistically significant difference, whereas a p-value greater than 0.05 indicates a non-significant difference.

For the statement, *‘‘Most people I know would support someone being harassed online,’’* responses varied across the four simulations, with a greater number of participants in the Infographic and Chat Screenshot simulations responding ‘‘Yes’’ compared to the other groups. However, the obtained p-value was 0.1984, which is greater than 0.05, indicating that the differences in responses across the four experimental conditions were statistically non-significant.

Regarding the statement, *‘‘My friends think it’s important to speak up against online harassment,’’* an overwhelming majority of participants across all four simulations responded ‘‘Yes,’’ reflecting generally supportive peer attitudes toward intervening against cyber harassment. The obtained p-value was 0.1904, which is greater than 0.05, demonstrating that the differences in responses among the four groups were statistically non-significant.

Overall, the findings suggest that participants across all four experimental conditions perceived relatively similar social norms regarding online harassment and intervention behavior. Since all p-values were greater than 0.05, none of the variables showed statistically significant differences across the groups, indicating comparable perceptions of peer attitudes and social expectations among participants.

Conclusion

This research shows that online harassment bystander intervention may depend on stimulus modality and psychological characteristics of the individual. In particular, videos and chat messages generated more emotional responses, more perceived responsibility by the public, and less victim-blaming (meaning that videos and chat messages are better at making people believe authorities should take action) than indirect formats. Although participants demonstrated high levels of empathy and bystander awareness, the gap between desired intervention and actual intervention remains, said Ruvalcaba – a phenomenon that highlights the ongoing prevalence of the bystander effect. It was also seen that social norms and online self-efficacy further influenced the willingness to intervene. In summary, the results suggest stimulus design and psychological readiness are key factors in enacting active bystander behaviour online.

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References

1. Latané B., Darley J.M., *The Unresponsive Bystander: Why Doesn't He Help?*, Appleton-Century Crofts, 1970.
2. Ajzen I., *The Theory of Planned Behavior*, *Organizational Behavior and Human Decision Processes*, 1991, 50 (2), 179–211.
3. Batson C.D., *The Altruism Question: Toward a Social-Psychological Answer*, Lawrence Erlbaum Associates, 1991.
4. Suler J., *The Online Disinhibition Effect*, *CyberPsychology and Behavior*, 2004, 7 (3), 321–326.
5. Wright M.F., Wachs S., *Bystander Self-Efficacy and Empathy in Bullying Intervention*, *Cyberpsychology: Journal of Psychosocial Research on Cyberspace*, 2019, 13 (1).
6. Patchin J.W., Hinduja S., *Cyberbullying and Online Harassment: Reconceptualizing the Role of Bystanders*, *Journal of School Violence*, 2018, 17 (4), 1–15.

7. Barlińska J., Szuster A., Winiewski M., Cyberbullying Among Adolescents: Role of Empathy and Moral Disengagement, *Computers in Human Behavior*, 2013, 29 (6), 2358–2365.
8. Machackova H., Pfetsch J., Bystanders' Responses to Online Aggression: The Role of Empathy and Normative Beliefs, *Telematics and Informatics*, 2016, 33 (3), 872–882.
9. Kowalski R.M., Limber S.P., Agatston P.W., *Cyberbullying: Bullying in the Digital Age*, Wiley-Blackwell, 2012.
10. Slonje R., Smith P.K., Frisé A., The Nature of Cyberbullying and Strategies for Prevention, *Computers in Human Behavior*, 2013, 29 (1), 26–32.
11. Schultze-Krumbholz A., Scheithauer H., Social-Behavioral Correlates of Cyberbullying in a German Student Sample, *Journal of Psychology*, 2009, 217 (4), 224–226.
12. Brewer G., Kerslake J., Cyberbullying, Self-Esteem, Empathy and Loneliness, *Computers in Human Behavior*, 2015, 48, 255–260.
13. DeSmet A., Bastiaensens S., Van Cleemput K., Vandebosch H., De Bourdeaudhuij I., Deciding Whether to Intervene in Cyberbullying: The Role of Empathy and Perceived Norms, *Cyberpsychology, Behavior, and Social Networking*, 2016, 19 (11), 1–7.
14. Obermaier M., Schmuck D., Bystander Intervention in Cyberbullying: The Role of Responsibility and Anonymity, *Computers in Human Behavior*, 2019, 93, 82–90.
15. Meter D.J., Bauman S., Moral Disengagement and Cyberbullying: The Role of Parental Monitoring, *Journal of Youth and Adolescence*, 2018, 47 (6), 1239–1251.
16. Allison K.R., Bussey K., Individual and Collective Moral Influences on Cyberbullying Intervention, *Computers in Human Behavior*, 2016, 63, 7–15.
17. Erreygers S., Pabian S., Vandebosch H., Baillien E., Helping Behavior Among Adolescent Bystanders of Cyberbullying, *Learning and Individual Differences*, 2016, 48, 61–67.
18. Bastiaensens S., Vandebosch H., Poels K., The Effect of Anonymity on Cyberbullying Behavior: The Role of Perceived Norms, *Computers in Human Behavior*, 2014, 38, 1–9.
19. Festl R., Quandt T., Social Relations and Cyberbullying: The Influence of Social Support and Norms, *Journal of Youth and Adolescence*, 2013, 42 (10), 1463–1476.
20. Hinduja S., Patchin J.W., *Bullying Beyond the Schoolyard: Preventing and Responding to Cyberbullying*, Sage Publications, 2015.