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Safer Viewing: A Study of Secondary Trauma Mitigation Techniques in Open Source Investigations

ELISE BAKER, ERIC STOVER, ROHINI HAAR, ANDREA LAMPROS, AND ALEXA KOENIG

Abstract

Human rights investigators often review graphic imagery of potential war crimes and human rights abuses while conducting open source investigations. As a result, they are at risk of developing secondary trauma, a condition that can produce a range of cognitive and behavioral consequences, including elevated anxiety and distress, depression, and post-traumatic stress disorder. Human rights organizations have traditionally been slow to recognize the risk of secondary trauma. However, in recent years, several university programs offering students practical experience in open source human rights investigations have implemented training on secondary trauma mitigation. We administered a survey to students in these programs to determine whether they are implementing recommended mitigation techniques and to document what techniques they find helpful. From 33 responses, we identified six general practices as helping mitigate secondary trauma: processing graphic content, limiting exposure to graphic content, drawing boundaries between personal life and investigations, bringing positivity into investigations, learning from more experienced investigators, and employing a combination of techniques. We also identified recommendations for institutions to protect the right to health of investigators and to support secondary trauma mitigation, both through frequent training and through practices such as labeling graphic content and emphasizing self-care. The article concludes with areas for future research.

Elise Baker is a JD candidate at the University of California, Berkeley, School of Law, USA.

Eric Stover is Faculty Director of the Human Rights Center and Adjunct Professor of Law and Public Health at the University of California, Berkeley, USA.

Rohini Haar, MD, MPH, is Lecturer in the Division of Epidemiology and Biostatistics, School of Public Health at the University of California, Berkeley, USA.

Andrea Lampros, MJ, is Associate Director of the Human Rights Center and Resiliency Manager of the Human Rights Investigations Lab at the University of California, Berkeley, USA.

Alexa Koenig, JD, MA, PhD, is Executive Director of the Human Rights Center and Lecturer-in-Residence at the University of California, Berkeley, School of Law, USA.

Please address correspondence to Elise Baker. Email: elise_baker@berkeley.edu.

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Introduction

As technology improves and social media platforms grow, people living in conflict zones are increasingly posting video and photographic documentation of human rights violations online. This audio and visual documentation allows investigators to view events they were never physically present for and to study footage of these events from multiple viewpoints. With audio-visual documentation, investigators can independently verify suspected human rights violations or war crimes by geolocating footage, ascertaining approximate time and date, identifying perpetrators and weapons, and confirming casualties and physical destruction. This process of identifying, collecting, and analyzing open source information—information that is publicly available and attainable by anyone—is known as "open source investigation."[1]

In recent years, international tribunals, United Nations bodies, and nongovernmental human rights organizations—ranging from large groups such as Amnesty International (Amnesty) to smaller groups such as the Syrian Archive—have assigned individual staff members or entire teams to conduct digital open source investigations.[2] Today, Amnesty maintains one of the largest open source investigation programs, known as the Digital Verification Corps (DVC). Established in 2016, the DVC comprises more than 100 student volunteers from the University of California, Berkeley (UC Berkeley); University of Cambridge; University of Essex; University of Hong Kong; University of Pretoria; and University of Toronto. Students receive training in open source investigation and verification methods and assist Amnesty researchers in monitoring and documenting human rights violations.[3]

Digital open source investigators scour the internet for information relevant to their investigations. They source information from blogs and websites; reports and other digital documents; user-generated content; digital photographs, videos, and audio recordings; satellite imagery, maps, and geospatial data; and information contained in internet archives and databases. While this audio-visual documentation may be a goldmine of information, it can also serve as a trigger for secondary trauma. Witnessing traumatic events on screens poses mental health risks, as the American Psychiatric Association has recognized.[4] Digital open source human rights investigators are only beginning to recognize the scope of these risks and how to mitigate them.

Background

Secondary trauma refers to a range of trauma-related stress reactions and symptoms that may result from exposure to graphic details of another individual's traumatic experience. There is no single, agreed-on definition of secondary trauma, and the Diagnostic and Statistical Manual of Mental Disorders does not define or discuss secondary trauma, vicarious traumatization, compassion fatigue, or other related terms. The term "secondary trauma" is used broadly in this paper to encompass a range of cognitive and behavioral changes one may experience from indirect trauma exposure.[5]

The cognitive and behavioral changes that can result from secondary trauma include elevated levels of anxiety and distress, depression, post-traumatic stress disorder (PTSD), sub-threshold PTSD (multiple symptoms of PTSD that do not rise to levels sufficient for a PTSD diagnosis), and fundamental changes to world views.[6] According to Sam Dubberley, the head of Amnesty's DVC, secondary trauma can lead to "changes in social and occupational functioning or to thoughts of harming oneself or others. All of these changes are cause for concern, and thoughts of harm should prompt an investigator to seek immediate support."[7]

Studies have found high rates of secondary trauma in psychologists and other helping professions, such as police, emergency medical workers, crisis workers, and religious leaders.[8] While there is comparatively less literature on secondary trauma in the human rights field, this area of study has grown in the past five years. In 2015, two studies on mental health and well-being in the human rights field were published. An online survey-based study examined rates of depression, PTSD, and sub-threshold PTSD among human rights workers and found that 19.4% of respondents met PTSD

criteria, 18.8% met criteria for subthreshold PTSD, and 14.7% indicated probable major depression.[9] An interview-based study examining mental health effects of traumatic content on human rights workers and journalists found that 44% of human rights and humanitarian respondents reported high or very high "personal adverse effects"—feelings of isolation, flashbacks, nightmares, and other stress-related symptoms—as a result of their work, while 25% reported high or very high "professional adverse effects."[10] Three recent studies have also examined occupational and personal factors that affect one's ability to mitigate the negative mental health impacts of traumatic content, as well as human rights organizations' responses to mental health and well-being needs.[11]

These studies have identified potential risk factors for secondary trauma and recommended a range of techniques to help mitigate these risks. Recommendations include strategies for reviewing content, such as working in groups or next to colleagues, taking breaks, not working late at night, prohibiting work from bleeding into personal life, and limiting exposure to graphic images and sounds.[12] Recommended community support techniques include talking about work with colleagues, supervisors, family, friends, and counselors; bonding with colleagues outside of work; and reflecting on the impact and positive aspects of work.[13] Recommended self-care practices include meditation and mindfulness, regular exercise, adequate sleep, and limited exposure to graphic or disturbing materials outside of work.[14]

However, until now, no study has assessed whether these mitigation techniques are effective in preventing the onset of secondary trauma. To fill this gap, we designed this study to identify what mitigation techniques open source investigators self-report as useful or unproductive, and why. Our hope is that this study can contribute to improving health outcomes for human rights researchers who put their health at risk to carry out their work.

Methodology

We developed a survey to examine the perceived efficacy of secondary trauma mitigation techniques recommended by previous studies. The primary goal of this study was to see whether investigators were implementing the training they had received on secondary trauma, and to understand what they found helpful, what they found unproductive, and why. The broader purpose of this research is to improve and ensure the protection of human rights researchers' own health and human rights. The study was designed to be a preliminary study on perceived efficacy, which could pave the way for future empirical research on the efficacy of mitigation techniques. The study did not seek to identify rates of secondary trauma among respondents.

The survey was sent to students who had participated for at least one semester in a digital open source human rights investigation program at UC Berkeley, University of Cambridge, University of Essex, University of Hong Kong, University of Pretoria, or University of Toronto. These university programs provide students with an opportunity to work on open source human rights investigations with Amnesty's DVC and other clients.[15] The programs all also instruct students on mitigation techniques to reduce the risk of developing secondary trauma, teach students to recognize signs of secondary trauma, and provide resources on how to cope with traumatic content.[16]

Between August and October 2019, we used an online tool to conduct our survey. Students were asked 46 questions covering the training they had received on secondary trauma mitigation and whether they found certain techniques helpful. Questions were based on mitigation techniques identified in literature on secondary trauma in the human rights field, discussed above, and recommended in trainings students received. The survey produced quantitative data from yes/no responses to questions about whether students employed a certain technique. It also produced qualitative data from open-ended questions about why students found a certain migration technique useful or unproductive. The authors can provide the survey upon request.

Quantitative survey data were analyzed in Excel to provide demographic statistics. Qualitative

survey data were analyzed using a conceptual content analysis approach. Concepts to code for were identified based on quantitative survey results and through an iterative process of reading open-ended survey responses. Concepts were coded for frequency and for both explicit and implicit references.

The Committee for the Protection of Human Subjects at UC Berkeley approved this study on June 28, 2019, under protocol number 2019-03-12007.

Results

Out of approximately 160 students who received the survey link, 33 responded. Twenty-six respondents were from UC Berkeley, three from University of Toronto, two from University of Pretoria, one from University of Cambridge, one from University of Essex, and none from University of Hong Kong. Twenty-two respondents identified as female, 10 as male, and one as non-binary. The average age of respondents was 23.4 years, with the youngest being 19 and the oldest being 48. Respondents had spent between one and seven semesters with their university's open source investigation program, while the average number of semesters was 2.7.

The study examined three categories of secondary trauma mitigation techniques: (1) strategies for reviewing content, (2) community support techniques, and (3) self-care practices. In general, respondents said they were more inclined to implement strategies for reviewing content than to seek community support or implement self-care practices. Quantitative and qualitative data on each of the three categories are discussed in detail below.

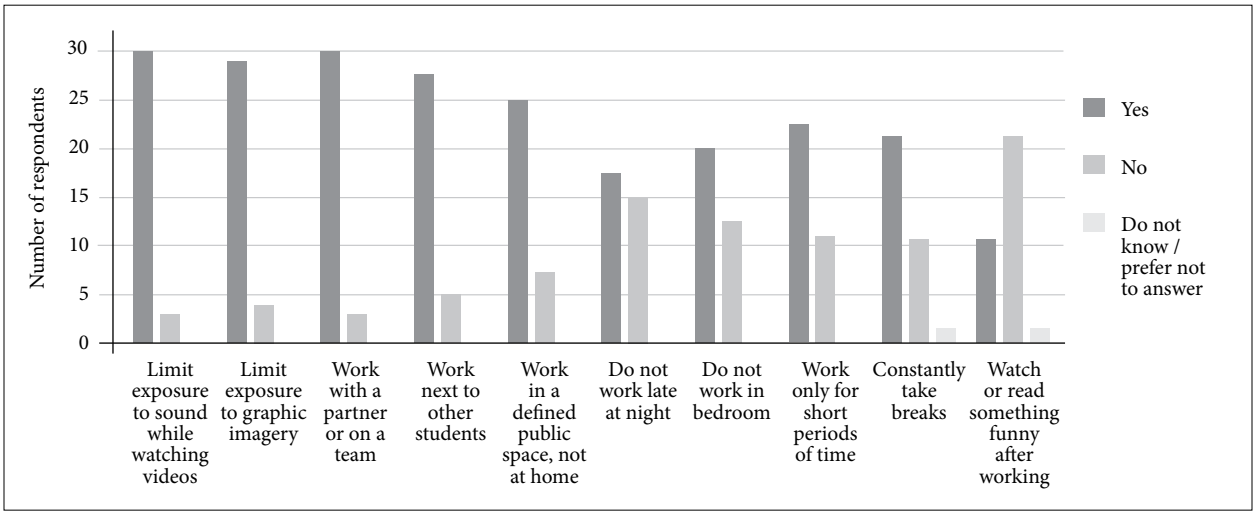
Strategies for reviewing content

The survey asked students about 10 strategies for reviewing graphic or potentially traumatic content. Nine of the strategies were implemented by a majority of respondents, while one strategy was less frequently implemented. Figure 1 illustrates responses for all 10 strategies.

Two questions focused on limiting exposure to potentially traumatic content. The majority of respondents (n=30, or 90.9%) said they followed the recommendation of limiting exposure to sound while watching graphic videos. Many respondents explained that turning off sound helped reduce the emotive impact of graphic content and that they muted videos unless they were actively listening to audio for verification purposes. One respondent added that sound was more "stimulating" than visual content, as it had the effect of making it "seem like you're there at the moment of the video." Some respondents added that they listened to music while they worked, rather than listening to the audio content.

The majority of respondents (n=29, or 87.9%) also said they followed the recommendation of limiting exposure to graphic imagery, such as by avoiding unnecessary exposure, minimizing win-

FIGURE 1. Strategies for reviewing content



dows with graphic imagery, and reducing the size of graphic images on screens. Many respondents said that reducing the display size of graphic content helped limit its impact, as did focusing on the corner of an image and using peripheral vision to assess content. Some respondents also said they reduced overall exposure to graphic content by stopping videos before graphic content appeared or by watching graphic content only when "absolutely necessary." One respondent said that limiting overall exposure to graphic content helped keep her in the right "frame of mind." Another respondent stressed the importance of labeling graphic content in advance, as it would limit surprise and allow investigators to "steer clear" of extremely graphic material. Similarly, one respondent said she clicked through individual frames before watching a video so as to prepare herself in advance of viewing disturbing images.

However, some respondents said they did not limit exposure to sound (n=3, or 9.1%) or graphic imagery (n=4, or 12.1%) because doing so was not always possible. Audio content can have valuable information that contextualizes images and can thus be important to listen to. Oftentimes it is also necessary to view images in full resolution in order to identify landmarks for geolocation and obtain other "vital information" for verification. One respondent said it was particularly difficult to avoid graphic content while doing discovery (searching for documentation online) but that he would prepare himself in advance to reduce the surprise of encountering graphic content.

Three questions asked respondents about techniques relating to where and with whom they conducted human rights investigations. The majority of respondents said they implemented recommendations of working with a partner or team (n=30, or 90.9%), working next to other students (n=28, or 84.8%), and working in public spaces around other people (n=25, or 75.8%). Respondents explained that working in groups or next to others created a sense of community and offered opportunities to discuss material, which helped with processing content. Others explained that having someone next to them was helpful, even if they were not collaborating, as it made them realize they were not alone. Working with a partner also helped "distance" themselves from the "immediacy" and "shock" of graphic content. Others stressed the importance of having a designated physical space to work in with others, with one stating, "when we leave, we leave the work in the room."

However, some respondents said they did not work with a partner or team (n=3, or 9.1%), work next to other students (n=5, or 15.2%), or work in public spaces around other people (n=8, or 24.2%). Some explained that they did not find these recommendations helpful, as working next to others could be counter-productive or distracting. Others said that practical challenges, such as scheduling conflicts, prevented them from implementing these recommendations. Some respondents discussed strategies they employed to mitigate the risks of working alone, when forced to do so. For example, one respondent would set a timer and announce, "Ok, I'm starting to work on [project name] now, I'll stop in X hours." The respondent explained that the verbal and auditory signals helped set boundaries—when the timer went off, the work was over. One respondent also expressed concern over the risks associated with working in public—public internet connections may be insecure, and working in public can unnecessarily expose others to graphic content.

Two survey questions focused on recommendations to not let work bleed into personal lives. The majority of respondents said they followed recommendations of not working late at night (n=18, or 54.5%) and not doing work in their bedroom (n=20, or 60.6%). In explaining why they found these recommendations useful, respondents emphasized the need to separate their "investigative life" from their "private life." Respondents stressed the importance of dissociating their work from their home life, as they did not want to associate it with traumatic material that could potentially consume their lives. One respondent said that while the separation of work and home was important when working on graphic content, it was less important when looking at non-graphic content such as corporate documents.

However, a significant minority of respondents

said they did work late at night (n=15, or 45.5%) and in their bedroom (n=13, or 39.4%), largely because of practical considerations. Deadlines could force people to work late into the night, especially students, whose daytime hours are often filled with classes and other obligations. The lack of a defined workspace for students also posed challenges. One respondent explained that she worked in her bedroom because she lived far from campus. Another respondent lived in a one-room apartment and had no choice but to work in the bedroom. Four respondents said they worked late at night only if they took additional precautions such as making sure they were not particularly tired, leaving time to unwind before going to bed, and working with someone else.

Regarding the length of time students worked on investigations, the majority of respondents said they worked only for short periods of time (n=22, or 66.7%) and regularly took breaks (n=21, or 63.6%). Several respondents said these practices helped them avoid getting "bogged down" watching graphic content and helped reduce stress. However, a significant minority of respondents said they did not follow recommendations to work only for short periods of time (n=11, or 33.3%) or to regularly take breaks (n=11, or 33.3%). Some respondents explained that they got "caught up in" or "lost in" the work and simply forgot to take breaks. Others explained that working for short periods of time or taking breaks was less productive, as it made them less engaged and caused them to lose their train of thought.

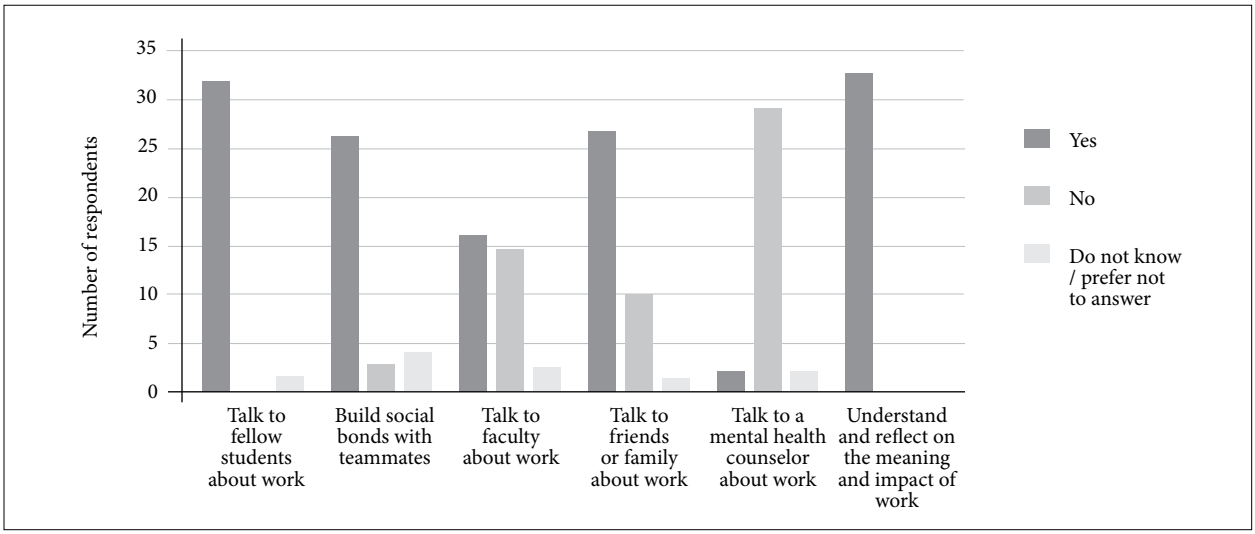
A majority of respondents (n=21, or 63.6%) said they did not use distraction techniques, such as reading or watching something funny after working or during breaks. Two respondents explained why. One said that interrupting investigations with social media or funny content risked collapsing leisure activities with "hard or mundane" investigations work; scrolling through Facebook for fun, after scrolling through Facebook for investigative content, risked emotionally conflating the two activities and rendering Facebook unenjoyable in personal life. Another respondent explained she did not want to use mindless content to dissociate from the work, as she did not want to trivialize the people who had suffered from a terrible event.

Community support techniques

The survey asked students about six community support techniques for mitigating the risk of secondary trauma. Three techniques were reported as popularly implemented, while two had mixed implementation, and one had rare implementation. Figure 2 illustrates responses for all six techniques.

Two survey questions focused on team-building and social bonds among teams. The vast

FIGURE 2. Community support techniques



majority of respondents (n=32, or 97.0%) said they followed recommendations of talking to fellow students about their work. Many explained that this helped them process information, provided relief, and reassured them of the importance of their work. Many respondents further explained that talking to teammates helped create a sense of understanding, trust, and empathy. Some respondents said that talking with teammates brought positivity and humor to their work, which helped create a more lighthearted work atmosphere. This was particularly true when speaking with team leaders or more experienced students who could provide additional insight and new perspectives. Some respondents noted that discussing graphic content and mental well-being with team members was useful, as it reduced feelings of being alone. Some respondents recommended having structured resiliency check-ins within teams. One respondent said that bringing snacks to team meetings helped facilitate bonds, as it became a collaborative effort and helped make meetings "fun," even if the work was hard.

The majority of respondents (n=26, or 78.8%) said they followed the recommendation of building social bonds with teammates outside of work. This practice helped facilitate better collaboration, improved team support, fostered a collective sense of progress, and prompted reflection on the purpose of their work. Some respondents said that building friendships with teammates helped them look forward to team meetings, as they were like "getting together with friends to work on something important." This made graphic content "easier to bear" and reduced feelings of being alone.

About half of respondents (n=16, or 48.5%) said they implemented the recommendation of talking to faculty about their work. Two respondents said they found it particularly helpful to talk to professionals about resiliency, as hearing about real-world experiences helped drive home the importance of self-care. However, half of respondents (n=15, or 45.5%) said they did not talk to faculty. One respondent explained that while they would have liked to talk to faculty more, it was difficult finding time to connect.

A majority of respondents (n=22, or 66.7%) said they talked to friends or family about their work, while a significant minority (n=10, or 30.3%) said they avoided doing so as they believed their family and friends would not understand their work. One respondent added that discussing traumatic content with family and friends was not useful, as their displays of shock, horror, and dismay were more "performative" than empathetic. Some respondents explained they could not talk to family and friends about their work because of its confidential nature.

The vast majority of respondents (n=29, or 87.9%) said they did not talk to a professional mental health counselor about their work. In explaining why, many respondents said they remained resilient using other mitigation techniques and did not need professional help. Some respondents viewed counseling as a last resort, saying they had not sought mental health care because they had not experienced any "serious traumatic episodes." One respondent added that wait times for accessing mental health care posed an additional barrier. Only two respondents (n=2, or 6.1%) said they spoke to a professional counselor about their work. Two respondents explained they previously did not feel a need to talk to a professional but had recently changed their minds.

All respondents (n=33, or 100%) said they followed the recommendation of reflecting on the meaning of their work. Many respondents explained that reflection helped motivate them to continue, even when work was difficult. One respondent added that reflection helped reduce feelings of being overwhelmed by the large amount of content she had to work though. One respondent explained that reflection was an important ethical practice, while another said she found it helpful to receive explicit thanks or congratulations for her work.

Self-care practices

The last category of mitigation techniques was self-care practices to reduce the risk of secondary trauma. Although implemented by many respondents, this set of mitigation techniques was the least popular. Figure 3 illustrates responses for the four

self-care practices that students were asked about.

Three survey questions focused on self-care practices that students would engage in when working with graphic content. Roughly half of respondents said they meditated or practiced mindfulness (n=15, or 45.5%), exercised (n=18, or 54.5%), and slept more (n=19, or 57.6%). Some respondents explained that meditation helped center them, cleared their minds, and reduced anxiety. Respondents also said that sleep and exercise helped increase energy levels. However, roughly half of respondents said they did not meditate or practice mindfulness (n=18, or 54.5%), exercise (n=14, or 42.4%), or sleep more (n=14, or 42.4%), explaining that they did not have enough time or did not find these practices useful. On meditation in particular, some respondents remarked that they had not found it useful, as it stressed them out or they could not stop their mind from wandering. One respondent said that sleeping more felt unproductive, while another found exercise too stressful.

The final survey question asked if respondents limited exposure to sad or graphic content outside of work. Roughly half (n=17, or 51.5%) said they implemented this recommendation. Some respondents explained that continuous exposure to graphic content outside of work could increase the risk of secondary trauma during work, and they consciously limited exposure to graphic media, films, and other content outside work. One respondent noted that after starting to work on human rights investigations, media coverage of war or violence evoked stronger emotions than it had previously.

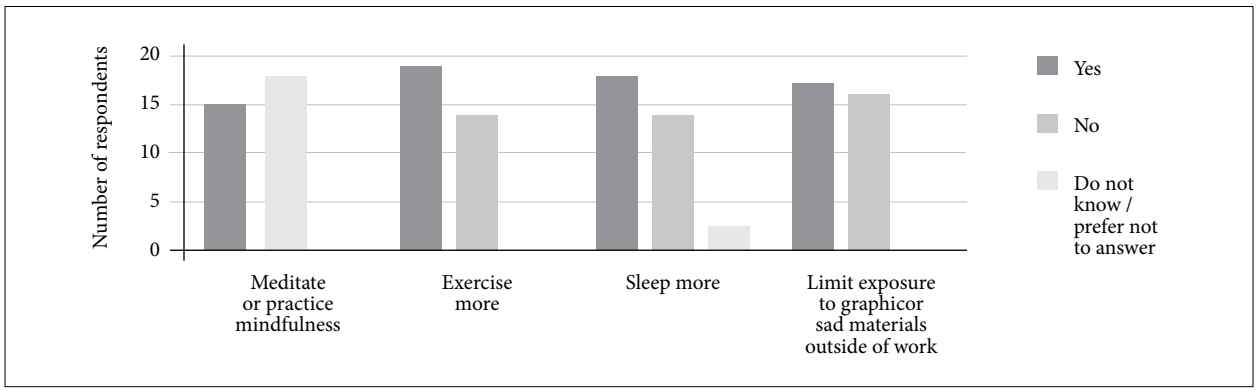
However, roughly half of respondents (n=16, or 48.5%) said they did not limit exposure to sad or graphic content outside of work. Many respondents explained that they conducted human rights investigations because they cared about current events and human rights issues, and they did not want to limit consumption of this information and feel less connected to these issues. Some respondents said they found it important to read the news and remain aware of events happening outside their work. Some respondents also explained that it was not practical to limit exposure to sad or graphic content, as they studied that content in their coursework. However, many respondents said they watched sad or graphic content cautiously and only when "necessary."

When asked whether they took other personal actions to mitigate the risk of secondary trauma, respondents provided a list of activities they found useful. This list included cooking, spending time in nature, playing music, and watching positive and inspiring content. One respondent said she took time to study the culture of the region their team was working on, so as to view those affected by violence as a "whole" rather than reducing them to their "oppression and suffering."

Discussion

Open source human rights investigations, especially those involving graphic content, can be difficult for investigators. However, the survey results demonstrate that investigators are employing

FIGURE 3. Self-care practices



techniques to reduce the impact of graphic content and mitigate the risk of secondary trauma. Overall findings on mitigation techniques are discussed below, focusing on which techniques appear to be most effective and what institutions can do to support investigators.

Successful mitigation techniques

Six general takeaways on mitigation techniques emerged from the study. First, investigators need to process graphic materials and information with individuals who understand the work they do. It is also important that they develop ways of reflecting on the meaning of their work, which, in turn, will help them process graphic material and stay motivated. Working in teams is also critical. Teamwork offers opportunities to discuss challenges that will undoubtedly emerge in an investigation and reduce feelings of isolation. When possible, investigators should also strive to build community with teammates by spending time together on activities separate from their investigations. Many respondents explained that they preferred to process their work with people who shared a common understanding—teammates, faculty, or professionals in the same field—rather than processing with family, friends, or counselors outside of work.

Second, limiting exposure to graphic content is important and can be practiced in numerous ways. Setting limits includes taking breaks, working for shorter periods of time, muting audio, reducing the size of graphic imagery, focusing on the corner of a graphic video, or clicking through video frames to prevent surprisingly graphic content. Many respondents noted that reviewing audio and visual content was more emotionally impactful than reviewing written content, suggesting that exposure to these mediums in particular should be limited. Some respondents also noted the importance of reducing exposure to graphic content in their personal lives.

Third, investigators need to draw boundaries between human rights investigations and their personal lives. Investigators should have access to a distinct physical space for working (for example, a common space or office) to prevent work from bleeding into their personal lives. They should also avoid mixing too much of their personal lives into work and maintain a life outside of their investigations work.

Fourth, it is important to bring positivity into human rights investigations. While investigators need to set boundaries between their private lives and investigative work and respect the dignity of those affected by the violations they are investigating, establishing such a boundary does not mean they should avoid creating a lighthearted working atmosphere with their teammates. Supervisors, in particular, should be aware of the importance of giving positive feedback to investigators by thanking and congratulating them for work completed. Supervisors and investigators alike should learn about the political, social, and cultural lives of the communities affected by the human rights abuses or war crimes they are investigating. This can include inviting individuals from affected communities to speak to a team or having team members give presentations on a community's cultural practices, such as food, musical traditions, or sports activities.

Fifth, investigators need to receive guidance from more experienced human rights investigators and other professionals to gain insight and perspective. Respondents said they found talking with faculty and area experts useful. Equally important was hearing about resiliency from human rights professionals who have conducted investigations in war zones or other extreme situations.

Sixth, not every mitigation technique will work for everyone and every type of work. Investigators have different work styles, process graphic content differently, and have different relaxation needs. In addition, different projects may also call for different mitigation techniques. Investigators should explore a variety of mitigation techniques to determine what works best for them. Investigators should also implement a range of mitigation techniques and continue to adjust techniques throughout their careers, being mindful of how personal changes or particular investigations may demand different techniques.

Institutional support for implementing mitigation techniques

The survey findings discussed above also suggest ways institutions can support investigators—whether students or staff—to mitigate secondary trauma, through both training and the implementation of techniques. Institutions that employ or train individuals to conduct human rights research—including universities, nonprofit organizations, courts, and tribunals—have both practical and ethical responsibilities to protect the health of those engaged in such activities. If institutions ask individuals to put their health at risk by conducting this type of work, they must help mitigate the negative health impacts of that work.[17]

Institutions should train investigators on a variety of mitigation techniques, as not all will be adopted by or work for every person or project. During training, instructors should identify practical challenges that may impede implementation of a mitigation technique and train investigators on how to overcome those challenges. Universities should consider practical challenges that students may face because of their class schedules, living and working arrangements, and financial situations. Institutions should also consider and inform investigators of possible risk factors associated with implementing mitigation techniques, such as the risks of insecure internet connections and exposing others to graphic content when working in public. Most importantly, training on mitigation techniques should not be a one-off activity but should take place during the breadth of an investigation. Consistent attention to resiliency strategies will help ensure that investigators remain well-versed in mitigation techniques throughout their work.

In addition to training, institutions should support investigators in implementing secondary trauma mitigation techniques in a variety of ways. Institutions should establish procedures for flagging graphic content—labeling images and videos as "graphic" or "very graphic," and providing some indication of the type of content (for example, sexual violence or murder)—so that investigators can prepare themselves before viewing such material. Institutions should also enable investigators to separate their work and personal lives. This can be done by ensuring that investigators have the time and physical space to do their work in a way that will not infringe on their personal lives. Institutions should also ensure that investigators can access mental health professionals familiar with human rights investigations, to ensure that access is not a barrier to needed mental health care. Finally, institutions should underscore the importance of self-care and of taking time off from investigative work. This may include providing ample opportunities for breaks, allowing for flexible work schedules and locations, and offering opportunities for staff to engage in entertaining activities that may help build a sense of mutual support and community.

Limitations

The survey was designed to reduce potential bias and other threats to its viability. Nevertheless, possible limitations must be acknowledged. First, the data set is limited to 33 responses. This sample size is not large enough to draw statistically significant conclusions. Second, the study does not have equal representation from all universities included in the study; more than three-quarters of respondents were from UC Berkeley. Third, the responses are not from a representative sample of students participating in each university's program. The sample was not randomized; respondents were a self-selecting group that may be more attuned to issues of secondary trauma than other students or may vary from norms in other ways. Fourth, the survey does not account for differences in secondary trauma training among respondents, which results from variation in training practices between universities, variation in the number of semesters that respondents have participated in programs, and the degree to which respondents paid attention to trainings. Fifth, the study does not consider prior trauma exposure, prior exposure to or use of mitigation techniques, or preexisting mental health issues, which are potential confounding factors. Finally, the study does not account for intensity, duration, or recency of exposure to traumatic content, all of which are additional potential confounding factors.

Given these limitations, this study cannot conclusively identify which mitigation techniques do and do not work. However, the study is helpful for viewing recommended mitigation techniques in a practical light, formulating hypotheses on what works, and identifying areas for further research.

Future research

This study provides the first systematic glimpse into the adoption and potential efficacy of secondary trauma mitigation techniques in student-led open source human rights investigations. But it provides only a glimpse. We have much more to learn, and it is our hope that additional studies and research will follow with the aim of making online human rights and war crimes investigations as safe and effective as possible.

Future research should explore specific findings from this survey, which mitigation techniques are most useful for different types of investigations, and changes in the implementation and success of mitigation techniques over time. Studies should examine why and in what contexts investigators favor community support techniques over self-care practices such as meditation and exercise. Research should also explore why reflecting on the impact and meaning of work is helpful, as all respondents indicated its usefulness but few explained why. Future research should also explore which specific audio and visual techniques work best for reducing exposure to graphic content, and which other self-care practices might be helpful.

Future studies should include deployment of a survey similar to the one used in this study but should administer the survey to a larger and more representative sample of human rights investigators, so as to determine in a statistically significant manner which mitigation techniques are most often used and most helpful. Additional interviews with survey respondents could explore open-ended answers provided in survey responses, to better understand the reasons why certain mitigation techniques are more or less useful. Future research could also include longitudinal studies to explore changes in secondary trauma mitigation techniques over time and to determine the extent to which these techniques are successful in improving well-being in the medium to long term. Longitudinal studies could be deployed through repeat surveys and interviews, or by conducting an ethnographic study within an institution, following select investigators over a period of months or years. Longitudinal studies could include psychometric tools to measure PTSD, depression, and self-efficacy before and after the implementation of mitigation techniques, to more objectively test efficacy of techniques.

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