Journalism on the Digital Frontline and the Mental Health of Investigators: Risks, Tactics, and Resources

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Abstract: This paper deals with those working on the digital frontline, namely journalists, researchers and investigators who view, evaluate, and potentially use digital content such as eyewitness media for their reporting. Viewing such content often means being exposed to gruesome or disturbing material of all types. This can take its toll on the mental wellbeing of investigators. The paper outlines existing research in the domain and provides tips and advice on how so-called vicarious or secondary trauma caused by working with user-generated content can be avoided, or at least kept to a minimum. It also points to the potential harm that can be done. Another aim is to give the topic more prominence and encourage further research in this field.

Keywords: digital journalism, digital investigations, mental health, gruesome imagery, disturbing digital content, eyewitness media, user-generated content, trauma, trauma prevention, PTSD, mitigation of mental harm, mental wellbeing

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Introduction

Journalists, reporters, investigators, and others working 'in the field' (such as human rights personnel) who gather information or report about certain topics can easily experience distressing or disturbing situations as part of their profession. This is especially so – but not exclusively – in conflict or war zones.

Those sent out to report 'on location' in potentially dangerous places usually get proper training beforehand. This is to prepare them for all sorts of eventualities, such as kidnappings, being shot at and other potentially life-threatening situations. Ideally, this includes equipping trainees with handling and coping mechanisms as much as possible to guard their wellbeing.[1]

However, even the best trainings and preparations cannot fully avoid encounters with potentially traumatizing events and one of the possible subsequent consequences: Post-Traumatic Stress Disorder (PTSD) and other mental conditions.[2]

But what about those reporting from the *digital* frontline? Are they prepared in a similar way and depth as those who are sent out to report about disasters, wars, and conflicts on location? Can and do they suffer from the same or similar mental conditions at times? What can or should be done to prepare them accordingly, ideally reducing mental harm as much as possible, or even avoid it altogether?

This paper sheds some light on these matters. It aims to raise awareness about the topic and provide advice to both those reporting from the digital frontline as well as managers responsible for these reporters and investigators.

Reporting directly from war and conflict zones

PTSD – and what may lead to it because of physical or direct encounters of traumatic situations – is a reasonably well researched domain generally. However, until the turn of the century, almost no research existed on the relationship between the field of journalistic reporting and trauma, according to scholar and professor of psychiatry Anthony Feinstein (Feinstein, 2006).[3]

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[1] Many German news media organisations use or used the training facilities of the German army (Bundeswehr) to prepare their journalists before they are sent to conflict / war zones or other potentially dangerous places. See e.g., Schumacher (2016) who gives an account of her training.

[2] PTSD as a diagnosis first appeared in the 1980s when the American Psychiatric Association revised its classification system for mental illnesses. For a detailed definition of PTSD, see the various editions of the American Psychiatric Association's 'Diagnostic and Statistical Manual of Mental Disorders'. This article does not focus on details of related psychological conditions, their classifications, treatment, and such like. Only this much: while PTSD is regarded as one of the most common results of exposure to potentially traumatic events, other mental illnesses such as burnout, anxiety or depression may also result from traumatic experiences. For more on this topic, see also Feinstein & Osmann (2023).

[3] Anthony Feinstein's book *Journalists under Fire* is the first research of its kind that deals with the relationship of journalistic reporting and mental issues / trauma / PTSD and such like. For the main

Since then, times have changed. Awareness among (newsroom) managers is generally there concerning the potential dangers and physical as well as mental harm that can be done to those reporting from and witnessing distressing situations on location. Staff (and here it is important to make a distinction between employed staff and freelance personnel) are usually not sent to dangerous places without preparing them adequately. In case of them suffering from trauma or other conditions, many media organisations now have at least some basic support services in place, ranging from psychological help to sick pay.

The situation for freelancers is usually different (in other words: worse) as they often do not have adequate 'safety and care nets' in place or to turn to. Hence, they are confronted with additional difficulties and challenges. For them, organisations like the Rory Peck Trust can come into play. It has been established specifically to deal with the situation of freelance (war) reporters and provide a selection of affected journalists with at least some form of support.

No matter what employment status: witnessing and experiencing harrowing and gruesome situations first-hand as part of reporting or carrying out an investigation on the ground can have a serious toll on the mental wellbeing of individuals, with long-lasting consequences. What this can entail and result in is described in detail in a very personal account by BBC war reporter and correspondent Fergal Keane (Keane, 2022) and scholars researching the topic (e.g., Feinstein, 2006; Buchanan & Keats, 2011; Feinstein & Osmann, 2023).

Working on the '*digital* frontline': Adequately prepared? Coping well?

The above sections briefly raised a few aspects concerning the topic of war and crisis reporters working 'in the field', and the dangers of developing mental or psychological illnesses. But what about those journalists, researchers and investigators who work on the digital frontline? Those who are confronted with potentially traumatizing digital imagery and other disturbing material on their screens as part of their work, dealing with eyewitness media – without ever traveling to a war or conflict zone in person. Are they adequately prepared? Do they get proper training? What about coping and avoidance techniques?

The large part of the remainder of this paper takes a closer look at these matters.[4] One focus is on illustrating some basic techniques that can aid digital workers – in

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part of the book, Feinstein interviewed 140 journalists covering wars and conflicts via questionnaire, of which 28 were then interviewed in person (a control group of non-war reporters was also included). All this took place in 2000/2001. A second study among journalists active in Iraq, also covered in the book, included questionnaires with 85 individuals.

[4] The article will not deal with aspects such as: interviewing trauma survivors, hearing distressing testimony, online harassment, hate, and such like. For more on the latter, see e.g., the work and resources of the Center for Countering Digital Hate or respective national initiatives that provide resources or direct support (e.g., Hate Aid in Germany).

particular journalists and investigators such as those using OSINT (Open Source Intelligence) practices – in protecting their mental wellbeing and avoiding trauma or other mental conditions when dealing with digital content, and hence protect them from vicarious or secondary trauma. Another aim is to also provide guidance and advice to (newsroom) managers and those responsible for individuals doing digital investigations. The final aim of the paper is to raise more awareness about the subject, encourage more research in the field and, in doing so, contribute to guarding the mental wellbeing of journalists and investigators dealing with digital content. All this is considered of vital importance (to some extent literally) as, without awareness and coping mechanisms, serious mental injuries may occur. Injuries, that, at times, can take a long time to heal, if at all.

The state of research in vicarious / secondary trauma

To start with, let us first look at the term and condition of vicarious trauma more closely.

Vicarious trauma here is defined as a condition resulting from exposure to traumatic content indirectly, e.g., via screen. In principle, it may also involve listening to or viewing accounts of eyewitnesses, or hearing from victims of trauma and violence. While the terms vicarious and secondary trauma rose to prominence from the mid-1990s onwards, their impact on journalism started to gain traction in the early 2010s when graphic content from the so-called Arab Spring was disseminated via social networks. This contribution is almost exclusively concerned with the effects resulting from the viewing of *digital* imagery and audio-visual material online (e.g., eyewitness media or user-generated content), and its potential impact on professionals. In other words: the viewer / listener is not directly exposed to (physical) acts of violence or such like but experiences it as a party that is not directly involved by not being physically present at the scene.

Regarding respective research covering the topic it can be stated that some research into vicarious trauma resulting from digital exposure to events in the field of journalism exists (see e.g., Newman et al., 2003; and notably Feinstein et al., 2014). Overall, however, it is rather limited in scale and scope. So is research on the effects and tactics of avoidance techniques for those working with digital eyewitness media in news, i.e. in-depth research of what works how (or doesn't) when it comes to trying to limit negative effects because of exposure to gruesome or disturbing material (such as user-generated content) online. Notable exceptions in the field, among others, are the works of Dubberley et al. (2015), Dubberley & Grant (2017), Dubberley et al. (2019), Koenig & Lampros (2023), the work of the DART Center for Journalism and Trauma (a project of Columbia Journalism School), initiatives like Eyewitness Media Hub / First Draft News (now abandoned), Headlines Network, and the works of individuals published mostly in the form of web articles and related contributions (e.g., Ellis, 2018; Fiorella, 2022; Rees, 2017, 2023) to name a selection.

Illuminating insights into what it is like to be "wading through others' suffering" and what this can result in is provided by Shah (2023) who describes both what she had to deal with as a reporter and investigator in the BBC's User-Generated Content and Social Media Hub, and the impact this has had on her life. In the end, Shah quit her job as she could not take it any longer.

The research of Dubberley et al. (2015) on the matter is of particular interest. They carried out a systematic study by getting 209 investigators who regularly deal with eyewitness media to participate in an online survey, canvassing their experiences as well as related strategies while dealing with graphic and potentially traumatising content. This was followed by 38 in-depth interviews.

Before we investigate concrete measures that can be deployed to avoid or at least reduce negative impact of exposure to disturbing digital material, let us first look at some general developments of relevance that took place in the past 20 years and how this impacted investigations and reporting.

Technological developments and advancements of relevance

Over the past two decades we have witnessed permanent improvements of high quality image capturing devices (e.g., cameras, smartphones), an onset of digital connections ('always on', access anywhere, even in formerly remote corners of the world, often with high data transmission rates), and availability of distribution / sharing platforms that reach huge audiences (social networks, messengers, Very Large Online Platforms (VLOPs)) with all kinds of media (audio, video, text) at users' fingertips.

On the one hand, this proved to be highly beneficial for news and information gathering as it provides access to both content and regions that, otherwise, are or were difficult or even impossible to reach. On the other hand, and in parallel, these developments also facilitated and dramatically increased the volume and 'quality' of gruesome and/or distressing material that is shared online.

While these developments were beneficial from a newsgathering perspective, they also had their downside in that, these days, graphic content, too, is frequently making it into the news feeds of journalists carrying out digital (open source) research and investigations. In other words: journalists who largely rely on digital material posted online as sources of evidence or information and use it to e.g., corroborate a claim, can be heavily exposed to and confronted with material that may have negative effects on their mental wellbeing.

That is why related dangers and risks must not be ignored. Especially repeated or frequent exposure to potentially traumatizing audio-visual material – a major trigger of vicarious trauma – should be avoided.

Journalists, digital investigators, or OSINT experts can come across a variety of potentially disturbing eyewitness media as part of their work. This may include, but is not limited to:

- sifting through large sets of data of e.g., war material, to gather evidence or annotate it to easily retrieve it for future tasks, such as filing charges or using it in court proceedings. (See, for example, the work of the Syrian Archive (https://syrianarchive.org/) or similar organisations that focus on archiving material such as potential war crimes.)
- reporting about and documenting atrocities or events as they unfold when access on the ground is limited or impossible. (For a new kind of storytelling using various techniques and tools, standing for a new trend and genre, see e.g., the work of the New York Times' Visual Investigations Unit (https://www.nytimes.com/spotlight/visual-investigations) documenting what is and has been happening in Ukraine and Gaza, where access for journalists on the ground is difficult or even partially impossible.)
- going over and over a piece of evidence such as a video documenting a killing to determine the precise location of it. One such example is determining the location where aid worker James Foley was executed by the so-called Islamic State, as done by OSINT investigators of Bellingcat. Their founder Elliot Higgins outlines in Higgins (2014) how a video of the execution led him to locate the site of the killing.
- following an event as it unfolds or its immediate aftermath, such as a mass shooting. An example is the attack that took place in Christchurch, New Zealand, in March 2019 in which 51 people were killed. The killer live-streamed his rampage and the killings he had previously announced. The video was quickly shared elsewhere by numerous people. Attempts by platforms to take it down only partially succeeded.

Exposure to atrocities and human suffering online carries the risk of serious impact on the wellbeing of investigators. Hence it is important to prepare accordingly and limit negative consequences as much as possible – ideally avoid them completely.

Dealing with potentially disturbing digital material: tips and advice for investigators

The following sections deal with concrete measures and activities that can be undertaken to reduce negative impact and support the mental wellbeing of investigators as much as possible. It is based on own experiences, discussions with peers, journalists, OSINT investigators, human rights researchers, and others active in the domain, and combines this with findings and advice from sources listed in the

reference section of this paper and in previous notes. Special thanks and credit go to the work of and discussions with Sam Dubberley of Human Rights Watch, Gavin Rees and colleagues at the Dart Center, Hannah Storm of Headlines Network and Dhruti Shah (formerly BBC, now freelance).

To start with, it needs to be stated that everyone reacts differently to potentially disturbing content. Below, some practical tips and advice are provided. This represents only a selection or snapshot[5] and is by no means a guarantee to avoid vicarious trauma or other mental injuries.

Awareness is important to start with. Being aware of the potential negative consequences of exposure to graphic or disturbing material is very important. So is knowing that it can impact mental wellbeing. Investigators need to understand the risks involved. It helps to think of disturbing material as a kind of 'harmful substance' on which one should not overdose. Hence exposure to such content (frequency as well as volume) should be limited or minimized as much as possible.

Being prepared: Obviously, if one works in investigations (or news and current affairs in general), exposure to potentially traumatizing material cannot be avoided completely. That is why it is important to always be mentally prepared when scrolling through a news feed or digital material coming from e.g., a war or conflict zone, as this is likely to contain potentially disturbing imagery. It thus helps to 'up your guards' when doing this kind of work and always expect the worst. This offers some initial form of protection.

Know your triggers: If you can, try and avoid especially what triggers you. This can be different things to different people. Being involved personally (e.g., because one has family in a war zone) can add to the potential difficulties and impact of one's experiences.

The power of sound: Investigators should always have audio turned off as a default setting on the devices they use for investigations. It should only be turned on when needed. An alternative can be transcription services in certain cases so that what is uttered can be read, instead of investigators having to listen repeatedly to scenes of pain or torture, victims pleading for their lives, or screams of death. This is vitally important as the sound of such incidents can have significant negative effects on investigators' psyche, hence it must not be underestimated.

Dealing with video: When viewing videos (e.g., on social networks), it is advisable to minimize the screen instead of viewing graphic scenes in large format and detail. Ideally, videos posted in messengers are not viewed on a large desktop screen unless necessary. Another good idea is to disable auto-play of videos (it is often enabled as a default setting on social networks). Instead, the investigator should decide when a

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[5] For more advice and tips, see e.g., Dubberley et al. (2015); Dubberley & Grant (2017); Rees (2017); and Headlines Network (2022).

video is played, following an active decision to do so, including the mental preparation for what may be about to appear on screen.

Little helpers: There are also some very ordinary (non-digital) tactics that can be of benefit. This includes having 'post-its' at hand when needed. They can be used to cover parts of the screen, especially during longer or deeper investigations, for example when one must do an in-depth investigation of a war scene video. Video editors can also use digital techniques to eliminate part of a video they have to deal with. As everyone is different, it is advisable to experiment with different ways of building a distance into how disturbing material is viewed and dealt with.

Self-care: It is important to take regular breaks away from the screen. This includes doing things that are pleasant and comforting. Do not forget to treat yourself when carrying out digital investigations! Fresh air and going out (e.g., into nature) can do wonders and reduce the body's stress responses. So does physical activity like sport or working out. But again: different things work for different people. Try and find out what works best for you – and do not feel bad or guilty about treating yourself, even if it is after you have seen someone being killed or tortured. Also avoid working with disturbing material before going to sleep. It is furthermore important to preserve a breathing space outside of work, even though this may seem hard or even impossible at times, especially when one is working on an important story or on something that feels like it cannot be left unattended because of its gravity. However, journalists should always be aware that if they suffer (mental or other) illnesses through overwork, they are in danger of undermining their mission altogether. Finally, investigators should be careful with alcohol and the use of other substances as this is likely to disrupt sleep and make nightmares worse.

Separating work from time off: Investigators should try and disconnect from work tools and related activities when they are not working.

The workplace: Ideally, the place where one works with potentially disturbing material is light, pleasant and comforting, not dark and gloomy. Employers should provide for this and listen to staff wishes and desires. However, not everyone is 'going into work': working from home, in turn, has increased significantly over the past years, especially since the Covid-19 pandemic. Some investigators state that certain rituals help them separate working life from home life if both are taking place in the same location. This includes, for example, getting dressed into a work outfit before starting to work, and changing into a different (e.g., leisure) outfit once work is completed. All this while sticking to dedicated work – leisure timeslots, with as little interference of working matters into private life as possible. Of particular importance in this context: if possible, to separate the workplace from where one tries to relax and regain strength. It is thus a bad idea to do investigations of a harrowing nature in a bedroom where, later-on, one tries to go to sleep and have pleasant dreams. Ideally, work (including the viewing of potentially disturbing material) is done in a room that is used for nothing else, clearly separated from other activities.

Protecting others: When you are about to send a video or audio with potentially disturbing content to colleagues or others, let them know in advance what type of content it is so they can prepare mentally for what they are about to view. Limit distribution as much as possible. Talk to colleagues about how they feel when you have shared disturbing material with them. Everything that is shared, posted, archived, or published that is potentially upsetting should be labelled appropriately (e.g., including a note or sign clearly stating something like 'WARNING – graphic imagery'), so others do not stumble across gruesome material accidentally and unprepared. Blurring material can do some of the job. Clear annotation practices add to it, so it is advisable to potentially review sorting and tagging procedures and how material is stored, organised, and archived. Also, alert colleagues when certain materials are 'making the rounds', so they can prepare accordingly.

Opening up and seeking help: If you notice that something 'isn't right', do not feel ashamed about it. Those working in corporate environments should talk to their managers in such cases. Insist on not having to do too many shifts dealing with potentially harmful material if you find this upsetting. Talking to colleagues or friends may also be of help. If negative feelings persist and really trouble you over longer periods, seek professional help.

Advice for – and the role of – management

Newsroom and corporate management of media organisations have a vitally important role to play in all of this. It ranges from offering and providing practical help to putting the topic high on the workplace agenda, removing any stigma surrounding mental illness should this be the case. Those responsible for others also need to be on the lookout for signs in staff that may be early indicators of an onset of psychological issues. Team members, in turn, should be briefed on normal responses to trauma and understand that different people cope differently, how the impact of exposure to distressing material can accumulate over time, and how to recognize when they or their colleagues need to practice more active self-care. Simply put: the commitment and support of senior managers is key!

Below is some general advice for managers and those in charge of staff dealing with potentially distressing material.

Work atmosphere and surroundings: An important task of management is to provide a supportive atmosphere and pleasant workplaces, including e.g., light through windows, airy spaces, plants, and other natural elements as this can help build some separation from the violence in source footage that is being investigated.

Awareness and security: It is important to de-stigmatize the topic, raise awareness about it and make clear to all staff that nobody will suffer any negative consequences

should they become ill or in other ways affected as a result of their work, e.g., if they do not wish to work in particular shifts or do not want to be allocated certain tasks.

Task types: No one should be made to work shifts in which they have to deal with potentially traumatizing material for longer periods of time. Instead, topical rotas or frequently changing shifts should be established (e.g., moving staff from war news to culture to sports etc.) for those also working with gruesome material, unless they explicitly say otherwise. Employees should not be forced into shifts or tasks they do not want to cover. If that is the case, they should not be afraid to openly speak out. Ideally, solutions or alternatives can be found.

Clear handling mechanisms: There should be clear handling and archiving procedures in place. Guidelines on how graphic material is stored and distributed should be established and enforced by management. Only staff who must view potentially traumatic material should be exposed to it, making sure they follow established procedures and are fully aware of respective practices. The latter usually requires adequate trainings to prepare staff accordingly, as well as close supervision and retraining.

Expert support: Management should provide for experts (e.g., psychologists) that staff can turn to easily and without any bureaucracy or administrative or formal burden. Ideally, they are available 24 hours a day, seven days a week (by phone and without appointment at short notice, if needed) and can be reached in an anonymous fashion. In other words: they can be contacted without the employer being informed about it unless staff want this. Some organisations have established a sort of 'therapy-consulting credit system' that allows their employees to use the services of e.g., psychologists at no costs to them for a certain number of sessions, and without long waiting times for an appointment.

Closeness to staff: Managers should be particularly close to staff who deal with potentially disturbing content. Ideally, they are equipped with 'sensitive antennas' in order to notice when someone is unwell or work-related matters negatively affect employees. When staff are working from home this is even more important. Regular check-ins are a good means to stay in touch and informed about how staff are doing. So is being connected. This includes having a good idea about the situation of staff outside the workplace and support them whenever necessary.

If precautions and everything else fails – spotting the signs

Obviously, there is no guarantee that what has been outlined above serves as a definite means of protection from mental illness or injury resulting from dealing with digital content of all sorts. However, it hopefully provides at least some basic help, advice, coping and handling mechanisms.

In principle, almost anybody can be affected at any time. Sometimes, this goes unnoticed by colleagues, friends and even family. That is why it is furthermore important for those around individuals who must deal with potentially disturbing digital material to be aware of possible consequences of their work, and to 'spot the signs' of colleagues, friends or loved ones being unwell or negatively impacted.

Signs that someone may be affected or that something 'isn't quite right' may include some or more of the following. It is important to stress here that what is listed below may be signs of someone being affected, but must not be. It furthermore needs to be made clear that the author of this paper is no psychologist or clinician[6]:

Excessive use of drugs, alcohol, medicine, and such like (substance abuse): Some people use substances to forget – at least temporarily – about things they have seen, heard or that they cannot get out of their minds. Other reasons for substance abuse are trying to have no bad dreams, being able to sleep, etc.

Being increasingly introvert or feelings of detachment from other people: Not being able or willing to share with others what they have seen, heard or been through. For some individuals, this results in avoiding social activities or withdrawing from them altogether, such as not going out anymore, mingling with others, be they colleagues or friends. One reason for this: investigators' minds can be so dominated by what they have seen, heard and been through that such activities simply do not feel 'right' anymore.

Difficulty to relate to mundane / ordinary concerns of others: For those who have had to witness killings, torture, executions and such like as part of their work (e.g., to verify claims, geolocate where something happened etc.) it can be difficult to put this aside once work finishes, and deal with ordinary matters of everyday life. For some, emptying the dishwasher, planning a holiday, or paying the electricity bill simply does not feel right, appropriate, or relevant in relation to the suffering or cruelty and pain they have had to witness during working hours.

Being short-tempered or easily irritable: Some people – contrary to being introvert and withdrawing more and more from others – quickly 'explode' if affected, often for no big reason it seems.

Other coping mechanisms (or signs indicating someone may be affected) can be frequent one-night stands, binge-eating, various types of self-torture or self-harm, and different forms of disassociation. Slightly less destructive coping tactics can be dark humour, having a cry, spending time with elevating or funny digital content, sport, or staying clear of all things digital while not working.

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[6] What follows can apply to both 'screen-only workers' and those working 'in the field'. Signs can be present in both people who directly or indirectly witnessed potentially traumatising incidents. In any case: if you feel unsure about signs and symptoms, either in yourself or someone else, it is important to seek professional help or refer your colleagues or friends to respective experts and provide the support you can give on an oftentimes difficult journey.

Once again: the above can – but must not – be signs of someone being unwell or negatively affected because of exposure to graphic or disturbing content. Furthermore, signs and symptoms vary from person to person. Another note of caution: some of the indicators listed above can also be signs of depression. Feinstein (2006) points out: "Depression is but one of the conditions frequently found together with post-traumatic stress disorder. Substance abuse is another" (p. 80).

Important in any case: not to ignore the signs and – for those affected – seek professional help, while those in management should be on the lookout for potential signals and indicators in their staff, and encourage those affected to consult with specialists, while being as supportive as possible in the process.

Using advances in technology to reduce exposure to – or impact of – graphic imagery

A common practice nowadays, at least in professional environments, is (or should be, as outlined above) to make sure that nobody stumbles upon graphic or potentially disturbing digital imagery accidentally once it is circulating inside an organisation. This includes adequate labelling of such material (e.g., when it is stored, archived, or disseminated) and the blurring of it, making it necessary to actively deblur an image if needed. The downside here: it is either 'all or nothing'. In other words: the viewer either has little idea what exactly is behind a blurred picture or sees it in full after deblurring. Plus: raw footage is never blurred before it pops up in a news stream or during initial research and viewing of eyewitness media.

This prompted a group of researchers (the author of this paper included) to try and find a way forward and research whether there is some way in-between, using advances in technology development. The overall aim: supporting investigators in their work while limiting full exposure to gruesome digital imagery at the same time.

Sarridis et al. (2024) thus came up with a study design that "explores the capability of Artificial Intelligence (AI)-based image filters to potentially mitigate the emotional impact of viewing such disturbing content" (p. 1). In other words: gruesome images showing visible injury or harm were detected and then 'alienated' to different degrees by applying various filters. This left a sense of what the images were about, giving investigators some idea what an image depicts. The 107 individuals who participated in the study (mainly journalists and human rights investigators) were then asked to evaluate and judge their preferences, and whether this was a useful approach. A primary finding: the so-called 'AI-based drawing style filter' demonstrated the best performance, "offering a promising solution for reducing negative feelings while preserving the interpretability of the image" (Sarridis et al., 2024, p.1).

Much more work needs to be done in this domain, too. However, this research offers promising ways to use technology for the benefit and mental well-being of investigators.

Conclusion

This paper has pointed to some dangers and possible negative consequences of working with digital material such as user-generated content and eyewitness media. It focused on those working in the (news) media and investigative sector. However, similar effects are likely to be experienced by academic researchers (e.g., in the field of terrorism or security research or those dealing with the annotation or analysis of large datasets), those working in other domains (e.g., rescue services, police) and even the general public who – when surfing the web – are also highly likely to come across potentially disturbing content, often without warning beforehand or adequate coping techniques known or in place.

Contrary to the effects of war reporting in the field on the mental wellbeing of journalists, the case of investigators working primarily with digital material is somewhat under-researched, notable exceptions included. It is hoped that this paper triggers further interest in the field and encourages others to carry out more work in this domain. After all, what is at stake is the mental wellbeing of journalists, investigators, and researchers.

Thankfully, recent years have seen encouraging efforts by managements of more and more media organisations when it comes to putting the topic of dealing with eyewitness media and potentially traumatising digital content on their agenda. This includes providing psychological support for affected staff and taking the matter seriously, too – as is the case with war reporting on location. Depths of engagements as well as offers and resources spent vary from organisation to organisation, and likely also from world region to world region. More research as well as comparisons would be an interesting and important future research field.

While the topic of and awareness about vicarious or secondary trauma has or is in the process of finding its way into more and more newsrooms and media organisations, those working on their own, such as freelancers, must not be forgotten in the process. They often operate without any corporate support or safety nets in place, and they receive no or little sick pay when mental illness puts them off work. This possibly makes them even more vulnerable than employed personnel – although this too could do with further research.

Finally, it is hoped that this contribution succeeded in raising further awareness for the topic and, ideally, can help to avoid 'learning it the hard way' by providing some useful tips, advice, and resources before the (mental) damage is done to those dealing with potentially disturbing digital content.

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Recommended readings and viewing

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Selection of useful (practical) resources

DART Center for Journalism and Trauma (https://dartcenter.org/)
The Dart Center for Journalism and Trauma, a project of the Columbia University Graduate School of Journalism established in 1991, according to its own description, "is dedicated to informed, innovative and ethical news reporting on violence, conflict and tragedy." Among other, it provides useful resources and tactics on trauma prevention, and gives advice on dealing with illnesses such as PTSD.

Center for Countering Digital Hate (https://counterhate.com/)
The center's mission is to protect human rights and civil liberties online by holding social media companies "accountable and responsible for their business choices by highlighting their failures, educating the public, and advocating change from platforms and governments to protect our communities."

Hate Aid (https://hateaid.org/en/)
Hate Aid promotes human rights in the digital space and stands up against digital violence and its consequences at both social and political levels. It supports people who are affected in various ways.

Headlines Network (https://headlines-network.com/)
Network and consultancy dealing with mental health matters in the media.

International News Safety Institute (https://newssafety.org/)
The International News Safety Institute INSI is dedicated to journalists' safety and offers news or-ganisations a forum for networking and information sharing, alerts and advisories, workshops, re-gional meetings, and webinar discussions.

Rory Peck Trust (https://rorypecktrust.org/)
The Rory Peck Trust, established in 1995, is dedicated to the support, safety and welfare of freelance journalists / newsgatherers around the world. The Trust's Resilience Programme provides specialist trauma-informed training and access to psychological treatment.

Schutzkodex (in German) (https://schutzkodex.de/)
Established 2022, run by various media organisations, aiming to protect journalists and provide sup-port in various forms.