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Post-traumatic stress, personal risk and post-traumatic growth among UK journalists

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ABSTRACT

Background: Journalists covering traumatic news events can develop symptoms of posttraumatic stress disorder (PTSD). However, they may also experience perceived posttraumatic growth (PTG). The outcome may be affected by whether work-related traumatic stress has a degree of personal risk.

Objective: To investigate the relationship between PTSD symptoms and PTG among journalists who experienced work-related trauma and to examine whether positive associations would exist between exposure to personal risk and PTG.

Method: A web-based survey measuring post-traumatic stress symptoms and post-traumatic growth was completed by print and broadcast journalists (N = 69) working for UK-based media organizations. An open-ended question asked participants how media organizations can help to promote growth after work-related trauma.

Results: The findings show a significant relationship between PTSD symptoms and PTG (p = 0.04). Journalists working in war-zones had significantly more PTSD symptoms (p < .001) and PTG scores (p < .001) than those who did not. Journalists who described their worst, work-related trauma as having a degree of personal, life-threatening risk, also reported higher levels of PTG than those who did not (p < .001). This was consistent across all PTG subscales.

Conclusions: This study, the first to examine PTSD symptoms, personal risk and posttraumatic growth within journalists, suggests those working in conflict areas experience significantly higher levels of post-traumatic stress and post-traumatic growth, than those who do not. Those who experience personal risk also had high PTG levels. Media companies can help develop PTG by recognizing when personal risk plays a role in covering demanding assignments. Participants suggested organizations also needed to allow sufficient time for reflection and meaning-making for all those working in hostile environments.

Estrés postraumático, Riesgo personal y crecimiento postraumático entre periodistas británicos

Antecedentes: Los periodistas que cubren eventos noticiosos traumáticos pueden desarrollar síntomas de Trastorno de Estrés Postraumático (TEPT). Sin embargo, también pueden experimentar Crecimiento Postraumático percibido (PTG, por su sigla en inglés). El resultado puede ser afectado por la presencia de un grado de riesgo personal en el estrés traumático relacionado al trabajo.

Objetivo: Investigar la relación entre los síntomas de TEPT y PTG entre los periodistas que experimentaron trauma relacionado al trabajo y examinar la existencia de asociaciones positivas entre la exposición a riesgo personal y PTG.

Método: Periodistas de medios impresos y de difusión, que trabajaban en organizaciones de medios localizados en el Reino Unido (N = 69) completaron una encuesta en la web que midió síntomas de estrés postraumático y crecimiento postraumático. Se consultó a los participantes mediante una pregunta abierta cómo podrían las organizaciones de medios ayudar a promover el crecimiento después de un trauma relacionado al trabajo.

Resultados: Los hallazgos muestran una relación significativa entre los síntomas de TEPT y PTG (p = 0.04). Los periodistas que trabajaban en zonas de guerra tuvieron significativamente más síntomas de TEPT (0 < .001) y puntajes de PTG (p < .001) que los que no lo hacían. Los periodistas que describieron su peor trauma relacionado al trabajo con un grado de riesgo personal, con amenaza a su vida, también reportaron mayores niveles de PTG que quienes no lo hicieron (p < .001). Esto fue consistente en todas las subescalas de PTG.

Conclusiones: Este estudio, el primero en examinar los síntomas de TEPT, riesgo personal y crecimiento postraumático entre periodistas, sugiere que aquellos que trabajan en áreas en conflicto experimentan niveles significativamente mayores de estrés postraumático y crecimiento postraumático que quienes no lo hacían. Aquellos que experimentaron riesgo personal también tuvieron mayores niveles de PTG. Las compañías de medios pueden ayudar a desarrollar PTG reconociendo cuando el riesgo personal juega un rol al cubrir

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PALABRAS CLAVE

Periodistas; trauma; TEPT; estrés postraumático; crecimiento postraumático; resiliencia; riesgo personal

关键词

记者; 创伤; PTSD; 创伤后成长; 心理韧性; 个人风险

HIGHLIGHTS

• This is the first study examining PTSD and posttraumatic growth (PTG) in UK journalists experiencing work-related trauma with personal risk.

• Those in war zones showed more PTSD symptoms and higher PTG.

• Journalists called for time and support to reflect after traumatic events.

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Supplemental data for this article can be accessed here.

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tareas exigentes. Los participantes sugirieron que las organizaciones también necesitaban conceder suficiente tiempo para la reflexión y construcción de significados para todos quienes trabajan en ambientes hostiles.

英国新闻工作者的创伤后应激,个人风险和创伤后成长

背景: 报道创伤新闻事件的记者可能会出现创伤后应激障碍 (PTSD) 的症状。但是, 他们也可能会经历创伤后成长 (PTG) 。工作相关创伤应激是否具有一定程度的个人风险可能会影响结果。

目的:调查经历工作相关创伤的新闻工作者中PTSD症状与PTG的关系,并探讨个人风险暴露与PTG之间是否存在正相关关系。

方法: 69名由为英国媒体组织工作的印刷和广播新闻工作者完成了一项网络调查, 该调查 测量了创伤后的压力症状和创伤后的成长。以一个开放式的问题询问参与者, 媒体组织如 何在与工作相关创伤之后帮助促进成长。

结果:研究结果表明PTSD症状与PTG之间存在显著相关性 (p = 0.04)。在战区工作的新闻工作者的PTSD症状 (p <.001)和PTG得分 (p <.001)明显多于非战区记者。将最严重的工作相关创伤描述为具有一定程度的危及生命的危险的记者,也报告了比其他人高的P。这在所有PTG分量表中都是一致的。

结论:本研究首次在记者中考察PTSD症状,个人风险和创伤后成长,表明在冲突地区工作的 个人创伤后应激和创伤后成长显著高于未经历创伤的人。经历了个人创伤的人有更高的 PTG水平。媒体公司可以通过识别个人风险在满足要求严苛的任务中所起的作用来帮助开 发PTG。参与者建议组织还需要为在敌对环境中工作的所有人员留出足够的时间进行反思 和表达自己的想法。

1. Introduction

Members of the media often work in hostile or dangerous environments and those in news gathering roles can experience higher levels of post-traumatic stress disorder symptoms (PTSD) than that seen in the general population, due to repeated, intensive exposure to trauma (Newman, Simpson, & Handschuh, 2003; Smith, Drevo, & Newman, 2017). US research suggests a significant minority of journalists, between 9.7% and 28.6%, experience some PTSD symptomology, with rates among war correspondents similar to that of combat veterans (Feinstein, Owen, & Blair, 2002). An overview of research into US and European non-war journalists suggests that between 4.3% to 13% reported post-traumatic stress severe enough to be considered probable PTSD (Smith, Newman, & Drevo, 2015) and studies suggest the risk of PTSD increases as the frequency or intensity of exposure to traumatic events rises (Newman et al., 2003). A study of UK journalists reported that guilt cognitions were also positively associated with PTSD symptomology (Browne, Evangeli, & Greenberg, 2012) and exploratory research into journalists covering the refugee crisis, suggests guilt may be associated with a perceived moral failure in response to events; what the authors describe as a 'moral injury' (Feinstein, Pavisian, & Storm, 2018).

While exposure to traumatic events may cause acute or post-traumatic stress, there is increasing recognition that growth may emerge from the processing of such trauma (Backholm & Björkqvist, 2012; Chopko, 2010). Post-traumatic growth (PTG) has been variously described as benefit-finding, stress-related growth and thriving (Helgeson, Reynolds, & Tomich, 2006). There are several models of PTG and this study is informed by the 'transformational' model of PTG by Tedeschi and Calhoun (1996), which notes that while a 'seismic event' can challenge or invalidate pre-trauma schemas, positive growth and change can emerge as the meaning of the traumatic event is processed and accommodated into the individual's life and existing belief systems.

This is not to negate the effects of trauma or invalidate the experiences of those who suffer with PTSD who do not perceive growth. However, intrusive and avoidant thinking can be seen as a measure of cognitive processing (Helgeson et al., 2006), with negative and positive thoughts co-existing, potentially leading to 'adversarial' growth (Linley & Joseph, 2004). It is this reflection and reappraisal which research suggests provides the strongest relationship with PTG, more so than personality structure, social support or coping styles (Helgeson et al., 2006; Prati & Pietrantoni, 2009).

Those who support individuals affected by hazardous or hostile events may experience vicarious trauma (Pearlman & Saakvitne, 1995). Research with those involved in disaster relief efforts suggest a potential for positive growth here too, with participants describing their experiences as meaningful, rewarding and fulfiling (Brooks, Dunn, Amlôt, Greenberg, & Rubin, 2016). Vicarious post-traumatic growth (VPTG) has been reported in groups including ambulance workers (Shakespeare-Finch, Smith, Gow, Embelton, & Baird, 2003), therapists (Splevins, Cohen, Joseph, Murray, & Bowley, 2010) and firefighters (Armstrong, Shakespeare-Finch, & Shochet, 2014). Research also suggests that individuals exposed to a trauma at work that becomes personal and more emotionally relevant to their own world, may experience a greater stimulation of cognitive processes, leading to more deliberate, effortful rumination and higher post-traumatic growth (Calhoun & Tedeschi, 2013).

While some studies into PTSD in news crew exist, those examining the link with trauma and positive growth, the focus of this study, are limited. Research into PTSD symptoms in conflict journalists with more than a decade of frontline experience, suggest that although most did not display prominent symptoms, many showed mild symptomology, which the authors hypothesized could reflect the build-up of psychological resilience to traumatic events through repeated exposure (Feinstein, Osmann, & Patel, 2019). A qualitative study into coping strategies of journalists reporting on hazardous events suggests 'bearing witness' to a traumatic event may help mitigate distress (Novak & Davidson, 2013) and research into post-traumatic growth in journalists covering the 2011 terror attack in Norway suggests social support from management and peers, including confidential talks on any ethical dilemmas faced, may help develop PTG (Idås, Backholm, & Korhonen, 2019). Limited published research exists on whether an individual experiences PTSD and/or PTG if their own life is put at risk in the course of their job, with one study into Mexican journalists reporting that personal intimidation increased PTSD symptomology (Feinstein, 2012).

The aim of this study was to describe the prevalence of PTSD symptoms and PTG among journalists describing their worst, work-related traumatic event. The study investigated associations between PTSD/ PTG and the impact of working in conflict areas. Additionally, we aimed to investigate the effect of personal risk on PTG, with a hypothesis that if the traumatic news event also had some sort of direct personal threat, such as being attacked, kidnapped or being injured, this would result in more deliberate reflection and meaning-making, leading to higher post-traumatic growth. Finally, we explored qualitatively, participants' perceptions about how media companies could support journalists who witness or are involved in traumatic events in the course of their work, in order to help promote PTG.

2. Method

2.1. Participants and procedure

Participants were recruited through convenience sampling following approval by the University of Westminster Ethics Committee. The first author, a working broadcast journalist, contacted managers and staff at six UK media organizations, as well as four affiliated journalist support groups, and two unions representing news crew (NUJ and BECTU), supplying a questionnaire with accompanying information about the nature of the research. As the focus of the study was the impact of working on traumatic news events, this was established as an inclusion criterion, which is used in similar studies and was further clarified in personal communication with authors of the Journalist Trauma Exposure Scale (JTES, Pyevich, Newman, & Daleiden, 2003) and those who amended the scale for UK journalists (Browne et al., 2012). Of the 140 journalists who gave informed consent and participated in the survey, 71 participants returned an incomplete survey or specified a personal rather than a work-related trauma and these responses were counted as missing data and excluded, leaving a sample of 69.

These participants all worked in UK-based media organizations and fitted the inclusion criterion of working on traumatic events and experiencing a workrelated trauma. They were largely male (58%), with a mean age of 46 (24-63) years. Half had 20 or more years of journalism experience. Most reported that they had worked in a war zone (60.9%) or a disaster area (62.3%) and many had witnessed life-threatening illness, injury (33.3%) or other life-threatening events (39.1%). More than a third (36%) had been physically threatened or attacked in the course of their work, 46% had been verbally attacked and 17% had received an injury (see supplementary material: Table 1). Comparisons of available demographic data of British journalists in a PTSD study, suggest the sample was comparable in age, gender and trauma experience (Browne et al., 2012).

2.2. Measures

2.2.1. Journalist Trauma Exposure Scale (JTES; Pyevich et al., 2003)

Work-related trauma was measured using a revised version of the JTES (Browne et al., 2012). 27 questions measured the type of exposure (e.g. incidents involving natural disaster, war, child abuse) together with intensity (e.g. reporting from the scene, being threatened, attacked or injured) and frequency (never to weekly). Internal reliabilities in this study were good: frequency ($\alpha = .95$), intensity ($\alpha = .87$) and range ($\alpha = .88$).

2.2.2. PTSD Checklist

Post-traumatic stress was measured using the PTSD Checklist from DSM-5 (PCL-5; Weathers et al., 2013). This scale expands previous definitions to include witnessing a traumatic event, so is applicable to the direct and indirect exposure experienced by journalists. The measure contains 20 items rated on a 5-point Likert scale. The most recent version has acceptable reliability ($\alpha = .75$), and in the current study ($\alpha = .94$). While PTSD is diagnosed in a structural, clinical interview, a PCL-5 score can provide a provisional diagnosis. Cut-off scores vary according to the population and purpose of screening; studies of samples of UK war veterans suggest an optimal cut

off score of 34 (Murphy, Ross, Ashwick, Armour, & Busuttil, 2017), or 27 for some civilian populations (Blevins, Weathers, Davis, Witte, & Domino, 2015).

2.2.3. Post Traumatic Growth Inventory

The 21-item Post Traumatic Growth Inventory (PTGI; Tedeschi & Calhoun, 1996) gives an overall score on five subscales (range 0–105): New Possibilities, Relating to Others, Personal Strength, Spiritual Change and Appreciation of Life. It is one of the few standardized and validated questionnaires into positive post-traumatic change. In the present sample, Cronbach's alpha was high ($\alpha = .95$).

2.2.4. Qualitative question

An open-ended question was included, asking participants for their suggestions for media organizations to help improve training and support structures. It asked: 'Is there anything you think your organization could do to better support journalists who witness or are involved in traumatic incidents in the course of their job?'

2.3. Data analysis

The section of the survey dealing with PTSD symptoms began with an open-ended question which asked participants to describe the traumatic event that bothered them the most. Those that specified their worst, work-related event as occurring in a war zone (Libya, Syria, Rwanda, Iraq) were put into a 'war' condition. Participants whose traumatic event involved news events elsewhere (murders, traumatic court cases) were put into the 'non-war' condition. Those who stated in the open question that worst, work-related traumatic event involved a lifethreatening risk (abduction, kidnap, injury) were put into a 'personal risk' condition. Those whose traumatic event did not include personal threat (witnessing trauma, editing distressing footage) were put into the 'non personal risk' condition.

Independent *t*-tests were used to determine any differences in PCL-5 and PTGI scores based on exposure to personal risk and work context (war zone/not). Effect sizes were calculated using Cohen's d, with effect sizes defined as small (d = 0.2), medium (d = 0.5) and large $(d \ge 0.8)$ (Cohen, 1988). Once it was established that scores were normally distributed, all independent variables, including war/non-war and personal risk/no personal risk, were examined for collinearity. The data met assumptions of independent errors, with the results of the variance factor all less than 2 and the tolerance higher than .5, indicating that multicollinearity was not a concern. Correlational analyses were conducted to examine the relationships between variables and to determine which variables should be included in the regressions. Hierarchical multiple regression analyses were conducted to examine the effects of these variables, plus gender, age, experience, employment status, trauma frequency and intensity to exposure on PTSD and PTGI scores. Content analysis was used to classify and categorize the qualitative data, a commonly used analytic approach in PTG research (Hefferon, Grealy, & Mutrie, 2009). Relevant text was grouped together and two main categories emerged, barriers to growth and suggestions to promote growth. Construct labels were assigned to each.

3. Results

3.1. Sample characteristics

This sample consisted of those who had been present at a traumatic news story at least once in their career and who were able to report the impact of the worst of those events on them. Participants most frequently reported witnessing the death of a stranger (72.4%), being at a natural disaster (62.3%), in a war zone (60.9%) or at a major accident such as a plane crash (59.4%). Other assignments included encountering physical (40.6%) or sexual assault (26%), child abuse or cruelty (30.4%), or witnessing the traumatic death of someone they knew (33.3%). Many participants had attended several, similar traumatic incidents in the space of a week (43.3%). Of those asked to identify their most traumatic work-related event, almost half suggested assignments in war zones (49.2%). More than a quarter (27.5%) said it had been where their own life had been at risk through abduction, kidnap, being shot at, ambushed, or being trapped inside a building which was being attacked.

3.2. Post-Traumatic Stress Disorder (PTSD)

The mean PCL-5 score for the current sample was 10.84 (SD = 12.27). Independent t-tests suggest a significant difference in the PCL-5 scores of those who specified their most traumatic event as occurring while covering war (M = 14.21, SD = 13.86) to those who did not (M = 7.57, SD = 9.61, t (67) = 2.32, p < .0005, d = 0.57). There was no significant difference between personal risk and PCL-5 scores (t (67) = 1.18, p = .24, d = 0.3).

Correlational analyses were conducted to examine the relationships between demographic factors, the frequency and intensity of exposure to trauma and the length of time since the reported traumatic event. Only variables significantly correlated with PTSD symptoms (PCL-5) were entered in the hierarchical multiple regression. Age (continuous) was entered as the first step of the hierarchical regression and explained 8% of the variance in PTSD symptoms, which was statistically significant (F(1,55) = 5.69, p= .020). Employment status (coded as 1 =staff, 2 =freelance) was entered at step 2 in the regression model and contributed a statistically significant increase in variance of PTSD symptoms (F (2,54) = 6.65, p = .011) with an R2 change of .10. The significance of the increment showed that employment status had a statistically significant unique contribution to PTSD symptoms, indicating that those with freelance status experienced higher PCL-5 scores than those who were staff. Age, time since the event and trauma exposure and intensity were not independently associated with PTSD symptoms once employment status was in the model (see Table 1). Using the civilian cut-off score of 27, 12% (N = 8) of participants experienced PCL-5 symptoms severe enough to be considered probable PTSD. Of these, 6 stated their worst event happened while reporting on war.

3.3. Post-traumatic growth (PTGI)

Results of the PTGI showed a mean score of 38.93. Pearson correlations showed a significant positive correlation between PTGI and PTSD symptoms (PCL-5 scores) (r = .247, N = 69, p = .040). There were no significant correlations between PTGI score and trauma exposure, age, experience, gender, role, employment status or time since the trauma. Independent t-tests indicated that the PTGI scores of those who specified their most traumatic, workrelated event as occurring while covering war, were significantly higher (M = 50.91, SD = 22.19) than those who had not (M = 27.29, SD = 18.69;*t* (67) = 4.788, *p* < .0005, *d* = 1.2). Scores were higher still if the event involved personal risk, such as being kidnapped or shot at (M = 58.67, SD = 17.64) compared to the non-personal risk condition (M = 31.42,SD = 21.15; t (67) = 4.991, p < .0005, d = 1.4).

Correlational analyses were conducted to examine the relationships between demographic factors, PTSD symptoms (PCL-5 scores), frequency and intensity to exposure, work context (war zone/non-war) and personal risk. Those variables significantly correlated with PTGI were entered in the hierarchical multiple

regression. PTSD (PCL-5) was entered as the first step in the hierarchical regression, explaining a statistically significant amount of variance in PTGI symptoms (F(1,67) = 4.37, p = .040). The war/non-war factor was entered as step 2 in the regression model. The addition of this variable contributed a statistically significant increase in variance in PTGI symptoms (F(2,66) = 12.08, p < .0005), with an R2 change of .21. The significance of the increment showed that those participants serving in war zones, had considerably higher PTGI scores than those who had not. When personal risk was entered as step 3 in the model, it too added a statistically significant increase in variance in PTGI scores (F (3,66) = 11.13, p < .010) with an R2 change of .07, suggesting that those who experienced personal risk experienced significantly higher levels of posttraumatic growth than those who had not (see Table 2).

Of the five subscales of the PTGI, the three most endorsed positive changes reported by the whole sample were: relating to others (M = 13.13, SD = 8.16), finding new possibilities, (M = 8.46, SD = 6.96) and developing personal strength (M = 8.45, SD = 5.34). Those journalists who experienced a work-related trauma with personal risk attached, showed statistically significant higher PTGI scores across all subscales with large effect sizes (Relating to others d = 1.0; new possibilities d = 1.1; personal strength d = 1.2; appreciation of life d = 1.0; spiritual change d = 1.0) (see supplementary material: Table 2).

An open-ended response asking for suggestions on how media organizations can improve resilience and growth after work-related trauma was completed by the majority of participants (N= 49, 71%) and their responses were quantified and categorized using content analysis. Potential obstacles or barriers to growth were named by a number of participants and grouped into three themes: perceived insensitivity or lack of awareness of trauma by management, a culture of silence and a failure to acknowledge that trauma

Table T. Hierarchical	regression: PISD	(PCL-5).			
	B (95% CI)	SE B	ß	Т	ΔR2
Step 1					
Åge	40	.17	31	-2.39	.08*
Step 2					
Age	43	.16	33	-2.69	
Staff/freelance	9.06	3.43	.32	2.64	.17*
Step 3					
Age	17	.19	13	88	
Staff/freelance	9.25	3.30	.33	2.79	
Time since event	04	.02	33	-2.25	.23*
Step 4					
Åge	21	.19	16	-1.08	
Staff/freelance	9.41	3.25	.34	2.89	
Time since event	03	02	23	-1.47	
Trauma Exposure	.30	.18	.21	1.67	.25

Table 1. Hierarchical regression: PTSD (PCL-5)

R2 = .09 for Step 1, R2 change = .10 for Step 2, R2 change = .07 for Step 3, R2 change = .04 for Step 4. * p = < 0.05.

Table	2.	Hierarchical	regression:	PTGI.
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	В	SE B	ß	Т	ΔR2
Step 1					
PCL-5 (PTSD)	.475	.23	25	2.09	.05*
Step 2					
PCL-5 (PTSD)	.228	.21	12	1.08	
War/non-war	-22.11	5.12	.47	-4.31	.25**
Step 3					
PCL-5 (PTSD)	.249	.20	13	1.23	.31*
War/non-war	-11.94	6.22	.25	-1.92	
Personal risk	-17.94	6.77	34	-2.65	.31*

R2 = .061 for Step 1, R2 change = .21 for Step 2, R2 change = .07 for Step 3.

 $p^* p = < 0.05 \ p^* = < 0.01.$

can happen covering domestic court cases or viewing distressing imagery. Suggestions for media companies to improve growth and resilience were categorized into four broad themes; encouraging conversations around trauma with meetings and formal or informal debriefing sessions as well as peer support, greater support for freelancers, improved access to counselling services, an increased awareness of the potential for trauma and allowing time off to process and reflect (see Table 3 for illustrative quotes).

4. Discussion

To our knowledge, this is the first study to suggest a link between perceived post-traumatic growth and work-related trauma involving personal risk, threat or injury among journalists in UK-based media organizations, who are exposed to distressing news stories. It's also the first to do this while reflecting participants own suggestions on how organizations can improve support. In this sample, journalists were asked to describe their worst, work-related traumatic event. As hypothesized, those who reported encountering personal threat or harm during the event, saw significantly higher PTG levels than those who had not, building on research which suggests an event with personal risk leads to greater, more deliberate cognitive processing and stronger perceived growth (Barton, Boals, & Knowles, 2013; Calhoun & Tedeschi, 2013).

It is worth noting that the relationship between PTSD symptoms and PTG is a complex one and this is reflected in the study. For example, although participants who experienced a life-threatening event reported higher PTG levels, there was no significant difference between PCL-5 scores and personal risk. Those participating in this study may have experienced a traumatic event with personal risk that, while not currently causing them undue distress, had led to perceived PTG, others reported that distress and growth were co-existing. Research suggests that both linear and quadratic (curvilinear) relationships can exist between PTSD and PTG, with the potential for positive and negative trauma outcomes (Shakespeare-Finch & Lurie-Beck, 2014). This may reflect research suggesting that distress can be mitigated by the act of 'bearing witness' (Novak & Davidson, 2013), or that resilience may develop through repeated exposure to traumatic events (Feinstein et al., 2019).

This study adds to the understanding of how journalists are psychologically affected in the course of their work and how growth can be promoted. However, it also investigated predictors of posttraumatic stress among journalists covering a traumatic event. In this study, PCL-5 scores were significantly higher among freelance journalists than those who were staff, a finding which may be of value to news organizations considering further training and support. Freelancers may not have access to the same level of organizational support than that offered to staff, can experience isolation with limited access to appropriate training, and may work directly within the community in which they live, which might affect their ability to get help, or reflect on their experience with peers (McMahon & Lyall, 2019). This was endorsed in suggestions to the open-ended qualitative question.

Between 6% and 12% of participants experienced symptoms severe enough to be considered probable PTSD. Of these, most reported that their most traumatic event occurred while covering war and while the figures must be interpreted with caution, it was notable that the war condition was associated with significantly higher PCL-5 scores, adding to research on PTSD in journalists and the heightened risks faced by those reporting in areas of conflict (Feinstein, Wanga, & Owen, 2015). However, it is also worth acknowledging that two of the journalists reporting clinical levels of PTSD did not work in conflict zones, but in the office, monitoring footage of disturbing images of dead and dying civilians sent from Afghanistan, Iran and Syria and several participants suggested their worst work-related traumatic event was related to watching distressing footage. While this was not a focus of this study, their experiences are consistent with research suggesting high levels of PTSD among journalists viewing usergenerated content of violent imagery (Feinstein, Audet, & Waknine, 2014).

Table 3. Barriers to growth and suggested changes: journalists' suggestions.

Barriers to growth	
Perceived management	Some news desks act like 1st world war generals and send in the troops regardless of the situation just to be first
insensitivity/lack of awareness	with the story, excuses are frowned upon. What affects one person may not affect another. I have been told things like "Well they were ok with it why not you?"
	Journalists – people – are viewed as part of the cost and resource matrix. There needs to be fewer spread sheets and more humanity shown.
	I think my organization takes its staff – and their mental robustness – for grantedmy line manager has never once asked or shown an interest in possible repercussions.
	Mostly, organizations care little or nothing for their employees. If you are broken, they will get someone who is not.
	A colleague had to remove body parts from his car resulting from a bomb explosion, before he could drive off. There would appear to be no realization that events such as this can have a long-term impact upon those involved.
Culture of silence	Having returned from a war zone or major incident you are just expected to go into the edit and start making the programmeyou experience the events twice – once at the location and then back at base. There's a culture of silence on the issue or those affected by trauma – not about addressing it but letting other
Culture of slience	people know that staff are affected. There's very little appreciation of the complex nature of reporters who want to cover potentially traumatic events
	but end up being scarred. There is also a lingering macho stigma to asking for help.
	It wasn't done to even mention trauma you had experienced. Only after I was ill did people contact me to say they had all had very similar experiences
	I didn't feel that my colleagues could understand what had happened. I even feared they wouldn't believe me. That sense of isolation prolonged my own period of post-traumatic stress disorder. PTSD is not thought about routinely.
lt's not just war	I think we need to appreciate that sometimes the stressful events are not the most dramatic. So, we should focus on people who are working on terrible court cases as well as those who go to war zones. Warn before a court case.
	We are often seeing repeated quite traumatic images and stories a number of times over one shift. I have been to war zones and in riots. I think we are good at dealing with this. I think we are less good at spotting the people who are jaded (at best) or badly affected (at worst) through coverage of grim UK stories (the child
	abuse trials etc). Where they could support better is with the humdrum UK based stories.
uggestions to encourage growt	
Offer to talk/debrief	Journalists are reluctant to ask for help perhaps a personal offer to talk would be better than the offer of professional counselling from strangers. Managers and colleagues could be more proactive, making sure people are ok after having to cover difficult
	issues. A debrief after difficult assignments with the whole team would be beneficial. No one sits down and checks how
	people are coping and what issues there might have been. Have regular conversations and provide feedback, especially to those who work remotely.
	A formal de-brief for people returning from a traumatic event / story. Arrange frequent meetings where people can explore such issues
Increased awareness	It's not just about the immediate aftermath, but several months down the line toomanagers need to be aware and sensitive to this.
	Keep an eye on those both in the field AND BACK IN THE OFFICE who witness/deal with disturbing images. It is difficult to get committed individuals sometimes to admit that potentially they could do with 'sitting this one out' as they feel it may impact in their future roles. Unless decisions are made for them, individuals will find it
Time off	hard to say no to deployments. What is needed is some cool off period. Having enforced periods where staff cannot deploy after a stressful incident/deployment.
More support for freelancers	Allow at least a few days off after a long assignment in a conflict area. Organizations have outsourced trauma to "citizen journalists" and freelances in conflicts such as Syria. Organizations
	look after their own much better than in the past but there is a whole new group of people for which they need to take responsibility.
	I'm freelance, and we have no support the pay is too low to afford the safety precautions necessary for my work. I am a freelancertaking care of myself psychologically means being prepared ahead of time to deal with
	traumatic events I might witness, and arranging to take care of myself afterwards. I freelance so knew little about the help available to me and was very distressed when I briefly displayed symptoms of PTSD.
	Give greater access to support structures for local staff across the world, even if they are only occasionally employed (freelancers).
Greater access to counselling services	I carefully changed the kind of reporting I do after being diagnosed with PTSD. I think counselling could have made a huge difference.
	Counselling is offered, however the shift I work makes it extremely difficult for me to see when I would be able to attend.
	l think everyone should have counselling on return whether you ask for it or not. Extend the use of the in-house counselling telephone service to freelancers. Some pro counselling in extreme cases.

Journalists in this study reported levels of PTG in three subscales; relating to others, personal strength and new possibilities, which were similar or higher than US soldiers with a history of combat duty (Gallaway, Millikan, & Bell, 2011; Lee, Luxton, Reger, & Gahm, 2010). All five PTGI subscales were significantly higher among those experiencing personal risk in their worst, work-related traumatic event than those who had not. Overall, participants' most endorsed factor in developing PTG was their ability to relate to others. This subscale contained items such as being able to count on people in times of trouble, a sense of closeness with others, being willing to express emotion, having compassion, developing relationships and accepting the need for others. The second most endorsed subscale was new possibilities, which includes items such as developing new interests, a new life path, a willingness to change and a recognition that life can be better. The personal strength subscale, which includes self-reliance and accepting how things work out, as well as the knowledge that one can handle difficulties and the discovery of one's strength was the third most endorsed. In this cohort, the scores from the PTGI subscales of appreciation of life and spiritual growth were lower than any of the twelve studies reported in a posttraumatic growth inventory overview (Steffens & Andrykowski, 2015), however, these subscales only contain three and two items respectively. Tedeschi et al., have acknowledged a potential weakness in the original spiritual growth subscale, as it fails to acknowledge growth that may be more existential in nature (Tedeschi, Cann, Taku, Senol-Durak, & Calhoun, 2017). Future research would benefit from incorporating their revised 25-item PTGI-X which measures growth outside traditional religious ideas.

This study also explored journalists' own perceptions of how media organizations can help promote growth after work-related trauma. The importance of time and space to reflect on the trauma with peers, or in open conversations with management, echoed the high scores on the PTGI 'relating to others' subscale, and reflects previous research which suggests social support and dialogue about potential ethical dilemmas, can help develop PTG (Idås et al., 2019). Many media organizations already offer social support after trauma, including confidential conversations with colleagues, which can help promote PTG (Idås et al., 2019). The Trauma Risk Management model (TRiM), used in organizations like the BBC, is a peer support system which identifies those who are not coping after potentially traumatic events, to help point them towards professional help (Whybrow, Jones, & Greenberg, 2015). Journalists are also encouraged to use networks such as the Dart Centre for Journalism and Trauma (https://dartcenter.org/) which provides resources for those reporting on violence, conflict and tragedy. Both these and other supportive forums and support structures are used widely in UK media companies and this was reflected by some participants. However, others expressed frustration about an apparent 'disconnect' between managers and staff, remarking that even if support was available, they were often not given the encouragement or time to engage with it before they were out onto the next story. There was also concern about potential isolation and lack of support for those in the field, especially freelancers, and this echoes the study's findings about their increased vulnerability. While organizations like DART offer resources for media organizations on supporting freelancers (McMahon & Lyall, 2019), this could be further supported with studies examining the different needs of freelancers and this would benefit from further research.

Several limitations of the above study should be noted. There may have been a non-response bias and there are risks of recall bias in self-report measures. Also, the use of convenience sampling and the low completion rate mean the sample may not be representative of UK journalists. Although the study sample displays similar characteristics to research in similar cohorts (Browne et al., 2012), its findings should nonetheless be generalized with caution. The use of a cross-sectional design restricts conclusions regarding the direction or causation of associations, which require further longitudinal investigation. Journalism is fast-paced with many deadlines, many may not have had time to complete a questionnaire, but those who did engage were keen to discuss the issue, with most survey participants leaving suggestions on how organizations can help develop growth after trauma.

Despite limitations, these findings have potential implications for media companies and clinicians, as they add to the recent, growing literature regarding trauma and journalism, supporting evidence suggesting that while most UK journalists accept traumatic assignments as part of the job, a minority experience posttraumatic stress symptoms (Browne et al., 2012). In this study, between 6% to 12% of journalists who had worked on traumatic news events and whose most impactful trauma was a work-based event, reported post-traumatic stress scores above the suggested cut-off values.

The study is thought to be the first to examine PTSD, personal risk and post-traumatic growth within the profession, and suggests that those in conflict zones experience both more post-traumatic stress and post-traumatic growth, than those who do not. PTG is higher still in those who report that their worst work-related traumatic event involved some degree of personal risk, threat or injury. Most of those who reported perceived posttraumatic growth suggested that social support was key to helping them to process difficult and distressing events. However, many participants who experienced post-traumatic stress, reported that they were unable to seek help within their organizations, either because it was not provided, or that the workplace culture contained a 'lingering macho stigma', which did not allow for it.

Discussion around the possible impact of trauma pre and post assignment would alert individuals and organizations to the potential risk of post-traumatic stress, especially for those working in war zones. It would also allow for reflection on encouraging posttraumatic growth, allowing for sensitivities towards those who may not experience it. Journalists need to tell their trauma story to colleagues and managers who understand and validate it as this was seen as key to processing the event and subsequent healing. Allowing space, time, resources and support for these conversations is crucial. Journalists provide an essential role in society, holding a mirror to atrocities and horror and bearing witness to them on behalf of others, which may allow scrutiny and change. If society is to give voice to the vulnerable, it is vital that those who report from traumatic and challenging environments are protected too.

Data availability statement

The data that support the findings of this study are available on request from the corresponding author [SW]. The data are not publicly available due to their containing information that could compromise the privacy of research participants.

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