

## Trauma Exposure and Substance Use in Journalists: A Narrative Review

Nahisha Williams-Wynn<sup>1</sup> and Jasmine B. MacDonald<sup>1,2</sup>

<sup>1</sup>Discipline of Psychology, RMIT University, <sup>2</sup>School of Psychology, Charles Sturt University

*Individuals and teams in the journalism community cover stories relating to death, destruction, and tragedy in society, exposing themselves to potentially traumatic events (PTEs). The aim of this review was to explore: (1) the impact trauma exposure may have on substance use, (2) substance use as a method of coping, and (3) personality profiles that are predictive of substance use. Findings indicate that journalists are exposed to a wide variety of PTEs. Despite substance use being considered a trauma reaction in the broader literature, this connection has not been adequately addressed within journalist samples. The most common substance researched in journalists is alcohol consumption, with few studies considering other substances (e.g., nicotine, caffeine, or illicit substances). Future research with journalist samples could evaluate substance use as a method of coping and incorporate broader theory relating to substance use risk personality profiles. There is a need to bridge the gap that exists between broader trauma and substance use literature and a focus on journalist samples, with the intention of: (1) providing a more holistic understanding of psychosocial issues associated with trauma exposure and substance use to inform diagnosis and treatment, (2) assessing risk and protective factors for this community, (3) informing the development of health promotion and education programs specific to practising journalists and journalistic organisations, and (4) highlighting opportunities for trauma specific education targeted at those training to become a journalist, including protective coping strategies.*

*Keywords:* journalist, substance use, trauma, coping, personality, alcohol

Journalists are an important community group in society as they are relied upon to report matters of the world as they occur, conveying current and factual information on topics such as politics, foreign affairs, and public health. What they report has the power to influence peoples' decisions and behaviours (Infante et al., 2003). The term 'journalist' can cover various roles in the broader journalism community, such as writers, camera-operators, managers, editors, and technical staff (MacDonald et al., 2017). The unique role of a journalist puts them in a position where they are often covering stories relating potentially traumatic events (PTEs), including death, destruction, violence, crime, and tragedy. Applying the broader work of Bonanno and Gupta (2009), researchers have found that journalist reactions to trauma vary and are based on individual differences—one person may experience an event as traumatic, and another may not, so the term PTEs is used (Backholm & Björkqvist, 2012b; MacDonald et al., 2016). Studies that have investigated trauma reactions in journalists have focused on symptoms of posttraumatic stress disorder (PTSD; MacDonald, Dale et al., 2021) and depressive symptoms (MacDonald, Hodgins, Saliba et al., 2021). However, substance use is another potential trauma reaction (Konkolý Thege et al., 2017) and is additionally found to be comorbid with other psychological disorders (Haller & Chassin, 2014; Perkonig et al., 2000). Research that has considered substance use typically positions substance use as a method of coping in groups that are subjected to PTEs (Tomaka et al., 2017; Ullman et al., 2013).

Major theories of addiction, such as the stress coping model of addiction (Wills & Shiffman, 1985), the relapse prevention model (Marlatt & Gordon, 1985), and the self-medication hypothesis (Khantzian, 1997) stipulate that stress is a significant contributor to substance use, addiction, and relapse. Journalists are under pressure to be multiskilled; in

addition to writing, they may also be expected to do camerawork and editing, amongst other demanding tasks (MacDonald & Fox, 2018). They face competitive pressures to find the next story before a competitor does, and must deal with onerous time pressures and deadlines (Monteiro et al., 2016). Some may be reluctant to take time off work or be unwilling to turn down a challenging story for fear that they may lose their job or be replaced (Fedler, 2004; Keats & Buchanan, 2012). Therefore, at least theoretically, journalists are at risk of developing substance use disorders (SUDs; Sinha 2001, 2008). MacDonald, Backholm et al. (2021) found that exposure to personal PTEs was associated with elevated levels of stress using the Depression Anxiety Stress Scale (Lovibond & Lovibond, 2004), whereas work-related PTEs was not. This is relevant because substance use, stress, and exposure to PTEs are theoretically connected and the focus of this paper.

The aim of this review is to understand the types of traumatic events members of the journalism community are exposed to and to explore the impact this trauma exposure may have on their substance use behaviours. This review will then go on to define and look at coping, specifically exploring substance use as a method of avoidant-emotional coping. Finally, in linking the area of journalists' trauma exposure to substance use more broadly, another important factor to consider is personality constructs that are predictive of substance misuse (MacDonald et al., 2016). Therefore, the review will also consider personality profiles (anxiety sensitivity, hopelessness, sensation seeking, and impulsivity) that may be influencing substance use behaviours in journalists. This narrative review focuses on peer-reviewed journal articles with the intention of providing directions for future community psychology research and practice in order to: (1) provide a more holistic understanding of psychosocial issues associated with trauma exposure and substance use to inform diagnosis and treatment, (2) assess risk and protective factors for this community, (3) inform the development of health promotion and education programs specific to practising journalists and journalistic organisations, and (4) highlight opportunities for trauma specific education targeted at those training to become a journalist, including protective coping strategies.

## **Trauma Exposure Experienced by Journalists**

The constant demand for instantaneous up-to-date news means that journalists are often exposed to multiple PTEs. At times they can be a witness to an event arriving at a scene before any first responder emergency services do. The nature of the job can also put journalists in danger and at risk of death, imprisonment, injury, threats, and intimidation (Committee to Protect Journalists, 2020; Feinstein et al., 2002; Monteiro et al., 2016). Not only are they exposed to multiple forms of firsthand and vicarious PTEs professionally, they are also susceptible to the kinds of PTEs members of the general public might ordinarily experience in their personal lives. Research suggests that 80–100% of journalists have been exposed to a PTE through their work (Dworznic, 2011; Feinstein et al., 2002; MacDonald et al., 2017; Smith et al., 2018). Western and global general population studies show PTE exposure rates of 26–90% (Benjet et al., 2016; Breslau et al., 1998; Roberts et al., 2011; Ogle et al., 2014), meaning journalists as a community experience elevated risk of PTEs exposure compared to the general population.

### ***Work-related PTE Exposure***

On average, journalists are exposed to 1.72–32.4 PTEs (Backholm & Björkqvist, 2012b; Browne et al., 2012; MacDonald, Backholm et al., 2021; Pyevich et al., 2003). A direct comparison of studies exploring PTEs within this population proves difficult given methodological differences, including the use of different trauma exposure scales. Pyevich et al. (2003) sampled 866 U.S. daily newspaper journalists and found that, on average, participants were exposed to 7.8 PTEs. The most common PTE experienced was road

accidents. Participants reported that the most stressful kinds of stories covered included—injured/dead children (36.1%), murder (11.2%), and road accidents (8.1%). Backholm and Björkqvist (2012b) sampled 407 Finnish journalists and also found the most frequent PTE experienced was road accidents. However, on average their sample was exposed to 1.72 PTEs, which is notably lower than that reported by Pyevich et al. This discrepancy could be due to the comparatively larger size of the U.S. relative to Finland.

Limited research has been conducted in an Australian context. A more recent study conducted by MacDonald, Backholm et al. (2021) found that their sample of international journalists, the majority being based in Australia (73%), were exposed to an average of 9.1 PTEs. The three most common work-related PTEs experienced were injured/dead children, fire, and motor vehicle accidents (MacDonald, Backholm et al., 2021). Lee et al. (2018) sampled 367 Korean journalists. Comparable to Pyevich et al., they found that on average participants were exposed to 7 PTEs; participants were most frequently exposed to fires (73.41%), and the most stressful kind of story covered was ship accidents (42.7%). Notably, participants in this study had recently covered the Sewol ferry accident. Smith et al. (2018) sampled 167 U.S. journalists and also found that fires (67.1%) were the most frequent type of PTE. However, like Pyevich et al., the most stressful PTE to be reported by Smith et al. was dead/injured children. Browne et al. (2012) included a sample of 50 UK journalists and reported that the most common PTE experienced was war zones. Each of the above studies used the Journalist Trauma Exposure Scale (JTES) and of those that provided descriptive statistics for all items, war zones were the least common PTE to be experienced (Backholm & Björkqvist, 2012b; Lee et al., 2018; Pyevich et al., 2003).

The JTES is a 23-item self-report questionnaire, which queries journalists' exposure to PTEs over a specified time period (Pyevich et al., 2003). It requires participants to indicate the range, frequency, and intensity of exposure (Pyevich et al., 2003). Despite the common use of the JTES, direct comparison of findings across studies is difficult due to a range of inconsistent methodological decisions. For example, Lee et al. (2018) made modifications to the 14 types of PTEs experienced to reflect the situation in Korea; 'ship accidents' do not appear as original items on the JTES scale. Browne et al. (2012) added a 15<sup>th</sup> item to the scale to include 'child abuse/cruelty'.

The Trauma History Questionnaire (THQ; Green 1996) is a self-report questionnaire that measures the exposure to PTEs. It consists of 24 yes/no questions relating to different PTEs experienced, and the number of times experienced (Hooper et al., 2011). Although this scale is not specific to journalists, it has been applied to the study of trauma exposure in journalists. Feinstein and Nicolson (2005) looked at the difference between embedded journalists (those attached to military units), and unilateral journalists (those not associated with the military) covering the Iraq war. The authors found that there was no difference in PTE exposure between these groups. Sinyor and Feinstein (2012) explored gender differences in trauma exposure of war journalists, and found no significant differences in THQ responses. Levaot et al. (2013) explored PTE exposure between Israeli war journalists and Western war journalists. Similar to the other two studies, Levaot et al. found no significant differences between the two groups.

It is clear that individuals within the journalism community are exposed to multiple types of PTEs, however these vary between countries and context. Using scales that are specific to an occupation, such as the JTES, enables a greater understanding of that community group. However, such scales also make it difficult to compare findings with other occupations or the general population (MacDonald et al., 2017). This is also a challenge when authors use non-established scales or informal assessments. Therefore, scales that are not occupation specific, such as the THQ, facilitate comparisons (MacDonald et al., 2017).

As well as work-related exposure to PTEs, journalists are subject to personal exposure to PTEs. However, few studies distinguish between work-related and personal trauma exposure

in journalist samples. It is important to distinguish between the two, as the broader trauma literature outlines that previous exposure to personal trauma is a predictor of negative trauma reactions. Backholm and Björkqvist (2012a) highlight the importance of this in journalist samples. Their study included 196 Finnish journalists covering the Jokela school shooting and found that the level of previous exposure to PTEs positively predicted more distress when covering the school shooting, but previous exposure to work-related PTEs did not.

### ***Trauma Exposure and PTSD Symptoms in Journalists***

Symptoms of PTSD in journalists are an important consideration as they are a common trauma reaction, they are also comorbid with substance use, and they provide a broader psychological context for consideration when assessing and treating substance use as a trauma reaction within the journalism community. Those previously exposed to any form of trauma are more likely to experience negative trauma reactions when exposed to subsequent PTEs (Breslau et al., 1999). This has been demonstrated in journalist samples for depressive symptoms (MacDonald, Hodgins et al., 2021) and PTSD symptoms (MacDonald, Dale et al., 2021). Research indicates that the prevalence of PTSD symptoms in journalists ranges from 4.3–43.2% (MacDonald, Dale et al., 2021), which is higher than that of the general population at 7.9% (Aoki et al., 2013; Kessler et al., 1995). Prevalence rates vary between studies due to differences in the measures and samples used, as well as differences in clinical cut-off scores for PTSD.

Using the Impact of Events Scale-Revised (IES-R), Lee et al. (2018) found a 43.2% prevalence rate for PTSD symptoms in their sample of 367 Korean journalists, which is one of the highest figures recorded for journalists. The authors note that what may have influenced such an elevated prevalence rate could have been the large proportion of participants who had recently covered the Sewol ferry accident (73.6%). Lee et al. used a PTSD clinical cut-off score of 25, which they outline as standard practice in Eastern studies (Hatanaka et al., 2010). However, other Western studies conducted in the U.S. that utilise the PTSD Checklist (PCL) to measure the prevalence of PTSD symptoms use a more conservative clinical cut-off of 44. Pyevich et al. (2003) found a prevalence rate of 4.3% in their sample of journalists, Dworznik (2011) found a prevalence rate of 7.14% in their sample of TV news workers, and Smith et al. (2018) found a prevalence of 9.7% in their sample of news journalists. Notably, MacDonald, Dale et al. (2021) found that their sample of 117 international TV news camera operators had a prevalence rate of 16.2%, which is higher than any other study within this area. This suggests that TV news camera operators experience elevated symptoms of PTSD compared to other roles within the journalism community. However, it should be noted that although the sample consisted of international journalists, the majority were Australian so the generalisability of the findings should be considered when drawing conclusions.

Future research should involve collaboration with community and clinical researchers to establish the most appropriate cut-off when exploring symptoms of PTSD in journalists. Journalists' exposure to work-related and personal trauma is well-established in the literature. A large proportion of the literature focuses on symptoms of PTSD as a trauma reaction. However, when exposed to a PTE, between 4.3–43.2% of journalists experience symptoms of PTSD, demonstrating that many journalists do not experience symptoms of PTSD (MacDonald, Dale et al., 2021). This highlights the potential role for community researchers and practitioners to evaluate sources of social capital that can be further engaged and mobilised to support individuals who may be at elevated risk of developing PTSD symptoms. It is beyond the scope of this paper to further explore social capital. However, MacDonald and Fox (2018) found that social capital among journalists reduces physical and psychological risks. Social capital in the form of mentoring and protective behaviours from more experienced and



established news workers can serve as a buffer for journalists exposed to PTEs and other work-related stressors (MacDonald & Fox, 2018).

### **Substance Use Behaviours in Journalists**

Due to the nature of the job, the journalism community has been stereotyped as being made up of regular drinkers, as they frequently perform their job in social places where alcohol is consumed (Casper & Hughes, 1982). Alcohol consumption is also embedded and accepted in journalist culture. In an interview conducted by Seely (2019, p. 254), one reporter states: “There was a time when I drank a lot. But we’re reporters, we’re supposed to drink”. A study conducted by Joseph (1983) found that journalists were more than twice as likely to suffer from alcoholism compared to the general public; this is the only study to look at alcoholism in journalists and was conducted some time ago. Over the years awareness, availability, and patterns of alcohol consumption have evolved, so whether Joseph’s findings are still relevant today is unclear. This provides a potential space for further development, evaluating current consumption trends within the journalism community and using it to inform support service work and develop educational programs that are tailored to this community group and reflect the aforementioned changes in awareness and consumption observed in the broader population.

The majority of earlier trauma exposure and substance use research in journalists has been conducted by Feinstein and colleagues and assessed by measuring the quantity of alcohol consumed as well as the risk associated with this use. Journalists were asked how many units of alcohol they consumed in a week. Feinstein et al. (2002, p. 1571) defined a unit of alcohol as “either a regular size bottle of beer, glass of wine or shot of spirits”. The authors used Canadian guidelines for safe alcohol consumption (Bondy et al. 1999), which sets a maximum of 14 units for males and 9 units for females per week. In their sample of 140 war journalists, Feinstein et al. (2002) found that males and females consumed 14.7 and 10.8 units of alcohol per week respectively; these figures are in excess of the guidelines for safe alcohol consumption in both groups and are 2–3 times more than non-war journalists. In Feinstein and Nicolson’s (2005) study on embedded and unilateral journalists covering the Iraq war, the authors found that embedded male and female journalists consumed 15.1 and 12 units of alcohol per week respectively, and unilateral male and female journalists consumed 12.8 and 6.9 units per week respectively. Although embedded journalists consumed more alcohol per week, no statistically significant differences were found between the two groups. This suggests that frequency of consumption could be an important consideration, and worth contemplating in future research. Both studies suggest that male journalists consume more alcohol than their female counterparts. It is important to note that different countries will have their own guidelines for safe alcohol consumption.

MacDonald et al. (2016) conducted a systematic literature review on substance use behaviours in journalists synthesising research conducted prior to 2013 ( $n = 10$ ). The review found that only two studies assessed nicotine use (Feinstein & Nicolson, 2005; Feinstein & Owen, 2002) and none had assessed caffeine use. Cannabis use is documented in the literature and authors report prevalence rates for war journalists (24.3%; Feinstein & Owen, 2002), and comparisons between embedded journalists (18.4%) and unilateral journalists (12.8%; Feinstein & Nicolson, 2005), and war journalists (23.1%) and Mexican journalists (7.6%; Feinstein, 2013). Illicit substance use has been reported in a number of studies (Feinstein, 2013; Feinstein et al., 2002; Feinstein & Nicolson, 2005; Feinstein & Owen, 2002). However, some do not provide descriptive statistics for specific substances, and only two studies report prevalence rates. Feinstein (2013) reported that 5.6% of war journalists and 2.9% of Mexican journalists use substances such as amphetamines, cocaine, barbiturates, and heroin. Feinstein and Owen (2002) reported that 6.4% of war journalists used illicit drugs, such as cocaine and

amphetamines. Without associated descriptive statistics it is difficult to compare with other journalist samples, occupation groups, and the general population (MacDonald et al., 2016).

Since the review by MacDonald et al. (2016), only three studies have explored substance use in journalists. Weekly units of alcohol consumption were recorded, where a unit of alcohol was defined as per previous studies discussed, and safe alcohol consumption was also based on guidelines set by Bondy et al. (1999). Feinstein and Starr (2015) explored the psychological wellbeing of Western journalists reporting on the conflict in Syria. Again, men on average consumed more alcohol (11.56) than women (10.3), however only women exceeded the upper limit of safe consumption. Feinstein et al. (2015) investigated the psychological health of journalists in Kenya and found that men and women consumed 4.8 and 2.18 units of alcohol per week respectively. The authors did not find that substance use was comorbid with other psychological disorders, which is otherwise well-established in the literature (Blanco et al., 2013).

Feinstein et al. (2016) explored the psychological wellbeing of 114 Iranian journalists. Men consumed an average of 4.18 units of alcohol and women consumed an average of 2.31 units of alcohol per week, similar to rates reported by Feinstein et al. (2015). Feinstein et al. (2016) reported other drug use rates ranging between 1.8%–2.7%, for cannabis, heroin, LSD, and cocaine use. The authors also reported a high barbiturate use of 30.6%, a sedative that induces muscle relaxation. The high use of barbiturates suggests that they are more readily available in Iran compared to other substances. In Western populations, barbiturates are rarely prescribed due to addictive potential and risk of fatal overdose (Weaver, 2015).

As outlined above, substance use in journalists consistently explores alcohol consumption with demographic comparisons being of focus, while other substances are often neglected (MacDonald et al., 2016). There are some exceptions, such as Feinstein et al. (2016) who report illicit substance use, but without descriptive data. This could have been because participants were not as forthcoming about illicit substance use compared to alcohol use. Alcohol consumption in Kenyan journalists was not found to be comorbid with other psychological disorders, comparable to findings of Feinstein et al. (2016) with Iranian journalists. This suggests that culture plays a role in alcohol consumption; alcohol is more widely accepted in Western cultures compared to African or Middle Eastern cultures (Richie & Roser, 2018). Alternatively, it could be that there are differences in presentation and assessment of mental disorders across cultures and geographical regions.

It is notable that the substance use in journalists literature has not to date compared journalists' substance use to that of other occupation groups or the general population; without these comparisons it is difficult to ascertain if substance use is an area that requires further consideration in this community (MacDonald et al., 2016). It is also surprising that no-one seems to have explored the potential association between trauma exposure and substance use in journalists, despite (1) the elevated risk of PTE exposure in journalists and, (2) this association having been established in general population (Khoury et al., 2010; Konkoly Thege et al., 2017) and clinical samples (Kuksis et al., 2017).

### **Coping Motives in Journalists**

When considering motives for substance use, the literature suggests that journalists use substances as a method of coping (Buchanan & Keats, 2011; Keats & Buchanan, 2012; MacDonald et al., 2016; Monteiro et al., 2016). Coping is defined as a regulatory process that can stabilise and reduce negative feelings associated with stressful situations (Afshar et al., 2015). A number of coping strategies that journalists employ when faced with PTEs have been identified, including: (1) social support—talking to family, significant others, or therapists, (2) disconnecting, such as exercising, (3) remembering job purpose, (4) substance use and risky behaviour (Buchanan & Keats, 2011; Monteiro et al. 2016; Seely, 2019).

Greenberg et al. (2009) included 124 journalists to explore their views on PTSD and associated help-seeking behaviours. The researchers found that participants were more likely to reach out to family or friends for support, and least likely to turn to managers or therapists. These results indicate that journalists do not feel comfortable seeking professional help or reaching out to their superiors, however the authors draw no concrete conclusions as to why this is. Feinstein et al. (2002) indicate that there is a “culture of silence” (p. 1574) within the news reporting community. Keats and Buchanan (2009) report journalists do not seek help and silence their distress for fear of being perceived as weak and unable to cope. Community researchers and practitioners could consult groups of journalists in various media organisations to evaluate their psychosocial and systemic environment and gain further insights, especially with respect to social support networks. This would enable researchers and practitioners to: (1) collaborate directly with journalists in the area of capacity building and addressing specific risks, and (2) developing context specific interventions and education programs aimed at improving individual and organisation wellness.

### ***Coping and Substance Use in Journalists***

When journalists are forced to suppress their distress other unhealthy coping strategies may be adopted, such as substance use (Keats & Buchanan, 2012). Seely’s (2019) interview study revealed that some reporters drink alcohol at elevated levels when their work assignments are emotionally taxing. Research has indicated a positive association between avoidant coping and substance use (Aldridge-Gerry et al., 2011; Digdon & Landry, 2013; Lyness & Koehler, 2016), further suggesting that journalists are at greater risk of substance use disorders compared to the general population.

When considering avoidant-emotional coping, a common strategy is the use of alcohol and other substances. The Drinking Motives Model (Cooper, 1994) proposes that individuals may consume alcohol to: (1) increase their positive affect through social motives, (2) increase their positive affect through enhancement motives, or (3) reduce negative affect. Of these three, drinking to cope is of primary concern because it is most likely to be associated with substance misuse (Mackinnon et al., 2014; Moran & Saliba, 2011). This theoretical explanation, although specific to alcohol, has been found to be transferable to other substances, such as cannabis (Cooper et al., 2016). Tobacco use and caffeine consumption have also been identified as coping mechanisms (Lawless et al., 2015; Šabić & Mujanović, 2019). Applying the theory behind the self-medication hypothesis (Khantzian, 1997), this form of coping within journalist populations is characterised by the need to self-medicate in an effort to alleviate and numb adverse experiences associated with trauma reactions (Buchanan & Keats, 2011; Feinstein et al., 2016; Keats & Buchanan, 2012; Monteiro et al., 2016). It is noteworthy that some psychological disorders are intensified by substance use (Kaysen et al., 2011; Smith et al. 2018; Shah et al., 2020) and so this avoidant coping strategy is particularly risky for individuals with a pre-existing disorder.

There are many different theories on coping, but one of the first and most influential was developed by Lazarus and Folkman (1984) who defined two major coping categories: (1) emotion-focused coping—regulating emotions when faced with something stressful, and (2) problem-focused coping—managing the problem. However, other researchers have argued that there are more than two coping categories. For example, Carver et al. (1989) developed a new coping measure and found statistical support for three factors: emotion-focused coping, problem-focused coping, and avoidant-emotional coping. Avoidant-emotional coping is characterised by avoidance of dealing with the stressor and as such denies a solution being reached (Carver et al., 1989). While problem-focused and emotional coping are considered protective and associated with psychological well-being (Meyer, 2001), avoidant-emotional

coping can be harmful in the long-term; those who tend towards this coping style have been found to have higher levels of perceived stress (Thompson et al., 2010).

With these three coping strategies in mind, Carver et al. first developed the Coping Orientation to Problems Experienced (COPE) Inventory which is a 60-item scale with 15 subscales (1989) and later developed a shorter version of the COPE called the Brief COPE (1997). The Brief COPE is a 28-item self-report questionnaire that uses a 4-point Likert scale ('I usually don't do this at all' to 'I usually do this a lot') to assess different coping styles (Carver, 1997). The items can be grouped into three subscales: (1) problem-focused coping, (2) emotional coping, and (3) avoidant-emotional coping. This measure has been used in studies involving the general population as well as in journalist samples (Schnider et al., 2007; Shah, 2020; Smith et al., 2018). All three subscales have shown good internal consistency ( $\alpha = .80-.88$ ; Schnider et al., 2007).

In their study of 367 Korean journalists, Lee et al. (2018) explored coping strategies using the Stress Coping Scale (Carver, 1997). Although not explicitly stated, what the authors refer to as the Stress Coping Scale appears to be congruent with the Brief COPE. They found that journalists adopting avoidant coping strategies to reduce emotional distress (such as drinking alcohol, smoking cigarettes, and self-blame) had greater symptoms of PTSD. Consistent with Lee et al., both Smith et al. (2018) who sampled 167 U.S. news journalists, and Shah et al. (2020) sampling 236 journalists in Pakistan, found (using the Brief COPE) that avoidant-emotional coping was associated with statistically significant elevated PTSD symptoms. These studies highlight journalists use of avoidant coping strategies in the context of increasing symptoms of PTSD.

However, what is missing from the literature is an exploration of substance use specifically as a method of coping, which has been considered in other populations. Ullman et al. (2013) sampled 1863 sexual assault victims in the U.S. and explored the connection between trauma exposure and substance use to cope. Using the Brief COPE, the researchers found that elevated lifetime exposure to trauma was significantly associated with increased use of substances to cope ( $r = .36, p < .001$ ). Other research including 740 U.S. firefighters explored substance use coping via the Brief COPE (Tomaka et al., 2017) and reported a significant positive correlation between PTSD symptoms and substance use coping ( $r = .40, p < .001$ ). Both studies use the self-medication hypothesis (Khantzian, 1997) to explain their results. Although using different samples, both studies suggest that those exposed to trauma and/or experiencing negative trauma reactions are at an increased risk of using substances to cope. As both studies were conducted in the U.S., some level of caution should be taken when making generalisations outside of this context and to other population groups.

However, it is reasonable to suggest that the journalism community may be particularly susceptible to using substances to cope. Future research should be directed in this area to fill the gap within the literature and understand if these associations are found in journalists. Research investigating journalists and substance use coping is limited; however, in the broader trauma literature and dominant theoretical perspectives, substance use as a method of coping is clearly established. Other motives for substance use behaviours are outlined in the broader substance use literature and include specific personality profiles, which the following section will explore.

### **The Role of Personality in Substance Use Behaviours**

Personality is predictive of substance use and a contributing risk factor for substance use disorders (Afshar et al., 2015). Specific personality profiles that include neurotic tendencies and deficits in behavioural inhibition tend to be associated with substance use (Malmberg et al., 2010). These personality traits have been identified as strong risk factors for elevated patterns of substance use and motivations for use, as well as risk factors for different types of



SUDs and vulnerabilities to comorbid psychopathology (Castellanos-Ryan et al., 2013; Castellanos-Ryan & Conrod, 2012; Woicik et al., 2009). A scale that specifically measures these personality profiles is the Substance Use Risk Profile Scale (SURPS; Woicik et al., 2009). The SURPS is a 23-item questionnaire with four subscales assessing personality traits that are associated with an increased risk of substance misuse: anxiety sensitivity, hopelessness, impulsivity, and sensation seeking. Participants respond to each item using a four-point Likert scale ('strongly disagree' to 'strongly agree'). Hopley and Brunelle (2015) report good internal consistency for the SURPS subscales ( $\alpha = .71-.78$ ).

Anxiety sensitivity is defined as a fear of anxiety-related physical sensations (Reiss et al., 1986). High levels of anxiety sensitivity is associated with coping motives for substance use (Stewart & Kushner, 2001), high levels of problem drinking, smoking, and sedative use (Conrod et al., 2000; Conrod et al., 1998). Sensation seeking is associated with the need for stimulation, a low tolerance to boredom, and willingness to take risks (Arnett, 1994; Woicik et al., 2009); it is associated with an increase in substance use behaviours to enhance positive affect (Comeau et al., 2001; Conrod et al., 2000; Cooper et al., 1995). Impulsivity is associated with rapid decision making (Krueger et al., 2002) and the inability to control behaviour (Woicik et al., 2009); it has been linked to high-risk behaviours, problem drinking, and stimulant and polysubstance use (Conrod et al., 2000; Finn et al., 2005; Jackson & Sher, 2003).

Finally, hopelessness refers to holding negative views about the self and the world, and is characterised by low mood and worthlessness (Castellanos & Conrod, 2006); it is associated with increases in alcohol consumption and opioid use as a method of coping to reduce negative affect (Woicik et al., 2009). This trait is particularly pertinent when considering groups that may be using substances as a result of trauma exposure and that may have comorbid PTSD or depressive symptoms. One of the outcomes of trauma exposure is a cognitive shift towards viewing the world and other people as dangerous and unsafe (Janoff-Bulman, 1989); this relationship has been established in journalists (Pyeovich et al., 2003). Finally, one of the diagnostic criteria for major depressive disorder is a sense of hopelessness (American Psychiatric Association, 2013). Journalists are at an elevated risk of trauma exposure as well as PTSD and depressive symptoms (MacDonald et al., 2017, MacDonald, Backholm et al., 2021, MacDonald, Dale et al., 2021).

In a systematic literature review conducted by MacDonald et al. (2016), the authors recommend the application of the SURPS in journalist samples as this would allow: (1) a more specific understanding of factors associated with substance use compared to other broader models of personality, and (2) the implementation of specific personality-targeted interventions for the prevention and treatment of SUDs (Conrod, 2016). Therefore, application of the SURPS in the journalism community may improve the quality and potential outcomes of research within this area (MacDonald et al., 2016). Currently, there is no existing research that explores substance use risk personality profiles in journalists, highlighting a gap within the literature. However, this well-established theory has been applied, validated, and well-documented in adolescent (Jurk et al., 2015) and adult populations (Hopley & Brunelle, 2015; Schlauch et al., 2015).

## Conclusion

This narrative review explored and evaluated research investigating trauma exposure in the journalism community. The majority of research reviewed comprised peer reviewed journal articles, with the aim of understanding the type of trauma journalists are typically exposed to and how this may impact their substance use behaviours. Substance use was considered as a trauma reaction and as a method of coping. Personality profiles that may predict substance use behaviours were also considered. The review has focused on peer-reviewed literature with the intention of suggesting directions for future research and to inform the

diagnosis and treatment of journalists. A limitation to this review is the lack of accessibility of relevant literature in this area published in languages other than English.

The current review highlights that journalists are exposed to a wide variety of PTEs. The specific type of PTE and how stressful it is varied. Most studies found that covering road accidents and fires were the most frequently experienced work-related PTE; war zones were generally the least common. However, specific types of PTEs differ between countries and related contextual factors. Making direct comparisons between studies proves difficult due to differences in methodology. A distinction between work-related trauma from personal trauma is not consistently found in the literature; this is an important distinction because those previously exposed to trauma are more likely to experience negative trauma reactions when exposed to subsequent PTEs. Despite elevated levels of trauma exposure, many journalists do not experience symptoms of PTSD and this highlights the potential role for community researchers and practitioners to evaluate sources of social capital that can be further engaged and mobilised to support individuals who may be at elevated risk of developing PTSD symptoms.

Alcohol consumption is the most common substance assessed in journalist samples. War journalists are more likely to drink excessively compared to non-war journalists, and males drink more than females. Few studies considered journalists use of nicotine or illicit substances, and caffeine consumption does not appear in the existing literature. The concern here is that maintaining the narrow focus on alcohol consumption skews our understanding of substance use and serves to reduce the capacity of psychological services to support individuals who may not adopt alcohol as a means of substance use related coping. Further research into various types of caffeine consumption in addition to coffee (e.g., energy drinks) and nicotine use in addition to cigarettes (e.g., vaping) could provide meaningful insights and a more holistic and nuanced understanding of substance use coping behaviours and outcomes. Comparing journalists' illicit substance use across studies and to other community groups is difficult because studies with journalist samples have not typically reported descriptive statistics. Comparisons between journalist samples and other high-risk occupations, clinical groups, and the general population are desirable in the endeavour to determine if substance use is elevated amongst journalists in a clinically and practically significant way.

Some notable areas for future research are apparent. Personality, specifically substance use related traits, have been shown to be predictive of substance use behaviours. However, these traits are yet to be explored in journalist samples. Scales, such as the SURPS should be applied to journalist samples to explore the role personality has in substance use behaviours of this unique occupational group. Finally, there is limited research exploring substance use as a trauma reaction in journalists. Studies including other high-risk groups have found a positive association between trauma exposure and substance use. Substance use is identified as a form of coping, generally associated with an avoidant coping style, to deal with occupational stressors and as a way to alleviate symptoms of various types of trauma reactions (e.g., depressive disorders and PTSD). An exploration of the association between trauma exposure and substance use in journalists that accounts for the most relevant personality traits may bridge the gap that exists within the literature to better inform diagnosis and treatment of this group. It may also serve to guide community researchers and practitioners in consulting with key members or organisations within the journalism community to co-design health promotion and education programs specific to this community's context and that raise awareness about healthy behaviours and individual wellness. Other implications include increasing opportunities for trauma specific education targeted at those studying and training to become a journalist, including protective coping strategies.

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### Acknowledgements

The authors would like to acknowledge the research assistance of Deanne Drury who assisted with the identification of relevant articles for this narrative review.

### Address for Correspondence

Correspondence concerning this article should be addressed to Nahisha Williams-Wynn at [nahishaww@gmail.com](mailto:nahishaww@gmail.com)

### Author Biographies

**Nahisha Williams-Wynn** (B.Soc.Sci. Psychology)(Honours) is currently undertaking the Master of Addictive Behaviours program at Monash University. She is based in Melbourne,

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Australia. Nahisha works within community mental health as a Service Manager supporting those who have psychosocial disabilities and complex trauma, as well as providing leadership and support to dedicated teams. Her research interests include trauma and substance use.

**Dr Jasmine B. MacDonald** BA/BSW(Hons), PhD) is an Adjunct Lecturer with the School of Psychology, Charles Sturt University. Jasmine is a Research Fellow at the Australian Institute of Family Studies (AIFS); this paper was not completed in affiliation with AIFS. Jasmine's subject matter expertise is trauma exposure and reactions, including in occupational and intimate partner violence contexts. Jasmine's methodological expertise is in literature reviews, evidence synthesis and knowledge translation. She creates the psychology research and practice podcast Psych Attack. Website: [jasminebmacdonald.com.au](http://jasminebmacdonald.com.au)