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A contextual approach to trauma experience: lessons from life events research

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Editorial

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Defining trauma

There has been much debate over what constitutes trauma experiences, how these are differentiated from other very negative events, and the importance of personal impact – for example, witnessing *v.* experiencing events. The Diagnostic and Statistical Manual of Mental Disorders (5th ed.; *DSM–5*; American Psychiatric Association, 2013) defines post-traumatic stress disorder (PTSD) trauma events specifically as those where the individual experiences, witnesses or is confronted with actual/threatened death, serious injury or sexual violence. Whilst experiencing a Criterion-A defined traumatic event is a necessary component of the PTSD diagnosis, it is clearly not a sufficient explanation of disorder risk. Studies show significant between- and within-event variation on disorder impact (Darves-Bornoz *et al.*, 2008; Carmassi *et al.*, 2014) suggesting that (a) some trauma events are much more prone to provoking PTSD than others and (b) that after experiencing the same trauma event type, some individuals will go on to develop PTSD while others will remain resilient. Therefore, trauma event characteristics as well as individual vulnerability are required to explain disorder risk.

Currently, individual factors such as sex, age and psychiatric history are known to increase the risk for developing PTSD (Brewin *et al.*, 2000). However, refining our understanding of trauma events could also further help explain these differences (Kilpatrick *et al.*, 2009). Indeed, further improving the specifics of trauma experiences might actually help reduce the discrepancy between the incidence of currently defined traumatic events and the much lower rate of PTSD cases found by epidemiological studies (Darves-Bornoz *et al.*, 2008; Digangi *et al.*, 2013; Carmassi *et al.*, 2014). Certainly, it is important to increase our knowledge of risk and resilience surrounding trauma, as PTSD is associated with some of the widest use of health care systems and a high associated cost per patient (Kessler, 2000; Boscarino, 2004).

We believe the DSM implication that trauma events are uniquely different from other types of negative life events and are limited to a few specific types of predetermined event that can be identified categorically and of which only one or two may occur in a given case, hinders the utility of current trauma definitions in research and practice. Whilst we do not take issue with the standard definition of trauma events, a binary checklist-style approach to such events has a potential for missing relevant experience. Instead, we argue that trauma events should be considered to be at one end of a continuum of threat, with potential for more or less 'threat to life' in a range of domains. For example, a serious violent attack from a partner with injuries sustained could be differentiated from lesser conflict and verbal threats which may precede it. Yet both are likely to add to the duration of threat and impact, and individuals seeking treatment may be at different phases in a developing scenario. Similarly witnessing violence may be considered less threatening (or of different valence) than being the recipient in many cases. Taking a wider assessment of adverse experience around an identified trauma with the grading of 'threat to life' for the individual or another can help to contextualise the experience and predict or understand the impact. This might help explain why some negative life events which fall short of current trauma definitions, such as certain instances of infidelity and relationship disturbances, can be related to risk of PTSD (Gold *et al.*, 2005; Van Hooff *et al.*, 2009; Catherall, 2011) and why traumatic events can fail to demonstrate this association if experienced indirectly (Anders *et al.*, 2011). Furthermore, a wider assessment of events could elucidate a greater range of co-existing trauma events, or those sub-threshold experiences related to the phasing of trauma, and other unrelated negative life events which may contribute to context and impact (e.g. reducing resources).

A contextual approach to severity

Whilst there are a few intensive life events interview measures, largely developed in the 1980s and 1990s (Paykel, 1997), the Life Events and Difficulties Schedule (LEDS; Brown and Harris, 1978) has been utilised in a body of research and is often considered a 'gold standard' of this type of approach. The LEDS uses intensive interview questioning to provide an objective assessment of an event's threat (i.e. where it sits on the spectrum of negativity) through close examination of the event itself, its context and the resulting inferred objective life change

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for the individual (Brown and Harris, 1978). This occurs through precedent ratings and some panel reviews for reliability purposes.

A 'severe' life event is one that involves an enduring or relatively extensive negative life change (with high score of threat or unpleasantness), including those requiring substantial cognitive reappraisal, lasting at least 2 weeks post-event and impacting either solely or jointly on the individual/someone close (Brown and Harris, 1978). The level of threat (scored on a four-point scale) is determined using information about both current circumstances and relevant past biography, as well as evidence for relevant plans, purposes and concerns held by the respondent at the time of the event (Brown, 1991). Rating of 'marked' threat is relatively unusual and involves aspects such as bereavement of someone close (i.e. where loss is permanent) or violent attack (i.e. where real physical danger is involved). This is all rated free from the actual emotional response or disorder occasioned and based on the response of the 'average person' in similar circumstances. Thus, it reflects factual information independent of symptomatology and emotional response about change, focusing on potential negative impacts.

However, to our knowledge, the theoretical grounding and methodology used in life events research have not been specifically applied to trauma exposure. Using life events procedures for identifying a wider range of negatively life-changing events may serve to identify multiple trauma experiences wider than those restricted to current Criterion-A definitions, identifying related severe events or chronic problems which add to the trauma context, severity and 'dosage', or explicate the causes of comorbid disorder adding to both research prediction and treatment focus.

The research on trauma implies that for many individuals, traumatic events occur within a context of other negative experiences such as ongoing deprivation or substance abuse (Hamel and Pampalon, 2002; Kim *et al.*, 2010). Moreover, severe life events tend to cluster within the same individuals (Kendler *et al.*, 1993; Foley *et al.*, 1996; Bifulco *et al.*, 1998). Thus, the clustering of severe events and their likely effect on coping/support resources may help explain why PTSD is frequently comorbid with other psychiatric diagnoses (Grubaugh *et al.*, 2010; Contractor *et al.*, 2014), as well as why events that do not meet Criterion-A can be related to PTSD (Bodkin *et al.*, 2007; Van Hooff *et al.*, 2009).

Severe events not reaching current trauma criterion evoke a range of emotional reactions such as anger, sadness and anxiety as well as negative cognitions around pessimism, self-doubt and hopelessness. This increase in general psychological distress can reduce an individual's available coping resources, which in turn may increase the likelihood of psychological disorder in general. Indeed, it is well documented that severe life events are related to onset of major depression (e.g. Brown *et al.*, 1995; Bifulco *et al.*, 1998; McQuaid *et al.*, 2000) and other psychopathology such as schizophrenia, eating disorders and bipolar disorder (Hultman *et al.*, 1997; Schmidt *et al.*, 1997; Hosang *et al.*, 2012; Beards *et al.*, 2013). Alternatively, a traumatic event may itself increase psychological distress reducing the ability to cope with other life events, further increasing distress and the likelihood of PTSD symptoms along with other disorders. Therefore, it should be unsurprising to conclude that the co-occurrence of severe events with present or past trauma(s) could be important for both PTSD and comorbid psychopathology.

This is borne out by research which illustrates that experiencing a severe negative life event can add to the impact of trauma experiences (Brewin *et al.*, 2000). Studies show that delayed PTSD onset is often associated with experiencing severe life events, sometimes many years after the initial trauma (Andrews *et al.*, 2000; Boscarino and Adams, 2009; Horesh *et al.*, 2011) and negative life events contribute to PTSD and depression comorbidity (Jin *et al.*, 2018). Additionally, PTSD symptomatology increases after experiencing a subsequent severe life event or trauma (Schock *et al.*, 2016).

This illustrates the importance for both clinicians and researchers to examine in detail not only the index trauma(s) but any stressful experiences surrounding the trauma. Those who fail to assess the impact of other contextual factors might misattribute the cause of distress or ignore their intersecting effects which could be decreasing the resilience and increasing the likelihood of disorder, greater symptomatology or comorbidity.

Possible dimensions of trauma events

Life events have also been analysed in terms of characteristics or dimensions which cut across the usual event categories (such as partner, housing, parenthood) (Brown *et al.*, 1995) and these may be usefully attributed to trauma events. One of these is loss, defined broadly as the loss of a person (attachment threat), role (identity threat), important plan (achievement threat) or cherished idea about the self (identity threat). The permanence of such loss denotes higher severity ratings with bereavement having particular prominence. Although PTSD Criterion-A does not specifically mention loss, its inclusion of death, serious injury and sexual assault may all involve aspects of loss, i.e. death breaks attachments, and injury or assault may lead to the loss of role and functioning central to self-concept. Events involving emotional loss have been found to be significantly associated with PTSD symptoms above and beyond Criterion-A stressors (Carlson *et al.*, 2013). This indicates not only that loss events provoke severe emotional pain of the sort consistent with Criterion-A, but suggests that other loss events may additionally be considered traumatic. Certainly, bereavement is commonly associated with PTSD symptoms in the general population (Zisook *et al.*, 1998; O'Connor, 2010) even when non-violent, but with sudden and untimely elements such as the death of a child from chronic illness.

Danger events are those clearly indicating a future loss or security threat, threats to plans (achievement) and threats to ideas about the self, particularly when they are associated with behavioural commitment (identity), with those threatening to life and safety having highest severity. Similar to loss, it could be implied that the Criterion-A events of threatened death, injury or assault carry high weightings of danger to security and potentially identity and attachments. Cognitive models of PTSD argue that trauma events violate formerly held beliefs and lead to cognitive restructuring around concepts of safety and self-assessment (Brewin, 2014). Indeed, individuals who experience threats to safety show a raised likelihood of PTSD, including war veterans and victims of stalking or natural disasters (Xu and Liao, 2011; Norris and Slone, 2013; Kessler *et al.*, 2017). The perception of life threat is significantly associated with PTSD (Larsen and Berenbaum, 2017), even after adjusting for objective trauma exposure (Heir *et al.*, 2016).

Another severe life event dimension, humiliation, involves rejection, devaluation and role failure (attachment and identity threats), leading to a sense of shame or devaluation with more public events and those in areas of high commitment being more severe. Feelings of anger, shame and guilt are often associated with trauma, and humiliation may underlie some of the association between traumatic events and PTSD (Lee *et al.*, 2001). For example, experiencing shame and anger at others after a violent

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Table 1. The number (%) of LEDS 'marked' severity and Criterion-A traumatic events classified by each threat type in a London sample (Bifulco *et al.*, 1998)

	LEDS highest rated threat dimension ('marked')				Total (*n*)
	Loss	Danger	Humiliation	Entrapment	
Type of marked event trauma LEC-5 event (*n* = 22)					
Actual/threat of death	5 (20.0)	7 (35.0)	–	–	12
Actual/threat of serious injury	2 (8.0)	5 (25.0)	2 (28.6)	–	9
Actual/threat of sexual violence	–	1 (5.0)	–	–	1
Non-trauma event (*n* = 38)					
Disability and death (e.g. serious chronic illness child, or sudden, untimely but non-violent death of close other)	5 (20.0)	1 (5.0)	–	1 (12.5)	7
Relationship crisis/breakdown (e.g. 14-year-old child ran away following row and missing in London)	7 (28.0)	3 (15.0)	2 (28.6)	–	12
Crime/legal (e.g. individual arrested for murder)	3 (12.0)	1 (5.0)	3 (42.8)	–	7
Material/finance (e.g. made homeless)	2 (8.0)	2 (10.0)	–	4 (50.0)	8
Body image (e.g. disfigurement following illness)	1 (4.0)	–	–	3 (37.5)	4
Total	25	20	7	8	60

event is predictive of PTSD (Andrews *et al.*, 2000). More broadly, research suggests that negative social events involving public humiliation, ridicule or rejection can be experienced as more distressing than those meeting Criterion-A (Carleton *et al.*, 2011) and lead to PTSD symptoms (Erwin *et al.*, 2006; Guðmundsdóttir, 2016). There is also evidence that persistent humiliation can lead to significantly lower psychological functioning than periodic exposure to violence (Barber *et al.*, 2016).

Entrapment is a characteristic of both severe events and related long-term problems, where there is an erosion of hope with events confirming imprisonment in an ongoing, highly negative situation (security threat), with the most severe involving little chance of escape. Torture, hostage situations and domestic abuse are all cases which could easily fulfil Criterion-A but also have features of entrapment in the cultivation of hostile and punishing environments. Certainly, feelings of entrapment are significantly associated with PTSD (Griffiths *et al.*, 2015; Siddaway *et al.*, 2015) and are strongly related to suicidal behaviour in those with PTSD (Panagioti *et al.*, 2012). These can encompass events not in themselves traumatic, such as carer experience, which can be associated with PTSD when involving perceptions of entrapment (van den Born-van Zanten *et al.*, 2016). Similar findings hold for entraping experiences of parents of children with chronic illnesses (Cabizuca *et al.*, 2009) and victims of school and workplace bullying (Nielsen *et al.*, 2015).

Testing overlap of markedly severe events, their attributes and trauma events

In order to examine how attributes of severe events may overlap with trauma classifications, a secondary analysis of published data of LEDS events was undertaken. In a London community sample of 110 vulnerable women seen prospectively (Bifulco *et al.*, 1998), the LEDS interview classified 1232 events. The analysis examined only those with the most 'marked' threat rating taken to be similar in severity to trauma events. A *post hoc* analysis applied the Life Events Checklist for DSM-5 (LEC-5; Weathers *et al.*, 2013) classification to summarised events (inter-rater reliability of $\kappa = 0.90$) and found 4.4% of events meeting Criterion-A Trauma across 40 respondents. Most were physical assault (39%) or death/life-threatening illness (28%). There were fewer sexual assaults (11%), accidents (13%) or severe human suffering (e.g. suicide attempt of other, stillbirth) (9%). Analysis showed that of those categorised as having LEC-5 trauma events, most (88%) had *also* experienced at least one other severe event as identified in the LEDS. Thus, trauma events and severe life events co-occur in the same respondents.

The overlap of 'markedly' severe life events and LEC-5 trauma events was further examined. This yielded 60 events across 22 respondents. There was a modest agreement between the two scorings ($\kappa = 0.36$, $p < 0.0001$). The LEDS 'marked threat' rating had a specificity of 97% (95% CI 95.60–97.71) but a sensitivity of only 41% (95% CI 27.57–54.97) with the trauma classification, and a PPV of 37% and an NPV of 97%. Thus LEDS 'marked' threat events failed to detect 59% of trauma events, but incorrectly identified only 3%. The two measures are overlapping but by no means identical.

The examination of pre-rated severe events features (i.e. loss, danger, humiliation, entrapment) and LEC-5 trauma classification for this group of 'marked' threat events are shown in Table 1. Nearly all those classified as trauma were scored additionally as having danger or loss with a further two categorised as humiliation. For non-trauma events, there was a wider spread of classifications including humiliation and entrapment.

This brief analysis suggests that trauma events commonly occur with severe life events, are a subset of events with marked threat and similarly have characteristics of loss, danger and humiliation.

The LEDS approach is thorough but very time consuming and therefore expensive. A new online approach – Computerised Life Events Assessment Record CLEAR – mimics aspects of the interview ratings with good reliability and validity and is able to provide ratings of the threat as well as the further characteristics in a large number of event categories (Bifulco *et al.*, 2019). The overlap of trauma and other severe events and their characteristics have been investigated with some success in relation to depression (Bifulco *et al.*, under review). Whilst these scores constitute reported rather than investigator-coded characteristics of events, aids to rating online through written and video instruction, and detailed labelling of rating points with examples potentially

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objectifies ratings. In addition, the potential for providing algorithms for comparing detailed and time-based demographic information to underpin severity ratings is present. Given trauma is a characteristic rated online, this has the potential for beneficial use in trauma-related research and services but requiring fewer resources than the intensive interview.

Treatment implications

There is already some support for the further specification of the trauma concept for PTSD along potential dimensions already used for severe life events research. Potentially, adopting both a dimensional approach to investigating what makes negative life events traumatic and what other attributes are particularly traumagenic would increase the breadth of experience encompassed but also the potential specific meaning of different subsets of trauma experience for the individual. Equally, this more qualitative or 'meaning' approach to understanding trauma would allow for a more considered approach when formulating treatment, placing the individual within their context at the time of the event but also in encompassing other related stressful events which impinge on the individual but may also have implications for managing trauma (e.g. through loss of other close support figures).

Using greater specification in assessing the characteristics of trauma events may aid not only in refining diagnosis but also in treatment or intervention. Thus, psychotherapeutic techniques appropriate to grief, over-vigilance, damaged self-concept or helplessness can be used to supplement those already available for less specified trauma. Whether or not the trauma situation is ended/resolved or still active is relevant for appropriate levels of vigilance experienced. Any of these approaches would also potentially benefit from a detailed knowledge of other severe life events or long-term problems still in evidence which may create further future risk or limit support or resource (escape from a violent partner also involving loss of home and financial support). Whilst intensive interviews may be ruled out for time and resource issues, an online assessment of severe life events and trauma, based on the LEDS and undertaken outside of clinician time may aid in improved treatment approaches as well as client understanding of their experience (Bifulco *et al.*, 2019). Failing this, clinicians simply being aware of distinctions in trauma characteristics (regarding loss, danger, humiliation and entrapment) and applying these to the trauma situations described, may find new themes for treatment. This would not necessarily involve extensive questioning, rather a deeper understanding of components of an identified trauma experience.

Conclusions

We have argued that trauma events should be considered in more varied terms, for example, on a spectrum of magnitude, in relation to phasing and tied to contextualised life event threat approaches. Specifically, we have highlighted the potential significance of loss, danger, humiliation and entrapment when rating the traumatic nature and likely impact of events. These attributes may be crucial in refining our understanding of not only why some events are considered traumatic, but their specific impacts, for instance, the likely repercussions of a traumatic loss compared with traumatic danger such as ongoing violence.

In addition, we have argued the importance of both current and longer-term context is critical, especially as negative experiences including traumatic events tend to cluster within individuals and their effects can have multiple and cumulative impacts. Critically, traumatic experiences are rarely isolated events and the unique impact of any given trauma may be difficult to ascertain. We believe a dimensional approach to the characteristics of trauma taken from life events research could have the potential for greater clarification of trauma attributes and severity. This would have direct implications for a more person-focused treatment of trauma. It could also inform predictions of future life trajectories to distress and disorder.

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