Multiple traumatisation and subsequent psychopathology in people with intellectual disabilities and DSM-5 PTSD a preliminary study


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Multiple traumatization and risk of harm in people with intellectual disabilities and DSM-5 PTSD: A preliminary study

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Title

Multiple traumatization and risk of harm in people with intellectual disabilities and DSM-5 PTSD: A preliminary study

Abstract

Background: It is recognised internationally that individuals with intellectual disability (ID) are at greater risk of being exposed to traumatic events compared to the non-disabled population. Yet no study to date has examined the role of multiple traumatisation and subsequent mental health symptomology in people with ID. The aim of this study was to explore the association between multiple traumatisation and subsequent mental health.

Method: A preliminary quantitative study involving 33 participants with DSM-V PTSD completed self-report questionnaires on exposure to traumatic life events and PTSD symptoms, anxiety, depression and general distress.

Results: A proportion of 55% of the sample reported exposure to life events in both childhood and adulthood. Those who reported exposure to life events in childhood and adulthood reported significantly higher risk of harm compared to those who reported exposure to life events only in adulthood. The two groups did not differ significantly on measures of PTSD, anxiety, depression and general distress.

Conclusions: Preliminary results indicate that exposure to multiple traumatisation is associated with the risk of harm in people with intellectual disabilities. Clinical implications and directions for future research are discussed.

Key words: intellectual disabilities; learning disabilities; developmental disabilities; post-traumatic stress disorder; PTSD; EMDR; trauma
Introduction

Individuals with intellectual disabilities (ID) have an increased risk of exposure to traumatic life events such as long-term physical, interpersonal, and sexual abuse (Pestka & Wendt, 2014; Byrne, 2017). Exposure to traumatic events in this population group has been associated with numerous mental health conditions (for review see Hulbert-Williams & Hastings, 2008) including; anxiety (e.g. Bonell- Pascual, Huline-Dickens, Hollins 1999), Post Traumatic Stress Disorder (PTSD) (e.g. Mevissen & de Jongh, 2010; Wigham & Emerson, 2015), and symptoms of depression and aggressive or self-injurious behaviour (e.g. Esbensen, & Benson, 2006; Peckham, Corbett, Howlett, McKee & Pattison, 2007; Jowett, Karatzias, Brown, Grieve, Paterson et al., 2016). Compared to the non-disabled population, people with ID are more like to develop traumatic stress following exposure to traumatic events (Hatton & Emerson 2004; Focht-New et al., 2008). This might be due to a number of reasons including difficulties in recognising and avoiding potentially dangerous situations (Focht-New et al., 2008), a reduced ability to process traumatic memories (Breslau, et al., 2006) or lack of social support, and communication difficulties (Tomasulo & Razza, 2007).

Although individuals with ID are at greater risk of being exposed to multiple traumatic events, particularly in childhood, (McCarthy, 2007; Emerson, 2013, Hatton & Emerson 2004), and are more vulnerable to developing severe mental health problems following trauma (e.g. Wigham & Emerson, 2015), there have been few studies that have examined the experience of negative life events and effect on mental health in people with ID. Research in this area has predominantly focused on single life events, for example, sexual abuse (Sequeira and Hollins, 2003; Byrne, 2017) and bereavement (MacHale & Carey, 2002). However, some studies have explored the association between a range of life events and subsequent psychopathology in adults with ID (Hastings, Hatton, Taylor, & Maddison, 2004; Owen et al., 2004; Hamilton, Sutherland, & Iacono, 2005; Esbensen & Benson, 2006). Nevertheless, these studies relied on
informants such as carers and family members to provide information and none of these studies assessed lifetime history of traumatic life events and severity of DSM-V PTSD, anxiety, and depression in a single study. We aimed to preliminary address these gaps in the literature.

Methods

Design and Participants

Participants in this study were recruited from a trial on psychological therapies for PTSD. Participants were adults with ID who were attending one of 6 NHS outpatient clinics in the UK for this population and they have had history of at least one traumatic life event. Fifty-one participants who met inclusion criteria were identified and approached to take-part; of those, 33 individuals consented (65%) and agreed to participate.

Participants were included if they had an ID, were over 18 years old, and were able to give informed consent. All potential participants identified by clinicians completed the Post-Traumatic Stress Disorder Checklist (PCL-5; Weathers et al., 2013). Individuals unwilling to participate, who did not give consent or who attended psychotherapy services in the voluntary or private sector were excluded from the study. Ethical approval was obtained from the appropriate Ethics Committee within the UK.

Measures

Traumatic events

The Life Events Checklist (LEC; Gray, Litz, Hsu, & Lombardo, 2004) is a 17-item, self-report measure that screens for potentially traumatic events in the respondent’s lifetime and was used to assess adulthood trauma. The measure demonstrates good test-retest reliability and convergent validity (Gray et al., 2004).
The Childhood Trauma Questionnaire (CTQ; Bernstein & Fink, 1998) is a 28-item self-report questionnaire that assesses history of childhood emotional, sexual and physical abuse and emotional and physical neglect. The measure demonstrates good internal consistency, test-retest reliability, and convergent validity (Bernstein & Fink, 1998).

**PTSD**

The Post-Traumatic Stress Disorder Checklist (PCL-5; Weathers, et al., 2013) is a 20-item self-report questionnaire, which assesses DSM-5 posttraumatic symptoms. The measure has good reliability and validity across a range of populations (e.g. Bovin, Marx, Weathers, Gallagher, Rodriguez et al., 2016).

**Anxiety**

The Glasgow Anxiety Scale for People with a Learning Disability Scale (GAD-LD; Mindham & Espie, 2003) is a 27-item self-report scale that comprises the ‘three systems’ of cognitive, behavioural and somatic symptoms which co-present anxiety disorders. The measure has demonstrated good test retest reliability and validity in adults with an ID (Mindham & Espie, 2003).

**Depression**

The Glasgow Depression Scale for People with a Learning Disability Scale (GD-LD; Cuthill Espie & Cooper, 2003) is a 20 item self-report scale to measure depression symptoms in individuals with ID. The measure has demonstrated good test retest reliability and validity in adults with an ID (Cuthill et al., 2003).
**Psychological wellbeing**

*Clinical Outcomes in Routine Evaluation – Learning Disability* (CORE – LD; Marshall & Willoughby-Both, 2007) is a 34-item generic measure of psychological distress comprising of 4 domains: functioning (6 items), problems (10 items), well-being (3 items), and risk (5 items). The measure has shown good test retest reliability and validity in adults with an ID (Marshall & Willoughby-Both, 2007; Brooks, Davies & Twigg, 2013).

**Statistical analysis**

Two groups were created; one with participants who reported traumatic life events only in adulthood (N= 15) and another with participants who reported traumatic life events in both childhood and adulthood (N= 18). Data was analysed using SPSS (version 20). Comparisons between groups were made by means of t tests for parametric data and Mann-Whitney U test for comparisons where assumptions of normality were not met (Field, 2009).

**Results**

**Sample characteristics**

The mean age of participants was 41 (Sd = 11.9). There were 20 (39%) males and 13 (61%) females. The majority had attended primary/secondary education (66.7%), were taking psychotropic medication at the time of assessment (75.8%), and had a diagnosis of mild ID (72.7%). Just over half of participants had another co-morbid condition (57.6%) (Table 1).

[Table 1 about here]
Nature of life events in childhood and adulthood

All participants reported having experienced at least one traumatic life events (Table 1). Over half of the participants (n= 18, 55%) reported that they had experienced traumatic events in both childhood and in adulthood, and just under half of the sample reported only experiencing trauma during adulthood (n= 15, 45%). No participants reported exposure to traumatic events in only in childhood. Of those who experienced childhood trauma (Table 2), the most common event reported was physical abuse (67%) and 42% were exposed to more than one type of trauma.

The most common life event reported in adulthood (Table 3) was physical assault (64%). Nearly all participants (97%) reported experiencing more than one type of traumatic event in adulthood. The mean number of life events experienced was 4.6 (Sd = 1.97)

Childhood and adulthood trauma in ID

The childhood and adulthood trauma group scored higher on the measures of functioning (CORE), PTSD (PCL) and depression (GDS), however, was almost equal or lower in anxiety scores for the child and adulthood trauma group compared to the adulthood only group (Table 4). This difference only reached significance on the CORE subscale of Risk, \( t (-2.580) = 3.44, p < .05, d = 23.98 \) (see Table 4). There were not significant differences between males and females.

Discussion

In this first ever preliminary study, it was found that a proportion of 55% of the sample reported exposure to life events in childhood and adulthood. Those who reported exposure to
traumatic life events in childhood and adulthood reported significantly higher risk of harm to self and others compared to those who reported exposure to life events only in adulthood.

The finding regarding the association between multiple traumatisation and risk of harm to oneself and others support findings from previous studies in people with ID (e.g. O’Callaghan, 2003; Peckham, et al., 2007). However, and considering evidence from the non-disabled population (e.g. Briere, Kaltman, & Green, 2008; Cloitre, Cohen, Edelman, & Han, 2001; Yates, 2004; Cloitre, Stolbach, Herman, van der Kolk, Pynoos, et al., 2009; Rytwinski, Scur, Feeny, & Youngstrom, 2013), it was surprising that multiple traumatisation was not found to be associated with increased PTSD, depressive and anxiety symptomatology. Although this might reflect a unique profile of the traumatic symptomatology in people with ID (McCarthy, 2007; Byrne, 2017), our results require replication with larger samples.

Another limitation of the present study is that the PCL-5 scale is not standardised in people with ID and there has been concern raised that the concept of PTSD, and its effect on mental health for the non-disabled population, may be limited when applied to people with ID (Byrne, 2017). There is a need for further work on the phenomenology and standardisation of instruments that correspond to conditions of traumatic stress as per DSM-V and the forthcoming ICD-11. The ICD-11 will include a new condition of traumatic stress, Complex – PTSD (CPTSD), which is associated with multiple traumatisation (Karatzias, Shevlin, Fyvie, Hyland, Efthymiadou et al., 2017) and new instruments for the assessment of CPTSD (Karatzias, T. Shevlin, T Fyvie, C Hyland, Efthymiadou et al., 2016) have emerged in the literature.

**Conclusion**

On the basis of these findings we recommend routine screening of traumatic life events and subsequent distress in people with ID.
Table 1: Demographic Characteristics (n = 33)

<table>
<thead>
<tr>
<th>Factor</th>
<th>Level/Units</th>
<th>Mean (SD) or n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (n = 31)</td>
<td></td>
<td>41 (11.9)</td>
</tr>
<tr>
<td>Gender</td>
<td>Male</td>
<td>20 (39)</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>13 (61)</td>
</tr>
<tr>
<td>Living arrangements</td>
<td>Alone</td>
<td>6 (18.18)</td>
</tr>
<tr>
<td></td>
<td>With others</td>
<td>11 (33.33)</td>
</tr>
<tr>
<td></td>
<td>Hospital</td>
<td>1 (3.03)</td>
</tr>
<tr>
<td></td>
<td>Supported living</td>
<td>11 (33.33)</td>
</tr>
<tr>
<td></td>
<td>Unknown</td>
<td>4 (12.12)</td>
</tr>
<tr>
<td>Education</td>
<td>Basic</td>
<td>22 (66.67)</td>
</tr>
<tr>
<td></td>
<td>Higher</td>
<td>7 (21.21)</td>
</tr>
<tr>
<td></td>
<td>Unknown</td>
<td>4 (12.12)</td>
</tr>
<tr>
<td>Medication</td>
<td>Yes</td>
<td>25 (75.76)</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>4 (12.12)</td>
</tr>
<tr>
<td></td>
<td>Unknown</td>
<td>4 (12.12)</td>
</tr>
<tr>
<td>ID</td>
<td>Mild</td>
<td>24 (72.73)</td>
</tr>
<tr>
<td></td>
<td>Moderate</td>
<td>5 (15)</td>
</tr>
<tr>
<td></td>
<td>Unknown</td>
<td>4 (12)</td>
</tr>
<tr>
<td>Co-morbidity</td>
<td>Yes</td>
<td>19 (57.58)</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>10 (30.30)</td>
</tr>
<tr>
<td></td>
<td>Unknown</td>
<td>4 (12.12)</td>
</tr>
<tr>
<td>Trauma</td>
<td>Childhood only</td>
<td>0 (0)</td>
</tr>
<tr>
<td></td>
<td>Adulthood only</td>
<td>15 (45.45)</td>
</tr>
<tr>
<td></td>
<td>Childhood and adulthood</td>
<td>18 (54.55)</td>
</tr>
</tbody>
</table>

Table 2: Childhood trauma (n=18)

<table>
<thead>
<tr>
<th>Childhood trauma</th>
<th>n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotional Abuse</td>
<td>9 (50.0)</td>
</tr>
<tr>
<td>Emotional Neglect</td>
<td>9 (50.0)</td>
</tr>
<tr>
<td>Physical Abuse</td>
<td>12 (66.7)</td>
</tr>
<tr>
<td>Adulthood trauma</td>
<td>n (%)</td>
</tr>
<tr>
<td>-----------------------</td>
<td>-------</td>
</tr>
<tr>
<td>Natural disaster</td>
<td>1 (3)</td>
</tr>
<tr>
<td>Fire</td>
<td>6 (18.2)</td>
</tr>
<tr>
<td>Vehicle accident</td>
<td>7 (21.2)</td>
</tr>
<tr>
<td>Serious accident</td>
<td>10 (30.3)</td>
</tr>
<tr>
<td>Toxic substance</td>
<td>6 (18.2)</td>
</tr>
<tr>
<td>Physical assault</td>
<td>21 (63.6)</td>
</tr>
<tr>
<td>Weapon assault</td>
<td>9 (27.3)</td>
</tr>
<tr>
<td>Sexual assault</td>
<td>16 (48.5)</td>
</tr>
<tr>
<td>Other sexual</td>
<td>12 (36.4)</td>
</tr>
<tr>
<td>Captivity</td>
<td>10 (30.3)</td>
</tr>
<tr>
<td>Illness</td>
<td>13 (39.4)</td>
</tr>
<tr>
<td>Extreme suffering</td>
<td>1 (3)</td>
</tr>
<tr>
<td>Witnessed death</td>
<td>1 (3)</td>
</tr>
<tr>
<td>Death of relative</td>
<td>22 (66.7)</td>
</tr>
<tr>
<td>Caused injury/death</td>
<td>3 (21.2)</td>
</tr>
</tbody>
</table>

Table 3: Adulthood trauma (n=33)

Table 4: Trauma group differences in psychological wellbeing, PTSD symptomology, anxiety and depression (N=33)
<table>
<thead>
<tr>
<th>Measures of psychopathology</th>
<th>Overall Mean (Sd)</th>
<th>Adulthood only (n= 15) Mean or median (Sd)</th>
<th>Childhood &amp; Adulthood (n= 18) Mean or median (Sd)</th>
<th>t or Mann-Whitney u</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>CORE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Functioning</td>
<td>4.70 (2.47)</td>
<td>3.80 (2.21)</td>
<td>5.44 (2.48)</td>
<td>-1.99</td>
<td>.055</td>
</tr>
<tr>
<td>Problems&lt;sup&gt;a&lt;/sup&gt;</td>
<td>11.5 (3.92)</td>
<td>11.00 (2.80)</td>
<td>13.00 (4.55)</td>
<td>176.0</td>
<td>.145</td>
</tr>
<tr>
<td>Risk</td>
<td>1.79 (1.83)</td>
<td>1.00 (.93)</td>
<td>2.44 (2.15)</td>
<td>-2.58</td>
<td>.016*</td>
</tr>
<tr>
<td>Social&lt;sup&gt;a&lt;/sup&gt;</td>
<td>6.45 (2.24)</td>
<td>7.00 (1.92)</td>
<td>7.50 (2.52)</td>
<td>136.5</td>
<td>.957</td>
</tr>
<tr>
<td>Wellbeing</td>
<td>3.30 (1.29)</td>
<td>3.20 (1.27)</td>
<td>3.39 (1.34)</td>
<td>- .41</td>
<td>.681</td>
</tr>
<tr>
<td>Total</td>
<td>27.76 (9.28)</td>
<td>25.0 (5.39)</td>
<td>30.06 (11.22)</td>
<td>-1.60</td>
<td>.103</td>
</tr>
<tr>
<td>PCL</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arousal</td>
<td>12.88 (4.93)</td>
<td>12.73 (4.68)</td>
<td>13.00 (5.26)</td>
<td>-.15</td>
<td>.880</td>
</tr>
<tr>
<td>Avoidance&lt;sup&gt;a&lt;/sup&gt;</td>
<td>4.91(1.57)</td>
<td>4.00 (1.92)</td>
<td>5.00 (2.20)</td>
<td>169.5</td>
<td>.215</td>
</tr>
<tr>
<td>Alterations</td>
<td>15.42 (6.14)</td>
<td>14.27 (7.03)</td>
<td>16.39 (5.32)</td>
<td>-.99</td>
<td>.331</td>
</tr>
<tr>
<td>Re-experiencing</td>
<td>13.42 (4.38)</td>
<td>13.27 (4.35)</td>
<td>13.56 (4.53)</td>
<td>-.19</td>
<td>.845</td>
</tr>
<tr>
<td>Total</td>
<td>46.64 (12.57)</td>
<td>44.87 (13.49)</td>
<td>48.11 (11.95)</td>
<td>-.73</td>
<td>.469</td>
</tr>
<tr>
<td>GAS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Behavioural/specific</td>
<td>7.58 (3.58)</td>
<td>7.60 (3.52)</td>
<td>7.56 (3.52)</td>
<td>.04</td>
<td>.972</td>
</tr>
<tr>
<td>Somatic/physiological</td>
<td>10.03 (3.15)</td>
<td>10.13 (2.75)</td>
<td>9.94 (3.62)</td>
<td>.16</td>
<td>.867</td>
</tr>
<tr>
<td>Cognitive/worries</td>
<td>13.30 (3.41)</td>
<td>13.13 (3.27)</td>
<td>13.44 (8.88)</td>
<td>-.26</td>
<td>.978</td>
</tr>
<tr>
<td>Total</td>
<td>30.91 (7.94)</td>
<td>44.87 (6.96)</td>
<td>30.94 (5.26)</td>
<td>-.03</td>
<td>.880</td>
</tr>
<tr>
<td>GDS</td>
<td>17.82 (6.19)</td>
<td>16.27 (3.73)</td>
<td>17.50 (7.54)</td>
<td>-1.41</td>
<td>.171</td>
</tr>
</tbody>
</table>

Note: <sup>a</sup> Median and Mann Whitney U, * significant at .05 level 9<sup>a</sup>

References


Breslau, N., Lucia, VC., & Alvarado, GF. (2006) Intelligence and other predisposing factors in exposure to trauma and posttraumatic stress disorder: a follow-up study at age 17 years. *Arch Gen Psychiatry*. 63(11), 1238-45.


