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Secondary traumatic stress and trauma informed practice in Higher Education students: an exploratory study --Manuscript Draft--

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**Secondary traumatic stress and trauma informed practice in Higher Education students:
an exploratory study**

Short Title: Secondary Trauma and Trauma Informed Practice in HE Students

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This study was approved by the School of Health Research Ethics Committee at the University of Derby

Abstract

The helping professions have long understood that secondary traumatic stress and its counterpart's burnout and compassion fatigue are a problem for workers in the field. However, less is known about the impact of the issue on students who have placements. This quantitative research study sought to explore if a convenience sample of 45 students on two programmes in the field were affected, using the Secondary Traumatic Stress Scale. The results have shown several non-significant results, suggesting that the number of weekly caring responsibility hours did not predict perceived STSS scores after placement, and that high scoring students have shown no significant difference in STSS scores before and after placement. Overall, we also found that the sub-sample of 10 students with caring responsibilities had higher STSS scores. The article discusses wellbeing in students generally, incorporating trauma informed perspectives. While no students in this study were affected, the discussion what can be done to better support students from an ecological perspective to protect and prepare them for their placements and future careers. Finally, this article calls for policy and practice in education and the curriculum of the professions to routinely incorporate awareness of the issues in training and supervision.

Keywords: burnout, compassion fatigue, placements, secondary trauma, vicarious trauma

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Conflict of Interest:

The Authors declare that there is no conflict of interest.

Abstract

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5 counterpart's burnout and compassion fatigue are a problem for workers in the field.
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Introduction

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5 Secondary Traumatic Stress (STS) and its counterparts, burnout, compassion fatigue and
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7 vicarious trauma have been described as 'the cost of caring' (p.3), an occupational hazard
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9 from working in the helping professions (Figley 1995; 2002). The terms are often used
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11 interchangeably to describe the negative effects of experiencing the emotions of another, but
12
13 there are subtle differences. It has been suggested that STS can have a more rapid onset and
14
15 subtle symptoms, such as emotional destabilisation and low mood, and decreased self-esteem
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17 (Ying, 2011). Despite awareness of the detrimental emotional impact that can cause the
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19 phenomena for staff, organisations are increasing tasking them to deal with a client
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21 population that is growing in volume, with greater and more complex need, in an environment
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23 that is increasingly turbulent. This is all in the context of services that are under significant
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25 strain (Care Quality Commission, 2020; Hood, 2018; Lawler & Bilson, 2009).
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37 A number of studies have suggested that students in the caring professions, such as social
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39 workers and nurses, are ill prepared for placements in the field dealing with traumatised
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41 clients, or the possibility that they could be at emotional harm having contact with them
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43 (Dane, 2002; Barlow & Hall, 2007; Collins, Coffey & Morris, 2010; Harr & Moore, 2011;
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45 Carello & Butler, 2015; Hemy et al., 2016; LoGiudice & Douglas, 2016; Butler et al., 2017;
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47 Harr et al., 2019). Along with their professional supervisors, students on placement are likely
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49 to be exposed to distressing client stories and suffering (Cunningham, 2014; Lewis & King,
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51 2019). Therefore, understanding how exposure to these materials could impact on their
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53 wellbeing, educational success, practice, and future employment is crucial. There is already
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55 evidence that a number of trainees in the helping professions experienced an adverse,
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1 traumatic event in placement, affecting their sleep, appetite, concentration and academic
2 performance. (Didham et al., 2011; Rinfrette et al., 2021). This article seeks to build on and
3 expand that knowledge base.
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12 In addition to the risk of students suffering STS in placement itself, research also suggests
13 that the students going into the helping professions have additional vulnerabilities. Agencies
14 and organisations are only beginning to recognise and identify that it is not only the client
15 group they deal with that have suffered adversity; the staff who look after them also have
16 histories of distress and trauma (Lewer et al, 2019). The seminal study by Felitti et al., (1998)
17 set out eight categories covering child abuse and neglect (physical, psychological, sexual,
18 emotional), domestic abuse, household mental illness and substance abuse and incarceration
19 and parental separation before the age of 18. It identified that half of respondents had one
20 adverse childhood experience (ACE) one-fourth reported greater or equal to 2, with
21 respondents with four or more ACE's having significantly increased risks of mental illness,
22 substance misuse and poor health outcomes, amongst others.
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43 Furthermore, ACE's are inter-relational; if there is one, there is an 80% chance of exposure
44 to another. Additional studies have been carried out cross culturally; in Wales, the incidence
45 was comparable; 47 out of every 100 adults will have experienced at least one ACE during
46 their childhood and 14 of that number will have experienced 4 or more (Public Health Wales,
47 2015). Understanding ACE's gives a flavour of the type of adversity an individual has been
48 subject to; it is a useful, if somewhat blunt instrument by which to measure historical trauma
49 in adults. In the field of Higher Education (HE), a recent UK study established that nearly
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1 80% of students have at least one adversity in their history, over half had three or more, and
2 20% more than six (Davies et al., 2022). Furthermore, in contrast to the general student
3 population, there is evidence to suggest that students going into the helping professions
4 have more of their own history of ACE's and traumatic stress (Tarshis & Baird, 2018). In one
5 study, adversity featured in the history of three quarters of students undertaking clinical
6 placement in the field, with a third having four or more (Butler et al, 2018).
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19 There are a limited number of studies conducted with students in placement that explore STS
20 and it's counterparts, but of the one's that exist, it appears that those in the helping professions
21 may be more vulnerable, not just by their own histories but also due to the type of stress that
22 working with clients who frequently have a history of trauma and high stress has an impact,
23 possibly due to students feeling unskilled (Cunningham, 2014; Harr et al., 2019) or simply
24 overwhelmed by the nature and degree of some of the issues they are required to support clients
25 with. Indeed, while some helping professions such as psychotherapy discuss phenomena that
26 could have an emotional impact, such as how to deal with transference on their programs,
27 many health and social care, nursing or social work programmes do not include it as a core
28 component of the curriculum (Social Work England 2020; Nursing & Midwifery Council,
29 2022).
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51 If then, there is evidence in the helping professions that the student population has
52 disproportionate adversity in its demographic, this means that qualified workers are likely to
53 reflect this. Maunder et al., (2010) found that 81% of healthcare workers experiences of
54 adversity, and as well as this, some workers are more prone to stress than others. There was
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1 research undertaken during the coronavirus pandemic that focused on racial and ethnic
2 disparities, finding that black and ethnic minority workers can be disproportionately affected
3 by stress (Grooms et al., 2022). As the trauma informed care movement grows, critics note
4 that this must extend to caring for staff as well as clients (Menschner & Maul, 2016;
5 Shemmings, 2017). We argued in our last study (Conroy et al., 2022) that the trauma
6 informed agenda also needs to include student workers via both education and adequate
7 preparation for practice, including promotion of self-care, accessible and supportive
8 university services such as study skills, library, and student wellbeing services. This should
9 sit alongside students having regular, good quality supervision in placement that explores the
10 emotional impact of the work. Having an environment that is student centred and sensitive
11 to individual needs, rather than being a one size fits all and mechanistic, is the best placed to
12 be anti-oppressive (Burke & Harrison, 2012; Thompson, 2016)

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34 This quantitative research was designed to explore if any students experienced STS during
35 placement by measuring three types of symptoms: arousal, avoidance and intrusion using the
36 Secondary Traumatic Stress Scale (STSS) developed by Bride (2007). STS has been
37 observed to occur more quickly than its slow burn partner, vicarious trauma, (Jenkins &
38 Baird, 2002), allowing this study to be cross-sectional as students are in placement for a
39 limited amount of time. For example, in the United Kingdom, Counselling and
40 Psychotherapy Students are required to undertake 100 hours of placement to meet
41 requirements of their professional body for entry into the profession (British Association for
42 Counselling & Psychotherapy, 2022). In the UK and USA, Social Workers are required to
43 complete 200 day or 400 hours as undergraduates respectively (Petra et al., 2020; Social
44 Work England, 2020). An exploratory quantitative approach was chosen to identify if
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1 disparities in perceived secondary traumatic stress were present in people with caring
2 responsibilities, due to the potential additional stresses and challenges they face in their daily
3 lives. Therefore, having a sense of the scale of the problem (even if it was small) is helpful
4 to identify if follow up qualitative research on the topic with the sample would be useful, and
5 indeed further research with bigger student samples in the future. While the results of our
6 study could be ambiguous, they yield information that could be helpful, encourage future
7 studies, and locate what was discovered into the current knowledge base.
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21 The previous article (Conroy et al., 2022) analysed data post placement and identified that
22 no students in the sample had been affected by STS, discussing protective factors that may
23 explain this. This article explores data further in relation to the STSS scores pre-placement
24 using Bronfenbrenner's Ecological Theory (1979). The original model was designed for
25 child development but has expanded and can be used to explore the variables in a topic
26 between an individual, their microsystem (close influences such as school, family), exosystem
27 (neighbours, extended family), macrosystem (wider social and culture) and the mesosystem
28 (how these different systems interact and impact on one another) and chronosystem (the
29 influence of time). The model is widely used in social work, so one that was felt was
30 appropriate to apply to the issue at hand, enabling a thorough analysis of different factors
31 that influence this complex issue. In relation to this sample, there is the individual student
32 who has a microsystem that is made up of the University or institution, that includes their
33 course and general support services, such as the library and student wellbeing services. The
34 exosystem would be bodies that oversee institutions, such as Advance HE and the charity
35 Student Minds. While analysis of all the levels of Bronfenbrenner would be beneficial,
36 constraints mean the focus of this article will be on these three key levels.
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2 The aim of this cross-sectional quantitative study was to explore whether already existing
3 caring responsibility or ethnicity can predict STSS scores post-placements. This was in order
4 to identify students with additional needs and characteristics in the broader context of who
5 was vulnerable and trauma informed practice. We were particularly interested in analysing
6 data from high scoring students (those who have scored above 28 on the STSS scale) prior
7 to completing their first Social Care placements, students who care for their relative at least
8 1h per week, and students who identify as Black British, Asian, or Mixed or Multiple Ethnic
9 Groups.
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26 **Method**

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28 This study was approved by the University of Derby Research Ethics Committee. Permission
29 from Bride (2004) was obtained for inclusion of the STSS scale for research purposes of this
30 study.
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41 **Design**

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43 The design of this study is identical to the one published by Conroy et al. (2022). Analyses
44 to investigate differences in STSS scores before and after placements were conducted to
45 compare groups of students with already existing caring responsibilities with students without
46 caring responsibilities, and across ethnic groups.
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58 **Participants**

Participants were recruited via an opportunity sample from University of Derby. The students were all studying on Health and Social Care or Social Work programmes, prior to their first compulsory placement. The group of Health and Social Care students were final year bachelor students, while the Social Workers were on the first year of their Masters. For both groups, this was the first formal work placement they had undertaken on their programmes. Two members of the research team were also module leaders with the group of students who were recruited, so were fairly well known to them. While this may have had ethical implications for students wanting to ‘please’ or be more compliant, measures were put in place to mitigate power dynamics. The research team recruited an independent assistant for this stage of the research. This ensured that students were not coerced, as they had had no previous contact with the assistant. The students were also reminded of their voluntary participation and right to withdraw when the assistant was administering the questionnaire. The analysed sample in this study comes from a previously recruited larger sample (N = 45), where only data of those who have declared caring responsibilities prior to placement (N = 10) were further analysed (see Table 1 for demographic information). There were no further inclusion or exclusion criteria.

Table 1

Demographic information

Age, N (%)	
18-24	4 (40)
25-34	4 (40)

35-44 2 (20)

Gender, N (%)

Male

Female

0 (0)

10 (100)

Programme studied

Health & Social Care

Social Work

6 (60)

4 (40)

Ethnicity, N (%)

White British

7 (70)

Black British

1 (10)

Asian

1 (10)

White Other

1 (10)

Weekly hours of caring responsibilities, N (%)

1 to 19 hours

6 (60)

20 to 49 hours

1 (10)

50 + hours

3 (30)

Materials

STSS (Bride, 2004) was utilised to measure the level of perceived secondary stress before

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andafter placement. The STSS measures overall trauma, but also includes three sub-scales that measure elements of trauma: intrusion, avoidance and arousal. The STSS has seventeen items scored on a Likert scale.

Participants were also asked to provide some demographic information, including age, gender, programme they studied on, ethnicity, relationship status, caring responsibility, weekly hours of caring responsibilities, disability and employment status. These were collected to allow better understanding of any significant differences between group during analysis of data.

Procedure

Participants were recruited before their first compulsory placements and asked to complete demographic forms and a baseline STSS questionnaire. The student participants then completed their placements, which ranged from 24 to 80 days in length. The type of placements included voluntary and statutory services, such as charities or child safeguarding. Once students returned from their first placements, they were asked to complete the STSS questionnaire again, thus allowing for comparative data analysis. All participants gave informed consent to take part in the study and were fully debriefed. Participants who scored 28 or higher on the STSS before or after their placement were offered additional wellbeing support. In order to demonstrate a duty of care and be proactive, those students were personally contacted by the member of research team who knew them best to advise of the score, and discuss what this could mean, and how students could access support. Two students were referred to Student Wellbeing services provided by the University. The student participants were aware of this process and consented to be contacted if their scores

were high.

In terms of analytical strategy, the team opted to utilize t-test and ANOVAs, because they are the most straightforward, and work with means and standard deviations. These two statistical analysis approaches were used to compare the differences in STS scores before and after the participants with caring responsibilities completed their placements. The t-test is a robust statistical option for smaller sample sizes (King & Eckersley, 2019). While applying ANOVA to smaller sample size might result in results that are difficult to generalise, represent the population and might lead to some misleading results, Sullivan (2016) argues that ANOVA is robust for deviations from normality when the sample sizes are small but equal, which the case for this exploratory study. In this case, ANOVA was used to investigate differences in pre and post-placement scores across 2 conditions (1. Students who spent 1-19 hours per week caring for someone, 2. Students who spent 20-24 hours per week caring for someone, and 3. Students who spent 50+ hours caring for someone).

Results

The overall pre-placement STSS scores for this sample of students with caring responsibilities had $M = 37.4$ ($SD = 12.58$), whereas the post-placement STSS scores showed a slight decrease in $M = 31.4$ ($SD = 15.33$). The slight decrease in M and SD post-placement was also seen across the board. Detailed means and standard deviations for pre- and post-placement STSS sub-scales can be found in Table 2.

Table 2

Pre-placement and post-placement mean (standard deviation) scores for STSS and sub-scales

	Pre-placement	Post-placement
Overall STSS (SD)	37.4 (12.58)	31.4 (15.33)
Intrusion (SD)	10.6 (2.95)	8.5 (3.47)
Avoidance (SD)	14.8 (5.96)	13.2 (7.24)
Arousal (SD)	12 (4.32)	9.7 (5.42)

Firstly, a simple t-test revealed a non-significant difference between overall STSS scores for pre-placement and post-placement data in the student sample with caring responsibilities ($t = .710$, $df = 8$, $p = .249$, $d = .28$). However, while the terms statistically significant and non-significant are mentioned, the sample size used for these analyses was very small, and thus the significance is not only not representative of our population of placement students, but also not generalizable to them either. The intention was to conduct an exploratory study, to attempt to understand whether this topic needs a much more robust quantitative investigation and qualitative exploration in the future. From here onwards, please interpret the terms statistically significant or non-significant as ambiguous.

Secondly, data were analysed using a one-way ANOVA, the results have shown that there was a non-significant main effect of overall pre-STSS scores between pre-placement and post-placement across the three conditions; weekly hours of caring responsibilities; 1-19h ($M = 37.34$, $SD = 12.24$), 20-24h ($M = 36.0$), and 50+h ($M = 38.0$, $SD = 18.36$), $F(2,7) = 1.689$,

p = .269.

There was also a non-significant main difference of overall post-STSS scores between pre-placement and post-placement across the three conditions; number of caring responsibilities; 1-19h (M = 36.4, SD = 11.44), 20-24h (M = 49.0), and 50+h (M = 27.67, SD = 8.02), $F(2,7) = .008$, $p = .992$.

Table 3

Means (and Standard Deviations) of pre-placement and post-placement scored based on number of hours of caring responsibility

	1-19h	20-24h	50+ h
Pre-placement	37.34 (12.24)	36.0	38.0 (18.36)
Post-placement	36.4 (11.44)	49.0	27.67 (8.02)

In addition, data from all students who scored high on the STSS (score of 28 or above) at baseline with or without caring responsibilities, before going to placement were further investigated (N = 23, 8 of those had caring responsibilities). The analysis consisted of investigating differences between the pre-placement and post-placement scores, in terms of overall STSS scores but also the intrusion, avoidance and arousal sub-scales. No significant difference was found between overall pre-placement and post-placement STSS scores when comparing those with and without caring responsibilities ($t = .1136$, $df = 15$, $p = .137$), nor

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inthe intrusion sub-scale ($t = .146$, $df = 15$, $p = .443$), avoidance sub-scale ($t = .1352$, $df = 15$, $p = .098$), or arousal sub-scale ($t = 1.162$, $df = 15$, $p = .132$).

We also investigated how STSS scores for the high scoring students with and without caring responsibilities differ, once they return from placement. We found that while there was no significant difference on post-placement overall STSS scores between the students with caringresponsibilities and students without caring responsibilities ($t = .850$, $df = 19$, $p = .203$) Interestingly, we found that the high scoring students with caring responsibilities scored significantly higher on the overall STSS score pre-placement ($M = 41.12$, $SD = 11.0$), than those without caring responsibilities ($M = 33.8$, $SD = 5.6$); ($t = .2.122$, $df = 21$, $p = .023$, $d = 0.8$, 95% CI; lower = .15, upper = 14.50).

Lastly, all sub-scales (intrusion, avoidance, and arousal) were investigated for only students with caring responsibilities and compared between pre-placement and post-placement. Avoidance ($t = .284$, $df = 8$, $p = .392$) and arousal ($t = .609$, $df = 8$, $p = .280$) yielded non-significant differences, however, the results have indicated a significant difference in the pre- placement and post-placement intrusion sub-scale, where pre-intrusion scores were higher ($M = 11$, $SD = 2.82$), than post-placement intrusion scores ($M = 9.44$, $SD = 1.88$), ($t = 2.031$, $df = 8$, $p = .038$, $d = 0.67$, 95% CI; lower = -.21, upper = 3.32).

However, as this was a sub-study of a main study, the authors are aware that the sample size was small, the study lacked power, and the statistical significance is not representative and might be misleading, though the initial exploratory findings in this study indicate that more

investigation of this field will be beneficial in the future.

Discussion

Firstly, several non-significant results were found, suggesting that students with caring responsibilities between 1 and 50+ hours per week, demonstrated no difference in perceived overall STS scores before going to placement and upon returning from placement. Secondly, we found that the number caring responsibilities hours (1-19, 20-24 or 50+ hours), had no significant difference on the overall STS scores before or after placement. Additionally, high scoring students (those scoring 28 points or higher on STSS prior to going placement) with and without caring responsibilities have shown no significant difference in overall STSS scores before placement and after placement, and also no significant difference in STSS sub-scales intrusion, arousal and avoidance before and after placement.

However, we found two significant results. Firstly, there was a significant difference between high scoring students with caring responsibilities and high scoring students without caring responsibilities, where those with caring responsibilities already scoring high, had significantly higher overall STSS scores than high scores without caring responsibilities. Secondly, students with caring responsibilities (high and non-high scorers), have also shown a significant difference in perceived intrusion, with results indicating significantly higher intrusion scores pre-placement compared to post-placement.

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There is no simple answer to these results; the issues related to the phenomenon of STS are multifaceted and are made up of a complex mix of the influences, so elements of Bronfenbrenner’s Ecological Theory (1979) set out earlier to analysis the key issues will now be applied. When considering STS, there is no doubt that the institution (the microsystem) and organisational culture (the exosystem, which is shaped by macrosystems) is heavily influential on what happens to an individual.

The Individual

The individual is at the heart of the matter and as discussed above, there is evidence to suggest the helping professions, including its student populace, contain disproportionate numbers of by individuals who have a personal history of significant adversity (Black et al., 1993; Maunder et al., 2010; Thomas, 2016; Bryce et al., 2021) making them more prone to retraumatisation when working with clients in the helping professions (Butler et al., 2017; Butler et al., 2018). Furthermore, as well as a difficult personal history, student wellbeing generally has deteriorated at universities in both the UK and USA. The largest piece of research into mentalhealth of U.K. students, established that a third of respondents reported a serious psychological issue that required professional help, with half of respondents admitted that they alcohol or other substances to cope (The Insight Network and Dig-In, 2019). These poor levels of wellbeing have being have been exacerbated by the Covid-19 pandemic; a trio of different studies undertaken in November 2020 concluded that 50% of students’ mental health and wellbeing had deteriorated as a consequence of the pandemic (Office for National Statistics, 2021).

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In the USA, suicide is the second leading cause of death of college students, and 95% of counselling centre directors report that meeting the needs of students with significant psychological needs is a growing concern for them (The Association for University and CollegeCounselling Centre Directors Annual Survey, 2019; Centre for Disease Control, 2019). Moreover, students who are black are at an increased risk; there is evidence that indicates this is twofold due to mental health services being inadequate to meet the needs of that client group, as well as increased vulnerability caused by racial and socio-economics factors, such as discrimination and poverty (Wang et al., 2013; Busby et al., 2021) At an individual level, this suggests that students who already had vulnerabilities could be even more prone to STS in placement and reflects research that has established that students with traumahistories suffer more anxiety, are more likely to drink and take drugs and are lonely at university compared to their peers (Kearney et al., 2018; McIntyre et a.l, 2018; Arnekrans et al., 2018). When considering other factors such as ethnicity and gender, Crenshaw’s (1989) seminal model rightly points out that intersectional factors can have a compounding influence, and we suggest that students who have multiple characteristics may need more care and intervention from tutors and institutions. Overall this makes issues such as accessibility of services and teaching of resilience and self-care strategies a critical part of helping every student build resilience, and issue that sits in the microsystem around the student.

Microsystem

A curriculum should adequately prepared students for the possibility of STS and how servicesin higher education such as library, study skills and student wellbeing could play a vital part inbeing a protective factor (Conroy et al., 2022). Given the statistics above, this is

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arguably an even more critical component when put into the context of the impact of the pandemic on student mental health and the levels of adversity that are already present in the helping professions. Regrettably, the individual professions appear to be slow to recognise that their student populace is contains high amounts of adversity and ensure that this is this should be an essential part of their curriculum. In the UK, professions such as midwifery and nursing are only just piloting trauma informed practice, and nursing in the USA ‘lags behind other health sciences’ (p.1) in teaching the core concepts, this having been mostly something that qualified nurses undertake after their training.

Including coverage of STS in a programme enlightened students to both the possibility of the phenomena in the clients (Cannon et al., 2019). Yet, it does not appear that this is related to the students own experience. Nevertheless, Goddard et al., (2021) have put out a call for action, to ensure that educators start to recognise trauma informed practice needs to extend to the students themselves, highlighting how Covid-19 has impacted students, and rightly shining the spotlight on the impact of issues such as ongoing racial trauma on minority students. Indeed, Bosse et al., (2021) suggest that some teaching activities can reactivate trauma, advocating for Trauma Informed Education Practices (TIEP) to be implemented as a helpful component in the mental health nursing course in the study. Of course, programmes can work towards this at that level, but this also brings up the wider issue of how universities are approaching the issue. Porges (2017) argues that one of the essential features of safety is co-regulation; thus one-to- one tutorials could provide an opportunity for lecturers to embody this quality, meaning that students are much more likely to engage with them.

Exosystem

1
2 Compared to the United States, universities in the United Kingdom have been slow to
3
4 recognize the importance the trauma informed practice for their student populace. Advance
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6 HE (2022), the British charity and professional membership scheme that promotes
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8 excellence in higher education, has no mention of trauma informed approaches in its
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11 *Education for Mental Health Report or Toolkit*, but does however discuss the importance of
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13 creating psychological safe environments, an essential component for those with a history of
14
15 adversity (Herman, 1992; Fisher, 1999; Porges, 2009; Levine, 2010). Nevertheless, the
16
17 safety of the university environment can be heavily compromised in a number of ways; it is
18
19 an evaluative system, requiring students to regularly undertake assessments, meaning that
20
21 this compromises feeling safe (Porges, 2017) as the threat of failure looms ever present. The
22
23 University Mental HealthCharter (UMHC), recognise that certain genetic and environmental
24
25 factors make a student morevulnerable, but does not go as far as exploring or recommending
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27 trauma informed education practice as part of its mission.
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39 Having significant adversity in a student's history impacts on their ability to socially engage
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41 ifthey do not feel safe in an environment (Porges, 2017), so how universities create these,
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43 whilealso being a system that demands achievement creates a paradox that is difficult to
44
45 navigate. Nevertheless, the UMHC does emphasise the importance of support services being
46
47 safe for students to access and Student Minds (2018), the UK's student mental health charity
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49 does mention trauma in briefly in its materials preparing students for university. However,
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51 the issueof safety and security that students who have a history of trauma needs to go well
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53 beyond the brief materials or support services available in order for universities to be truly
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55 supportive andeffective. This is a wider issue than just the U.K. , for social work programmes
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1 span the globe and institutions everywhere need to ensure that student welfare is considered.

2 Universities worldwide need to commit to creating an environment of safety at every level

3 of the organisation; this can be achieved by ensuring that trauma informed practices are

4 embedded at all levels of the organisation, such as by utilising the four principles set out by

5 Substance Abuse & Mental Health Services Administration (2014): realising the issue exists,

6 recognising the signs in students and staff, responding by ‘fully integrating knowledge about

7 trauma into policy, procedure and practices and resisting retraumatisation’ (p.13).

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19 It is also important to note that in our sample of students, the majority of those who have

20 declared to have caring responsibilities scored highly on the STSS before going to placement.

21 This might indicate that students might already find themselves in stressful and challenging

22 environments before starting at university, which might have an impact on their academic

23 and professional performance. While our small exploratory sample lacked diversity,

24 intersectionality needs to be investigated further, to help educational settings understand how

25 in addition to prior caring responsibilities, ethnicity, race, class or gender might intertwine

26 with student experience, academic performance and overall satisfaction. While universities

27 generally have services and support for student carers (The Universities & Colleges

28 Admission Services, 2022), the flexibility that some of these students require is not met due

29 to rigid university policies and rules (Runacres et al., 2021).

30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 **Limitations**

52 The sample numbers were clearly a serious limitation in this study, but it is hoped that the small

53 findings will be built on in the next study with a bigger sample across a number of programmes.

54 The fact that it just included Social Work and Health and Social Care courses meant that

1 differences between the professions, and most importantly, the type of placement were not
2 identified. There is research suggesting that work in particular fields, such as safeguarding
3 children, could place workers (and therefore students) at increased risk of STS if they have
4 trauma in their history (Bride et al., 2007; Caringi, 2008; Sprang et al., 2011). The STSS used
5 as measurement was given at different times due to students finishing across a range of dates,
6 and it may not be sensitive enough to detect changes over time, and it may not be culturally
7 sensitive due to it not being validated across differing populations (Ting et al., 2008; McNeil,
8 2012; Jacobs, 2019). The research also did not consider any of other factors that could have an
9 influence in a student's life and affect their scores such as pre-existing mental health conditions
10 or stressors unrelated to placement such as relationship breakdown or family difficulties.

11 **Future recommendations**

12 In the UK, it would be helpful for trauma informed practice to be incorporated into the
13 AdvanceHE Education for Mental Health toolkit; it would benefit staff and students having
14 a greater awareness of the issue, particularly in programmes in the helping professions.
15 Clearly, it would be helpful if the professions themselves (Nursing, Social Work, etc) could
16 stipulate that trauma informed practice, including STS and its associated phenomena,
17 compassion fatigue or burnout were explicitly named and incorporated routinely into
18 bachelor's level education. The University MH Charter needs to take into account that the
19 student populace, reflect the wider one and have existing vulnerabilities, including additional
20 loads for students who may have multiple characteristics such as race and gender. Students
21 who are enrolled on some courses, such as social work, are likely to carry more adversity in
22 their histories than others. As noted above, institutions need to become more trauma aware
23 and embed trauma informed practice at all levels of their policy and practice.

References

1
2
3
4 Advance HE. (2022) *Education for Mental Health: Enhancing Student Mental Health*
5 *Through Curriculum and Pedagogy*. Available at: [https://s3.eu-west-](https://s3.eu-west-2.amazonaws.com/assets.creode.advancehe-document-manager/documents/advance-he/AdvHE_Education%20for%20mental%20health_online_1644243779.pdf)
6 [2.amazonaws.com/assets.creode.advancehe-document-manager/documents/advance-](https://s3.eu-west-2.amazonaws.com/assets.creode.advancehe-document-manager/documents/advance-he/AdvHE_Education%20for%20mental%20health_online_1644243779.pdf)
7 [he/AdvHE_Education%20for%20mental%20health_online_1644243779.pdf](https://s3.eu-west-2.amazonaws.com/assets.creode.advancehe-document-manager/documents/advance-he/AdvHE_Education%20for%20mental%20health_online_1644243779.pdf) (Accessed:
8 27 May 2022).
9

10
11 Advance HE. (2022) *Education for Mental Health Toolkit*. Available at:
12 <https://www.advance-he.ac.uk/knowledge-hub/education-mental-health-toolkit> (Accessed:
13 27 May 2022).
14

15
16 Arnekrans, A. K., Calmes, S. A., Laux, J. M., Roseman, C. P., Piazza, N. J., Reynolds, J.
17 L., Harmening, D., & Scott, H. L. (2018) 'College students' experiences of childhood
18 developmental traumatic stress: resilience, first-year academic performance, and
19 substance use' *Journal of College Counseling*, Vol. 21, Issue 1, pp. 2–14.
20

21
22 The Association for University and College Counseling Center Directors. (2019)
23 *Annual Survey 2018*. Available at:
24 [https://www.aucccd.org/assets/documents/Survey/2018%20AUCCCD%20Survey-](https://www.aucccd.org/assets/documents/Survey/2018%20AUCCCD%20Survey-Public-June%2012-FINAL.pdf)
25 [Public-June%2012-FINAL.pdf](https://www.aucccd.org/assets/documents/Survey/2018%20AUCCCD%20Survey-Public-June%2012-FINAL.pdf) (Accessed: 19 October 2021)
26

27
28 Barlow, C. & Hall, B.L. (2007) 'What about feelings?': A study of emotion and tension
29 insocial work field education, *Social Work Education*, Vol.26, Issue 4, pp.399-
30 413, DOI: [10.1080/02615470601081712](https://doi.org/10.1080/02615470601081712)
31

32
33 Black, P. N., Jeffreys, D., & Hartley, E. K. (1993). 'Personal history of psychosocial
34 trauma in the early life of social work and business students' *Journal of Social Work*
35 *Education*, Vol.29, Issue 2, pp.71–180. <https://doi.org/10.1080/10437797.1993.10778812>
36

37
38 Bosse, J.D., Clark, K.D. & Arnold, S. (2021) 'Implementing Trauma-Informed Education
39 Practices in Undergraduate Mental Health Nursing Education' *Journal of Nursing*
40 *Education*, Vol.60, Issue 12. DOI: <https://doi.org/10.3928/01484834-20211103-02>
41

42
43 Bride, B.E., Jones, J.L., Macmaster, S.A. (2007) 'Correlates of Secondary Traumatic Stress
44 in Child Protective Services Workers', *Journal of Evidence - Based Social Work*, Volume
45 4, Issue 3-4, pp.69-80, DOI: [10.1300/J394v04n03_05](https://doi.org/10.1300/J394v04n03_05)
46

47
48 Bride, B.E., Robinson, M.M, Yagidis, B. Figley, C.R. (2004) 'Development and validation
49 of the secondary traumatic stress scale', *Research on Social Work Practice*, Vol.14, Issue
50 1, pp.27–35.
51

52
53 British Association for Counselling & Psychotherapy. (2022) *Training to become a*
54 *counsellor or psychotherapist*. Available at: [https://www.bacp.co.uk/careers/careers-in-](https://www.bacp.co.uk/careers/careers-in-counselling/training/)
55 [counselling/training/](https://www.bacp.co.uk/careers/careers-in-counselling/training/) (Accessed: 03 March 2022).
56

57
58 Bronfenbrenner, U. (1979) *The ecology of human development*. Boston: Harvard
59 University Press.
60
61
62
63
64
65

1 Bryce, I., Pye, D., Beccaria, G, McIlveen, P. & Du Preez, J. (2021) 'A Systematic
2 Literature Review of the Career Choice of Helping Professionals Who Have Experienced
3 Cumulative Harm as a Result of Adverse Childhood Experiences', *Trauma, Violence, &
4 Abuse*. DOI: [10.1177/15248380211016016](https://doi.org/10.1177/15248380211016016).

5
6 Busby, D. R., Zheng, K., Eisenberg, D., Albucher, R.C., Favorite, T., Coryell, W.,
7 Pistorello, J. & King, C.A. (2021) 'Black college students at elevated risk for suicide:
8 Barriers to mental health service utilization'. *Journal of American College Health*. Vol.69,
9 Issue 3, pp.308-314. DOI: 10.1080/07448481.2019.1674316

10
11
12 Burke, B. & Harrison, P. (2012) 'Anti-oppressive Practice' in Adams, R., Dominelli, L.
13 & Payne, M. (eds) *Social Work: Themes, Issues & Critical Debates*. Basingstoke:
14 Palgrave.

15
16
17 Butler, L. D., Carello, J., & Maguin, E. (2017). 'Trauma, stress, and self-care in clinical
18 training: Predictors of burnout, decline in health status, secondary traumatic stress
19 symptoms, and compassion satisfaction'. *Psychological Trauma: Theory, Research,
20 Practice, and Policy*, Vol.9 Issue 4, pp.416–424

21
22
23 Butler, L. D., Carello, J., & Maguin, E. (2018). 'Retraumatization mediates the effect
24 of adverse childhood experiences on clinical training-related secondary traumatic
25 stress symptoms', *Journal of Trauma Dissociation*, Vol.19, Issue , pp.25-38. DOI:
26 10.1080/15299732.2017.1304488.

27
28
29 Cannon, L.M., Coolidge, E.M., LeGierse, J., Moskowitz, Y., Buckley, C., Chapin,
30 E., Warren, M. & Kuzma, E.K. (2020) 'Trauma-informed education: Creating and
31 pilot testing a nursing curriculum on trauma-informed care', *Nurse Education Today*.
32 DOI: 10.1016/j.nedt.2019.104256.

33
34
35 Carello, J. & Butler, L.D. (2015) Practicing What We Teach: Trauma Informed
36 Educational Practice, *Journal of Teaching in Social Work*, Vol.35, Issue 3, pp.262-278

37
38
39 Care Quality Commission. (2020) *2020 Community Mental Health Survey Statistical
40 Release*. Available at:
41 https://www.cqc.org.uk/sites/default/files/20201124_cmh20_statisticalrelease.pdf
42 (Accessed: 27 May 2021)

43
44
45 Caringi, J. C. (2008). Secondary traumatic stress and child welfare. *International Journal
46 of Child & Family Welfare*, Volume 11, Issue 4, pp.172-184.

47
48
49 Centre for Disease Control and Prevention. (2019) *Adolescent Health*. Available at:
50 <https://www.cdc.gov/nchs/fastats/adolescent-health.htm> (Accessed: 19 October
51 2021).

52
53
54 Collins, S., Coffey, M. & Morris, L. (2010) 'Social work students: stress, support and
55 well-being', *British Journal of Social Work*, Vol.40, Issue 3, pp.963-982.

56
57 Conroy, D., Benaton., T, Babicova. I. & Eate, E. (2022) 'Investigating Secondary Trauma in
58 Student Placements: An Exploratory Study', *The British Journal of Social
59 Work*. <https://doi.org/10.1093/bjsw/bcac052>

1 Crenshaw, K. (1989) 'Demarginalizing the Intersection of Race and Sex: A Black Feminist
2 Critique of Antidiscrimination Doctrine, Feminist Theory and Antiracist Politics' *University*
3 *of Chicago Legal Forum* Vol. 1989, Issue 1, Article 8. Available at:
4 <http://chicagounbound.uchicago.edu/uclf/vol1989/iss1/8> (Accessed: 04 January 2024).
5
6

7
8 Cunningham, M. (2014) 'Teaching social workers about trauma: reducing the risk of
9 vicarious traumatization in the classroom', *Journal of Social Work Education*, Vol.40,
10 Issue2, pp.305-317.
11

12
13 Dane, B. (2002) 'Duty to inform: preparing social work students to understand
14 vicarioustraumatization', *Journal of Teaching in Social Work*, Vol.22, Issue 3-4),
15 pp.3-20.
16

17
18 Davies, E., Read, J. & Shevlin, M. (2022) 'Childhood adversities among students at an
19 English University: A latent class analysis', *Journal of Trauma & Dissociation*, Volume
20 23, Issue 1, pp.79-96, DOI: [10.1080/15299732.2021.1987373](https://doi.org/10.1080/15299732.2021.1987373)
21

22
23 Didham, S., Dromgole L., & Csiernik, R., Csiernik, L., Dermot, M. & Dermot, H.
24 (2011). 'Trauma exposure and the social work practicum.' *Journal of Teaching in Social*
25 *Work*, Vol.31, Issue 5, pp.523-537, DOI: [10.1080/08841233.2011.615261](https://doi.org/10.1080/08841233.2011.615261)
26

27
28 Felitti, V. J., Anda, R. F., Nordenberg, D., Williamson, D. F., Spitz, A. M., Edwards,
29 V., Koss, M. P., & Marks, J. S. (1998). Relationship of childhood abuse and
30 household dysfunction to many of the leading causes of death in adults. The Adverse
31 Childhood Experiences (ACE) Study. *American journal of preventive medicine*,
32 14(4), 245–258. [https://doi.org/10.1016/s0749-3797\(98\)00017-8](https://doi.org/10.1016/s0749-3797(98)00017-8)
33
34

35
36 Figley, C.R. (1995) 'Compassion fatigue: Toward a new understanding of the costs of
37 caring', in Stamm, B.H. (Ed.), *Secondary Traumatic Stress: Self-Care Issues for Clinicians,*
38 *Researchers, and Educators*. Baltimore, MD: The Sidran Press.
39

40 Figley, C.R. (2002) *Treating Compassion Fatigue*. New York, NY: Brunner-Routledge.
41

42
43 Fisher, J. (1999) *The Work of Stabilisation in Trauma Treatment*. Available at:
44 <https://janinafisher.com/pdfs/stabilize.pdf> (Accessed: 27 May 2022).
45

46
47 Goddard, A., Jones, R. W., Esposito, D., & Janicek, E. (2021). Trauma informed education
48 innursing: A call for action. *Nurse education today*, 101, 104880. DOI:
49 10.1016/j.nedt.2021.104880
50

51
52 Grooms, J., Ortega, A., Rubalcaba, J. A., & Vargas, E. (2022) 'Racial and Ethnic
53 Disparities: Essential Workers, Mental Health, and the Coronavirus Pandemic' *The*
54 *Review of Black political economy*, Vol.49, Issue 4, pp.363–380, DOI:
55 /10.1177/00346446211034226
56

57
58 Harr, C.R. & Moore, B. (2011) 'Compassion fatigue among social work students in
59 fieldplacements', *Journal of Teaching in Social Work*, Vol.31, Issue 3, pp.350-
60 363, DOI: [10.1080/08841233.2011.580262](https://doi.org/10.1080/08841233.2011.580262)
61
62
63
64
65

1 Harr, C.R., Brice, T.S., Riley, K. & Moore, B. (2019) 'The impact of compassion fatigue
2 and compassion satisfaction on social work students', *Journal of the Society for Social
3 Work & Research*, Vol.5, No. 2, pp.233-249.
4

5
6 Hemy, M., Boddy, M. Chee, P. & Sauvage, D. (2016) 'Social work students juggling
7 fieldplacement', *Social Work Education*, Vol.35, Issue 2, pp.215-225, DOI:
8 10.1080/02615479.2015.1125878
9

10
11 Herman, J. (1992) *Trauma & Recovery: The Aftermath of violence – from domestic abuse
12 to political terror*. New York, NY: Basic Books.
13

14
15 Hood, R. (2018) *Complexity in Social Work*. London: Sage.
16

17
18 The Insight Network/Dig-In (2019) *University Student Mental Health Survey
19 2018*. Available at:
20 <file:///U:/Research/Insight%20Network%20Student%20Mental%20Health%20Report%202018.pdf>
21 (Accessed: 18 September 2019).
22

23
24 Jacobs, I., Charmillot, M., Martin Soelch, C., & Horsch, A. (2019). 'Validity, reliability,
25 and factor structure of the secondary traumatic stress scale-french version. *Frontiers in
26 psychiatry*, Vol.10, Issue 191. DOI: 10.3389/fpsy.2019.00191
27

28
29 Jenkins, S. R., & Baird, S. (2002). 'Secondary traumatic stress and vicarious trauma:
30 A validation study'. *Journal of traumatic stress*, Vol.15, Issue 5), pp.423–432.
31

32
33 Kearney, M. A., Zeligman, M., Brack, J. L., & Payne, E. (2018) 'Trauma and
34 dissociation: Predictors of loneliness in students at an urban university' *Journal of College
35 Counselling*, Volume 21, Issue 2, pp.165–179
36

37
38 King, A. P., & Eckersley, R. (2019). *Statistics for biomedical engineers and scientists:
39 how to visualize and analyze data*. London: Academic Press.
40

41
42 Lawler, J. & Bilson, A. (2010) *Social Work Management & Leadership*. London:
43 Routledge.
44

45
46 Levine, P.A. (2010) *In an Unspoken Voice: How the Body Releases Trauma &
47 Restores Goodness*. Berkley, CA: North Atlantic Books.
48

49
50 Lewer, D., King, E., Bramley, E., Fitzpatrick, S., Treanor, M. C., Maguire, N., Bullock,
51 M., Hayward A. &, Story, A. (2019) 'The ACE Index: mapping childhood adversity in
52 England', *Journal of Public Health*, Vol. 42, Issue 4, pp.487-495.
53

54
55 Lewis, L.L. & King, D.M. (2019) 'Teaching self-care: The utilization of self-care in
56 social work practicum to prevent compassion fatigue, burnout and vicarious trauma',
57 *Journal of Human Behaviour in the Social Environment*, Vol. 29, No.1, pp.96-106.
58

59
60 LoGiudice, J.A. & Douglas, S. (2016) Incorporation of Sexual Violence in Nursing
61 Curricula Using Trauma Informed Care: A Care Study, *Journal of Nursing Education*
62 [online].
63
64
65

1 Available at: <https://journals.healio.com/doi/full/10.3928/01484834-20160316-06>
2 (Accessed: 17 January 2022).

3 Maunder, R. G., Peladeau, N., Savage, D., & Lancee, W. J. (2010). The prevalence
4 of childhood adversity among healthcare workers and its relationship to adult life
5 events, distress and impairment. *Child abuse & neglect*, 34(2), 114–123.
6 <https://doi.org/10.1016/j.chiabu.2009.04.008>
7

8
9
10 McNeil, A. D. (2012) *Identification and Prevention of Secondary Traumatic Stress in*
11 *Mental Health Professionals Who Work With Child Sexual Abuse Victims*. Doctoral Thesis,
12 Hattiesberg, University of Southern Mississippi. Available at:
13 https://aquila.usm.edu/dnp_capstone/35 (Accessed: 10 December 2021).
14

15
16 McIntyre, J. C., Worsley, J., Corcoran, R., Woods, P. H., & Bentall, R. P. (2018)
17 ‘Academic and non-academic predictors of student psychological distress: The role of
18 social identity and loneliness’ *Journal of Mental Health*, Volume 27, Issue 3, pp.230–239
19

20
21 Menschner, C. and Maul, A. (2016) *Key Ingredients for Successful Trauma Informed Care*
22 *Implementation*. Available at:
23 [https://www.samhsa.gov/sites/default/files/programs_campaigns/childrens_mental_health/atc-](https://www.samhsa.gov/sites/default/files/programs_campaigns/childrens_mental_health/atc-whitepaper-040616.pdf)
24 [whitepaper-040616.pdf](https://www.samhsa.gov/sites/default/files/programs_campaigns/childrens_mental_health/atc-whitepaper-040616.pdf) (Accessed: 30 September 2021).
25

26
27 Nursing & Midwifery Council. (2022) *Standards for Student Supervision &*
28 *Assessment*. Available at: [https://www.nmc.org.uk/standards-for-education-and-](https://www.nmc.org.uk/standards-for-education-and-training/standards-for-student-supervision-and-assessment/)
29 [training/standards-for-student-supervision-and-assessment/](https://www.nmc.org.uk/standards-for-education-and-training/standards-for-student-supervision-and-assessment/) Accessed: 04 March 2022).
30

31
32 Office for National Statistics (2021) *Coronavirus and the impact on students in higher*
33 *education in England: September to December 2020*. Available at:
34 [https://www.ons.gov.uk/peoplepopulationandcommunity/educationandchildcare/articles/co](https://www.ons.gov.uk/peoplepopulationandcommunity/educationandchildcare/articles/coronavirusandtheimpactonstudentsinhighereducationinenglandseptembertodecember2020/2020-12-21)
35 [ro](https://www.ons.gov.uk/peoplepopulationandcommunity/educationandchildcare/articles/coronavirusandtheimpactonstudentsinhighereducationinenglandseptembertodecember2020/2020-12-21)
36 [navirusandtheimpactonstudentsinhighereducationinenglandseptembertodecember2020/202](https://www.ons.gov.uk/peoplepopulationandcommunity/educationandchildcare/articles/coronavirusandtheimpactonstudentsinhighereducationinenglandseptembertodecember2020/2020-12-21)
37 [0-12-21](https://www.ons.gov.uk/peoplepopulationandcommunity/educationandchildcare/articles/coronavirusandtheimpactonstudentsinhighereducationinenglandseptembertodecember2020/2020-12-21) (Accessed: 03 March 2021).
38
39

40
41 Petra, M., Tripepi, S. & Guardiola, L (2020) ‘How Many Hours is Enough? The Effects of
42 Changes in Field Practicum Hours on Student Preparedness for Social Work’, *Field*
43 *Educator*, Vol.10.. Available at: [https://fielddeducator.simmons.edu/article/how-many-](https://fielddeducator.simmons.edu/article/how-many-hours-is-enough-the-effects-of-changes-in-field-practicum-hours-on-student-preparedness-for-social-work/)
44 [hours-is-enough-the-effects-of-changes-in-field-practicum-hours-on-student-](https://fielddeducator.simmons.edu/article/how-many-hours-is-enough-the-effects-of-changes-in-field-practicum-hours-on-student-preparedness-for-social-work/)
45 [preparedness-for- social-work/](https://fielddeducator.simmons.edu/article/how-many-hours-is-enough-the-effects-of-changes-in-field-practicum-hours-on-student-preparedness-for-social-work/) (Accessed: 22 September 2021).
46

47
48 Porges S. W. (2009). The polyvagal theory: new insights into adaptive reactions of the
49 autonomic nervous system. *Cleveland Clinic journal of medicine*, 76 Suppl 2(Suppl 2),
50 S86–S90. <https://doi.org/10.3949/ccjm.76.s2.17>
51

52
53 Porges, S. W. (2017). *The pocket guide to the polyvagal theory: The transformative power*
54 *of feeling safe*. New York, NY: W W Norton & Co.
55

56
57 Public Health Wales. (2015) *Adverse Childhood Experiences and their impact on health-*
58 *harming behaviours in the Welsh adult population*. Available at:
59 [https://www2.nphs.wales.nhs.uk/PRIDDocs.nsf/7c21215d6d0c613e80256f490030c05a/d4](https://www2.nphs.wales.nhs.uk/PRIDDocs.nsf/7c21215d6d0c613e80256f490030c05a/d488a3852491bc1d80257f370038919e/$FILE/ACE%20Report%20FINAL%20(E).pdf)
60 [88a3852491bc1d80257f370038919e/\\$FILE/ACE%20Report%20FINAL%20\(E\).pdf](https://www2.nphs.wales.nhs.uk/PRIDDocs.nsf/7c21215d6d0c613e80256f490030c05a/d488a3852491bc1d80257f370038919e/$FILE/ACE%20Report%20FINAL%20(E).pdf)
61
62
63
64
65

(Accessed: 04 March 2022)

1
2 Rinfrette, E. S., Rine, C. M., Pugh, D. N., Zaleski, K., & Araque, J. C. (2021)
3 'Preparing students for trauma exposure in field education settings', *Field Educator*,
4 Vol.11, issue 1. Available at: <http://hdl.handle.net/11212/5153> (Accessed: 11 August
5 2021).
6

7
8 J. Runacres, D. Herron, K. Buckless & S. Worrall (2021) 'Student carer experiences of
9 higher education and support: a scoping review', *International Journal of Inclusive
10 Education*, DOI: [10.1080/13603116.2021.1983880](https://doi.org/10.1080/13603116.2021.1983880)
11

12
13 Shemmings, D. (2017) 'Tackling burnout: Why organisations need to be
14 traumainformed', *Community Care*, 10 August. Available
15 at: [http://www.communitycare.co.uk/2017/08/10/tackling-burnout-organisations-
16 need-trauma-informed/](http://www.communitycare.co.uk/2017/08/10/tackling-burnout-organisations-need-trauma-informed/) (Accessed: 12 October 2018).
17
18

19
20 Social Work England (2020) *Guidance on practice placements*. Available at:
21 [https://www.socialworkengland.org.uk/standards/standards-guidance/practice-
22 placements-guidance/#health%20and%20wellbeing](https://www.socialworkengland.org.uk/standards/standards-guidance/practice-placements-guidance/#health%20and%20wellbeing) (Accessed: 02 March 2021).
23

24
25 Sprang, G., Craig, C., & Clark, J. (2011). Secondary Traumatic Stress and Burnout in Child
26 Welfare Workers: A Comparative Analysis of Occupational Distress Across Professional
27 Groups. *Child Welfare*, Volume 90. Issue 6, pp.149–168.
28

29
30 Student Minds. (2018) *Know Before You Go: Helping you to navigate university life*.
31 Available at:
32 https://www.studentminds.org.uk/uploads/3/7/8/4/3784584/180813_kbyg_interactive.pdf
33 (Accessed: 13 June 2022).
34

35
36 Substance Abuse & Mental Health Services Administration. (2014) *Concept of Trauma &
37 Guidance for a Trauma Informed Approach*. Available at:
38 <https://store.samhsa.gov/sites/default/files/d7/priv/sma14-4884.pdf> (Accessed: 18 July
39 2022).
40

41
42 Sullivan, L. M., Weinberg, J., & Keaney Jr, J. F. (2016). Common statistical pitfalls in
43 basic science research. *Journal of the American Heart Association*, Vol. 5, Issue 10, DOI:
44 10.1161/JAHA.116.004142
45

46
47 Tarshis, S. & Bird, S. L. (2018) 'Addressing the indirect trauma of social work students
48 in intimate partner violence (IPV) field placements: A framework for supervision',
49 *Clinical Social Work Journal*, Issue 47, pp.90-102.
50

51
52 Thomas, J. (2016) Adverse Childhood Experiences Among MSW Students, *Journal
53 of Teaching in Social Work*, 36:3, 235-255, DOI: [10.1080/08841233.2016.1182609](https://doi.org/10.1080/08841233.2016.1182609)
54

55
56 Thompson, N. (2016) *Anti-discriminatory Practice*. 6th edn. Basingstoke: Palgrave
57 MacMillan.

58
59 Ting, L., Jacobson, J.M., Sanders, S., Bride, B. & Harrington, D. (2008) 'The
60 Secondary Traumatic Stress Scale (STSS): Confirmatory factor analyses with a
61
62
63
64
65

1 national sample of mental health social workers', *Journal of Human Behaviour in the*
2 *Social Environment*, Vol.11, Issue 3-4, pp.177-194.

3
4 The Universities & Colleges Admission Services. (2022) *Students with Caring*
5 *Responsibilities*. Available at: [https://www.ucas.com/undergraduate/applying-](https://www.ucas.com/undergraduate/applying-university/individual-needs/students-caring-responsibilities)
6 [university/individual-needs/students-caring-responsibilities](https://www.ucas.com/undergraduate/applying-university/individual-needs/students-caring-responsibilities) (Accessed: 18 July
7 2022).

8
9 Wang, M. C., Lightsey, O. R., Jr, Tran, K. K., & Bonaparte, T. S. (2013) '
10 Examining suicide protective factors among black college students'. *Death*
11 *studies*, Vol. 37, Issue 3, pp.228–247. DOI: [10.1080/07481187.2011.623215](https://doi.org/10.1080/07481187.2011.623215)
12
13

14 Ying, Y. (2011) 'The effect of educational disequilibrium in field work on graduate social
15 work students' self-concept and mental health', *Journal of Teaching in Social Work*,
16 Vol.31,Issue 3, pp.278-294, DOI: [10.1080/08841233.2011.580250](https://doi.org/10.1080/08841233.2011.580250)
17
18
19
20
21
22
23
24
25
26
27
28
29
30
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34
35
36
37
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