

Individual paper

Teachers' attitudes toward trauma-informed practice: Associations with attachment and adverse childhood experiences (ACEs)

Hannah Robertson, Karen Goodall & Daniel Kay

Adverse childhood experiences (ACEs) have been associated with a range of poorer health and educational outcomes. In response, many schools have adopted trauma-informed practice (TIP). Staff attitudes are postulated to play a central role in behaviour change, potentially facilitating or hindering system change towards TIP. However, little is known about how individual or contextual factors in school staff are associated with attitudes towards TIP. The aim of this study was to investigate relationships between school staff demographic information, training experience, attachment patterns and ACEs, in relation to attitudes towards TIP. Participants were 128 UK-based educational staff, aged 19-70 years ($M = 37.76$, $SD = 11.34$). Females comprised 93% of the sample; 44% of participants indicated that they had received trauma awareness training. Participants completed an online survey comprising standardised measures of demographics, adult attachment, Adverse Childhood Experiences and Attitudes Related to Trauma-Informed Care (ARTIC). The ARTIC questionnaire yields five sub-scales of attitudes. Demographic variables were found to be unrelated to attitudes towards TIP. Zero order correlations revealed that ACEs and attachment dimensions were associated with attitudes. However, multiple linear regression analyses indicated that when exposure to trauma-informed training was controlled, only attachment avoidance explained a significant proportion of variance in attitudes towards TIP. In conclusion, previous experience of adversity was unrelated to attitudes when the effect of training was controlled. Insecure attachment styles may pose a barrier to favourable attitudes towards TIP, despite training. Further research is required to determine why insecurely attached individuals, especially those with high avoidance, are resistant to trauma-informed ways of working.

Keywords: ACEs; teachers; attitudes; trauma informed; attachment; education.

Introduction

AN INCREASING motivation to adopt trauma-informed practice (TIP) in schools has arisen from growing awareness of the impact of childhood adversity on educational experiences and outcomes (Hardcastle et al., 2018; Morrow & Villodas, 2018), as well as emerging evidence for the positive impact of trauma sensitive school interventions (Kearns & Hart, 2017; Sciar-

affa et al., 2018). It is commonly assumed that teachers hold innately favourable attitudes towards trauma-informed practices (Sweeney et al., 2016), yet unfavourable attitudes have the capacity to act as a barrier to the implementation of changes to policy and practice (Baker et al., 2010). Little is known about how individual characteristics of school staff are related to attitudes towards

related to
personal stat-
ment.
yes! we*

Subjective
definition

relate to
teacher
opinions on
trauma-informed
care & why
it's not widely
used in
schools systemat-
ically.

TIP. However, existing research suggests that teachers' interactions with pupils who have experienced adversity is influenced by teachers' attachment representations and their experiences of adversity (Anderson et al., 2015; Sciaraffa et al., 2018). This study investigated relationships between teachers' attachment style, lived experience of childhood adversity and their attitudes towards TIP in schools.

Adverse childhood experiences and their sequelae

Adverse Childhood Experiences (ACEs) comprise a range of events that have the potential to disrupt typical developmental processes (Poole et al., 2018; Sciaraffa, et al., 2018). These experiences include interpersonal trauma, such as childhood sexual and physical abuse and indicators of family dysfunction such as parental mental ill health, parental incarceration and domestic violence (Felitti et al., 1998). Early life adversity has been shown to have the capacity to disrupt the neurodevelopment of children (McLean, 2016; Thomason & Marusak, 2018), and has been associated with cognitive, emotional and behavioural difficulties in childhood and adolescence (McLaughlin et al., 2014; Perfect et al., 2016; Porche et al., 2016).

Furthermore, accumulating evidence points to relationships between early trauma and adversity and educational inequality in children and adolescents (Davidson & Carlin, 2019; Hunt et al., 2017; Poole, et al., 2018). Learners who have experienced ACEs are more likely than their peers to experience mental health difficulties and school attainment issues (Bethell et al., 2014). ACEs have also been associated with lifelong disadvantage through a variety of educational impacts, such as compromised attentional, literacy and maths skills (Blodgett & Lanigan, 2018; Delaney-Black et al., 2002), early school dropout (Morrow & Villodas, 2018), and leaving school without qualifications (Hardcastle, et al., 2018).

The two most pervasive impacts of trauma are dysregulated stress responses (Anda et al., 2006) and negative impacts on social relationships, including attachment relationships (Wright et al., 2017). Dysregulated attachment behaviours may manifest along a spectrum of challenging classroom behaviours, including helplessness, over-compliance, compulsive self-reliance, controlling or coercive behaviours and aggression (Berlin, 2001; Howe, 2006). ACE-related behaviour in the classroom can be misinterpreted as intentional behaviour and responded to with disciplinary strategies (Nash, Schlosser, & Scarr, 2016). At the same time, attachment relationships contribute to the internalisation of adaptive skills in regulating emotional responses and behaviours (Pearlmann & Courtois, 2005). A safe, nurturing relationship with an adult is one of the most important protective factors in promoting resilience and overcoming exposure to adversity (Bellis et al., 2018; Mortensen & Barnett, 2016). In response, trauma-informed school practices commonly focus on addressing dysregulated stress responses and promoting attachment relationships (Brunzell et al., 2015) through the provision of unconditional positive regard, positive classroom management strategies, consistency, predictability and building positive-student relationships (Briere et al., 2017; Kearns & Hart, 2017).

Attitudes towards trauma-informed practice

The success of any educational intervention is partly dependent on the existing attitude of staff, as attitudes determine the ongoing behaviour and interactions of staff and the motivation to implement new practices (Aarons, 2005; Baker et al., 2016; Petre et al., 2017). Attitudes are influenced by demographic characteristics, for example, new practitioners hold more positive attitudes to adopting new approaches than experienced ones (Aarons et al., 2010). The early life history of staff also has the potential to impact attitudes, as attachment style is associated with the capacity to build trusting relation-

* Use the after the what is hinner side

ships with others (Sweeney, et al., 2016) and exposure to ACEs interact with beliefs about one's capacity to cope with trauma-related behaviours in others (Anderson et al., 2015).

An important factor when incorporating trauma-informed approaches is the readiness of a service to embrace this shift, especially if teaching staff lean more towards traditional practices (Bloom & Farragher, 2013; Cole et al., 2013). The extent to which a school is trauma-informed is closely linked to the day to day behaviour and attitudes of its staff (Baker, et al., 2016, p.63). It is therefore crucial to understand whether individual characteristics of staff related to preliminary attitudes.

Teacher attachment style

Attachment style in teachers has been associated with attitudes towards interventions, as well as beliefs about relationships with learners, classroom behaviours and conflict tactics (Kennedy & Kennedy, 2004; Sher-Censor, Nahmias-Zlotolov & Dolev, 2019; Hunt, Slack & Berger, 2017). In adults, attachment is conceptualised as two dimensions of attachment insecurity: avoidance and anxiety (Fraley et al., 2011). Low scores on these dimensions denote secure attachment, which is characterised by the capacity to perceive and respond to a range of emotional states in others (Verscheuren & Koomen, 2012), to manage relationships and seek support from others (Darling Rasmussen et al., 2019) and to regulate emotion (Goodall, 2015; Orehek et al., 2017). Attachment insecurity dimensions are associated with distinct maladaptive emotion regulation styles (Brodie et al., 2019; Reisz et al., 2018; Zilberstein & Messer, 2010). Attachment avoidance is characterised by a dismissing interpersonal style, and a suppressive emotion regulation strategy (Goodall, Brodie & Schwannauer, 2020). Attachment anxiety is characterised by a high emotional reactivity to stress underpinned by a sense of the self as vulnerable, and a heightened fear of rejection (Hunt et al. 2017; Orehek et al., 2017). Furthermore, the distinct insecurity dimensions are associated

with classroom management. In classroom conflict situations, teachers with high attachment avoidance rarely use adaptive conflict management styles, such as prioritising concern for the student (Morris-Rothschild & Brassard, 2006). Insecure attachment has also been associated with burnout and compassion fatigue (West, 2015). Attachment style is therefore a potential candidate variable for understanding how personal characteristics of teachers might relate to their attitudes towards TIP, via their conceptualisation of relationships with learners, their views on classroom management and their perceptions of their own abilities to cope.

Teachers' lived experience of childhood adversity

Recent studies suggest that the prevalence rates of ACEs is slightly higher in teachers than in the general population (Hubel et al., 2020; Whitaker et al., 2014) but little is known about how this might affect interactions with learners. In parents, higher ACEs have been associated with hostility and a reduced capacity to provide sensitive care to a child (Bailey et al., 2012; Gonzalez et al., 2012). Similarly, ACEs in teachers have been negatively associated with the emotional and social atmosphere in a classroom (Hubel, et al., 2020). By contrast, in a study with child welfare workers, those with higher ACEs had an elevated professional quality of life (Hiles Howard et al., 2015). A key benefit of trauma-informed training is that it serves not only to educate staff members effective means to regulate child stress in the face of adversity, but also helps those reinterpret or recontextualise their own trauma responses (Mendleson et al., 2015). Examining whether teachers' lived experiences of ACEs is related to their attitudes towards trauma informed practice is therefore warranted.

While general positive attitudinal change has been reported following trauma-informed training (Parker et al., 2020), it is important to determine whether specific characteristics of individuals contribute to favourable or unfavourable attitudes towards imple-

menting TIP. The aim of this study was therefore to examine relationships between demographic factors, teachers' ACEs, attachment styles and attitudes towards TIP, while accounting for the impact of previous training. It was hypothesised that higher levels of attachment insecurity (avoidance and anxiety) would be associated with more negative attitudes towards. We hypothesised that there would be a relationship between self-reported ACEs and attitudes but given that research on this topic is limited, we advanced no hypotheses about direction.

Method

Participants

Participants were 128 UK-based teaching staff, who were age 19–70 years ($M = 37.76$, $S.D. = 11.34$), predominantly female (93%) and had worked in education from 1 to 43 years ($M = 11.57$, $S.D. = 8.83$). Most had received no trauma-informed training (66%). Participants worked in early years or junior schools (62%), senior schools (18%), alternative provision schools (18%) or in multiple settings (2%).

Procedure

Following university ethical approval, the survey was advertised on social media and the Barnardo's website. A web link via Online Surveys took participants to the information and consent section, followed by the survey, comprising demographics and the measures below. As the ACEs measure referred to potentially distressing childhood events, participants were instructed that they could opt out of the ACEs measure.

Measures

Attitudes towards trauma-informed practice

The Attitudes Related to Trauma-Informed Care (ARTIC; Baker, et al., 2016) is a psychometrically validated 45-item measure of favourable or unfavourable attitudes towards trauma-informed care in schools and organisations. Five subscales measure attitudes of the following:

1. Understanding of the underlying causes

of problem behaviour and symptoms (*underlying causes*). Emphasises behaviour and symptoms as malleable versus intentional and fixed.

2. Responses to problem behaviour and symptoms (*responses*). Emphasises relationships, flexibility and safety as the agent of change versus rules, consequences, and accountability.
3. On-the-job behaviour (*on-the-job*). Endorses empathy-focused staff behaviour versus control-focused staff behaviour.
4. Self-efficacy at work (*self-efficacy*). Endorses feeling able to meet the demands of working with a traumatised population versus feeling unable to meet the demands.
5. Reactions to work (*reactions*). Endorses appreciating the effects of secondary trauma/vicarious traumatisation and coping by seeking support versus minimising the effects and coping by ignoring or hiding the impact.

Responses are rated on seven-point bipolar Likert scales and scored according to a standardised manual (Baker et al., 2016). The authors report excellent internal consistency ($\alpha = .93$) and strong construct validity (Baker et al., 2016).

Adult attachment

The experiences in Close Relationships – Relationships Structures Questionnaire (ECR-RS; Fraley et al., 2011) is a 9-item measure of adult attachment, yielding two dimensions of attachment insecurity: attachment avoidance (6 items) and attachment anxiety (3 items). Respondents rate statements on a 7-point Likert scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). Higher scores represent greater levels of attachment insecurity. Good internal consistency has been noted for attachment anxiety, $\alpha = .83-.91$, and attachment avoidance, $\alpha = .81-.92$ (Donbaek & Elklit, 2014; Fraley et al., 2011).

Adverse Childhood Experiences

The Philadelphia Adverse Childhood Experiences Survey (PHL ACEs; Cronholm et al., 2015), is a 21-item a self-report measure of childhood exposure to adverse experiences, comprising two subscales. The Conventional ACEs subscale comprises 15 items measuring emotional, physical and sexual abuse, emotional and physical neglect, and household dysfunction, such as domestic violence and parental mental illness. The expanded ACEs subscale comprises 6 items measuring community problems, such as witnessing violence and living in foster care. The measure uses a multiple answer format leading to an aggregate score.

Statistical Analyses

All analyses were conducted in SPSS version 24. Relationships between variables were examined using Pearson's correlation coefficients. To explore predictors of attitudes

towards TIP, sub-scales of the ARTIC measure were regressed onto four variables (training exposure, ACEs, attachment anxiety and attachment avoidance) using multiple regression analysis. Based on a two-sided significance of 0.05 and a power of 0.80, 80 participants were required to find an effect of 0.1. The study was therefore adequately powered.

Results

Descriptive statistics and missing data

Eight participants declined to respond to the ACEs questionnaire. Their results were excluded from relevant analyses leaving a total of 120 participants. Table 1 displays the means and standard deviations for age, length of employment, attachment anxiety, attachment avoidance, ACEs total scores, and ARTIC subscale scores. All ARTIC subscales showed substantial left skewness (-.69 to -1.17), indicating generally positive attitudes towards trauma-informed care.

Table 1: Descriptive statistics and correlations between study variables

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | M | SD | α |
|------------------------|--------|--------|--------|--------|--------|-------|-------|-------|-------|----|-------|-------|----------|
| 1. Age | 1 | | | | | | | | | | 37.76 | 11.34 | |
| 2. Employment | .78** | 1 | | | | | | | | | 11.57 | 8.82 | |
| 3. ECR-anxiety | -.17 | -.25** | 1 | | | | | | | | 3.23 | 1.93 | .89 |
| 4. ECR-avoidance | -.18* | -.24** | .47** | 1 | | | | | | | 3.18 | 1.19 | .77 |
| 5. PACE total | -.25** | -.24** | .27** | .37** | 1 | | | | | | 3.42 | 3.89 | .80 |
| 6. ARTIC-underlying | -.02 | .03 | -.05 | -.31** | -.01 | 1 | | | | | 5.52 | .86 | .76 |
| 7. ARTIC-responses | .08 | .09 | -.05 | -.28** | -.06 | .69** | 1 | | | | 5.93 | .85 | .76 |
| 8. ARTIC-on-the-job | .04 | .06 | -.12 | -.32** | -.16 | .69** | .74** | 1 | | | 5.85 | .77 | .67 |
| 9. ARTIC-self-efficacy | .12 | .17 | -.24** | -.43** | -.25** | .48** | .46** | .57** | 1 | | 5.46 | 1.07 | .81 |
| 10. ARTIC-reactions | .15 | .11 | -.25** | -.52** | -.35** | .55** | .47** | .62** | .71** | 1 | 5.58 | .96 | .76 |

Correlational analyses

Table 1 presents the matrix for Pearson's correlation analyses between study variables. Neither gender nor length of employment were significantly correlated with any ARTIC subscales. Attachment avoidance was significantly associated with all ARTIC subscales: underlying causes ($r = -.31, p = .00$), responses ($r = -.28, p = .01$), on-the-job ($r = -.32, p = .00$), self-efficacy ($r = -.43, p = .00$) and reactions ($r = -.52, p = .00$). Attachment anxiety was significantly correlated with the ARTIC subscales self-efficacy ($r = -.24, p = .01$) and reactions ($r = -.25, p = .01$). Participant ACEs scores were significantly correlated with ARTIC self-efficacy ($r = -.25, p = .01$) and reactions ($r = -.35, p = .00$).

To examine whether there were significant differences in attitude between those exposed to trauma-informed training and those not, independent samples *t*-tests were conducted. Table 2 displays means and standard deviations for scores in both groups. The result indicated that those who were exposed to trauma-informed training held significantly more favourable attitudes towards TIP than those who had not across all subscales: underlying causes ($t(126) = -4.32, p = .00$), responses ($t(126) = -2.85, p = .01$), on-the-job ($t(126) = -2.72, p = .01$), self-efficacy ($t(126) = -2.95, p = .01$), reactions ($t(126) = -2.29, p = .02$). Exposure to training was therefore controlled for in all subsequent analyses. There were no significant differences in attitudes between males and females.

Multiple regression analyses

A series of five multiple regression analyses were conducted to determine the proportion of variance in attitudes towards TIP explained by exposure to training, teachers' self-reported ACEs and attachment insecurity dimensions. Each of the five ARTIC subscales constituted the independent variable in the five models (see Table 3). In the first model, the dependent variables explained 25% of the variance in underlying causes, ($F(4, 115) = 9.44, p = .00$), with an R^2 of .25. Exposure to training ($b = .64, 95\% CI .35, .93$) and attachment avoidance ($b = -.30, 95\% CI -.43, -.16$) were found to be significant independent predictors, indicating that training was associated with more positive attitudes towards underlying causes of problem behaviours, while higher levels of attachment avoidance were associated with more negative attitudes.

In the second model, the variables explained 14% of the variance in responses, ($F(4, 115) = 4.64, p = .00, R^2 = .14$). Similar to model 1, trauma-informed training ($b = .43, 95\% CI .13, .74$) and attachment avoidance ($b = -.23, 95\% CI -.38, -.09$) were found to be significant independent predictors.

A significant regression model was found ($F(4, 115) = 5.41, p = .00$) for on-the-job behaviour, with an R^2 of .16, when based on predictors trauma-informed training, attachment and PACE (Table 3). However only trauma-informed training ($b = .35, 95\% CI .07, .62$) and attachment avoidance ($b = -.22, 95\% CI -.35, -.09$) were found to be significant independent predictors of attitudes related to on-the-job behaviour.

Table 2: Comparison of ARTIC sub scales by exposure to training

| | Exposure (N=44) | | No exposure (N=84) | |
|-----------------------|-----------------|-----|--------------------|------|
| | M | SD | M | SD |
| Underlying causes | 5.94 | .71 | 5.29 | .85 |
| Responses | 6.22 | .75 | 5.78 | .86 |
| On-the-job behaviour | 6.09 | .72 | 5.72 | .76 |
| Self-efficacy at work | 5.84 | .93 | 5.26 | 1.10 |
| Reactions at work | 5.85 | .79 | 5.44 | 1.02 |

Table 3: Summary of regression analyses by ARTIC subscale

| | <i>B</i> | 95% CI (LL, UL) | β | <i>T</i> | <i>p</i> |
|---------------------------------------|----------|--------------------|---------|----------|----------|
| <i>Underlying causes</i> | | | | | |
| Intercept | 5.97 | 5.54, 6.40 | | 27.62 | .00** |
| TI-training | .64 | .35, .93 | .36 | 4.36 | .00** |
| PACE | .02 | -.02, .06 | .10 | 1.15 | .25 |
| ECR-anxiety | .07 | -.01, .15 | .15 | 1.68 | .10 |
| ECR-avoidance | -.30 | -.43, -.16 | -.41 | -4.33 | .00** |
| <i>Responses to problem behaviour</i> | | | | | |
| Intercept | 6.29 | 5.84, 6.74 | | 27.58 | .00** |
| TI-training | .43 | .13, .74 | .24 | 2.80 | .01* |
| PACE | .00 | -.04, .04 | .02 | .23 | .81 |
| ECR-anxiety | .06 | -.02, .15 | .14 | 1.43 | .16 |
| ECR-avoidance | -.23 | -.38, -.09 | -.32 | -3.22 | .00** |
| <i>On-the-job behaviour</i> | | | | | |
| Intercept | 6.37 | 5.96, 6.78 | | 31.07 | .00** |
| TI-training | .35 | .07, .62 | .22 | 2.51 | .01* |
| PACE | -.01 | -.05, .03 | -.05 | -.58 | .56 |
| ECR-anxiety | .03 | -.05, .11 | .07 | .78 | .44 |
| ECR-avoidance | -.22 | -.35, -.09 | -.33 | -3.36 | .00** |
| <i>Self-efficacy at work</i> | | | | | |
| Intercept | 6.41 | 5.87, 6.95 | | 23.52 | .00** |
| TI-training | .53 | .16, .90 | .24 | 2.87 | .00** |
| PACE | -.03 | -.08, .02 | -.11 | -1.30 | .19 |
| ECR-anxiety | .01 | -.09, .11 | .01 | .15 | .88 |
| ECR-avoidance | -.33 | -.50, -.16 | -.37 | -3.84 | .00** |
| <i>Reactions to work</i> | | | | | |
| Intercept | 6.73 | 6.28, 7.18 | | 29.48 | .00** |
| TI-training | .35 | .04, .65 | .17 | 2.25 | .03* |
| PACE | .02 | -.07, .10 | .04 | .45 | .65 |
| ECR-anxiety | -.37 | -.52, -.23 | -.46 | -5.13 | .00** |
| ECR-avoidance | -.04 | -.09, .00 | -.18 | -2.21 | .03* |

In the fourth model, a significant regression model was found ($F(4, 115) = 8.84$, $p = .00$) with an R^2 of .23, based on the same predictors, with only trauma-informed training ($b = .53$, 95% CI .16, .90) and attachment avoidance ($b = -.33$, 95% CI -.50, -.16) found to be significant independent predictors of self-efficacy.

Lastly, a significant regression model was found ($F(4, 115) = 13.78$, $p = .00$) for reactions, with an R^2 of .32, based on trauma-informed training, attachment and ACEs; in this regression trauma-informed training ($b = .35$, 95% CI .04, .65), attachment anxiety ($b = -.37$, 95% CI -.52, -.23) and attachment avoidance ($b = -.04$, 95% CI

-.09, -.00) were found to be significant independent predictors of reactions at work.

Discussion

The aim of this study was to investigate individual and contextual factors associated with teachers' attitudes towards TIP. The results indicated that gender and length of time in employment were unrelated to teachers' attitudes towards TIP. Teachers who had received trauma awareness training, had significantly more positive attitudes towards trauma-informed care than those who had not. After controlling for the effects of trauma-informed training, attachment avoidance was negatively associated with all sub-scales measuring attitudes towards TIP. Attachment anxiety was negatively associated with *reactions to problem behaviours only*. When the effect of trauma-awareness training was controlled, the number of ACEs that respondents reported was not significantly associated with attitudes towards TIP.

The findings of this study align with previous research indicating that trauma awareness training is not only positively associated with knowledge about ACEs (Bethell, et al., 2014; Sciaraffa et al., 2018), but is also positively associated with the motivation to implement trauma-informed practice (Carello & Butler, 2015). Currently, there is a dearth of research investigating other variables that might interact with attitudes towards TIP in teachers. This study demonstrated that even when the effects of training were controlled, attachment avoidance was associated with more negative attitudes across all sub-scales of the ARTIC. Thus, avoidant attached respondents were more likely to endorse trauma-related symptoms and behaviours as intentional and stable, rather than adaptive and potentially malleable. They were also more likely to endorse rules, consequences and accountability as appropriate response to these behaviours, rather than view safety, kindness and relationships as agents of change. Attachment avoidance was also associated with higher endorsement of control, rather than

empathic staff behaviour in relation to classroom management.

These subscales were designed to be indicative of the capacity to respond to students in security-enhancing ways (Baker et al., 2016). The negative attitudes more commonly endorsed by avoidant attached school staff are aligned with traditional behaviourist approaches to classroom management. Although behaviourist approaches are often implicitly endorsed in education, a more contemporary view emphasises effective classroom management as being dependent not only on how teachers respond to behaviour, but on the extent to which pupils feel valued, secure and can engage in positive social interactions (Hart, 2010).

Morris-Rothchild and Brassard (2006) have suggested that highly avoidant individuals have an internalised attachment model that promotes emphasis on independence and self-reliance, which in turn acts as a framework through which ACE-related behaviour is understood. This is potentially linked to overestimation of a child's ability to cope with negative affect (Orehek et al., 2017) and an under-estimation of the impact of trauma (Bellis et al., 2018). Due to the aversion to close relationships when dealing with personal issues (Morris-Rothchild & Brassard, 2006), avoidant individuals may find it challenging to commit to providing a secure base for pupils with trauma-related behavioural issues.

Attachment anxiety was associated with one facet of attitudes towards TIP only. Both attachment anxiety and avoidance were negatively associated with *reactions to work*, which measures the extent to which an individual will seek support for secondary trauma. This may be somewhat surprising considering that individuals who rate themselves high on attachment anxiety are more likely to view themselves as vulnerable and less likely to cope with stressful situations (Sher-Censor et al., 2019). However, attachment anxiety has been associated with weak self-other boundaries and strong needs for social approval (Lopez, 2001), potentially making it more

difficult for anxiously attached teachers to distinguish between doing a job well, and allowing that job to detrimentally impact their wellbeing. Furthermore, although anxiously attached adults are more inclined to seek support than avoidant attached individuals (Shaffer, Vogel & Wei, 2006), both adults with anxious and avoidant attachment generally report smaller social networks and less satisfaction with social support networks than securely attached individuals (Anders & Tucker, 2000). This suggests that they may perceive less benefit from seeking social support, making them potentially more vulnerable to vicarious trauma themselves.

Based on limited research linking teacher adversity experiences to classroom climate (Hubel et al., 2020) we expected to find positive associations between teacher-reported ACEs and negative attitudes towards TIPs. However, no significant associations were found between ACEs and attitudes towards TIP. In this study, an aggregate measure of ACEs was used. In cross-sectional studies, assumption of a cumulative risk model can lead to an underestimation of the effect of specific types of adversity (Goodall, Robertson & Schwannauer, 2020). Future research should utilise a measure which enables examination of the effects of different types of adversity.

Limitations

The results of this study were drawn from a cross-sectional, self-report survey with several limitations. First, causal relationships cannot be inferred from correlational analyses. Second, in studies where data for both

independent and dependent variables are obtained from the same person using a single survey, the results may be prone to common method bias, leading to spurious associations between variables. Third, the sample was majority female, limiting the generalisability of the results. Finally, it was not possible to determine the duration, nature or quality of training received. It cannot be ruled out that the relationships demonstrated in this study are an over- or under-estimation of the impact of trauma awareness training.

Despite the limitations, this study provides preliminary evidence to suggest that attachment style, which is a relatively stable attribute in adults (McConnell & Moss, 2011) is predictive of attitudes towards TIP. Further replication of this finding is required to determine whether addressing attachment concerns may be beneficial in to promoting TIP in schools.

The authors

Hannah Robertson

Karen Goodall

Daniel Kay

Department of Clinical and Health Psychology
University of Edinburgh

Correspondence

Dr Karen Goodall

Medical Quad, Teviot Place,
University of Edinburgh, Scotland, UK
Karen.Goodall@ed.ac.uk

References

- Aarons G.A., Glisson, C., Hoagwood, K., Kelleher, K., Landsverk, J., Cafri, G. & The Research Network on Youth Mental Health. (2010). Psychometric properties and U.S. national norms of the evidence-based practice attitude scale (EBPAS). *Psychological Assessment*, 22(2), 356–65. <https://doi.org/10.1037/a0019188>
- Aarons, G.A. (2005). Measuring provider attitudes toward evidence-based practice: consideration of organizational context and individual differences. *Child Adolesc Psychiatr Clin N Am.*, 14(2), 255–71. <https://doi.org/10.1016/j.chc.2004.04.008>
- Anda, R.F., Felitti, V.J., Bremner, J.D. et al. (2006). The enduring effects of abuse and related adverse experiences in childhood. A convergence of evidence from neurobiology and epidemiology. *European Archives of Psychiatry and Clinical Neuroscience*, 256(3), 174–186. <https://doi.org/10.1007/s00406-005-0624-4>
- Anders, S.L. & Tucker, J.S. (2000). Adult attachment style, interpersonal communication competence, and social support. *Personal Relationships*, 7, 379–389. <https://doi.org/10.1111/j.1475-6811.2000.tb00023.x>
- Anderson, E.M., Blitz, L.V. & Saastamoinen, M. (2015). Exploring a school-university model for professional development with classroom staff: Teaching trauma-informed approaches. *School Community Journal*, 25(2), 113–134.
- Bailey, H.N., DeOliveira, C.A., Wolfe, V.V., Evans, E.M. & Hartwick, C. (2012). The impact of childhood maltreatment history on parenting: A comparison of maltreatment types and assessment methods. *Child Abuse & Neglect*, 36(3), 236–246. <https://doi.org/10.1016/j.chiabu.2011.11.005>
- Baker, C.N., Brown, S.M., Wilcox, P.D., Overstreet, S. & Arora, P. (2016). Development and psychometric evaluation of the attitudes related to trauma-informed care (ARTIC). *School Mental Health*, 8(1), 61–76. <https://doi.org/10.1007/s12310-015-9161-0>
- Baker, C.N., Kupersmidt, J.B., Voegler-Lee, M.E., Arnold, D.H. & Willoughby, M.T. (2010). Predicting teacher participation in a classroom-based, integrated preventive intervention for preschoolers. *Early Childhood Research Quarterly*, 25(3), 270–283. <https://doi.org/10.1016/j.ecresq.2009.09.005>
- Bellis, M.A., Hughes, K., Ford, K. et al. (2018). Adverse childhood experiences and sources of childhood resilience: A retrospective study of their combined relationships with child health and educational attendance. *BMC Public Health*, 18(1), 1–12. <https://doi.org/>
- Berlin, I.N. (2001) Critical collaboration in the treatment of attachment disturbed children and adolescents in residential care. *Residential Treatment for Children & Youth*, 19(2), 1–12. https://doi.org/10.1300/J007v19n02_01
- Bethell, C., Newachock, P., Hawes, E. & Halfon, N. (2014). Adverse childhood experiences: Assessing the impact on health and school engagement and the mitigating role of resilience. *Health Affairs (Project Hope)*, 33(12), 2106–2115. <https://doi.org/10.1377/hlthaff.2014.0914>
- Blodgett, C. & Lanigan, J.D. (2018). The association between adverse childhood experience (ACE) and school success in elementary school children. *School Psychology Quarterly*, 33(1), 137. <https://doi.org/10.1037/spq0000256>
- Bloom, S.L. & Farragher, B. (2013). *Restoring Sanctuary: A new operating system for trauma-informed systems of care*. New York: Oxford University Press.
- Briere, J., Runtz, M., Eadie, E., Bigras, N. & Godbout, N. (2017). Disengaged parenting: Structural equation modeling with child abuse, insecure attachment, and adult symptomatology. *Child Abuse & Neglect*, 67, 260–270. <https://doi.org/10.1016/j.chiabu.2017.02.036>
- Brodie, Z.P., Goodall, K., Darling, S. & McVittie, C. (2019). Attachment insecurity and dispositional aggression: The mediating role of maladaptive anger regulation. *Journal of Social and Personal Relationships*, 36(6), 1831–1852. <https://doi.org/10.1177/0265407518772937>
- Brunzell, T., Waters, L. & Stokes, H. (2015). Teaching with strengths in trauma-affected students: A new approach to healing and growth in the classroom. *American Journal of Orthopsychiatry*, 85(1), 3–9. <http://dx.doi.org/10.1037/ort0000048>
- Carello, J. & Butler, L. (2015). Practicing what we teach: Trauma-informed educational practice. *Journal of Teaching in Social Work*, 35(3), 262–278. <https://doi.org/10.1080/08841233.2015.1030059>
- Cole, S.F., Eisner, A., Gregory, M. & Ristuccia, J. (2013). Creating and advocating for trauma-sensitive schools. In: *Helping Traumatized Children Learn*. Massachusetts, USA: Massachusetts Advocates for Children.
- Cronholm, P.F., Forke, C.M., Wade, R. et al. (2015). Adverse childhood experiences: Expanding the concept of adversity. *American Journal of Preventive Medicine*, 49(3), 354–361. <https://doi.org/10.1016/j.amepre.2015.02.001>
- Darling Rasmussen, P., Storebø, O., Løkkholt, T. et al. (2019). Attachment as a core feature of resilience: A systematic review and meta-analysis. *Psychological Reports*, 122(4), 1259–1296. <https://doi.org/10.1177/0033294118785577>

- Davidson, E. & Carlin, E. (2019). 'Steeling' young people: Resilience and youth policy in Scotland. *Social Policy and Society*, 18(3), 479–489. <https://doi.org/10.1017/S1474746419000095>
- Delaney-Black, V., Covington, C., Ondersma, S.J. et al. (2002). Violence exposure, trauma, and IQ and/or reading deficits among urban children. *Archives of Pediatrics & Adolescent Medicine*, 156(3), 280–285. <https://doi.org/10.1001/archpedi.156.3.280>
- Donbaek, D.F. & Elklit, A. (2014). A validation of the Experiences in Close Relationships-Relationships Structures (ECR-RS) scale in adolescents. *Attachment & Human Development*, 16(1), 58–76. <https://doi.org/10.1080/14616734.2013.850103>
- Felitti, M.D., Anda, R.F., Nordenberg, M.D. et al. (1998). Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults: The Adverse Childhood Experiences (ACE) Study. *American Journal of Preventive Medicine*, 14, 245–258. [https://doi.org/10.1016/s0749-3797\(98\)00017-8](https://doi.org/10.1016/s0749-3797(98)00017-8)
- Fraley, C.R., Heffernan, M.E., Vicary, A.M. & Brumbaugh, C.C. (2011). The Experiences in Close Relationships-Relationship Structures Questionnaire: A method for assessing attachment orientations across relationships. *Psychological Assessment*, 23(3), 615–625. <https://doi.org/10.1037/a0022898>
- Goodall, K. (2015). Individual differences in the regulation of positive emotion: The role of attachment and self-esteem. *Personality and Individual Differences*, 74, 208–213. <https://doi.org/10.1016/j.paid.2014.10.033>
- Goodall, K., Brodie, Z.P. & Schwannauer, M. (2020). Mediators of the relationship between attachment and dispositional mindfulness in adolescents. *Mindfulness*, 11, 1782–1791. <https://doi.org/10.1007/s12671-020-01395-6>
- Goodall, K., Robertson, H. & Schwannauer, M. (2020). The relationship between adverse childhood experiences and educational disadvantage: A critical perspective. *Scottish Affairs*, 29(4), 493–501. <https://doi.org/10.3366/scot.2020.0339>
- Gonzalez, A., Jenkins, J.M., Steiner, M., Fleming, A. S. (2012). Maternal early life experiences and parenting: The mediating role of cortisol and executive function. *Journal of the American Academy of Child & Adolescent Psychiatry*, 51(7), 673–682. <https://doi.org/10.1016/j.jaac.2012.04.003>
- Hardcastle, K., Bellis, M.A., Ford, K. et al. (2018). Measuring the relationships between adverse childhood experiences and educational and employment success in England and Wales: findings from a retrospective study. *Public Health*, 165, 106–116. <https://doi.org/10.1016/j.puhe.2018.09.014>
- Hart, R. (2010). Classroom behaviour management: educational psychologists' views on effective practice. *Emotional and Behavioural Difficulties*, 15(4), 353–371. <https://doi.org/10.1080/13632752.2010.523257>
- Hiles Howard, A., Parris, S., Hall, J. et al. (2015). An examination of the relationships between professional quality of life, adverse childhood experiences, resilience, and work environment in a sample of human service providers. *Children and Youth Services Review*, 57, 141–148. <https://doi.org/10.1016/j.childyouth.2015.08.003>
- Howe, D. (2006). Developmental attachment psychotherapy with fostered and adopted children. *Child and Adolescent Mental Health*, 11(3), 128–134. <https://doi.org/10.1111/j.1475-3588.2006.00393.x>
- Hubel, G., Davies, F., Goodrum, N., Schmarder, K., Schnake, K. & Moreland, A. (2020). Adverse childhood experiences among early care and education teachers: Prevalence and associations with observed quality of classroom social and emotional climate. *Children and Youth Services Review*, 111. <https://doi.org/10.1016/j.childyouth.2020.104877>
- Hunt, T., Slack, K. & Berger, L. (2017). Adverse childhood experiences and behavioral problems in middle childhood. *Child Abuse & Neglect*, 67, 391–402. <https://doi.org/10.1016/j.chiabu.2016.11.005>
- Kearns, S. & Hart, N. (2017). Narratives of 'doing, knowing, being and becoming': Examining the impact of an attachment-informed approach within initial teacher education. *Teacher Development*, 21(4), 511–527. <https://doi.org/10.1080/13664530.2017.1289976>
- Kennedy, J.H. & Kennedy, C.E. (2004). Attachment theory: Implications for school psychology. *Wiley Online Library*, 41(2), 247–259. <https://doi.org/10.1002/pits.10153>
- Lopez, F.G. (2001). Adult attachment orientations, self-other boundary regulation, and splitting tendencies in a college sample. *Journal of Counseling Psychology*, 48(4), 440–446. <https://doi.org/10.1037/0022-0167.48.4.440>
- McConnell, M. & Moss, E. (2011). Attachment across the life span. Factors that contribute to stability and change. *Australian Journal of Educational Psychology*, 11, 60–77. <https://eric.ed.gov/?id=EJ960225>
- McLaughlin, K.A., Sheridan, M.A. & Lambert, H. K. (2014). Childhood adversity and neural development: Deprivation and threat as distinct dimensions of early experience. *Neuroscience & Behavioural Reviews*, 47, 578–591. <https://doi.org/10.1016/j.neubiorev.2014.10.012>

- McLean, S. (2016). *The effect of trauma on the brain development of children: Evidence-based principles for supporting the recovery of children in care*. Australia: Australian Institute of Family Studies.
- Mendelson, T., Tandon, S.D., O'Brennan, L., Leaf, P.J. & Ialongo, N.S. (2015). Brief report: Moving prevention into schools: The impact of a trauma-informed school-based intervention. *Journal of Adolescence*, 43, 142–147. <https://doi.org/10.1016/j.adolescence.2015.05.017>
- Morris-Rothschild, B.K. & Brassard, M.R. (2006). Teachers' conflict management styles: The role of attachment styles and classroom management efficacy. *Journal of School Psychology*, 44, 105–121. <https://doi.org/10.1016/j.jsp.2006.01.004>
- Morrow, A. & Villodas, M. (2018). Direct and indirect pathways from adverse childhood experiences to high school dropout among high-risk adolescents. *Journal of Research on Adolescence*, 28(2), 327–341. <https://doi.org/10.1111/jora.12332>
- Mortensen, J.A. & Barnett, M.A. (2016). The role of child care in supporting the emotion regulatory needs of maltreated infants and toddlers. *Child and Youth Services Review*, 64, 73–81. <https://doi.org/10.1016/j.childyouth.2016.03.004>
- Nash, P., Schlosser, A. & Scarr, T. (2016). Teachers' perceptions of disruptive behaviours in schools: a psychological perspective. *Emotional and Behavioural Difficulties*, 21(2), 167–180. <https://doi.org/10.1080/13632752.2015.1054670>
- Orehek, E., Vazeou-Nieuwenhuis, A., Quick, E. & Weaverling, G. (2017). Attachment and self-regulation. *Personality and Social Psychology Bulletin*, 43(3), 365–380. <https://doi.org/10.1177/0146167216685292>
- Parker, J., Olson, S. & Bunde, J. (2020). The Impact of Trauma-Based Training on Educators. *Journal of Child and Adolescent Trauma*, 13, 217–227. <https://doi.org/10.1007/s40653-019-00261-5>
- Pearlman, L.A. & Courtois, C.A. (2005). Clinical applications of the Attachment Framework: relational treatment of complex trauma. *Journal of Traumatic Stress*, 18(5), 449–459. <https://doi.org/10.1002/jts.20052>
- Perfect, M.M., Turley, M.R., Carlson, J.S., Yohanna, J. & Saint Gilles, M.P. (2016). School-related outcomes of traumatic event exposure and traumatic stress symptoms in students: A systematic review of research from 1990 to 2015. *School Mental Health*, 8, 7–43. <https://doi.org/10.1007/s12310-016-9175-2>
- Petre, B., Gagnayre, R., Andrade, V.D., Ziegler, O. & Guillaume M. (2017). From therapeutic patient education principles to educative attitude: The perceptions of health care professionals – A pragmatic approach for defining competencies and resources. *Patient Preference and Adherence*, 11, 603. <https://doi.org/10.2147/PPA.S121892>
- Poole, J.C., Dobson, K.S. & Pusch, D. (2018). Do adverse childhood experiences predict adult interpersonal difficulties? The role of emotion dysregulation. *Child Abuse & Neglect*, 80, 123–133. <https://doi.org/10.1016/j.chiabu.2018.03.006>
- Porche, M.V., Costello, D.M. & Rosen-Reynoso, M. (2016). Adverse family experiences, child mental health, and educational outcomes for a national sample of students. *School Mental Health*, 8, 44–60. <https://doi.org/10.1007/s12310-016-9174-3>
- Reisz, S., Duschinsky, R. & Siegel, D. (2018). Disorganized attachment and defense: Exploring John Bowlby's unpublished reflections. *Attachment & Human Development*, 20(2), 107–134. <https://doi.org/10.1080/14616734.2017.1380055>
- Shaffer, P.A., Vogel, D.L. & Wei, M. (2006). The mediating roles of anticipated risks, anticipated benefits, and attitudes on the decision to seek professional help: An attachment perspective. *J. Couns. Psychol.*, 53, 442–452. <https://doi.org/10.1037/0022-0167.53.4.442>
- Sciaraffa, M., Zeanah, P. & Zeanah, C. (2018). Understanding and Promoting Resilience in the Context of Adverse Childhood Experiences. *Early Childhood Education Journal*, 46(3), 343–353. <https://doi.org/10.1007/s10643-017-0869-3>
- Sher-Censor, E., Nahamias-Zlotolov, A. & Dolev, S. (2019). Special education teachers' narratives and attachment style: associations with classroom emotional support. *Journal of Child and Family Studies*, 28, 2232–2242. <https://doi.org/10.1007/s10826-019-01440-6>
- Sweeney, A., Clement, S., Filson, B. & Kennedy, A. (2016). Trauma-informed mental healthcare in the UK: What is it and how can we further its development? *Mental Health Review Journal*, 21(3), 174–192. <https://www.emerald.com/insight/content/doi/10.1108/MHRJ-01-2015-0006/full/html>
- Thomason, M.E. & Marusak, H.A. (2018). Toward understanding the impact of trauma on the early developing human brain. *Neuroscience*, 342, 55–67. <https://doi.org/10.1016/j.neuroscience.2016.02.022>
- Verschuere, K. & Koomen, H.M. (2012). Teacher-child relationships from an attachment perspective. *Attachment and Human Development*, 14, 205–211. <https://doi.org/10.1080/14616734.2012.672260>
- West, A. (2015). Associations among attachment style, burnout, and compassion fatigue in health and human service workers: A systematic review. *Journal of Human Behavior in the Social Environment*, 25(6), 571–590. <https://doi.org/10.1080/10911359.2014.988321>

- Whitaker, R., Dearth-Wesley, T., Gooze, R., Becker, B., Gallagher, K. & McEwen, B. (2014). Adverse childhood experiences, dispositional mindfulness, and adult health. *Preventive Medicine*, 67, 147–153. <https://doi.org/10.1016/j.ypmed.2014.07.029>
- Wright, S., Firsick, D., Kacmarski, J. & Jenkins-Guarnieri, M. (2017). Effects of attachment on coping efficacy, career decision self-efficacy, and life satisfaction. *Journal of Counseling & Development*, 95(4), 445–456. <https://doi.org/10.1002/jcad.12159>
- Zilberstein, K. & Messer, E.A. (2010). Building a secure base: Treatment of a child with disorganized attachment. *Clinical Social Work Journal*, 38(1), 85–97. <https://doi.org/10.1007/s10615-007-0097-1>

Copyright of Psychology of Education Review is the property of British Psychological Society and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.