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To cite this article: Joanne Bennett, Hannah Edwards, Charlotte Finnegan, Rebecca Jones, Caroline Carpenter & Cora Sargeant (2021) Educational psychologists' involvement in critical incidents: self-efficacy and influencing factors, *Educational Psychology in Practice*, 37:4, 430-447, DOI: [10.1080/02667363.2021.2000371](https://doi.org/10.1080/02667363.2021.2000371)

To link to this article: <https://doi.org/10.1080/02667363.2021.2000371>



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Published online: 09 Nov 2021.



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Educational psychologists' involvement in critical incidents: self-efficacy and influencing factors

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ABSTRACT

Supporting school communities following a critical incident (CI) is a stressful, yet established, part of an educational psychologist's (EP's) role. The authors aim to explore whether emotional intelligence (EI), the number of CIs worked, and coping strategies predict EPs' CI self-efficacy, and to gather EPs' views on CI training. Ninety-five EPs working for UK local authorities completed an online survey that measured their self-efficacy towards CIs, their EI, and coping strategies. Information about how CIs are allocated, supervision, training received, and suggestions for future training were obtained. EI, approach coping strategies, and avoidant coping strategies were all predictors of CI self-efficacy. Results showed that 76.5% of EPs considered they needed more CI training and expressed they would benefit from knowledge- and experiential-based training. Implications are discussed, using a training framework informed by sources of self-efficacy, emphasising the need to be consciously aware of the EI and coping strategies that EPs already possess.

KEYWORDS

Educational Psychology;
critical incidents; self-efficacy;
emotional intelligence;
training; coping strategies

Introduction

An educational psychologist's (EP) responsibilities range from early years work, statutory involvement in education, health, and care (EHC) needs assessments, understanding and supporting behaviour, upskilling the workforce, and wider school development work (Department for Education and Employment (DfEE, 2000; Lyonette et al., 2019). In addition, it has become an established part of the EP role to support school communities following a critical incident (CI), with 80% of local authority services reporting involvement in CIs (DFEE, 2000). A CI within the UK education system is defined as a sudden, unanticipated, and distressing event, or sequence of events, which overwhelms the normal coping mechanisms of a school community (Beeke, 2011). Specific examples include the sudden death of a child, parent, or member of staff, deliberate acts of violence, and witnessing or involvement in fatal traffic incidents (Aucott & Soni, 2016; Hayes & Frederickson, 2008). CIs are understandably distressing for anyone involved; exposure to any form of human suffering can cause discomfort, and incidents involving children have been recognised as particularly stressful (Haslam & Mallon, 2003). Given the importance

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and sensitivity of CIs, research into this area is instrumental for helping service leaders plan their response to CIs and support their EP teams. Currently, there is little contemporary research on how CIs fit into current professional practice, how they are allocated in different services, and the training and support required by EPs to engage with them effectively (Beeke, 2011; Hayes & Frederickson, 2008).

The act of supporting individuals or communities who have experienced a traumatic event has the potential to negatively impact the well-being of the EPs involved (Hayes & Frederickson, 2008) and expose them to a risk of secondary trauma (Figley, 2002). Social Cognitive Theory (Bandura, 1986) outlines that an individual's reaction to stress is dependent on their perceived ability to cope. Within this theory, self-efficacy is described as an individual's belief in their ability to exert control over their functioning, and therefore to manage stressful events, meaning the higher a person's self-efficacy, the greater the effort and perseverance they will apply to a task (Bandura, 1977).

Despite a lack of research focussing specifically on EPs' self-efficacy in CI work, higher levels of self-efficacy have been shown to moderate professional burnout in other professions, including nursing (Fida et al., 2018) and fire fighting (Makara-Studzińska et al., 2019). In addition to protecting against burnout, self-efficacy has been recognised as a protective factor for mental health (Fida et al., 2018), a method of promoting resilience in the face of challenge (Bandura, 1977), and a means of reducing job-related anxiety (De Clercq et al., 2018), all of which are beneficial when dealing with the emotional demands of CIs. Self-efficacy has also been linked to motivation; people who believe they are more likely to succeed at a task will be more motivated to engage in such tasks and view them as an opportunity for challenge (Pedrazza et al., 2013).

Bandura (1994) posits that self-efficacy is developed through four sources: guided mastery experiences, vicarious experiences, social persuasion, and positive interpretation of somatic and emotional states. Although Bandura (1994) suggests mastery experiences are the most effective source of self-efficacy development, paradoxically, experiences of failure can be detrimental if self-efficacy was not sufficiently formed before the adverse experience. Effective training is crucial in preparing EPs for CIs and therefore promoting their CI self-efficacy. Beeke (2011) reported that although, overall, Principal EPs (PEPs) believed their teams had been provided with adequate training for CIs, this view was not shared by the EPs themselves. Over half of participants reported their initial course training on CIs was inadequate, and two-thirds said they were either inadequately prepared through a lack of, or ineffective in-service training, or had received only some that was relevant (Beeke, 2011). Although the qualitative component of this research made some training suggestions, further exploration and identification of appropriate modes of delivery and specific topics would be useful. It would, therefore, be beneficial to explore whether the training used to prepare EPs for this type of work is successful in fostering self-efficacy, and if not, how this can be achieved.

An important question is whether the simple act of increased involvement with this type of work is enough to increase self-efficacy towards CIs in the same way that job experience increases self-efficacy in other professions (Soudagar et al., 2015). The number of CIs with which an EP has had the opportunity to be involved might be dependent on the EP service's system for allocating CIs. In local authorities where EPs volunteer for CI work, EPs higher in self-efficacy may be more likely to put themselves forward for CIs and

obtain mastery experience, motivating them to volunteer on subsequent occasions. Alternatively, in EP services where CIs are allocated, as the number of CIs experienced increases, it would be expected that CI self-efficacy might also increase.

Alongside the number of CIs worked, the scientific literature also describes other variables that might contribute to EPs' CI self-efficacy, including emotional intelligence (EI) and coping strategies. EI is the ability to understand and manage emotions effectively (Nespereira-Campuzano & Vázquez-Campo, 2017), with Goleman (2001) identifying self-awareness, self-management, social awareness, and relationship management as key components. EI tends to have a positive relationship with occupational self-efficacy (Chan, 2004; Mouton et al., 2013; Rathi & Rastogi, 2009), meaning the higher a person's EI, the stronger the belief in their ability to do their job effectively. Although a relationship between EI and self-efficacy has not yet been demonstrated in the EP profession specifically, EPs who feel they can successfully manage their emotions may feel more prepared and better able to cope with the distressing and emotional nature of CIs.

A second variable displaying a relationship with self-efficacy is an individual's coping strategies, which can be defined as 'efforts to regulate emotions, behaviours, cognitions, psychophysiology, and environmental aspects in response to the stress of everyday events' (Morales-Rodríguez & Pérez-Mármol, 2019, p. 2). Research has shown that high levels of self-efficacy and active coping strategies are reciprocally predictive in both academic (Lane et al., 2003), and employment situations (Salanova et al., 2006). The utilisation of approach-coping strategies such as seeking emotional and informational support has been linked to higher psychological well-being in other high-stress professions such as nursing (Lee, Tzeng, & Chiang, 2019). It could, therefore, be suggested that employing active coping mechanisms such as positive reframing and seeking emotional support might promote problem-solving and support EPs' self-efficacy while completing emotionally demanding CI work.

With this study, the authors seek to enhance current understanding and contribute to the limited evidence base around EPs' involvement in critical incidents specifically, exploring the research question: what factors predict EPs' self-efficacy in relation to critical incidents? As previously mentioned, self-efficacy has been shown to increase confidence and resilience in the face of challenge. From the literature, potential predictors of self-efficacy have been identified (that is, coping strategies, EI, experience with CIs). Using the results and conclusions from this study, the authors aim to build on current knowledge and explore the extent to which these factors are successful in predicting EPs' CI self-efficacy. Additionally, previous literature has identified gaps in training for CIs (Beeke, 2011). Training was explored simultaneously, to further understand EPs' perceptions of CI training and how this can be improved to be more valuable and enable EPs to feel better prepared for their involvement in CIs.

Method

The aims of the study were to explore whether coping strategies, EI and experience with CIs are predictors of EPs' CI self-efficacy. Information on EPs' training experiences was also collected to allow experience-based suggestions to inform future EP training provision.

Design and procedure

This research was conducted from a critical realist epistemological position, taking the view that reality is objective but mediated by an individual's context and experience (Danermark et al., 2001), and utilised an embedded mixed methods design (Tashakkori & Teddlie, 2010). An embedded design was chosen as the main research question warranted quantitative data as the primary data source; however the researchers also wished to explore EP perceptions of CI training, which was best explored using qualitative data. Furthermore, it was intended that the conclusions made from quantitative data analysis would be enhanced by secondary data from qualitative data collection.

Ethical approval for this research project was provided by the University of Southampton Ethics Committee. Whilst no immediate risks to participants were identified, the potentially distressing nature of reflecting on CIs was acknowledged, and participants were encouraged to seek support from their supervisor/line manager if required.

The survey was open for 85 days, during which time participants were recruited via the University of Southampton Educational Psychology Doctorate Twitter account (@SUEdPsy) and email, using the National Association of Principal Psychologists (NAPEP) and the Educational Psychology list (EPNET) email forums for principal EPs, EPs and individuals interested in the field. The questionnaire contained 96 questions and took an average of 16 minutes to complete. Following completion, participants were shown a debriefing statement which included signposts to support due to the potentially distressing and uncomfortable nature of CIs.

Participants

Participants were ninety-five chartered Educational Psychologists currently working for UK local authorities. Ninety-eight participants completed the survey; however, three were removed from the regression analysis due to two having incomplete data and one being a point of particularly high influence in the regression. Participant characteristics are summarised in [Appendix 1](#). Based on Green's (1991) formula, a sample size of 82 was deemed suitable to achieve sufficient power ($n > 50 + (8 \times 4) = 82$) with a medium effect size (Cohen, 1988).

Measures

The self-efficacy in social work (SESSW) scale

The self-efficacy in social work (SESSW) scale (Pedrazza et al., 2013) was used to identify EPs' CI self-efficacy. This consisted of 13 items rated on a 7-point Likert-type scale, ranging from 1 = 'strongly disagree' to 7 = 'strongly agree'. Some of the language used in the survey was adapted to make the questions more relevant to EP practice, for example changing 'client' to 'service user', 'complex situations' to 'critical incidents', 'write and update case reports' to 'write reports/complete related administrative tasks'. Question 11 was also changed to 'when dealing with complex cases, I am always able to involve

people and services from different professions when appropriate' to reflect the nature of EP practice. Internal consistency of the revised scale was assessed using Cronbach's Alpha; this was considered generally good (Kline, 1999) for the data collected ($\alpha = .804$).

BRIEF COPE

The BRIEF COPE (Carver, 1997) was used to explore the relationship between different types of coping strategies (for example, self-distraction, active coping, denial) and EPs' CI self-efficacy. The survey consisted of 28 items rated on a 4-point Likert-type scale, ranging from 1 = 'I haven't been doing this at all' to 4 = 'I have been doing this a lot'. Cronbach's Alpha was considered generally satisfactory for the data collected ($\alpha = .763$).

Assessing emotions scale

The Assessing Emotions Scale (Schutte et al., 2009) was used to explore the relationship between self-reported EI and perceived self-efficacy in EPs completing critical incident work. The survey consisted of 33 items rated on a 5-point Likert-type scale, ranging from 1 = 'strongly disagree' to 5 = 'strongly agree'. Cronbach's Alpha was considered generally good for the data collected ($\alpha = .88$).

Results

EPs' qualitative experiences of training around CIs were summarised, focusing on CI allocation, types and perceived quality of training received, and suggestions for future training. A multiple regression analysis was conducted to explore the potential predictor variables' influence on EPs' CI self-efficacy.

Qualitative analysis

Critical incident allocation

Ninety-eight participants indicated how CIs are allocated within their EPS. Participants were able to select more than one answer; responses are shown in [Table 1](#).

Other comments included allocating CI work to a designated Critical Incident Response Team or a combination of link EP supported by either a Social, Emotional and Mental Health Specialist or Senior/Principal EP. Others stated that CI allocation often depends on the severity of the incident and the availability of the link EP.

Training received

Results indicated that 76.5% of participants either strongly agreed or agreed that EPs need more training specifically around CIs, 18.4% neither agreed nor disagreed, and 5.1% disagreed. Participants were asked what forms and what quality of training they had received in the past 10 years. The most commonly received training was independent reading (88.8%), followed by whole service day (65.3%), input during initial EP training (49%), external training (40.8%) and finally online training (10.2%). By combining good

Table 1. Critical incident allocation.

	Allocated to the school's link EP	Rota	Allocated by the senior manager	Voluntary	Other
Number of participant responses	50	1	43	18	17

and excellent scores, the best-rated training was whole service day (89%) followed by external training (87.5%) independent reading (72.4%), input during EP training (60.4%) and finally online training (50%).

Support following a CI

Participants were asked to what degree they agree with the statement 'when I am involved in critical incidents, I find them stressful'. Out of 87 respondents, 68.9% agreed or strongly agreed, 21.8% neither agreed nor disagreed and 9.2% disagreed.

Participants were asked to consider the helpfulness of a debriefing and supervision after their most recent CI, 88 EPs responded. For debriefings, 75% found it very helpful or helpful, 7.1% neither helpful nor unhelpful, 1% very unhelpful, and 14.3% did not receive a debriefing. For supervision, 72.5% found supervision very helpful or helpful, 7.1% neither helpful nor unhelpful, 1% unhelpful, and 9.2% did not receive supervision.

Suggestions for future training

In order to further understand EPs' perceptions of CI training and how this can be improved, participants were asked what training would be beneficial for CI practice. Inductive content analysis was conducted collaboratively by all four researchers. Each participant's response was broken into units, which were coded based on their meaning. From the codes, two themes emerged, each with two sub-themes (see [Appendix 2](#)). The themes identified participants' desire for both knowledge-based and experiential-based training (see [Table 2](#)). Within these themes, similar sub-themes regarding the content and delivery method were identified.

Knowledge-based training

The knowledge-based training theme incorporates comments advocating for training on topics relevant to CIs. This includes specific guidance about CIs such as what to expect, policy-based information and having an evidence-base to support appropriate responses. Several comments suggested developing a framework for CIs would be useful. Further suggestions focused on increasing knowledge about available resources and training on commonly addressed topics within CIs, such as bereavement, trauma and suicide.

Table 2. Percentage number of knowledge-based and experiential-based comments.

	Knowledge-based	Experiential-based
Number of comments	67.65%	32.35%

Suggested delivery methods for knowledge-based training included whole service training, training during the EP doctorate and recommendations for relevant reading. It was highlighted that regular top-up training would be useful.

Experiential-based training

The content of experiential-based training included EPs wanting the opportunity to reflect and share with colleagues about the CIs in which they have been involved. Being able to share best practice and resources with colleagues appeared to be desired by EPs to support their own experience of CIs. Similarly, participants highlighted a desire to have opportunities to work more systemically with other agencies to increase their awareness of the support networks available in their local area. A focus on talking directly with service users to consider what support schools find helpful would also be beneficial. In terms of training delivery, direct experience such as real-life experience, role-play or casework discussion as part of dedicated CI training was valued.

Quantitative analysis

Descriptive statistics

The mean number of critical incidents was calculated. For the BRIEF COPE, a mean participant score was calculated for the avoidant and approach sub-scales (i.e., on a scale of one to four). The results from the Assessing Emotions Scale were averaged to produce a mean participant score (that is, on a scale of one to five). These values are shown in Table 3.

The data met the assumptions required for a linear regression, including linearity, homoscedasticity and an absence of multicollinearity. Three participants were excluded: two due to incomplete data and one due to their undue influence on the regression as determined by having a Cook's distance substantially greater than other participants (Cook & Weisberg, 1982). A total of 95 participants was included in the final analysis.

Multiple regression

An entry method multiple linear regression was used to determine the extent to which the number of CIs an EP had been involved in, their use of avoidant and approach coping strategies, and their EI predicted CI self-efficacy.

The model was significant ($F(4, 94) = 8.95, p < .001$) and indicated that the model accounts for 28.4% of the variance ($R^2 = .28$) in reported CI self-efficacy. Avoidant coping strategies ($p = .04$), approach coping strategies ($p = .02$) and EI ($p < .001$) were found to be

Table 3. Means and standard deviations of participants' responses.

Predictors	Mean	Standard Deviation
Number of CIs involved in	6.89	8.75
Avoidant Coping Strategies	1.68	.36
Approach Coping Strategies	3.28	.59
Emotional Intelligence	3.94	.32

Table 4. Multiple regression analysis predicting CI self-efficacy.

Predictors	B	Standard Error B	β
Number of CIs involved in	.01	.01	.17
Avoidant Coping Strategies	-.35	.17	-.20
Approach Coping Strategies	.27	.11	.25
Emotional Intelligence	.71	.19	.36

significant predictors of self-reported CI self-efficacy score. The number of CIs an EP had been involved in ($p = .07$) was not significantly predictive of their CI self-efficacy score; however, it did contribute to the model alongside the other variables.

The strength of the relationship between each predictor variable and CI self-efficacy can be interpreted using the Standardised Beta coefficients (β) as correlation coefficients, shown in Table 4. This indicates that EI is the strongest contributor to the model, followed by approach coping strategies, avoidant coping strategies and then the number of critical incidents.

The model suggests that if an individual's avoidant coping strategy score increases by one-point, their CI self-efficacy score is predicted to decrease by $-.35$. For an increase in one point on the approach coping strategy sub-scale, their CI self-efficacy score is predicted to increase by $.27$. For an increase in one point on the Assessing Emotions Scale, their CI self-efficacy score is predicted to increase by $.71$. For each additional CI an EP is involved in, their CI self-efficacy score is predicted to increase by $.01$.

Discussion

The authors sought to enhance current understanding of EPs' involvement in CIs and to explore whether EI, coping strategies, and experience with CIs are predictive of EPs' CI self-efficacy. In addition, the authors aimed to further understand EPs' perceptions of CI training and how this can be improved.

Statistical analysis indicated that EI is the strongest predictor of EP CI self-efficacy, followed by approach coping strategies and then avoidant coping strategies, suggesting EPs who have higher EI, engage in more approach coping strategies, and use less avoidant coping strategies, have higher CI self-efficacy. The number of CIs in which an EP has been involved was not a significant predictor of CI self-efficacy. This may be due to the unpredictable and highly varied nature of CIs; previous experience may not prepare an individual for future CIs in the way that many EP services might expect. This may have implications for the way EP services allocate CI work. PEPs should be mindful that more experience of CIs may not indicate increased EP CI self-efficacy, therefore it will be important to have discussions with individual EPs about their CI self-efficacy, rather than making decisions based on experience of CIs alone.

Bandura suggests that a person's self-efficacy can be enhanced by successful mastery experiences which, in turn, increase the likelihood of further successful experiences. However, experiencing failure during a mastery experience can be detrimental if the individual does not have a sufficient level of self-efficacy beforehand to cope with adverse outcomes (Bandura, 1994). This suggests that a prior source of self-efficacy is required before engaging in any mastery experiences, to ensure that an individual is self-efficacious enough to cope with any unsuccessful outcomes. In EP services where CI

work is undertaken voluntarily, EPs volunteering may have greater CI self-efficacy from the outset, which is enhanced by the experiences they volunteer to undertake. In contrast, EPs who do not volunteer may represent those with less CI self-efficacy. PEPs should be mindful that EPs with lower self-efficacy will need more support to build this initial CI self-efficacy before undertaking any CI work rather than, contrary to the original assumption, just being allocated more CI work to gain further experience.

This research shows that EP emotional intelligence (EI) and coping strategies predict EP CI self-efficacy; high self-efficacy was related to lesser avoidant and greater approach coping strategies. Given EI features skills in self-recognition and management of emotions, this fits with Bandura's suggestion that positive interpretation of somatic and emotional states contributes towards greater self-efficacy. However, unlike Bandura (1994), who did not specify the most effective order of self-efficacy development sources, the authors propose that it would be beneficial for positive emotional/somatic appraisal to occur first, alongside the development of approach and reduction of avoidant coping strategies. Given the stronger relationship between emotional/somatic appraisal and CI-self efficacy, focussing efforts here should ensure adequate levels of self-efficacy to increase the likelihood of success from further development sources and to protect them from experiences of failure in future mastery experiences of CIs. See [Figure 1](#) for a visual representation.

The authors suggest that EP services need to ensure that EPs have developed, and are *aware* of, the EI and coping strategies they already possess; this may reflect Bandura's positive interpretation of somatic and emotional states and could be best supported and enhanced through regular supervision for EPs and trainees. Supervision is a useful opportunity to reflect upon thoughts and feelings and to consider personal and professional coping strategies. Appropriate practical and emotional support should always be available to EPs; this is particularly important in relation to CIs, as this would support the EP in being prepared to manage the emotional labour of this type of work. It is the awareness and deployment of emotional regulation skills that will increase EP CI self-efficacy, that will then contribute towards more successful experiences in CI, which in turn further enhances CI self-efficacy.

Although the quantitative findings suggest EI and coping strategies are most predictive of CI self-efficacy, it is acknowledged that 76.5% of EPs reported a desire for more training in CI work. Participants expressed a desire for experiential and knowledge-based training, which maps on to Bandura's self-efficacy development sources: vicarious experiences, social persuasion, and guided mastery experiences, and which may moderate the relationship between self-efficacy in CI work and the mastery experiences that might support it.

Drawing from Bandura's work and both the qualitative and quantitative results of the current study, the authors propose a training framework that could be used within EP initial training and within EP services as part of continuing professional development (CPD) to support EPs to gain knowledge and experience of CI work which, when successful, increases CI self-efficacy.

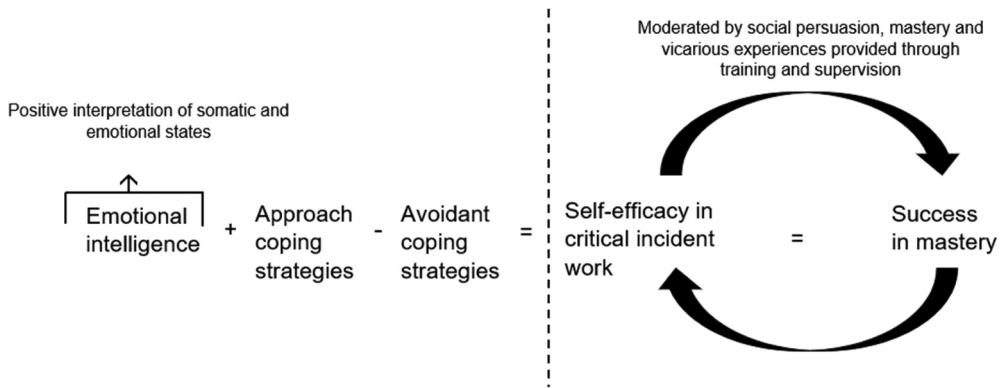


Figure 1. A visual representation of the proposed relationship between EI, coping strategies, CI self-efficacy, and mastery experiences.

Enhancing critical incident self-efficacy: a training framework

vicarious experiences

Participants reported that they desired more opportunities to shadow EPs during CI work. Whilst this may not always be possible due to the unanticipated and sensitive nature of CI work, shadowing opportunities, team meetings and CPD can enable EPs to engage in case discussions and share best practice. By seeing and hearing about the successful experiences of CI work by colleagues similar to themselves (Bandura, 1994) individuals can boost their own CI self-efficacy vicariously. Over time, vicarious experiences could include observation, case discussions and whole-service days on CI work to help EPs observe perseverance and success specifically in CIs. EPs' requests for more knowledge-based training on topics of specific relevance to CIs (for example, bereavement and suicide awareness) alongside practice guidance in the form of CI policies/frameworks will also be valuable. This may be particularly useful as part of wider local authority CI policies, incorporating multidisciplinary teams (Beeke, 2011) and details of local resources. It was suggested that informational content of training could be delivered via whole service days, recommended reading lists, and modules within initial EP training.

Guided mastery experiences

Guided mastery experiences occur across a range of situations within EP practice, not just specifically related to CI work. Whilst role playing CI situations would be advantageous for EPs, general experience of role-play, consultation and being observed using person-centred or personal construct approaches will support EPs to develop an awareness of their own general skills as EPs. Alongside supervision, EPs can be supported to recognise and value these skills and how they could be applied during CI work. With the strong foundation in EI and coping strategies EPs will already have behind them, this will increase the likelihood of positive outcomes in the guided mastery experiences EPs engage in, contributing towards greater CI self-efficacy.

Social persuasion

In isolation, social persuasion will not help EPs develop CI self-efficacy. However, positive verbal feedback, when used in conjunction with guided mastery and vicarious experiences, can contribute towards raising self-efficacy when given by peers, university tutors, supervisors and managers who have knowledge of CI work. Verbal feedback can also be provided during group discussions and supervision as a means of cultivating a joint belief that, as EPs, they have the skills needed to succeed in CI work.

The authors' proposed training framework for enhancing CI self-efficacy encapsulates both the desires of EPs involved in CI work, and the underlying skills needed to increase self-efficacy. Whilst EPs report that they would benefit from more CI training, the authors feel that it is imperative that consideration is given to the current EI and coping strategies of an EP, by discussing this in supervision, before engaging in any such training opportunities. This is to ensure that EPs are suitably protected from unsuccessful experiences in CI training, so that their CI self-efficacy isn't hindered. At a whole service level, time should be allocated, for example within a team meeting, to reflect on CI involvement and how approach coping strategies are promoted within the team. Collective areas for development should be identified and planning appropriate actions would be useful.

Applications within a real-world context

Nationally, there is a high demand for EP services. The profession's statutory workload has increased year-on-year (Department for Education, 2020a) since the introduction of the Children and Families Act (2014), which introduced the education, health and care (EHC) needs assessment process, within which local authorities are obliged to invite an EP to provide psychological advice. Simultaneously, local authority budget cuts due to austerity measures are described as directly affecting the number of EPs employed by LAs, and therefore reducing the capacity to complete an enhanced workload (Lyonette et al., 2019).

In addition to these pressures, EP services also need to be prepared to respond to sudden, unanticipated, and distressing events that occur within school communities (Beeke, 2011). Critical incidents are recognised as being challenging for all involved; this is supported by the results which showed that 68.9% of EPs reported finding CIs stressful; this makes it of paramount importance that EP services are proactive in supporting EPs' wellbeing. In the context of CIs, self-efficacy has been recognised as a protective factor for mental health and preventing professional burn out (Fida et al., 2018). Therefore, recognising the importance of EI, encouraging the use of approach coping strategies and decreasing the use of avoidant coping strategies (to increase the likelihood of successful mastery experiences with CIs), will likely support EPs with maintaining their wellbeing in relation to this emotionally demanding work.

The COVID-19 pandemic has added further pressure to already challenged services. In addition to their existing workload, EP services have supported schools with promoting wellbeing, whilst adapting to working primarily from home, as pupils and staff returned to school in September 2020 (Department for Education, 2020b). The impact of these additional responsibilities was reinforced by the Department for Education's attempt to increase the available workforce by recruiting former or part-time EPs

(Department for Education, 2020b). A BPS survey of 200 UK psychologists highlighted high levels of exhaustion and an increased risk of burnout resulting from working with individuals experiencing high levels of distress and loss within the context of COVID-19 (British Psychological Society, 2020). Speculating on the impact of the COVID-19 pandemic on the development of CI self-efficacy, it is considered that school closures and the increased requirement on working with schools remotely have introduced additional barriers to accessing already limited opportunities for EPs to increase their CI self-efficacy through accessing guided and vicarious mastery experiences. In addition, increased professional isolation has reduced opportunities for the development of self-efficacy through social persuasion and has made emotional check-ins following CI work more challenging.

Taking into consideration the previously mentioned statutory and CI work demands of the EP role and the additional pressure of the COVID-19 pandemic, it is clear that EPs are likely to be experiencing a high level of work-related stress. This study has identified factors that are supportive in developing CI self-efficacy, which is important in relation to all CI work; however, within the context of the COVID-19 pandemic, being able to cope with unanticipated and distressing events is crucial.

Limitations

It should be noted that data collection for this study began in March 2020 as national restrictions for the COVID-19 pandemic were implemented. As a sudden, unanticipated series of events which overwhelmed the normal coping mechanisms of school communities, arguably this should be considered a critical incident in itself (Beeke, 2011). Although the authors asked participants to reflect on previous CI experiences, the impact of this added national context is unclear. Considering the critical realist epistemological stance taken, the self-report survey nature of the study is appropriate for exploring the research question. However, it is acknowledged that using a survey has limited the flexibility of responses, and that participants may have interpreted Likert scales subjectively. There also may be limitations in relation to the accuracy of the respondents' representation of their abilities (for example, participants' introspective abilities, and demand characteristics), which directly impact on the results from the linear regression and, therefore, the accuracy of the conclusions that can be drawn.

Diversity of participants should be improved in future studies, as the national geographic distribution of participants was skewed. Although participants were recruited from across England, representation from Scotland ($n = 2$) and Wales ($n = 2$) was low, and there were no participants from Ireland. Male EPs were also underrepresented, with 5.1% of the sample being male in comparison to 7.4% of EPs in the UK (Lyonette et al., 2019). Due to not collecting data on the ethnicity of participants, the authors were unable to determine if the sample was representative of the EP population.

Considering limitations of the statistical methods, a linear regression requires all relevant variables to be included within the model to prevent variance being inappropriately attributed to a different variable. Although the model accounted for 28.4% of variance in reported CI self-efficacy, some of this variance may be better accounted for by 'training'. Training was recognised as an important factor within this research; however

it was not included as a variable within the regression due to the format of the data collected. Indeed, it is difficult to operationalise experienced training in a clear quantitative way, with training quality likely to be more important than training quantity, but with perceptions of training quality being particularly subjective and often unrepresentative of the amount of actual learning taking place (for example, Persky, Lee, & Schlesselman, 2020). In future research, it would be useful to operationalise the learning outcomes of training in such a way that it can be included within a regression model to more clearly establish its relationship to CI self-efficacy.

Conclusion

Overall, this study has evidenced that EPs' EI, their increased use of approach coping strategies and their reduced use of avoidant coping strategies are related to CI self-efficacy, which in turn Bandura (1977) suggests is connected to the likelihood of EPs having successful mastery experiences. The suggestion is not that EPs are lacking in these skills, but that EPs engage in situations which are highly emotionally challenging and therefore require EI and coping skills over and above those required in their day-to-day professional life. The authors propose that EP services should focus first on considering EPs' existing EI and coping strategies, via exploration in individual supervision and team meetings. Where required, EPSs should support the EP to develop their EI and coping strategies, before the EP engages in vicarious, guided mastery and social persuasion mastery experiences. Research indicates that EI can be effectively increased via staff training (see meta-analyses by Hodzic et al., 2017; Mattingly & Kraiger, 2019). However, it must be noted that these studies were not conducted with an EP workforce and therefore this highlights an important area for future research.

Disclosure statement

No potential conflict of interest was reported by the author(s).

References

- Aucott, C., & Soni, A. (2016). Reflections on the use of Critical Incident Stress Debriefing in schools. *Educational Psychology in Practice*, 32(1), 85–99.
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, 84(2), 191–215.
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice-Hall.
- Bandura, A. (1994). Self-efficacy. In: V. S. Ramachandran (Ed.), *Encyclopedia of human behavior* (Vol. 4, pp. 71–81). New York: Academic Press. (Reprinted in H. Friedman (Ed.), *Encyclopedia of mental health*. San Diego: Academic Press, 1998).
- Beeke, M. A. (2011). *Critical incidents: Exploring theory policy and practice* (Doctoral dissertation). Institute of Education, University of London.
- British Psychological Society. (2020). The impact of Covid-19 on the wellbeing of psychologists. Retrieved from September 6, 2020, <https://www.bps.org.uk/sites/www.bps.org.uk/files/Policy/Policy%20-%20Files/Impact%20of%20Covid-19%20on%20the%20Wellbeing%20of%20Psychologists.pdf>

- Carver, C. S. (1997). You want to measure coping but your protocol' too long: Consider the brief cope. *International Journal of Behavioral Medicine*, 4(1), 92.
- Chan, D. W. (2004). Perceived emotional intelligence and self-efficacy among Chinese secondary school teachers in Hong Kong. *Personality and Individual Differences*, 36(8), 1781–1795.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). New York: Academic.
- Cook, R. D., & Weisberg, S. (1982). Residuals and influence in regression. New York: Chapman and Hall. Retrieved September 6, 2020, from <http://hdl.handle.net/11299/37076>
- Danermark, B., Ekström, M., Jakobsen, L., & Karlsson, J. C. (2001). Grounded theory. In Danermark, B., Ekstrom, M., Jakobsen, L. and Karlsson, J.C. (Eds), *Explaining society: An introduction to critical realism in the social sciences* (pp. 130–137). Florence, KY: Routledge.
- De Clercq, D., Haq, I. U., & Azeem, M. U. (2018). Self-efficacy to spur job performance: Roles of job-related anxiety and perceived workplace incivility. *Management Decision*, 56(4), 891–907.
- Department for Education. 2014 Children and Families Act 2014. Retrieved September 6, 2020, from: <https://www.legislation.gov.uk/ukpga/2014/6/enacted>
- Department for Education. (2020a). Education, health and care plans. Retrieved September 6, 2020, from <https://explore-education-statistics.service.gov.uk/find-statistics/education-health-and-care-plans>
- Department for Education. (2020b). £8m programme to boost pupil and teacher wellbeing. Retrieved September 6, 2020, from <https://www.gov.uk/government/news/8m-programme-to-boost-pupil-and-teacher-wellbeing>
- Department for Education. (2020c). Educational psychologists: How to express an interest in providing temporary support for coronavirus (COVID-19) recovery. Retrieved September 6, 2020, from <https://www.gov.uk/government/publications/educational-psychologists-support-for-coronavirus-covid-19-recovery/educational-psychologists-how-to-express-an-interest-in-providing-temporary-support-for-coronavirus-covid-19-recovery>
- Department for Education and Employment (DfEE). (2000). *Educational Psychology Services (England). Current role, good practice and future directions* (Report of the working group). London: DfEE.
- Fida, R., Laschinger, H. K. S., & Leiter, M. P. (2018). The protective role of self-efficacy against workplace incivility and burnout in nursing: A time-lagged study. *Health Care Management Review*, 43(1), 21–29.
- Figley, C. R. (2002). Compassion fatigue: Psychotherapists' chronic lack of self care. *Journal of Clinical Psychology*, 58(11), 1433–1441.
- Goleman, D. (2001). *The emotionally intelligent workplace*. New York, NY: Jossey-Bass.
- Green, S. B. (1991). How many subjects does it take to do a regression analysis. *Multivariate Behavioral Research*, 26(3), 499–510.
- Haslam, C., & Mallon, K. (2003). A preliminary investigation of post-traumatic stress symptoms among firefighters. *Work & Stress*, 17(3), 277–285.
- Hayes, B., & Frederickson, N. (2008). Providing psychological intervention following traumatic events: Understanding and managing psychologists' own stress reactions. *Educational Psychology in Practice*, 24(2), 91–104.
- Hodzic, S., Scharfen, J., Ripoll, P., Holling, H., & Zenasni, F. (2017). How efficient are emotional intelligence trainings: A meta-analysis. *Emotion Review*, 10(2). doi:10.1177/1754073917708613
- Kline, P. (1999). *A handbook of psychological testing* (2nd ed.). London: Routledge. Retrieved September 6, 2020, from https://books.google.co.uk/books/about/The_Handbook_of_Psychological_Testing.html?id=lm2RxaKaok8C&redir_esc=y
- Lane, A. M., Devonport, T. J., Milton, K. E., & Williams, L. C. (2003). Self-efficacy and dissertation performance among sport students. *The Journal of Hospitality Leisure Sport and Tourism*, 2(2), 59–66.
- Lee, T. S., Tzeng, W. C., & Chiang, H. H. (2019). Impact of coping strategies on nurses' well-being and practice. *Journal of Nursing Scholarship*, 51(2), 195–204.
- Lyonette, C., Atfield, G., Baldauf, B., & Owen, D. (2019). *Research on the educational psychologist workforce: Research report, March 2019*.

- Makara-Studzińska, M., Golonka, K., & Izydorczyk, B. (2019). Self-efficacy as a moderator between stress and professional burnout in firefighters. *International Journal of Environmental Research and Public Health*, 16(2), 183.
- Mattingly, V., & Kraiger, K. (2019). Can emotional intelligence be trained? A meta-analytical investigation. *Human Resource Management Review*, 29(2), 140–155.
- Morales-Rodríguez, F. M., & Pérez-Mármol, J. M. (2019). The role of anxiety, coping strategies, and emotional intelligence on general perceived self-efficacy in university students. *Frontiers in Psychology*, 10(1689). doi:10.3389/fpsyg.2019.01689
- Mouton, A., Hansenne, M., Delcour, R., & Cloes, M. (2013). Emotional intelligence and self-efficacy among physical education teachers. *Journal of Teaching in Physical Education*, 32(4), 342–354.
- Nespereira-Campuzano, T., & Vázquez-Campo, M. (2017). Emotional intelligence and stress management in nursing professionals in a hospital emergency department. *Enfermería Clínica (English Edition)*, 27(3), 172–178.
- Pedrazza, M., Trifiletti, E., Berlanda, S., & Bernardo, G. (2013). Self-Efficacy in social work: Development and initial validation of the self-efficacy scale for social workers. *Social Sciences*, 2(3), 191–207.
- Persky, A. M., Lee, E., & Schlesselman, L. S. (2020). Perception of learning versus performance as outcome measures of educational research. *American Journal of Pharmaceutical Education*, 84(7), ajpe7782.
- Rathi, N., & Rastogi, R. (2009). Assessing the relationship between emotional intelligence, occupational self-efficacy and organizational commitment. *Journal of the Indian Academy of Applied Psychology*, 35, 93–102.
- Salanova, M., Grau, R., & Martínez, I. (2006). Job demands and coping behaviour: The moderating role of professional self-efficacy. *Psychology in Spain*, 10(1), 1–7.
- Schutte, N. S., Malouff, J. M., & Bhullar, N. (2009). The assessing emotions scale. In Stough, C., Saklofske, D., and Parker, J. (Eds.): *Assessing emotional intelligence* (pp. 119–134). Boston, MA: Springer.
- Soudagar, S., Rambod, M., & Beheshtipour, N. (2015). Factors associated with nurses' self-efficacy in clinical setting in Iran, 2013. *Iranian Journal of Nursing and Midwifery Research*, 20(2), 226–231. Retrieved September 6, 2020, from <http://www.ncbi.nlm.nih.gov/pubmed/25878701><http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=PMC4387648>
- Tashakkori, A., & Teddlie, C. (2010). *Sage handbook of mixed methods in social and behavioural research* (pp. 58–88). Thousand Oaks, CA: SAGE publications.
- The British Psychological Society. (2019). Standards for the accreditation of Doctoral programmes in educational psychology in England, Northern Ireland & Wales. Retrieved September 6, 2020, from <https://www.bps.org.uk/sites/www.bps.org.uk/files/Accreditation/Educational%20Accreditation%20Handbook%202019.pdf>

Appendix 1 Participant Characteristics

Variable	(N)
Gender:	
Male	4
Female	91
Years qualified as an EP:	
Less than one year	8
1 year	2
2 years	7
3 years	11
4 years	4
5 years	5
6 years	1
7 years	1
8 years	8
9 years	2
10 years	9
11 years	2
15 years	3
16+ years	32
LA worked in:	
Greater London	8
South East	28
South West	7
West Midlands	13
North East	3
North West	4
Yorkshire and the Humber	9
East Midlands	7
East of England	12
Wales	2
Northern Ireland	0
Scotland	2
Employment Status:	
Full-time	66
Part-time	29

Appendix 2 Themes arising from Content Analysis

Emergent Themes	Sub-themes	Codes	Number of units	Definition	Examples
Knowledge based training	Content of knowledge-based training	What to expect in CI work	14	General information about the characteristics of CI and how educational psychologists respond during and after a CI.	Types of critical incidents and characteristics of them, issues to be aware in each of them etc. Training which can focus on the processes required to effectively support schools. Training on major incidents
		Evidence base	17	Evidence-based methods and models that offer effective support in CI work.	Review of research into what works and what helps as well as what the dangers and pitfalls can be, research literature on what is effective in responding to CIs
		Development of a framework for CI input	9	Guidance in the form of a plan, script or framework to support CI work.	Support around consultation structure/scripts to use to support staff and guidance document to be able to refer to.e.g. "I think it would be helpful to have a more specific proforma about the steps to take once an EP is made aware of a CI having occurred (e.g. a flowchart or checklist of initial steps to take)- I am aware that often CIs develop in different ways depending on the level of support schools feel they require but an initial checklist/flowchart to make sure that all EPs are doing the same key starting points; would be helpful."
		Resources	6	Sharing of resources for young people, families, schools and/or professionals.	Resources for children and young people and parents. Recommendations to support those involved, useful resources
		Policy-based information	13	Information about the policies and procedures around CIs and EPs role.	Who should pay if you're a completely traded service How local policy sits within wider policy and how to work together in a response effectively

(Continued)

(Continued).

Emergent Themes	Sub-themes	Codes	Number of units	Definition	Examples
		Topic specific training	34	Request for training on specific topics relating to CI work	It is helpful to engage in CPD around bereavement and trauma The impact of suicide/Self harming Trauma informed practice training – may help to inform how to support the school/setting in planning/putting in support for the CYP post CI Mental health first aid
	Methods for delivering knowledge-based training:	External agency training	3	Training provided by agencies outside of the EPS.	CPD day session from another agency
		Within whole service training	8	Training provided to whole EPS teams either as part of team meetings or dedicated training days.	Whole EP service whole day training with in-service updates every 2 years or so.
		Recommended reading	1	Recommended reading around CIs.	Targeted reading
		Top up training	6	Regular additional training to refresh skills and knowledge of CI responses.	"I think regular revisits to training is useful for all EPs"
		Training at university	4	Training provided as part of the doctorate initial training.	"I think it should be included in doctorate training as it's something you can come into contact with almost immediately when you start."
Experience based training	Content of experience-based training	Reflecting and sharing with colleagues	30	Sharing and reflecting on experience, ideas and best practice with colleagues	Reflection on practice with colleagues Share experiences and resources
		Multi-agency working	5	Increasing awareness of support services and multi-agency working with other professionals.	"Access to information about local support networks in my area." "Training within my EPS that includes case studies of real events and the response that the EPS provided."
		Real life opportunities	9	Opportunities to shadow or receive support by an experienced EP whilst taking part in CI work.	"I think the most beneficial learning is likely to take place when responding to a genuine incident with collaboration and support from at least one other EP who is experienced in this area". More opportunity to be involved when they occur (shadowing supported practice etc)