



Citation for published version:

Schneider, C, Hobson, C & Shelton, K 2022, 'Grounding a PIE in the sky': Laying empirical foundations for a psychologically informed environment (PIE) to enhance well-being and practice in a homeless organisation', *Health & Social Care in the Community*, vol. 30, no. 3, pp. e657-e667. <https://doi.org/10.1111/hsc.13435>

DOI:

[10.1111/hsc.13435](https://doi.org/10.1111/hsc.13435)

Publication date:

2022

Document Version

Publisher's PDF, also known as Version of record

[Link to publication](#)

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'Grounding a PIE in the sky': Laying empirical foundations for a psychologically informed environment (PIE) to enhance well-being and practice in a homeless organisation

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Funding information

This research was funded by the host third-
sector organisation where the research took
place.

Abstract

While psychologically informed environments (PIEs) are gaining in prominence in efforts to improve well-being and practice in the homeless sector, their empirical foundations remain tenuous. We present a unique scoping needs analysis of staff and client well-being, staff attitudes and the social-therapeutic climate in a UK-based homeless prevention organisation (prior to PIE implementation). Our aims were: (a) to apply a robust framework to pinpoint need and target forthcoming PIE initiatives and (b) to establish a validated needs baseline that informs and measures efficacy of PIE for its future development. Four established personal and practice well-being measures were administered to 134 (predominantly 'frontline') staff and 50 clients. Staff completed the: Warwick-Edinburgh Mental Wellbeing Scale (WEMWBS), Professional Quality of Life Scale (measuring compassion satisfaction [CS], burnout [BO] and secondary traumatic stress [STS]), Attitudes related to Trauma-informed Care Scale (ARTIC-10; measuring practice attitudes towards trauma-informed values) and the Essen Climate Evaluation Schema (EssenCES; measuring perceptions of client cohesion, safety and practitioner relationships in housing projects). Clients completed the WEMWBS and EssenCES. Vulnerability to STS was evident in nearly two-thirds of frontline staff and it was a statistically significant predictor of BO. It was not, however, associated with lesser levels of CS. We discuss this complex dynamic in relation to highlighted strategic recommendations for the PIE framework, and the identified potential challenges in implementing trauma-informed and reflective practice in the organisation. We conclude with a critique of the value and the lessons learnt from our efforts to integrate stronger empirical substance into the PIE approach.

KEYWORDS

homeless sector, professional well-being, psychologically informed environments, secondary traumatic stress

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1 | INTRODUCTION

People who are homeless or threatened with homelessness often have multiple and complex needs (Fitzpatrick et al., 2015); with their previous life experiences frequently associated with trauma, abuse, neglect, violence, addiction, physical ill-health or mental distress (e.g. Buccieri et al., 2020; Kidd et al., 2007; Whitbeck et al., 2015). Intertwined with these individual experiences are contributory macro structural factors and constraints which lead to, and perpetuate, homelessness. Poverty, limited housing availability, widespread unemployment, limits to welfare support, austerity-constrained governmental policies, as well as multiple forms of discrimination, all contribute to pathways into homelessness and create barriers to finding ways out (Anderson & Christian, 2003; Giano et al., 2020). Against this backdrop of challenges has emerged a homelessness practitioner sector in the UK and Europe that is expansive and multifaceted (Quilgars et al., 2008; Wolf & Edgar, 2007). The sector includes a diverse range of support providers including those offering crisis management for rough sleepers (i.e. street homelessness) to various preventative supported housing, such as for people seeking temporary and permanent accommodation to escape abuse or to leave unfit dwellings or persistent 'sofa surfers' (Fitzpatrick et al., 2019).

Practitioners working in the sector face a challenging dynamic. On the one hand, there is evidence that they have a deep motivation and compassion to seek job satisfaction through helping vulnerable and disadvantaged people (Ferris et al., 2016; Kulkarni et al., 2013; Wirth et al., 2019). On the other hand, there are important challenges to practice resulting from systemic and structural limitations that combine with the complex needs of the client group. For example, the limited availability of housing 'solutions' or the abundance of overly bureaucratic and constraining housing, practice, financial and legislative policies (Blomberg et al., 2015; Lloyd et al., 2002), all pose layers of complex practice demands (Lemieux-Cumberlege & Taylor, 2019; Olivet et al., 2010). In addition, homelessness practitioners' wages are low and caseloads high (Wirth et al., 2019).

Needless to say, this dynamic is less than optimal. Research has highlighted that homelessness practitioners describe: feelings of helplessness or ineffectiveness in being able to change people's situations; difficulties in maintaining 'professional distance' between work and home life (Wirth et al., 2019); levels of 'emotional exhaustion' (Stalker et al., 2007) and vulnerability to what has been termed secondary traumatic stress (STS; with symptoms akin to primary trauma and post-traumatic stress disorder; Bride et al., 2004; Chrestman, 1999; Figley, 1995). These challenges, especially when enduring, can lead to reduced well-being and work effectiveness, 'emotional detachment', and, in some cases, 'burnout (BO)' and ultimately high rates of attrition and staff turnover (Borritz et al., 2006; Collins & Long, 2003; Hagen & Hutchison, 1988; Kidd et al., 2007; Lenzi et al., 2020; Lloyd et al., 2002). Moreover, beyond negatively impacting well-being, these challenges may adversely shape practitioners' perceptions of their working environments and

What is known about this topic?

- The psychologically informed environment (PIE) approach continues to permeate the homeless sector in response to the complex well-being and practice challenges that practitioners and clients face.
- Currently, PIE interventions are applied through a set of guiding principles rather than grounded in evidenced-based need and practice frameworks.

What this paper adds?

- Robust evidence of how a validated framework can identify well-being and practice priorities for a PIE intervention and lay empirical foundations to measure its effectiveness and development.
- Indication of heightened vulnerability in the homeless sector (most notably, secondary traumatic stress) and possible challenges to implementing PIE support interventions.
- Importance of empirically grounding current and future PIE initiatives across the homeless sector.

client relationships (Maslach, 1982), as well as attitudes towards their organisation's methods of practice and interventions (Deci & Ryan, 1985; Lynch et al., 2005; Ryan & Deci, 2000).

With the strains placed on practitioners, various specialist support initiatives are being developed and implemented, such as Trauma-informed Care (TIC; an approach originating in America that emphasises the impact of trauma on people's lives; Hopper et al., 2010; Jennings, 2007; Substance Abuse & Mental Health Services Administration, 2014), and its more recent UK adaption, psychologically informed environments (PIEs; Johnson & Haigh, 2010; Keats et al., 2012). Broadly speaking, PIEs aim to better understand and respond to the challenges services face by enhancing protective and support factors which encourage better staff and client well-being, staff-client relationships and ultimately client outcomes (Keats et al., 2012). Derived from values developed within therapeutic communities (Johnson & Haigh, 2010), at its core, the PIE approach is a set of guiding principles aimed to maximise support for people affected with complex and multiple vulnerabilities, while at the same time 'building' skills, knowledge base, job satisfaction and resilience in practitioners (Keats et al., 2012). It is intended to be flexible to practice context, and, in a particular situation, may entail anything from structural or physical environment changes, to implementing therapeutic or rehabilitative frameworks (e.g. reflective practice; Cocksell, 2011; Johnson, 2017; Johnson & Haigh, 2010).

Another important element of PIE is evidence-generating practice (Keats et al., 2012). However, the evidence base for the need and the efficacy of PIE interventions across vulnerable group

sectors remains sparse (Breedvelt, 2016; Cockersell, 2016; Phipps et al., 2017; for similar observations in relation to TIC, see Hanson & Lang, 2016; Jankowski et al., 2019). As a PIE intervention does not afford prototypical provision, it means that, in practice, its principles are interpreted differently, and an eclectic mix of frameworks are implemented. Moreover, and in relation to the flexibility inherent in PIEs (Johnson & Haigh, 2010), currently proposed 'evaluation' frameworks have evolved as practice self-assessments and service development tools (i.e. PIZAZZ; <http://pielink.net/pizazz/>). These, however, fail to evidence specific PIE-needs, or the effectiveness of PIE interventions themselves, in systematic and validated ways (Breedvelt, 2016; Phipps et al., 2017).

We argue that to imbue PIE, or similar support interventions, with practical and empirical substance, at least three important phases need to be systematically executed in the specific organisation or sector where any PIE intervention is being implemented: (a) a validated process of identifying specific core needs and areas of support concern (a validated needs assessment phase); (b) designing an intervention approach informed by the identified needs from phase one (a design phase); and (c) by implementing phases one and two, establishing a system to empirically measure any improvement and efficacy that follows from the intervention (an evaluative and refinement phase; Altschuld & Kumar, 2010). The current study presents the first two phases of a robust and empirically grounded PIE intervention framework.

We present a unique, comprehensive baseline scoping analysis of staff and client well-being and practice needs in a UK-based third-sector homeless prevention organisation (immediately prior to a PIE-based intervention being implemented). In doing so, we address an important gap in the literature and introduce clear implications for sector practice. Drawing on established and validated measurement frameworks, we (a) examined the general mental and professional well-being of staff (including levels of compassion satisfaction, CS; burnout, BO; and secondary traumatic stress, STS); (b) contrasted staff and client perceptions on levels of: safety, client-client support and client-practitioner relationship; and (c) staff attitudes towards trauma-informed practice.

2 | METHODS

2.1 | Design and participants

We applied a cross-sectional, quantitative survey design to identify staff and client well-being and practice needs in a UK homeless prevention third-sector organisation prior to the implementation of a PIE-based intervention (between February–November 2019). The organisation provides supported housing for people who are, or at risk of becoming, homeless; and other preventative or rehabilitative services that address contributory antecedents to homelessness (e.g. domestic abuse and mental health support, education and employment 'connection' initiatives, family mentoring and a crisis hotline).

We received ethical approval from the University Ethics Committee and adhered to the standards of the host organisation. Staff participants were recruited from 12 different in-house training initiatives. One hundred and thirty-four practitioners from a potential 140 (95.71%) consented to participate (most were 'frontline' staff working directly with clients in supported housing projects); 93 support workers and assistants, 21 team leaders, 6 area heads and 14 senior managers. The majority of clients (76%) lived in 24-hr staffed shared dwellings for six or fewer residents. The remaining clients came from supported housing projects that had either independent, but supported, tenancies or were larger congregate dwellings (between 8 and 25 people; Table 2). Clients were recruited through participating practitioners and personal invitations from the researchers. Fifty residents of a potential 159 (31.45%) consented to participate. Each (staff and client) respondent was asked to complete the survey beginning with anonymised demographic questions (Tables 1 and 2). The staff demographic questions included whether they had previous experience of PIE (or similar) interventions and had taken time-off due to work-related stress (Table 1).

2.2 | Measures

Staff completed four validated self-report measures: Warwick-Edinburgh Mental Wellbeing Scale (WEMWBS), Professional Quality of Life Scale (ProQOL; completed by staff with direct client support responsibilities, i.e. support staff and team leaders), Attitudes Related to Trauma-Informed Care Scale (ARTIC-10; completed by staff directly interacting with clients) and Essen Climate Evaluation Schema (EssenCES; completed by staff directly working in multi-occupancy projects, i.e. support staff and team leaders). Clients completed the WEMWBS and EssenCES. Where appropriate, and aligned with developers' recommendations, terms of reference were changed to make measures more relevant to respondents (e.g. 'service-users' replaced 'patients').

2.2.1 | WEMWBS

This is a 14-item measure on general mental well-being (Tennant et al., 2007). Respondents rated on a five-point Likert scale (1 = none of the time, 2 = rarely, 3 = some of the time, 4 = often and 5 = all of the time) for each item (e.g. 'I've been feeling useful'). A total score between 14 and 70 was achievable, 70 indicating the most positive well-being. Tennant et al. (2007) reported excellent internal consistency for a population sample (Cronbach's $\alpha = 0.91$; George & Mallery, 2003). For our sample, the scale presented identical reliability for both staff ($\alpha = 0.91$) and clients (0.91). Individual data were excluded in analysis if >3 items were missing per respondent (Stewart-Brown & Janmohamed, 2008). There were minimal missing items for staff (0.48%) and client participants (0.14%); any missing data were replaced by the series mean.

TABLE 1 Staff participant (n = 134) demographics

| Category | Subcategory | Frequency, n (%) |
|--|--|------------------|
| Gender | Males | 48 (35.82) |
| | Females | 85 (63.43) |
| | Unknown | 1 (0.75) |
| Age (age classes, years) | 18-24 years | 1 (0.75) |
| | 25-34 | 24 (17.91) |
| | 35-44 | 38 (28.36) |
| | 45-54 | 47 (35.07) |
| | 55+ | 23 (17.16) |
| | Unknown | 1 (0.75) |
| Highest level of education ^a | No formal qualifications | 6 (4.48) |
| | Level 1: NVQ level 1, GCSE's D-G | 5 (3.73) |
| | Level 2: NVQ level 2, GCSE's A-C | 20 (14.93) |
| | Level 3: NVQ level 3, A-levels | 21 (15.67) |
| | Level 4-7: NVQ level 4 & 5, Foundation & Undergraduate degree, Master degree, Postgraduate certificate | 74 (55.22) |
| | Level 8: Doctorate | 3 (2.24) |
| | Other professional qualification(s) | 3 (2.24) |
| Job role | Support worker & assistants | 93 (69.4) |
| | <i>Staff with managerial responsibilities</i> | |
| | Support staff team leaders | 21 (15.67) |
| | Area heads | 6 (4.48) |
| | Senior managers | 14 (10.45) |
| Employment status | Full-time | 103 (76.87) |
| | Part-time | 28 (20.9) |
| | Unknown | 3 (2.23) |
| Previous experience of PIE, TIC, ACEs or related training | Yes | 69 (51.49) |
| | No | 60 (44.78) |
| | Unknown | 5 (3.73) |
| Taken time off due to work-related stress in the last year | Yes | 13 (9.7) |
| | No | 118 (88.06) |
| | Unknown | 3 (2.24) |

Abbreviations: ACEs, adverse childhood experiences; PIE, psychologically informed environment; TIC, Trauma-informed care.
^aIn England, Wales and Northern Ireland, there are nine qualification levels (entry level 0, and levels 1 to 8).

2.2.2 | ProQOL (Version 5)

This is a 30-item scale measuring positive and negative aspects of working in the 'helping profession' (Stamm, 2010). It includes three

TABLE 2 Client participant (n = 50) demographics

| Category | Descriptives |
|--|----------------------------|
| Gender | Males, n = 23 (46%) |
| | Females, n = 26 (52%) |
| | Unknown, n = 1 (2%) |
| Age (in years) | Median = 18, range 16-42 |
| No. of clients living in housing project | Median = 5, range 1-25 |
| Length stay at organisation (in months) | Median = 2.5, range 0.5-42 |

10-item subscales: CS (positive aspects of supporting others; e.g. 'My work makes me feel satisfied'), BO (hopelessness and feelings of ineffectiveness; e.g. 'I feel "bogged down" by the system') and STS (exposure to trauma through others' narrative; e.g. 'I find it difficult to separate my personal life from my life as a support professional'). Respondents rated on a five-point Likert scale (1 = never, 2 = rarely, 3 = sometimes, 4 = often and 5 = very often), with total (raw) scores ranging between 10 and 50 for each subscale. For CS, higher scores represent greater satisfaction; for BO and STS, higher scores indicate greater vulnerability. Stamm (2010) reported good-to-acceptable internal consistency (George & Mallery, 2003) for each subscale ($\alpha = 0.81$, STS; 0.75, BO and 0.88, CS). Similar reliability levels were replicated in our sample ($\alpha = 0.83$, STS; 0.78, BO and 0.88, CS). Individual data were excluded from analysis if missing items were >3. There were minimal missing items (0.86%); when they happened, they were treated as 'missing data' (in SPSS).

2.2.3 | ARTIC-10

This is a 10-item measure of favourable and unfavourable attitudes towards trauma-informed values and (reflective) practice (Baker et al., 2016). Respondents rated on a seven-point Likert scale between two opposing statements (e.g. 'Service-users could act better if they really wanted to' vs. 'Service-users are doing the best they can with the skills they have'; 'It's best not to tell others if I have strong feelings about the work...' vs. 'It's best if I talk with others about my strong feelings about the work...'). A total average score over the ten opposing statements produces a final range between 1 and 7, with seven indicating the most favourable trauma-informed practice attitudes. Baker et al. (2016) reported good internal consistency ($\alpha = 0.82$). A similar reliability was observed in our sample ($\alpha = 0.84$). Data from an individual were excluded from analysis if >3 items were missing; when it happened, the remaining items were averaged. There were minimal missing items for our sample (0.47%).

2.2.4 | EssenCES (rev. 2010)

This is a 15-item measure to gauge the perception of the quality of experience and practitioner-client relationships in the supported housing projects (Tonkin et al., 2012). The measure has

three subscales: Client Cohesion (CC, perceptions of levels of mutual support between clients; e.g. 'The service-users care for each other'), Experienced Safety (ES, level of perceived tension and threat; e.g. 'Really threatening situations can occur here'), and Therapeutic Hold (TH, extent project environment is perceived supportive of clients, e.g. 'Staff take a personal interest in the progress of service-users'). Each subscale incorporated a five-point Likert scale (0 = not at all, 1 = little, 2 = somewhat, 3 = quite a lot and 4 = very much), with a total score ranging between 0 and 20 (higher scores are indicative of a positive perception). Tonkin et al. (2012) reported excellent-to-acceptable internal consistency for each subscale ($\alpha = 0.92$, CC; 0.80, ES and 0.79, TH). For our sample, the subscales CC and ES showed good reliability both for staff ($\alpha = 0.87$, CC; 0.85, ES) and acceptable for clients (0.79, CC; 0.78, ES). For TH, however, reliability was below preferred threshold levels for both clients ($\alpha = 0.70$) and staff (0.62; George & Mallery, 2003). Data from individuals were excluded if missing items were >1 per subscale and respondent (Schalast & Tonkin, 2016). There were minimal missing items for staff (0.59%) and clients (0.82%); when they happened, they were replaced by the series mean (Schalast & Tonkin, 2016).

2.3 | Procedure

All participants were informed that their responses were anonymous, treated confidentially, and informed of their rights and procedures for withdrawal. Staff completed their survey prior to attending an initial PIE in-house training session. Clients completed their survey in the presence of a researcher in their home environment or the organisation's nearby office; no host staff were present. Twenty-four clients (48%) opted for offered researcher support (e.g. to read out survey questions). All respondents were asked to complete and sign informed consent prior to participation. As a token of appreciation, staff were able to participate in

a voucher prize draw, and clients were offered a £10 High-street voucher. The survey took approximately 15–40 min to complete.

Due to violations of assumptions and unequal sample sizes between comparable groups, we used nonparametric tests (Kruskal-Wallis, Mann-Whitney *U*, Wilcoxon tests and Spearman's rho correlations). All *P*-values were two-tailed, and a null hypothesis was rejected at an α -level of 0.05. If computations were possible, exact significances were reported; otherwise, we referred to Monte Carlo significances (Mehta & Patel, 2012). We reported effect sizes (using Pearson's correlation coefficient *r*) for the Wilcoxon and Mann-Whitney *U* tests (Field, 2013). An effect size of 0.10 represents a small effect, 0.30 a medium effect, and 0.50 a large effect (Cohen, 1988). Unless stated otherwise, the mean (*M*) was the chosen form of central tendency.

3 | RESULTS

Descriptive statistics for questionnaire responses are presented in Table 3 (for staff) and Table 4 (for clients).

3.1 | Levels of general well-being

We found no well-being differences between staff roles (support staff, $n = 93$; team leaders, $n = 21$; area heads, $n = 6$; senior managers, $n = 14$; Kruskal-Wallis test: $H(3) = 4.150$, $p = 0.239$; $n = 134$).

3.2 | Levels of CS, STS and BO

No statistical mean differences between support staff and team leaders were identified for each ProQOL subscale: CS (support staff: $M = 38.47$, $SD = 6.12$, $n = 88$; team leaders: $M = 40.65$, $SD = 4.55$, $n = 17$; Mann-Whitney *U* test: $U = 587$, $p = 0.162$, $r = -0.14$); BO (support staff: $M = 21.74$, $SD = 5.86$; team leaders: $M = 21.53$, $SD = 5.47$;

TABLE 3 Descriptive statistics and bivariate correlations for applied measures and subscales for staff

| Variable | <i>M</i> | <i>SD</i> | <i>N</i> | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|-----------------|---------------------|-----------|----------|---|--------|---------|---------|---------|--------|---------|--------|
| 1 WEMWBS | 51.33 (range 27–70) | 8.04 | 134 | X | 0.53** | –0.59** | –0.33** | 0.17 | 0.28** | 0.04 | 0.15 |
| 2 ProQOL – CS | 38.82 (range 18–50) | 5.93 | 105 | | X | –0.5** | –0.14 | 0.32** | 0.42** | 0.12 | 0.41** |
| 3 ProQOL – BO | 21.70 (range 10–39) | 5.77 | 105 | | | X | 0.53** | –0.27** | –0.26* | –0.12 | –0.1 |
| 4 ProQOL – STS | 19.80 (range 10–44) | 5.85 | 105 | | | | X | –0.24* | –0.02 | –0.33** | –0.18 |
| 5 ARTIC-10 | 5.53 (range 2.6–7) | 0.88 | 128 | | | | | X | 0.07 | 0.19 | 0.19 |
| 6 EssenCes – CC | 10.59 (range 2–20) | 3.63 | 98 | | | | | | X | –0.08 | 0.3** |
| 7 EssenCes – ES | 11.32 (range 0–20) | 4.37 | 98 | | | | | | | X | 0.01 |
| 8 EssenCes – TH | 16.76 (range 6–20) | 2.57 | 98 | | | | | | | | X |

Abbreviations: ARTIC-10, Attitudes related to Trauma-Informed Care Scale; EssenCes – CC, Essen Climate Evaluation Schema – Client Cohesion; EssenCes – ES, Essen Climate Evaluation Schema – Experienced Safety; EssenCes – TH, Essen Climate Evaluation Schema – Therapeutic Hold; ProQOL – BO, Professional Quality of Life Scale – Burnout; ProQOL – CS, Professional Quality of Life Scale – Compassion Satisfaction; ProQOL – STS, Professional Quality of Life Scale – Secondary Traumatic Stress; WEMWBS, Warwick-Edinburgh Mental Wellbeing Scale.

* $p < 0.05$.; ** $p < 0.01$.

$U = 720.50, p = 0.814, r = -0.02$) or STS (support staff: $M = 19.85, SD = 6.00$; team leaders: $M = 19.53, SD = 5.15; U = 743.50, p = 0.971, r = -0.004$). With no differences identified (and these two practitioner groups sharing similar 'frontline' responsibilities), we merged support staff and team leaders to form a *frontline staff* group for the remaining analyses. We compared the individual scores against available 'risk vulnerability' threshold benchmark means for each subscale (Stamm, 2005). For STS and BO, Stamm (2005) proposed a cut score for vulnerability of needing support (set at 75th percentile), where further assessment from a relevant professional might be warranted. For CS, a score below the 25th percentile is assumed to be less than optimal.

For STS, 62.86% (66 of 105) of respondents scored above the 75th percentile (a score of 17; Figure 1). Note that these respondents included 10 of the 13 individuals who reported taking time-off for work-related stress. Our STS mean ($M = 19.80, SD = 5.85$) was considerably higher than Stamm's ($M = 13, SD = 6, n = 463$; Wilcoxon test: $z = -8.38, p < 0.001, r = -0.35$). For BO, 14.29% (15 of 105) respondents scored above the suggested cut-point of 27 (these included 4 of the 13 individuals who reported timeout from work due to stress). Our BO mean ($M = 21.70, SD = 5.77$) did not statistically differ from the Stamm (2005) vulnerability threshold ($M = 22, SD = 6, n = 463; z = -0.92, p = 0.359, r = -0.04$). For CS,

10.48% (11 of 105) respondents scored below the suggested cut-score of 33, and 26.67% (28 of 105) scored above the upper cut-point of 42 (i.e. professed high job satisfaction). For frontline staff ($M = 38.82, SD = 5.93$), these high levels of CS were statistically higher than the benchmark ($M = 37, SD = 7, n = 463; z = -3.26, p = 0.001, r = -0.14$).

In terms of correlation data, staff who scored lower on general well-being tended to score higher on both BO ($r = -0.59, p < 0.01$) and STS ($r = -0.33, p < 0.01$), and lower on CS ($r = 0.53, p < 0.01$). In addition, staff who showed higher STS scores tended to present increased levels of BO ($r = 0.53, p < 0.01$), and those who demonstrated higher BO tended to score lower on CS ($r = -0.50, p < 0.01$). There was no identified relationship between CS and STS ($r = -0.14, p > 0.05$).

3.3 | Attitudes towards trauma-informed practice

Preliminary analysis revealed staff who indicated previous experience of PIE, TIC or related training (e.g. while working for a previous provider) did not significantly differ in their attitudes towards trauma-informed practice ($M = 5.66, SD = 0.85, n = 65$) from those who had no previous experience ($M = 5.38, SD = 0.92,$

| Variable | M | SD | N | 1 | 2 | 3 | 4 |
|-----------------|---------------------|-------|----|---|--------|------|--------|
| 1 WEMWBS | 46.68 (range 25-69) | 10.97 | 50 | X | 0.37** | 0.3* | 0.34* |
| 2 EssenCes - CC | 12.16 (range 2-20) | 4.46 | 49 | | X | 0.04 | 0.34* |
| 3 EssenCes - ES | 15.84 (range 4-20) | 4.17 | 49 | | | X | 0.38** |
| 4 EssenCes - TH | 14.69 (range 9-20) | 3.51 | 49 | | | | X |

TABLE 4 Descriptive statistics and bivariate correlations for applied measures, subscales and selected supported housing demographics for clients

Abbreviations: EssenCes - CC, Essen Climate Evaluation Schema - Client Cohesion; EssenCes - ES, Essen Climate Evaluation Schema - Experienced Safety; EssenCes - TH, Essen Climate Evaluation Schema - Therapeutic Hold; WEMWBS, Warwick-Edinburgh Mental Wellbeing Scale.

* $p < 0.05$; ** $p < 0.01$.

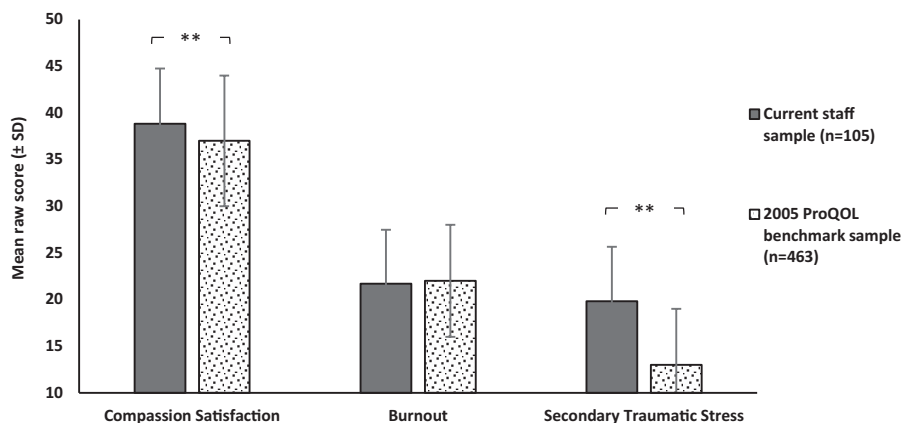


FIGURE 1 Sample mean raw scores ($\pm 1 SD$) for the three Professional Quality of Life Scales ($n = 105$) against Stamm's mean scores ($n = 463$; ** $p < 0.01$)

$n = 58$; $U = 1,519.50$, $p > 0.05$). We found, however, significant differences between staff groups with regard to their attitudes towards trauma-informed practice ($H(3) = 17.39$, $p < 0.001$; $n = 128$; Figure 2). Posthoc examinations yielded significantly more positive attitudes in senior management ($M = 6.44$, $SD = 0.52$, $n = 9$) than other staff groups (support staff, $M = 5.37$, $SD = 0.86$, $n = 92$, $U = 110$, $p < 0.001$, $r = -0.36$; team leaders, $M = 5.73$, $SD = 0.89$, $n = 21$, $U = 42$, $p = 0.016$, $r = -0.44$; area heads, $M = 5.88$, $SD = 0.55$, $n = 6$, $U = 10$, $p = 0.044$, $r = -0.52$).

Staff who presented less favourable attitudes towards trauma-informed practice tended to score lower on CS ($r = 0.32$, $p < 0.01$), while they were higher on BO ($r = -0.27$, $p < 0.01$) and STS ($r = -0.24$, $p < 0.05$).

3.4 | Perceptions of the quality of support of client needs, experienced safety and client cohesion

We compared 98 staff who had direct working contact with clients ($n = 49$) in projects on the three EssenCes subscales; CC

(perceptions of mutual support), ES (perceived safety vs. perceived threat) and TH (perceived quality of practitioner-client support). We found statistical differences in each subscale (Figure 3). Clients rated safety (clients: $M = 15.84$, $SD = 4.17$; staff: $M = 11.32$, $SD = 4.37$; $U = 1,031.50$, $p < 0.001$, $r = -0.47$) and cohesion (clients: $M = 12.16$, $SD = 4.46$; staff: $M = 10.59$, $SD = 3.63$; $U = 1,884.50$, $p = 0.033$, $r = -0.18$) in their projects significantly more positively than staff. Staff ($M = 16.76$, $SD = 2.57$), however, rated the support they and colleagues give significantly more positively than clients did ($M = 14.69$, $SD = 3.51$; $U = 1,593.00$, $p = 0.001$, $r = -0.28$).

Staff who rated higher in BO were significantly more likely to perceive CC in the housing projects more negatively ($r = -0.26$, $p < 0.05$); and staff who scored higher on STS tended to rate safety more negatively ($r = -0.33$, $p < 0.01$). In relation to clients, those who scored higher on general well-being indicated more positive perceptions of CC ($r = 0.37$, $p < 0.01$), safety ($r = 0.30$, $p < 0.05$) and TH ($r = 0.34$, $p < 0.05$). Finally, clients who held more positive perceptions of safety in the projects also indicated more positive perceptions of TH ($r = 0.38$, $p < 0.01$).

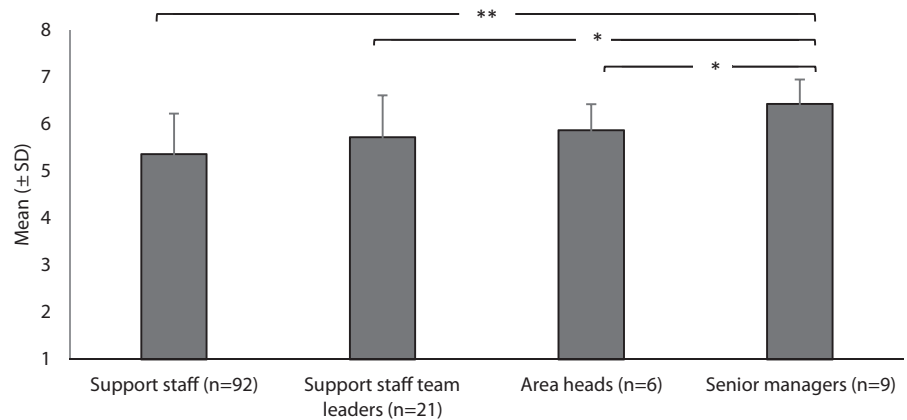


FIGURE 2 Mean Attitudes related to Trauma-Informed Care scores ($\pm 1 SD$) for four staff groups (** $p < 0.01$, * $p < 0.05$)

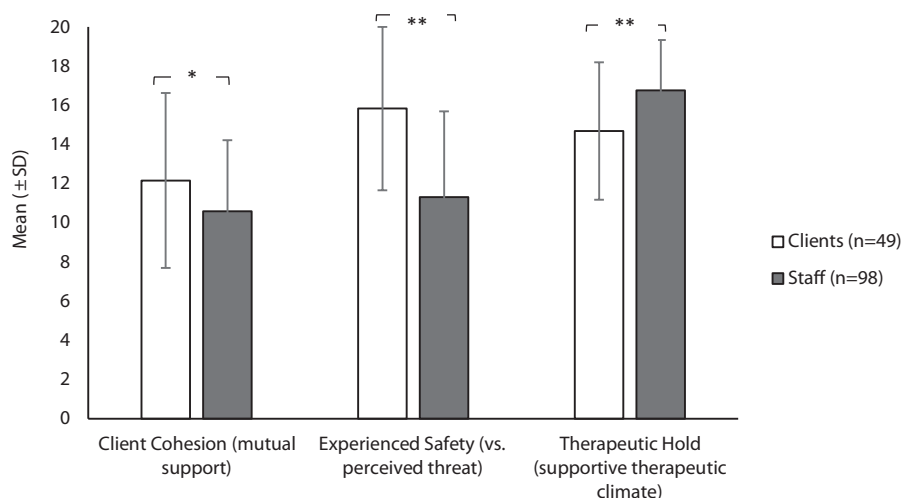


FIGURE 3 Mean scores ($\pm 1 SD$) for the three Essen Climate Evaluation Schema subscales reported by staff ($n = 98$) and clients ($n = 49$; ** $p < 0.01$, * $p < 0.05$)

4 | DISCUSSION

Our PIE needs analysis of general and professional well-being of staff working in a housing support and homeless prevention organisation signalled important needs. While levels of general well-being, CS and BO were broadly similar across practitioner roles, nearly two-thirds of frontline staff (i.e. support staff and team leaders) indicated that they were affected by higher levels of STS. In addition, STS was identified to have statistically significant predictive value in staff BO and negative perceptions of safety in the housing projects. It did not, however, correlate with CS, which in itself was evidenced to be higher than known benchmark thresholds (Stamm, 2005). Simultaneously, frontline staff were significantly less likely than senior managers to 'embrace' trauma-informed values and (reflective) practice, as were those staff who were particularly affected by STS and BO.

Clients showed important variability in how their well-being was distributed in the sample. Those with higher levels of well-being were more likely to evidence positive perceptions of CC (akin to peer support), and feelings of safety and TH (akin to staff support) in the projects. In addition, we identified interesting and significant distinctions in perceptions of the quality of support in housing projects between staff and clients. Clients rated the ES and peer support in their projects significantly more positively than staff, while staff rated the support they gave to clients significantly more positively than clients who were receiving it.

Our findings of heightened risk levels of STS in frontline staff, and its significant association with BO, align with previous studies in the homeless and other similar vulnerable people sectors (e.g. Cieslak et al., 2014; Salloum et al., 2015; Schiff & Lane, 2019; Sodeke-Gregson et al., 2013; Sprang et al., 2011; cf., Lemieux-Cumberlege & Taylor, 2019). Nearly two-thirds of staff in our sample indicated potentially problematic STS levels, and there was further evidence that this was affecting staff's mental health (i.e. 10 of 13 people who reported high levels of STS also indicated previous time-off due to work-related stress). These findings highlight important stressors and strains experienced by practitioners in the host organisation (e.g. in separating personal and professional lives) and areas to address in future PIE interventions.

Importantly, higher levels of CS (e.g. positive aspects of working as a 'helping' professional; Figley, 1995; Stamm, 2002) were significantly associated with lower levels of BO (Lee & Ashforth, 1996), and yet did not correlate with STS (cf., Makic, 2015). This highlights an important dynamic that makes the two constructs of BO and STS distinguishable. With those experiencing STS, there is evidence that frontline staff are able to remain emotionally engaged with clients, in spite of a working environment that affords significant challenges (e.g. Stalker et al., 2007; Wirth et al., 2019). With BO, on the other hand, there is indication in the sample that it may lead to disaffection and apathy in the working environment (Figley, 1995; Kidd et al., 2007). As proposed elsewhere, over and above 'CS' being an important precursor to entering the working sector (Ferris et al., 2016; Wirth et al., 2019), instilling and maintaining it can contribute to a

'resilience buffer' against emotional and other stresses implicated in BO (e.g. Stamm, 2002). It is therefore a further consideration for current PIE development.

While, through our initial needs-analysis, we have started to identify interventions and strategies to best support staff and clients in the current organisation, it is important to keep in sight the existing generic infrastructures already in place. For example, an organisational ethos which encourage feelings of efficacy and control, as well as good supervision and managerial support (Adams et al., 2006; Lloyd et al., 2002), are likely to lead to higher levels of job satisfaction and provide a protective buffer against STS (Berger et al., 2015; Hinderer et al., 2014; Makic, 2015). Similarly, provision that instils or facilitates appreciated collegial and supervision support is equally beneficial (Drüge & Schleider, 2016; Kidd et al., 2007; Lenzi et al., 2020; Stalker et al., 2007; Wirth et al., 2019). In addition, commitment to an organisational 'identity' can play a significant supporting role. Ferris et al. (2016), for example, proposed the possibility of a 'Florence Nightingale effect' in the homeless sector workforce, whereby a shared service identification predicts lower BO rates and higher job satisfaction. Similarly, Kosny and Eakin (2008) highlighted how client-centred organisational 'mission' discourses can make a positive contribution to staff well-being. In current and future PIE development, it will be important to maintain, further integrate and optimise existing support infrastructure and practice.

One additional form of organisational support infrastructure our findings point to is strengthening service-user involvement and 'co-production' (Homeless Link, The Innovation, & Good Practice Team & Expert Link, 2018). Our finding of differing perceptions between frontline staff and clients about practitioner-client relationships, peer support and safety within projects is likely to be indicative of a need for more effective shared staff-client forums (e.g. 'community meetings') to understand and problem-solve relational difficulties. Strengthening co-production not only has the potential to improve the quality and efficacy of client-practitioner relationships and well-being outcomes (Archard & Murphy, 2015; Homeless Link, The Innovation, & Good Practice Team & Expert Link, 2018; Shelter, 2005), but it can also enhance existing peer support (Barker & Maguire, 2017), and alleviate possible tensions, e.g. in the current organisation, it can lead to staff having a more informed understanding of the client and safety dynamics in supported housing projects.

Finally, a potential challenge for the implementation of future PIE interventions is that practitioners with potential need (i.e. frontline staff with higher STS and BO levels) appear to have less motivation to engage with, or less understanding of the need for, specialist and reflective practice interventions. With reflective practice (Schön, 1983) and TIC values being central to PIE approaches (Cockersell, 2011; Johnson & Haigh, 2010; Phipps et al., 2017), this finding highlights the need for the host organisation to proactively address these engagement challenges. Additional initiatives are needed to highlight and share identified support needs with staff and to promote their relevance for personal well-being and practice (Lenzi et al., 2020).

4.1 | Limitations and strengths

By its cross-sectional nature, our scoping analysis was an isolated measure of need from a single (albeit large) organisation. Our findings may, therefore, not be directly transferable to other similar settings. However, that the current host organisation is a leading sector provider which is funded and supported by identical commissioning structures as other providers, means that the practice and PIE implications we identified will resonate, and are likely to be applicable, elsewhere in the sector. That said, we must acknowledge that our targeted needs analysis was grounded in previous literature and was therefore partially deductive (i.e. theory-driven), and administered at a time prior to the COVID-19 pandemic. As such, there were boundaries to its scope, and other important factors, for example, work-life balance, salaries and the wider impact of the COVID-crisis, are all likely to affect staff well-being and were always going to be missed. In this respect, we would encourage more inductive qualitative components in future staff and client needs analysis.

While established and validated measures were incorporated, there were internal reliability issues with one specific component (i.e. for the subscale TH, reliability was below preferred threshold levels; George & Mallery, 2003). In addition, comparative ProQOL benchmark data ($n = 463$) were based on general health workers, child and family workers and school personnel (Stamm, 2005), and not specifically grounded in the homeless sector. However, the practical and needs-led ethos of the design mean that internal validity was embedded, and that unplanned evidence markers (e.g. 10 of 13 respondents who indicated high STS levels also reported stress-induced time off work) triangulated our survey design evidence (i.e. that STS was a statistically significant support need in the sample) indicates good external validity.

4.2 | Practice implications

The present study revealed support needs and vulnerabilities in a housing support and homeless prevention organisation, and lays the foundation for the development and implementation of a PIE intervention which has clear aims and empirically valid substance. Intensive reflective practice sessions, likely to be informed by team formulation (Johnstone, 2018), should be piloted with staff more vulnerable to STS. Moreover, efforts are needed to dismantle any potential PIE engagement barriers (e.g. raising awareness of the professional stressors identified and the mitigating role reflection and trauma-informed values can have). The prevalence of STS in the workforce suggests a need to offer staff psycho-education about self-management skills for handling work-related stress and personalised support options (e.g. telephone-based counselling). Moreover, these elements should align with existing (effective) organisational support mechanisms and the identified need to strengthen service-user involvement initiatives across housing projects. Grounded in these empirical foundations, it is anticipated that PIE initiatives

can be further evaluated and phased into generic practice over time.

5 | CONCLUSION

While PIEs are being widely expanded to meet the complex challenges faced by practitioners and clients in the homeless sector, current approaches remain somewhat nebulous and devoid of evidence-based foundations. We exemplify a phased approach to implementing more empirical foundations in PIE initiatives. We administered a validated-measures framework to identify: baseline vulnerabilities (most notably, high levels of STS in practitioners), the practice and well-being support initiatives that should be prioritised, piloted or strengthened and the potential barriers to implementation. In doing so, we afford a foundation for the host organisation to measure efficacy (and inform refinement) in PIE initiatives that stem from this empirical staged approach. We encourage similar grounding efforts from those involved in current and future PIE initiatives elsewhere.

ACKNOWLEDGEMENTS

We are most grateful to staff and clients who participated in this research. We thank and acknowledge the contribution of Ummul Humayra, Abigail O'Shea, Mira Osman and Naomi Lea who helped with data collection and related administrative tasks. Finally, we thank Mike and Elaine Chase for fruitful discussions and comments on manuscript drafts.

CONFLICT OF INTEREST

The authors declare they have no conflict of interest.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

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REFERENCES

- Adams, R. E., Boscarino, J. A., & Figley, C. R. (2006). Compassion fatigue and psychological distress among social workers: A validation study. *American Journal of Orthopsychiatry*, 76, 103–108. <https://doi.org/10.1037/0002-9432.76.1.103>
- Altschuld, J. W., & Kumar, D. D. (2010). *Needs assessment: An overview*. Sage.
- Anderson, I., & Christian, J. (2003). Causes of homelessness in the UK: A dynamic analysis. *Journal of Community & Applied Social Psychology*, 13, 105–118. <https://doi.org/10.1002/casp.714>
- Archard, P. J., & Murphy, D. (2015). A practice research study concerning homeless service user involvement with a programme of social support work delivered in a specialized psychological trauma service.

- Journal of Psychiatric and Mental Health Nursing*, 22, 360–370. <https://doi.org/10.1111/jpm.12229>
- 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) scale. *School Mental Health*, 8, 61–76. <https://doi.org/10.1007/s12310-015-9161-0>
- Barker, S. L., & Maguire, N. (2017). Experts by experience: Peer support and its use with the homeless. *Community Mental Health Journal*, 53, 598–612. <https://doi.org/10.1007/s10597-017-0102-2>
- Berger, J., Polivka, B., Smoot, E. A., & Owens, H. (2015). Compassion fatigue in pediatric nurses. *Journal of Pediatric Nursing*, 30, e11–e17. <https://doi.org/10.1016/j.pedn.2015.02.005>
- Blomberg, H., Kallio, J., Kroll, C., & Saarinen, A. (2015). Job stress among social workers: Determinants and attitude effects in the Nordic countries. *British Journal of Social Work*, 45, 2089–2105. <https://doi.org/10.1093/bjsw/bcu038>
- Borritz, M., Rugulies, R., Bjorner, J. B., Villadsen, E., Mikkelsen, O. A., & Kristensen, T. S. (2006). Burnout among employees in human service work: Design and baseline findings of the PUMA study. *Scandinavian Journal of Public Health*, 34, 49–58. <https://doi.org/10.1080/14034940510032275>
- Breedvelt, J. (2016). *Psychologically informed environments: A literature review*. Mental Health Foundation.
- Bride, B. E., Robinson, M. M., Yegidis, B., & Figley, C. R. (2004). Development and validation of the secondary traumatic stress scale. *Research on Social Work Practice*, 14, 27–35. <https://doi.org/10.1177/1049731503254106>
- Buccieri, K., Oudshoorn, A., Schiff, J. W., Pauly, B., Schiff, R., & Gaetz, S. (2020). Quality of life and mental well-being: A gendered analysis of persons experiencing homelessness in Canada. *Community Mental Health Journal*, 56(8), 1496–1503. <https://doi.org/10.1007/s10597-020-00596-6>
- Chrestman, K. R. (1999). Secondary exposure to trauma and self reported distress among therapists. In B. H. Stamm (Ed.), *Secondary traumatic stress: Self-care issues for clinicians, researchers, and educators* (pp. 29–36). Sidran.
- Cieslak, R., Shoji, K., Douglas, A., Melville, E., Luszczynska, A., & Benight, C. C. (2014). A meta-analysis of the relationship between job burnout and secondary traumatic stress among workers with indirect exposure to trauma. *Psychological Services*, 11, 75–86. <https://doi.org/10.1037/a0033798>
- Cockersell, P. (2011). More for less? Using PIEs and recovery to improve efficiency in supported housing. *Housing, Care and Support*, 14, 45–50. <https://doi.org/10.1108/14608791111187393>
- Cockersell, P. (2016). PIEs five years on. *Mental Health and Social Inclusion*, 20, 1–10. <https://doi.org/10.1108/MHSI-08-2016-0022>
- Cohen, J. (1988). *Statistical power analysis for the behavioural sciences* (2nd ed.). Academic Press.
- Collins, S., & Long, A. (2003). Too tired to care? The psychological effects of working with trauma. *Journal of Psychiatric and Mental Health Nursing*, 10, 17–27. <https://doi.org/10.1046/j.1365-2850.2003.00526.x>
- Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. Plenum Press.
- Drüge, M., & Schleider, K. (2016). Psychosoziale Belastungen und Beanspruchungsfolgen bei Fachkräften der Sozialen Arbeit und Lehrkräften. Ein Vergleich von Merkmalen, Ausprägungen und Zusammenhängen [Psychosocial burdens and strains of social workers and teachers. A comparison of characteristics, manifestations and interrelations]. *Soziale Passagen*, 8, 293–310. <https://doi.org/10.1007/s12592-016-0235-0>
- Ferris, L. J., Jetten, J., Johnstone, M., Girdham, E., Parsell, C., & Walter, Z. C. (2016). The Florence Nightingale effect: Organizational identification explains the peculiar link between others' suffering and workplace functioning in the homelessness sector. *Frontiers in Psychology*, 7, 1–15. <https://doi.org/10.3389/fpsyg.2016.00016>
- Field, A. (2013). *Discovering statistics using IBM SPSS statistics* (4th ed.). Sage Publications.
- Figley, C. R. (1995). *Compassion fatigue: Coping with secondary traumatic stress disorder in those who treat the traumatized*. Brunner.
- Fitzpatrick, S., Pawson, H., Bramley, G., Wilcox, S., & Watts, B. (2015). *The homelessness monitor: Scotland 2015*. Crisis.
- Fitzpatrick, S., Pawson, H., Bramley, G., Wood, J., Watts, B., Stephens, M., & Blenkinsopp, J. (2019). *The homelessness monitor: England 2019*. Crisis.
- George, D., & Mallery, P. (2003). *SPSS for Windows step by step: A simple guide and reference. 11.0 update* (4th ed.). Allyn & Bacon.
- Giano, Z., Williams, A., Hankey, C., Merrill, R., Lisnic, R., & Herring, A. (2020). Forty years of research on predictors of homelessness. *Community Mental Health Journal*, 56, 692–709. <https://doi.org/10.1007/s10597-019-00530-5>
- Hagen, J. L., & Hutchison, E. (1988). Who's serving the homeless? *Social Casework*, 69, 491–497. <https://doi.org/10.1177/104438948806900803>
- Hanson, R. F., & Lang, J. (2016). A critical look at trauma-informed care among agencies and systems serving maltreated youth and their families. *Child Maltreatment*, 21(2), 95–100. <https://doi.org/10.1177/1077559516635274>
- Hinderer, K. A., von Rueden, K. T., Friedmann, E., McQuillan, K. A., Gilmore, R., Kramer, B., & Murray, M. (2014). Burnout, compassion fatigue, compassion satisfaction, and secondary traumatic stress in trauma nurses. *Journal of Trauma Nursing*, 21, 160–169. <https://doi.org/10.1097/JTN.0000000000000055>
- Homeless Link, The Innovation and Good Practice Team and Expert Link. (2018). *Co-production – Working together to improve homelessness services: Overview of key ideas and principles*. Retrieved from https://www.homeless.org.uk/sites/default/files/site-attachments/Introducing%20Co-Production%20March%202018_0.pdf
- Hopper, E. K., Bassuk, E. L., & Olivet, J. (2010). Shelter from the storm: Trauma-informed care in homelessness services settings. *The Open Health Services and Policy Journal*, 3, 80–100. <https://doi.org/10.2174/1874924001003010080>
- Jankowski, M. K., Schifferdecker, K. E., Butcher, R. L., Foster-Johnson, L., & Barnett, E. R. (2019). Effectiveness of a trauma-informed care initiative in a state child welfare system: A randomized study. *Child Maltreatment*, 24(1), 86–97. <https://doi.org/10.1177/1077559518796336>
- Jennings, A. (2007). *Blueprint for action: Building trauma-informed mental health service systems*. Anna Institute. Retrieved from <https://www.theannainstitute.org/2007%202008%20Blueprint%20By%20States02.08.pdf>
- Johnson, R. (2017). Principles and practice in psychology and homelessness: Core skills in pretreatment, trauma informed care & psychologically informed environments. In J. S. Levy, & R. Johnson (Eds.), *Cross-cultural dialogues on homelessness: From pretreatment strategies to psychologically informed environments* (pp. 13–33). Loving Healing Press.
- Johnson, R., & Haigh, R. (2010). Social psychiatry and social policy for the 21st century: New concepts for new needs – The 'psychologically informed environment'. *Mental Health & Social Inclusion*, 14, 30–35. <https://doi.org/10.5042/mhsi.2010.0620>
- Johnstone, L. (2018). Psychological formulation as an alternative to psychiatric diagnosis. *Journal of Humanistic Psychology*, 58, 30–46. <https://doi.org/10.1177/0022167817722230>
- Keats, H., Maguire, N., Johnson, R., & Cockersell, P. (2012). *Psychologically informed services for homeless people good practice guide*. Department of Communities and Local Government. Retrieved from <https://eprints.soton.ac.uk/34002/1/Good%2520practice%2520guide%2520-%2520%2520Psychologically%2520informed%2520services%2520for%2520homeless%2520people%2520.pdf>
- Kidd, S. A., Miner, S., Walker, D., & Davidson, L. (2007). Stories of working with homeless youth: On being "mind-boggling". *Children and*

- Youth Services Review*, 29, 16–34. <https://doi.org/10.1016/j.childyouth.2006.03.008>
- Kosny, A. A., & Eakin, J. M. (2008). The hazards of helping: Work, mission and risk in non-profit social service organizations. *Health, Risk & Society*, 10, 149–166. <https://doi.org/10.1080/13698570802159899>
- Kulkarni, S., Bell, H., Hartman, J. L., & Herman-Smith, R. L. (2013). Exploring individual and organizational factors contributing to compassion satisfaction, secondary traumatic stress, and burnout in domestic violence service providers. *Journal of the Society for Social Work and Research*, 4, 114–130. <https://doi.org/10.5243/jsswr.2013.8>
- Lee, R. T., & Ashforth, B. E. (1996). A meta-analytic examination of the correlates of the three dimensions of job burnout. *Journal of Applied Psychology*, 81, 123–133. <https://doi.org/10.1037/0021-9010.81.2.123>
- Lemieux-Cumberlege, A., & Taylor, E. P. (2019). An exploratory study on the factors affecting the mental health and well-being of front-line workers in homeless services. *Health and Social Care in the Community*, 27, e367–e378. <https://doi.org/10.1111/hsc.12738>
- Lenzi, M., Santinello, M., Gaboardi, M., Disperati, F., Vieno, A., Calcagni, A., Greenwood, R. M., Rogowska, A. M., Wolf, J. R., Loubière, S., Beijer, U., Bernad, R., Vargas-Moniz, M. J., Ornelas, J., Spinnewijn, F., & Shinn, M., & HOME_EU Consortium Study Group. (2020). Factors associated with providers' work engagement and burnout in homeless services: A cross-national Study. *American Journal of Community Psychology*, 1–17. <https://doi.org/10.1002/ajcp.12470>
- Lloyd, C., King, R., & Chenoweth, L. (2002). Social work, stress, and burnout: A review. *Journal of Mental Health*, 11, 255–265. <https://doi.org/10.1080/09638230020023642>
- Lynch Jr., M. F., Plant, R. W., & Ryan, R. M. (2005). Psychological needs and threat to safety: Implications for staff and patients in a psychiatric hospital for youth. *Professional Psychology: Research and Practice*, 36, 415–425. <https://doi.org/10.1037/0735-7028.36.4.415>
- Makic, M. B. F. (2015). Taking care of the caregiver: Compassion satisfaction and compassion fatigue. *Journal of Perianesthesia Nursing*, 30, 546–547. <https://doi.org/10.1016/j.jopan.2015.09.006>
- Maslach, C. (1982). *Burnout: The cost of caring*. Prentice Hall.
- Mehta, C. R., & Patel, N. R. (2012). *IBM SPSS exact tests*. IBM Corporation.
- Olivet, J., McGraw, S., Grandin, M., & Bassuk, E. (2010). Staffing challenges and strategies for organizations serving individuals who have experienced chronic homelessness. *The Journal of Behavioral Health Services and Research*, 37, 226–238. <https://doi.org/10.1007/s11414-009-9201-3>
- Phipps, C., Seager, M., Murphy, L., & Barker, C. (2017). Psychologically informed environments for homeless people: Resident and staff experiences. *Housing, Care and Support*, 20, 29–42. <https://doi.org/10.1108/HCS-10-2016-0012>
- Quilgars, D., Johnsen, S., & Pleace, N. (2008). *Youth homelessness in the UK*. Joseph Rowntree Foundation.
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development and well-being. *American Psychologist*, 55, 68–78. <https://doi.org/10.1037/0003-066X.55.1.68>
- Salloum, A., Kondrat, D. C., Johnco, C., & Olson, K. R. (2015). The role of self-care on compassion satisfaction, burnout and secondary trauma among child welfare workers. *Children and Youth Services Review*, 49, 54–61. <https://doi.org/10.1016/j.childyouth.2014.12.023>
- Schalast, N., & Tonkin, M. (2016). *The Essen climate evaluation schema—EssenCES: A manual and more*. Hogrefe Publishing.
- Schiff, J. W., & Lane, A. M. (2019). PTSD symptoms, vicarious traumatization, and burnout in front line workers in the homeless sector. *Community Mental Health Journal*, 55, 454–462. <https://doi.org/10.1007/s10597-018-00364-7>
- Schön, D. (1983). *The reflective practitioner: How professionals think in action*. Temple Smith.
- Shelter. (2005). *Involving users in supported housing – A good practice guide*. Retrieved from https://england.shelter.org.uk/_data/assets/pdf_file/0014/40082/Involving_users_in_supported_housing.pdf
- Sodeke-Gregson, E. A., Holttum, S., & Billings, J. (2013). Compassion satisfaction, burnout, and secondary traumatic stress in UK therapists who work with adult trauma clients. *European Journal of Psychotraumatology*, 4, 21869. <https://doi.org/10.3402/ejpt.v4i0.21869>
- Sprang, G., Craig, C., & Clark, J. (2011). Secondary traumatic stress and burnout in child welfare workers: A comparative analysis of occupational distress across professional groups. *Child Welfare*, 90, 149–168.
- Stalker, C. A., Mandell, D., Frensch, K. M., Harvey, C., & Wright, M. (2007). Child welfare workers who are exhausted yet satisfied with their jobs: How do they do it? *Child & Family Social Work*, 12, 182–191. <https://doi.org/10.1111/j.1365-2206.2006.00472.x>
- Stamm, B. H. (2002). Measuring compassion satisfaction as well as fatigue: Developmental history of the Compassion Satisfaction and Fatigue Test. In C. R. Figley (Ed.), *Psychosocial stress series, no. 24. Treating compassion fatigue* (pp. 107–119). Brunner-Routledge.
- Stamm, B. H. (2005). *The ProQOL manual – The professional quality of life scale: Compassion satisfaction, burnout & compassion fatigue/secondary trauma scales*. Institute of Rural Health Idaho State University, A Collaborative Publication with Sidran Press. Retrieved from www.sidran.org
- Stamm, B. H. (2010). *The concise ProQOL manual* (2nd ed.). ProQOL.org.
- Stewart-Brown, S., & Janmohamed, K. (2008). *Warwick-Edinburgh mental well-being scale. User guide. Version, 1*. NHS Health Scotland, University of Warwick and University of Edinburgh.
- Substance Abuse and Mental Health Services Administration. (2014). *SAMHSA's concept of trauma and guidance for a trauma-informed approach*. HHS Publication No. (SMA) 14-4884. Substance Abuse and Mental Health Services Administration.
- Tennant, R., Hiller, L., Fishwick, R., Platt, S., Joseph, S., Weich, S., Parkinson, J., Secker, J., & Stewart-Brown, S. (2007). The Warwick-Edinburgh mental well-being scale (WEMWBS): Development and UK validation. *Health and Quality of Life Outcomes*, 5, 63. <https://doi.org/10.1186/1477-7525-5-63>
- Tonkin, M., Howells, K., Ferguson, E., Clark, A., Newberry, M., & Schalast, N. (2012). Lost in translation? Psychometric properties and construct validity of the English Essen Climate Evaluation Schema (EssenCES) social climate questionnaire. *Psychological Assessment*, 24, 573. <https://doi.org/10.1037/a0026267>
- Whitbeck, L. B., Armenta, B. E., & Gentzler, K. C. (2015). Homelessness-related traumatic events and PTSD among women experiencing episodes of homelessness in three U.S. cities. *Journal of Traumatic Stress*, 28, 355–360. <https://doi.org/10.1002/jts.22024>
- Wirth, T., Mette, J., Prill, J., Harth, V., & Nienhaus, A. (2019). Working conditions, mental health and coping of staff in social work with refugees and homeless individuals: A scoping review. *Health & Social Care in the Community*, 27, e257–e269. <https://doi.org/10.1111/hsc.12730>
- Wolf, J., & Edgar, B. (2007). Measuring quality of services and provision in homelessness. *European Journal of Homelessness*, 1, 15–39.

How to cite this article: Schneider CW, Hobson C, Shelton KH. 'Grounding a PIE in the sky': Laying empirical foundations for a psychologically informed environment (PIE) to enhance well-being and practice in a homeless organisation. *Health Soc Care Community*. 2021;00:1–11. <https://doi.org/10.1111/hsc.13435>