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A systematic review of staff training in residential childcare; and a grounded theory study of how residential childcare staff make sense of, and use, attachment theory in practice

Ailsa Morison

Doctorate in Clinical Psychology
University of Edinburgh
May 2018
Declaration of Own Work

Name: Ailsa Morison

Title of Work: A systematic review of staff training in residential childcare; and a grounded theory study of how residential childcare staff make sense of, and use, attachment theory in practice.

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Signature: A.Morison                             Date: 29.06.18
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Mum and Dad, you have never doubted me and I cannot thank you enough for everything that you have done for me.

Lastly, I dedicate this thesis to Kieran- I could not have done it without your endless love, care and patience!! You are my secure base! Thank you.
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Research Portfolio Abstract

Background/Aims:

Children and young people in residential care often exhibit complex emotional and behavioural needs. Attachment theory is frequently used to explain these difficulties, whereby a young person’s early experience can influence their internal representations of relationships and their subsequent interactions within the residential milieu. Thus, residential childcare staff have a fundamental role supporting young people, to facilitate therapeutic change and mitigate poor long-term outcomes.

Policy and research often recommend staff training and attachment-informed care, yet there is very limited understanding of how this translates into practice or influences outcomes. Therefore, this thesis aimed to systematically review literature on the types, measurement and effectiveness of residential staff training, focussed upon psychosocial outcomes. It also aimed to construct an explanatory theory of how residential staff make sense of, and use, attachment theory in practice.

Methods:

Research aims are addressed in two studies. Literature on residential staff training was systematically reviewed in Journal Article 1. This was conducted through a search of electronic databases, quality assessment of included studies, and subsequent narrative synthesis. Journal Article 2 used qualitative methodology in the form of constructivist grounded theory. Semi-structured interviews were conducted with twenty residential staff members through an iterative process of data collection and analysis, and theoretical sampling, until theoretical saturation was achieved.
Results:

Eighteen studies were included in the systematic review. Results highlight heterogeneous staff training, often evaluated through measurement of staff knowledge, skills and/or attitudes, and/or child behaviour frequency. Findings offer tentative support for the positive impact of training upon staff skills but other outcomes remain unclear. Results from Journal Article 2 indicate that staff had difficulty articulating attachment theory and often did not have a coherent narrative to describe attachment theory to practice links. Instead, they focussed upon a natural process of building relationships within a challenging context, with attachment theory only coming to the forefront when deemed relevant.

Conclusions:

The effectiveness of residential staff training remains unclear due to the methodological limitations of included studies. Significant improvements are identified for future evaluations of training to address this issue. Future staff training may benefit from limiting jargon, developing theory to practice links, and facilitating staff reflective function. Recommendations of attachment-informed care must also recognise the complexity of the residential system; and the current disparity between attachment theory narrative within policy and research, and practice.
Research Portfolio Lay Summary

A small number of young people are looked after in residential childcare settings by residential staff. This is often due to difficulties at home, such as loss, abuse and neglect. Understandably, these difficulties can result in young people showing lots of different emotions and behaviours. Residential staff spend a lot of time with young people and therefore have an important role in caring for them and helping them to feel safe and secure. In this context, ‘attachment theory’ is often referred to because it explains how a young person’s early experience can affect their relationships with others, and how staff can help to meet young people’s needs. It is recommended that staff receive training on attachment theory. However, there is a lack of research exploring how staff understand or use attachment theory; or whether staff training is helpful. It is important to understand this in order to provide the best support for staff and young people.

Therefore, this thesis aimed to review published research to look at what residential staff training is being delivered, how its impact is being measured, and whether it provides any benefit for staff and/or young people. Through in-depth discussion with twenty residential staff, this thesis also aimed to find out how staff make sense of attachment theory and use it in their practice.

Results show that staff training often contains information on improving relationships and managing behaviour. Training effectiveness is assessed by looking at any change in staff knowledge, attitudes and/or skills, and young people’s behaviour. Training seems to be effective in improving staff skills but other results are unclear due to weaknesses in published research. Findings also show that staff talk about the importance of relationships and how these can be challenged by the residential setting. Staff appear to work in a way that is consistent with attachment theory but they often find it difficult to describe this in words. These findings suggest that staff support is important; and could be improved further. However, the residential setting also presents different challenges that need to be considered.
Psychosocial outcomes of staff training in residential childcare: A systematic review

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Psychosocial outcomes of staff training in residential childcare: A systematic review

Abstract

Children in residential care are recognised as some of the most vulnerable in society, often experiencing poor long-term outcomes. Residential staff have the greatest contact with young people, yet the impact of staff training remains unclear. Therefore, this systematic review aimed to synthesise the types, effectiveness and measurement of training focussed upon psychosocial outcomes, which is delivered to staff within child welfare residential settings. A systematic search of electronic databases was conducted, followed by author contact and review of citations and reference lists. Eighteen studies, which met the inclusion criteria, were rated for quality and a narrative synthesis was completed. Results indicate heterogeneous training, often evaluated through observation or self-report of staff skills, written knowledge tests, and/or self-report staff attitudes, although many also used a measure of child behaviour frequency. Training appears to have an encouraging impact upon staff skills, whilst other outcomes remain unclear. However, studies are limited by poor methodology and thus, conclusions are tentative.

Highlights

- Findings offer tentative support for the impact of training upon staff skills.
- Significant methodological improvements are required for future research.
- There is ethical and economic concern in regards to an inadequate evidence base for staff training.

Key words: training, residential childcare, staff, looked-after, accommodated.

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1. Introduction

1.1 Residential Childcare Settings

Residential childcare encompasses a diverse range of settings, including shelter care, treatment centres, residential schools and family-style group homes (Farmer, Murray, Ballentine, Rauktis & Burns, 2017; Utterberg, 2016). Within residential care, many young people exhibit complex emotional and behavioural needs and have experienced at least one prior placement breakdown (Ford, Vostanis, Meltzer & Goodman, 2007; The Scottish Government, 2015; Zelechoski et al., 2013). Residential care is associated with poor long-term outcomes for young people, including health and education (Audit Scotland, 2010; Maclean, Taylor & O’Donnell, 2017; Scottish Executive, 2007). Indeed, children in residential care are often recognised as some of the most vulnerable in society, with significantly higher rates of emotional and conduct disorders, in comparison to alternative placement types such as foster or kinship care (Audit Scotland, 2010; Ford et al., 2007). Despite care placements evolving in response to different needs, residential care is often referred to as a ‘last resort’ (Knorth, Harder, Zandberg & Kendrick, 2008). Arguably, it is unhelpful to reinforce this stance due to the potential value of residential care as an appropriate, first-choice placement (Bayes, 2009; Steels & Simpson, 2017). However, in response to complex needs, residential staff require effective training and support (Bayes, 2009; Steels & Simpson, 2017). Therefore, there is a need to clarify what interventions work, and how they work, within different residential settings, including those with a function of child welfare (James, Thompson & Ringle, 2017; Knorth, et al., 2008).

1.2 Milieu-Wide Interventions

To contextualise staff training within residential care, it is necessary to consider some commonly recognised models of care. There is a vast array of milieu-wide
interventions, which encompass systemic change within an organisation and often include staff training (James et al., 2017). Interventions vary in their guiding philosophy and core principles; albeit many are informed by knowledge of trauma and attachment, including the Children and Residential Experiences (CARE) Model (Izzo et al., 2016; Nunno, Smith, Martin & Butcher, 2017); The Sanctuary Model (Bloom, 2005); and the Attachment, Self-Regulation and Competency Framework (ARC) (Kinniburgh, Blaustein & Spinazzola, 2005). In a comprehensive review, James (2011) also highlights the common component of dealing with child externalising behaviour through a range of different models, including Positive Peer Culture (Vorrath & Brendtro, 1985); Stop-Gap (McCurdy & McIntyre, 2004); The Teaching Family Model (Farmer et al., 2017); and Re-Ed (Hobbs, 1983).

However, empirical evidence for these existing models remains limited, with varying degrees of support for different approaches (James, 2011; Utterberg, 2016). Alongside minimal evaluation, many existing studies employ weak designs, without control groups or randomisation, resulting in an increased risk of bias. Moreover, it is often unclear whether findings are applicable to different residential settings and different ages of youth (James, 2011; Utterberg, 2016). Despite the relevance of this evidence-base for residential staff practice, the unique contribution of staff training is rarely identifiable in outcomes due to additional, corresponding changes within the residential system.

Research often provides sparse detail regarding the components of an intervention, resulting in a lack of clarity around what has been delivered and how its components may work (Axford, Little, Morpeth & Weyts, 2005; Palareti & Berti, 2009). In further critique, many fail to consider treatment fidelity, thus making it difficult to establish the continued integrity of interventions in practice (James et al., 2017; Knorth et al., 2008). In a recent article, James et al. (2017) highlight frequent use of evidence-based practices, yet note there is disparity between the perceived positive outcomes in practice and the limited, empirical evidence for effectiveness. Research may also fail
to recognise the dynamic interplay of different factors, which could influence outcomes (Coman & Devaney, 2011; Palareti & Berti, 2009). A minimalist approach may limit understanding and fail to capture the potential impact of informal, less concrete mechanisms of change, such as the daily interactions between young people and staff (Palareti & Berti, 2009). As a benchmark, the Medical Research Council offers guidance on evaluating complex interventions; in particular, the importance of process evaluation, whereby consideration is given to the relations between implementation (e.g. fidelity, dose), mechanisms of change (e.g. how the intervention works), and interaction with context (e.g. factors external to the intervention) (Moore et al., 2015).

**1.3 Residential Staff Training**

Aside from milieu-based interventions, a limited number of systematic reviews have aimed to examine the outcomes associated with residential staff training. In a recent review, Hermenau, Goessmann, Rygaard, Landolt and Hecker (2016) highlight beneficial effects of structural interventions and caregiver training on children’s emotional, social and cognitive development. However, only three out of twenty four included studies benefit from increased reliability, through delivery of a manualised intervention. The differential impact of training, structural changes and an enriched environment is also unclear. The validity of this review’s findings is challenged by the quality of the available evidence; specifically, inclusion of uncontrolled studies and a heterogeneous sample of residential institutions, reflecting large variability in care systems from low to high-income countries.

Everson-Hock et al. (2011) aimed to review the effectiveness of training and support for carers and other professionals on the physical and emotional health and well-being of looked after young people. Whilst training had limited impact upon outcomes, the most effective interventions were longer in duration, focused on younger children, and were conducted in the USA. However, this systematic review
did not include any studies employing samples of residential staff. Therefore, findings are only applicable to training and support within foster care. Indeed, the authors recognise a need for further research to focus upon the evaluation of training for other professionals.

Similarly, previous systematic reviews have focused on foster and adoptive carers or foster and kinship carers, and excluded residential care settings (Kerr & Cossar, 2014; Kinsey & Schlosser, 2012). These reviews include different types of carers in their samples and may therefore be limited due to confounding factors of varying levels of permanency for young people and different forms of caregiver systemic support. In their findings, Kinsey and Schlosser (2012) conclude limited evidence for the effectiveness of training programmes for foster carers, whereas Kerr and Cossar (2014) excluded any form of didactic training from their review. On this basis, there is no known review focused solely upon training for residential childcare staff.

Interestingly, recent findings highlight the frequent omission of residential childcare staff from training interventions, despite them arguably having the greatest contact with young people (James et al., 2017). However, James et al.’s (2017) study is limited by a small, potentially biased sample, use of a self-report measure, and missing response data. Many other authors recognise that staff training has an important role in residential care (Crimmens, 1998; Gharabaghi, 2008; NICE, 2015; Nordoff & Madoc-Jones, 2014). Notably, there are different forms of staff training, including qualifications prior to employment, initial induction training, mandatory training (e.g. first aid) and training whilst in-service, with a greater focus upon professional development (Gharabaghi, 2008; Heron, 2006). Despite this, the delivery of training appears to vary across residential settings and geographical locations, including reference to gaps in provision (Gharabaghi, 2010; House of Commons Education Committee, 2016). On this basis, it is unclear what training residential staff receive in-service and whether this training has any impact upon outcomes for staff or young people in residential care.
1.4 Justification for Current Study

Based upon existing literature, there is an evident need for further research to explore what interventions are used within residential care and whether they are effective in improving outcomes. Previous reviews have either excluded residential care from their samples or incorporated a heterogeneous range of settings, resulting in reduced validity of findings. Whilst training is often included in milieu-based interventions, the evidence base remains variable and the unique contribution of training is rarely identifiable due to systemic changes. Training is often recognised as important, despite limited understanding of what training is delivered, how it is measured, and whether it is effective in improving outcomes.

1.5 Aims

The aim of this review is to synthesise the types and effectiveness of training focussed upon psychosocial outcomes, which is delivered to staff within child welfare residential settings. Therefore, the following questions will be addressed:

1. Does staff training improve child and/or carer psychosocial outcomes in residential childcare settings?
2. What is the nature of these staff training interventions within residential childcare?
3. How are psychosocial outcomes being measured?

2. Method

2.1 Protocol and Registration

This review was conducted in accordance with guidance from the Centre for Reviews and Dissemination (CRD, 2009) and the PRISMA group reporting standards (Moher,
Liberati, Tetzlaff & Altman, 2009). A comprehensive search was completed to ensure that no previous reviews were already completed on this topic. This included a scoping exercise within the Cochrane Database of Systematic Reviews (CDSR), the Database of Abstracts of Reviews of Effects (DARE), PsycInfo, Medline, Embase, Social Services Abstracts, Applied Social Sciences Index and Abstracts (ASSIA) and Education Resource Information Center (ERIC). An a priori review protocol was then developed and registered with PROSPERO (See Appendix 2).

2.2 Search Strategy

The systematic search included a search of electronic databases, followed by contact with authors and review of reference lists and citation searches for included studies.

A systematic literature search was completed January 9th 2017 using the following search terms: ("residential care" or "residential child*" or "children's home*" or "group home*" or "treatment facilit*" or 'short-term care facilit*') AND (training or teaching) AND (personnel or staff or worker* or caregiver*)) OR ("children and residential experiences" or "skills for residential care workers" or "homeparent*"").

The following electronic databases were searched, within the domain of anywhere except full-text: PsycInfo (1806-2017 Jan Week 1); Embase classic and Embase (1947-2017 Jan 06); Epub ahead of print, in-process and other non-indexed citations; Ovid MEDLINE daily and Ovid medline (1946-present); Social Services Abstracts; Applied Social Sciences Index and Abstracts (ASSIA); Education Resource Information Center (ERIC); and ProQuest Dissertations and Theses Global.

A self-audit was completed whereby the final search was checked against previous records to ensure that it had captured all relevant literature from the initial scoping exercise. Difficult to access items were requested and reviewed through inter-library loan and/or contact with authors. Authors in the field were also contacted to obtain
any further unpublished literature mentioned in their publications. In August 2017, reference lists and citation searches were completed for all included studies.

2.3 Eligibility Criteria

No date restrictions were applied to this systematic search due to a large body of older literature existing within this field. Moreover, unpublished theses were included in an effort to reduce publication bias. No language restrictions were applied.

Population

Studies were included if their target population was any staff member and/or carer working in a residential childcare setting. The residential setting needed to have the predominant function of child welfare; for example, the referral pathway should relate to welfare as opposed to youth justice or psychiatric treatment. It is recognised that agencies often provide many different services and residential settings can have numerous functions (James et al., 2017). Hence, studies were only included if residential child welfare was the largest component, in order to reduce the heterogeneity of included settings. Group homes were included due to the presence of staff members and their similarity to residential settings (e.g. similar level of permanence and not focussing upon a single dyad).

Studies were excluded if the residential setting predominantly focussed upon physical health, adults, older adults, youth justice/delinquent youth, psychiatric treatment or intellectual disability. A previous systematic review highlights the variability in care models across low, middle and high-income countries and how a heterogeneous sample may limit internal validity (Hermenau et al., 2016). Therefore, studies were excluded if they were conducted within low-income countries, as defined by The World Bank Group (2017).
**Intervention**

Studies were included if their primary focus was to evaluate the impact of staff training. For the purpose of this review, training was defined as any intervention which focuses upon staff and involves teaching knowledge or skills. Studies were excluded if the contribution of staff training was not uniquely identifiable; for example, setting-level interventions/milieu-wide treatment models (Izzo et al., 2016; James, 2011).

**Design**

Studies were included if they were empirical, reported quantitative data and had outcomes at more than one time point (e.g. minimum pre and post).

**Outcomes**

Studies were included if they focussed upon staff and/or child psychosocial outcomes. For the purpose of this review, psychosocial outcomes were purposefully under-specified to avoid exclusion of relevant research, whilst not including practical training such as ‘fire safety’ or ‘food hygiene’. The term psychosocial sought to encapsulate outcomes on staff interpersonal behaviour (e.g. parenting skills, communication skills) and/or attitudes and/or knowledge of constructs in training (e.g. attachment, trauma). Child emotional and/or behavioural indicators (e.g. frequency of behaviour, physical restraint, well-being) were also included.

**2.4 Data Extraction**

A data extraction tool was developed by the first author to extract relevant demographic information and study details. This used the format of a spreadsheet, supported by Microsoft Excel software (See Elamin et al., 2009 for review of data
extraction tools). The following data were extracted from included studies: country of publication, residential setting, child characteristics (e.g. population, gender, age and ethnicity), staff demographics (e.g. job title, gender, age, education, experience and ethnicity), and training content, format, duration and delivery personnel. Moreover, study details were extracted including sample size, aims, design, follow-up, recruitment strategy, outcome measures, effect sizes and key findings. This was piloted by the first author on three studies and deemed to adequately represent the available information. In addition to the first author, the third author extracted data for six studies for comparison, to enhance reliability. Where sufficient statistics were reported, effect sizes were extracted or calculated by both the first and second author independently then compared, with full agreement.

2.5 Quality Criteria

A new quality tool was developed to represent the included training interventions and different study designs (See Appendix 3 for quality tool). This tool was informed by SIGN 50 (Scottish Intercollegiate Guidelines Network [SIGN], 2015) methodology checklists and guidance from the CRD (2009). The use of total quality scores to establish high or low study quality can be unreliable and misleading (CRD, 2009). Therefore, in order to assess risk of bias in individual studies, quality criteria were defined with requirements for each descriptive rating.

Quality criteria were piloted on four studies blindly by the first and second author and ratings discussed, to refine criteria. All studies were then rated by the first author, with a random selection (33%; N=6) also blind rated by the third author. Cohen’s Kappa highlighted a moderate to good rate of inter-rater reliability (K=0.7). Total agreement was reached for 83% (40/48) of items; with 13% (6/48) differing by 1 point; and 4% (2/48) differing by 2 points. Discrepancies were largely based upon subjectivity in details of reporting. After discussion, a rate of 100% agreement was achieved.
2.6 Data synthesis

In this instance, a meta-analysis was not feasible due to the heterogeneity of staff training interventions, measures, and analytic approaches (CRD, 2009). Therefore, a narrative synthesis was conducted, whereby patterns in the data were systematically explored (within and between studies), including risk of bias (Ryan, 2013). Findings were synthesised in relation to study outcomes (e.g. staff knowledge, skills and attitudes; and child behaviour). This was guided by an existing framework for training evaluation (Kirkpatrick, 1994).

3. Results

3.1 Study Selection

The systematic search yielded 3629 records, of which 1267 duplicates were removed. Authors in the field were contacted to obtain any further unpublished literature, which resulted in the review of one additional article (Nunno et al., 2017). Subsequently, 2363 records were screened via title, with 1463 excluded, resulting in the review of 900 abstracts. After exclusion of 776 abstracts against inclusion/exclusion criteria, the full-text of 124 articles were assessed for eligibility and reasons for exclusion documented (See Figure 1). Google search engine and/or author contact were occasionally required to clarify the predominant function of the intervention setting (e.g. child welfare). Of the excluded full-text articles (N=109), 15% (N=16) were discussed and agreed upon with the second author; and 28% (N=30) were blind rated by the third author, with 100% agreement reached upon reason for exclusion.

Despite inter-library loan requests and attempts to contact authors, two full-text articles, both original, hard copy theses, were not available to review or purchase and
were thus excluded due to no access (Layser, 1933; Leytham, 1984). Both articles appeared potentially relevant based upon their titles, albeit no abstracts or full-text were available. This initially resulted in seventeen articles for inclusion in the review.

Through subsequent review of reference lists and citation searches for included articles (N=17), three additional, potentially relevant studies were assessed at full-text (Collins, Gabor & Ing, 1987; Hemling & Mossing, 1978; Titus, 1989). Hemling and Mossing (1978) was excluded due to not having the relevant setting and Titus (1989) was excluded due to no full-text access and no response from the author. Collins et al. (1987) was included in the final sample of studies, resulting in a final total of eighteen full-text studies for data extraction and quality assessment. 100% of included articles (N=18) were discussed and agreed with the second author.
3.2 Characteristics and Quality of Included Studies

Many studies exhibited poor reporting quality and therefore, characteristics of included studies are based upon the information available. Seven of the included studies were unpublished theses and dissertations (Gramling, 1994; Kirby, 1987; Lavizzo, 2001; Mueller, 1995; Santa Lucia, 1989; Wahl-Thouin, 2011; Willner et al., 1975).

Figure 1 PRISMA Flowchart (See Moher et al., 2009 for PRISMA statement)
Staff and Settings (See Table 1)

Studies were conducted between 1975 and 2016 in the USA (13 studies, 72% of total sample); The Netherlands (2 studies, 11%); Portugal (2 studies, 11%) and Canada (1 study, 6%). Studies represented a diverse range of residential settings, from small group homes (e.g. capacity 6) to medium and larger sized institutions (e.g. capacity 50+), including both short and long-term care. Studies recruited from between one to four different residential services, with three studies also including colleges/universities preparing students for residential childcare work (Collins et al., 1987; Edens & Smit, 1992; Edens, 1998).

All studies included direct care staff in their samples, with three studies also including students (Collins et al., 1987; Edens & Smit, 1992; Edens, 1998); and three studies reporting inclusion of leadership, clinical and administration positions (Hidalgo, Maravic, Milet & Beck, 2016; Holden et al., 2010; Nunno, Holden & Leidy, 2003). Two studies did not report clear detail of staff roles (Moleiro, Marques & Pacheco, 2011; Santa Lucia, 1989). The majority of studies exhibited fragmented and poor quality reporting of staff demographic information, with a third not providing any details. Therefore, available data did not allow for any meaningful synthesis of staff demographic information.

Training Interventions (See Table 1)

Studies were heterogeneous in their delivered training, apart from two studies evaluating the same manual of ‘Professional Skills for Residential Childcare Work’ (Edens & Smit, 1992; Edens, 1998). Training appeared to largely cluster around a behavioural approach and/or the principles of attachment and relationships (See Figure 2). Fifteen studies report details of a training manual or detailed curriculum, with four also ensuring fidelity through video, audio-tape and/or supervision (Holden et al., 2010; Hurley, Ingram, Czyz, Juliano & Wilson, 2006; Lavizzo, 2001; Silva & Gaspar, 2014). Notably, the design of new or modified training programmes and/or
the reporting standards of curriculum contents created some difficulty establishing whether training was sufficiently manualised, to the point of enabling reliable replication (Collins et al., 1987; Crosland et al., 2008; Hurley et al., 2006; Kirby, 1987; Moleiro et al., 2011; Wahl-Thouin, 2011). Four studies appear to have previous evaluation conducted (Edens, 1998; Holden et al., 2010; Nunno et al., 2003; Silva & Gaspar, 2014).

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<th>Author</th>
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<td>Nunno et al. (2003)</td>
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<td>Santa Lucia (1989)</td>
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<td>Silva and Gaspar (2014)</td>
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<td>Wahl-Thouin (2011)</td>
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<td>Willner et al. (1975)</td>
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</tbody>
</table>

**Figure 2** Training Content

*Clearly aligned ++; Tentatively aligned +; No clear alignment –*

**Definitions:** Clearly aligned- explicit mention of theoretical orientation and/or clear outline of theory/principles; Tentatively aligned- outline of theory/principles but less explicit definition of theoretical orientation; No clear alignment- little or no outline of theory/principles.
All training used didactic and interactive components, often including skills practice and subsequent feedback. Delivery personnel was often the study author, although seven studies were unclear or did not report delivery details; and four studies employed independent personnel (Crosland et al., 2008; Hidalgo et al., 2016; Hurley et al., 2006; Moleiro et al., 2011). All studies, apart from three, conducted training or input over multiple sessions (Crable et al., 2013; Holden et al., 2010; Mueller, 1995). Six studies provided additional follow-up support, such as consultation, refreshers, technical assistance, practice/feedback or weekly meetings (Gramling, 1994; Hidalgo et al., 2016; Hurley et al., 2006; Lavizzo, 2001; Nunno et al., 2003; Santa Lucia, 1989).

Of the available data from fifteen studies, training duration ranged from approximately 1-45 hours.

**Study Designs (See Table 2)**

Thirteen studies employed a pretest and posttest design, with few studies using a comparable control group (Collins et al., 1987; Crable et al., 2013; Edens & Smit, 1992; Edens, 1998; Silva & Gaspar, 2011). One study used both a control group and random assignment (Collins et al., 1987). The remaining studies employed a multiple baseline or time series factorial design. Seven studies included a longer-term follow-up, ranging from 2 weeks to 12 months (Crable et al., 2013; Edens, 1998; Hidalgo et al., 2016; Kirby, 1987; Lavizzo, 2001; Nunno et al., 2003; Silva & Gaspar, 2014). Nine studies used a non-randomised sampling strategy, whilst one study used randomised (Crable et al., 2013); and another stated that the sample was representative of their service network (Hidalgo et al., 2016). The remaining studies were either unclear or did not report details of their sampling strategy.
<table>
<thead>
<tr>
<th>Author</th>
<th>Country</th>
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<th>Content</th>
<th>Format</th>
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<tbody>
<tr>
<td>Collins et al. (1987)</td>
<td>Canada</td>
<td>Setting: Community college, University, and residential agencies (No further details reported).</td>
<td>Staff: Childcare workers (CCW), childcare students (CYC) and social work students (BSW). <strong>Gender:</strong> NR. <strong>Age:</strong> CCW M=29.8yrs; CYC M= 20.7yrs; BSW M= 28.9yrs. <strong>Education:</strong> CCW- 56% degrees/diplomas. <strong>Experience:</strong> CCW- 72% 2+ yrs; CYC- 26% any 'experience' in social services; BSW 50% 2+yrs. <strong>Ethnicity:</strong> NR.</td>
<td>Content: Communication skills training. <strong>Manual or replicable:</strong> Yes. <strong>Fidelity:</strong> No.</td>
<td>Skills training, role play, live counselling situations, simulations and formal practice between sessions.</td>
<td>2 weeks (Total 18hrs.)</td>
<td>NR</td>
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<tr>
<td>Crable et al. (2013)</td>
<td>USA</td>
<td>Setting: Group care. <strong>Population:</strong> 'Traumatised' children. <strong>Gender:</strong> All female. <strong>Age:</strong> Adolescents. <strong>Ethnicity:</strong> NR.</td>
<td>Staff: Direct care staff. <strong>Gender:</strong> All female. <strong>Age:</strong> 22-55yrs. <strong>Education:</strong> NR. <strong>Experience:</strong> 1-5yrs. <strong>Ethnicity:</strong> Majority African American.</td>
<td>Content: Gender-specific and trauma-informed. <strong>Manual or replicable:</strong> Yes. <strong>Fidelity:</strong> No.</td>
<td>Didactic and experiential learning.</td>
<td>4hrs</td>
<td>NR</td>
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<tr>
<td>Crosland et al. (2008)</td>
<td>USA</td>
<td>Setting: 2 group homes (12-bed and 6-bed). <strong>Population:</strong> Children in foster care. <strong>Gender:</strong> Male and female. <strong>Age:</strong> 12-17 yrs. <strong>Ethnicity:</strong> NR.</td>
<td>Staff: Direct care staff. <strong>Gender:</strong> Male and female. <strong>Age:</strong> Early 20s-late 50s. <strong>Education:</strong> NR. <strong>Experience:</strong> 'Range' of experience including employee orientation training. <strong>Ethnicity:</strong> NR.</td>
<td>Content: Essential tools for positive behaviour change. <strong>Manual or replicable:</strong> Yes. <strong>Fidelity:</strong> No.</td>
<td>Didactic instruction, group discussion, practice, activities, role-play, reading and in-home feedback.</td>
<td>5 x 3hr sessions over 5 weeks (Total-15hrs.)</td>
<td>Certified behaviour analysts</td>
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<td>Edens (1998)</td>
<td>The Netherlands</td>
<td>Setting: Residential institutes and a school preparing for childcare work (No further details reported).</td>
<td>Staff: CCWs and STs. Gender: IG- CCWs 41% male; STs 7% male. CG- CCWs 32% male; STs 0% male. Age: IG- CCWs M=29.2 yrs; STs M=25.5 yrs. CG- CCWs M=27.7 yrs; STs M=23.2 yrs. Education: NR. Experience: IG- CCWs M=4.6 yrs; STs M=1 month. CG- CCWs M=6.1 yrs; STs M=5 months. Ethnicity: NR.</td>
<td>Content: Professional skills for residential childcare workers. Manual or replicable: Yes. Fidelity: No.</td>
<td>Reading, trainer explanation, videotapes, skill practice- role-play, feedback, group discussion.</td>
<td>15 x 3 hr sessions (Total 45hrs).</td>
<td>Researcher</td>
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<tr>
<td>Hidalgo et al. (2016)</td>
<td>USA</td>
<td>Setting: 4 shelters (one higher security). Population: Unaccompanied migrant youth; high levels of trauma. Gender: Male and female. Age: &lt;18 yrs. Ethnicity: NR.</td>
<td>Staff: 55% youth workers; 45% clinical or administrative staff (No further details reported).</td>
<td>Content: Play-based trauma informed training (PATHS). Manual or replicable: Partly manualised. Fidelity: No.</td>
<td>Didactic and interactive components.</td>
<td>2.5 days, 6-9 months weekly technical support/supervision; and 2 day refresher trainings</td>
<td>Office of Refugee Resettlement (ORR)</td>
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<td>Holden et al. (2010)</td>
<td>USA</td>
<td>Setting: 4 residential childcare agencies (No further details reported).</td>
<td>Staff: Some leadership positions (No further details reported).</td>
<td>Content: CARE model. Manual or replicable: Yes. Fidelity: Yes.</td>
<td>Presentations, group discussions, training workbook.</td>
<td>5 days</td>
<td>NR</td>
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<td>Kirby (1987)</td>
<td>USA</td>
<td>Setting: 3 cottages; part of larger institution, capacity approx. 220. Population: 'Emotionally disturbed' children. Gender: Male and female. Age: 5-12yrs (M=10.76yrs). Ethnicity: NR.</td>
<td>Staff: Homeparents. Gender: 7 female and 4 male. Age: M=33.3yrs. Education: High school-further education. Experience: 9 months-5 yrs (M=2.3yrs). Ethnicity: NR.</td>
<td>Content: 'Positive Homeparent Training' modified from 'Parents Are Teachers.' Manual or replicable: Yes (adapted) Fidelity: No.</td>
<td>Reading, ten written units, homework and group discussion.</td>
<td>3 x 1.5-3hr sessions (Total 4.5-9hrs).</td>
<td>Researcher</td>
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<td>Mueller (1995)</td>
<td>USA</td>
<td>Setting: Housing unit, capacity 8. <strong>Population:</strong> Placed due to 'abuse and neglect.' <strong>Gender:</strong> All female. <strong>Age:</strong> 6-12 yrs. <strong>Ethnicity:</strong> 85% (approx.) African-American.</td>
<td><strong>Staff:</strong> Child and youth care staff. <strong>Gender:</strong> All female. <strong>Age:</strong> 'Fairly young.' <strong>Education:</strong> NR. <strong>Experience:</strong> 'Inexperienced.' <strong>Ethnicity:</strong> 57% Caucasian; 29% African-American; 14% Hispanic.</td>
<td><strong>Content:</strong> De-escalation of aggressive behaviours. <strong>Manual or replicable:</strong> Yes. <strong>Fidelity:</strong> No.</td>
<td>Lecture, written project, role-plays, videotapes, group discussion.</td>
<td>3hrs</td>
<td>Researcher, director, and assistant program coordinator</td>
</tr>
<tr>
<td>Nunno, Holden and Leidy (2003)</td>
<td>USA</td>
<td>Setting: Medium sized facility- 4 residential units (rehabilitation, emergency shelter, welfare). <strong>Population:</strong> Abused, neglected, truant and/or delinquent children. <strong>Gender:</strong> 90% male. <strong>Age:</strong> 5-18yrs. <strong>Ethnicity:</strong> NR.</td>
<td><strong>Staff:</strong> 62 direct care staff; 58 clinical, supervisory, admin or support functions. <strong>Gender:</strong> 48% male. <strong>Age:</strong> NR. <strong>Education:</strong> 45% high school; bachelor's 36%; master's 19%. <strong>Experience:</strong> Approx. 50% &lt;1yr; 3% 11+yrs. <strong>Ethnicity:</strong> NR.</td>
<td><strong>Content:</strong> Therapeutic Crisis Intervention (TCI). <strong>Manual or replicable:</strong> Yes. <strong>Fidelity:</strong> No.</td>
<td>Teaching of skills (No further details reported).</td>
<td>5 days (35hrs) (across 6 different courses for all staff) + technical assistance.</td>
<td>Train-the-trainer model; supervisors.</td>
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<tr>
<td>Santa Lucia (1989)</td>
<td>USA</td>
<td>Setting: Group home (capacity approx. 25-30). <strong>Population:</strong> History of abuse. <strong>Gender:</strong> NR. <strong>Age:</strong> 3-12yrs. <strong>Ethnicity:</strong> NR.</td>
<td><strong>Staff:</strong> 62 direct care staff; 58 clinical, supervisory, admin or support functions. <strong>Gender:</strong> 48% male. <strong>Age:</strong> NR. <strong>Education:</strong> 45% high school; bachelor's 36%; master's 19%. <strong>Experience:</strong> Approx. 50% &lt;1yr; 3% 11+yrs. <strong>Ethnicity:</strong> NR.</td>
<td><strong>Content:</strong> Parenting skills using democratic model. <strong>Manual or replicable:</strong> No. <strong>Fidelity:</strong> No.</td>
<td>Sharing of literature, teaching skills and meetings with children.</td>
<td>6 x weekly sessions and weekly meetings.</td>
<td>Researcher</td>
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<td>Silva and Gaspar (2014)</td>
<td>Portugal</td>
<td><strong>Setting:</strong> Short-term residential centres. <strong>Population:</strong> Entry to care due to neglect and abuse. <strong>Gender:</strong> Male and female. <strong>Age:</strong> 3-8yrs. <strong>Ethnicity:</strong> NR.</td>
<td><strong>Staff:</strong> Direct carers. <strong>Gender:</strong> NR. <strong>Age:</strong> IG1 M=35.7yrs; IG2 M=38.8yrs; CG1 M=42yrs; CG2 M=37.1yrs. <strong>Education:</strong> IG1: 27.8% elementary; 27.8% high school; 45.5% university. IG2: 16.7% elementary; 38.9% high school; 18.2% university. CG1: 44.4% elementary; 11.1% high school; 9.1% university. CG2: 11.1% elementary; 22.2% high school; 27.3% university. <strong>Experience:</strong> IG1 M=4.5yrs. IG2 M=7.1yrs. CG1 M=9.3yrs. CG2 M=2.8yrs. <strong>Ethnicity:</strong> NR.</td>
<td><strong>Content:</strong> Incredible years basic parent programme (IY). <strong>Manual or replicable:</strong> Yes. <strong>Fidelity:</strong> Yes-supervision and facilitator feedback.</td>
<td><strong>Format:</strong> Facilitator led-group discussion, videotape modelling and rehearsal of intervention strategies.</td>
<td>13 weeks of 2hr sessions (Total 26hrs).</td>
<td>2 facilitators</td>
</tr>
<tr>
<td>Wahl-Thouin (2011)</td>
<td>USA</td>
<td><strong>Setting:</strong> Group homes, capacity approx. 50. <strong>Population:</strong> Child welfare. <strong>Gender:</strong> Male and female. <strong>Age:</strong> 12-18 yrs. <strong>Ethnicity:</strong> NR.</td>
<td><strong>Staff:</strong> Behavioural health technicians. <strong>Gender:</strong> 18 male and 9 female. <strong>Age:</strong> NR. <strong>Education:</strong> 67% high school; 26% bachelor’s; 7% master’s. <strong>Experience:</strong> 30% &lt;1 yr; 44% 1-5yrs; 26% 5-10yrs. <strong>Ethnicity:</strong> 48% Caucasian; 15% Hispanic; 4% Asian; 26% African-American; 7% Asian/Caucasian.</td>
<td><strong>Content:</strong> Positive Psychology. <strong>Manual or replicable:</strong> Yes. <strong>Fidelity:</strong> No.</td>
<td><strong>Format:</strong> Lecture, group exercises, handouts, questions and answers, review of research article, group discussion.</td>
<td>4 x 2hr sessions over 4 weeks (Total 8hrs).</td>
<td>Researcher</td>
</tr>
<tr>
<td>Author</td>
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<td>Willner et al. (1975)</td>
<td>USA</td>
<td>Setting: 2 group homes. Population: 'Institutionalised youth.' Gender: Male and female. Age: 12-16 yrs. Ethnicity: NR.</td>
<td>Staff: Married couples/trainee teaching-parents (No further details reported).</td>
<td>Content: Youth-preferred interaction behaviours. Manual or replicable: NR. Fidelity: No.</td>
<td>Reading material, verbal instructions, videotapes, role-play and feedback.</td>
<td>2 x 3hr sessions (Total 6hrs).</td>
<td>NR</td>
</tr>
</tbody>
</table>

CCW Childcare Worker; CG Control group; IG Intervention group; M Mean; NR Not reported; NS Not significant; ST Students.

Table 1 Summary of Settings, Staff and Training
Four studies highlighted inclusion of youth in their sample, resulting in a total sample of 62 youths (Lavizzo, 2001; Mueller, 1995; Santa Lucia, 1989; Silva & Gaspar, 2014). Others report youth behavioural outcomes without any description of youth in their sample.

The total staff sample is also difficult to reliably report due to studies not always specifying number of staff whom received training and/or lacking clarity regarding complete data used in analysis (Crosland et al., 2008; Hurley et al., 2006; Lavizzo, 2001). However, five studies used small samples of under 11 staff (Gramling, 1994; Kirby, 1987; Mueller, 1995; Santa Lucia, 1989; Willner et al., 1975). Remaining studies reported samples of under 135 staff, apart from one which reported a sample of 297 staff (Hidalgo et al., 2016). Sample size ranged from 4-297 included staff.

**Outcome Measures (See Table 2)**

Nine studies focused solely upon staff outcomes (Collins et al., 1987; Crable et al., 2013; Crosland et al., 2008; Edens & Smit, 1992; Edens, 1998; Gramling, 1994; Holden et al., 2010; Molerio et al, 2011; Silva & Gaspar, 2014) whilst two focused upon child behaviour (Mueller, 1995; Wahl-Thouin, 2011). Seven studies used a combination of child and staff outcomes (Hidalgo et al., 2016; Hurley et al., 2006; Kirby, 1987; Lavizzo, 2001; Nunno et al., 2003; Santa Lucia, 1989; Willner et al., 1975).

For staff, the most popular outcome was skills; for example, regulating young people, handling conflicts, communicating, problem solving or using reinforcement. Nine studies used an observational measure in-vivo or through a simulation task (Collins et al., 1987; Crosland et al., 2008; Edens & Smit, 1992; Edens, 1998; Gramling, 1994; Kirby, 1987; Lavizzo, 2001; Moleiro et al., 2011; Willner et al., 1975); and six studies using an in-direct measure (e.g. self-reported skills or intent to change practice) (Edens & Smit, 1992; Holden et al., 2010; Hurley et al., 2006; Moleiro et al., 2011; Nunno et al., 2003; Santa Lucia, 1989). Five studies included a written knowledge
test; for example, knowledge of social skills, trauma, the CARE model or crisis intervention techniques (Crable et al., 2013; Edens, 1998; Gramling, 1994; Holden et al., 2010; Nunno et al., 2003); and two studies examined staff attitudes or beliefs; for example, towards safety, trust, intimacy, punishment or service capacity to address mental health issues (Hidalgo et al., 2016; Silva & Gaspar, 2014). It was common for studies to combine measurement of observed staff behaviour with an additional outcome measure.

For child outcomes, eight studies used frequency of child behaviour (including physical restraint), mainly through written records (Hidalgo et al., 2016; Hurley et al., 2006; Mueller, 1995; Nunno et al., 2003; Santa Lucia, 1989; Wahl-Thouin, 2011); apart from two studies using observation in-vivo (Kirby, 1987; Lavizzo, 2001). Three studies used a measure of child attitudes towards staff, such as view of staff behaviour (Lavizzo, 2001; Santa Lucia, 1989; Willner et al., 1975).
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<tr>
<th>Author</th>
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<th>Aim/Design/Follow-up</th>
<th>Recruitment</th>
<th>Outcomes</th>
<th>Key Findings</th>
<th>Effect Sizes</th>
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</thead>
<tbody>
<tr>
<td>Collins et al. (1987)</td>
<td>29 childcare students; 19 social work students; 49 childcare workers.</td>
<td>Aim: Evaluate impact of training on staff communication skills; students' communication skills in preservice training; and compare skills of students and practising workers. <strong>Design:</strong> Pretest and postest (with control group/random assignment). <strong>Follow-up:</strong> None.</td>
<td>Unclear</td>
<td>Carkhuff Stems of Communication Skills (measures responses of accurate empathy, warmth and genuineness in vignettes, 5-point likert scale). The Carkhuff Discrimination Index (ratings of 5 responses, 5-point likert scale for 16 vignettes).</td>
<td>Significant improvement in communication skills for experimental group. Significant improvement in discrimination index for experimental and control. Students significantly surpassed post-test Carkhuff Stems of the control group.</td>
<td>Not calculated (3)</td>
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<tr>
<td>Crable et al. (2013)</td>
<td>40 staff (20 control; 20 treatment).</td>
<td>Aim: Establish if training increases awareness of trauma, and knowledge is retained. <strong>Design:</strong> Time series factorial design (pretest and posttest with control group). <strong>Follow-up:</strong> 45-days.</td>
<td>Randomised</td>
<td>Survey of knowledge (10-item).</td>
<td>No significant increase in knowledge. No significant difference between treatment and control on knowledge. Significant decrease in satisfaction from post to follow-up. Retention scores same from post to follow-up.</td>
<td>N/A</td>
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<td>Crosland et al. (2008)</td>
<td>Pre test- 22 (12 lost after pre-training; 5 new staff added); received training- 15; post-test- 15.</td>
<td><strong>Aim:</strong> Improve staff interactions with children. <strong>Design:</strong> Multiple baseline design (across settings). <strong>Follow-up:</strong> None.</td>
<td>Non-randomised</td>
<td>Role play (scored by observer; average % of steps correct) and observation of positive, negative or no interactions (60-100 mins of observation data per week; calculated mean total per week for each type of interaction).</td>
<td>Decrease in 'neutral' interactions; increase in 'positive' interactions; unclear impact upon 'negative' interactions. Staff learnt strategies evidenced by increase in average % of role-play steps correct.</td>
<td>Not calculated (3)</td>
</tr>
<tr>
<td>Edens (1998)</td>
<td>75 (28 students and 47 staff; complete data-53).</td>
<td><strong>Aim:</strong> Increase knowledge on skill application and extend skills for dealing with difficult situations. <strong>Design:</strong> Pretest and posttest with control (no random assignment). <strong>Follow-up:</strong> 6 months.</td>
<td>Non-randomised</td>
<td>Knowledge test- 11 open-ended questions and 5 multiple choice. Behavioural test of skills (regulating, empathy, stimulating, handling conflicts, problem solving, assertiveness) rated by observers on 5-point scale.</td>
<td>Significant increase in staff knowledge and behaviour at posttest, sustained at follow-up. Skills appeared to make a more lasting impression on students than on care workers.</td>
<td>Knowledge post-test D= 1.89 (2); follow-up D= 1.34 (2). Behaviour post-test D= 0.77 (2); follow-up D= 0.31 (2).</td>
</tr>
<tr>
<td>Edens and Smit (1992)</td>
<td>55 staff (26 control; 29 treatment).</td>
<td><strong>Aim:</strong> Enhance professional competence of childcare workers in social situations. <strong>Design:</strong> Pretest and posttest (with control group). <strong>Follow-up:</strong> None.</td>
<td>Non-randomised</td>
<td>Behavioural test of abilities (regulating, empathy, stimulating, handling conflicts, problem solving and assertiveness) rated by 3 independent observers on 5-point scale. Self-report questionnaire to measure application of skills (5-point likert scale).</td>
<td>Significant increase in staff skills- regulating, empathy, stimulating, handling conflicts, problem solving and assertiveness. Significant increase in application of skills (self-report).</td>
<td>Regulating D= 1.07 (1); Empathic D= 1.11 (1); Stimulating D= 1.14 (1); Handling conflicts D= 0.66 (1); Problem solving D= 0.82 (1); Assertiveness D= 0.71 (1). Other outcomes (3).</td>
</tr>
<tr>
<td>Author</td>
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<tr>
<td>Gramling (1994)</td>
<td>4 staff</td>
<td><strong>Aim:</strong> Gain working knowledge of a social skills intervention technique and help to learn treatment-planning skills. <strong>Design:</strong> Pretest-posttest (no control). <strong>Follow-up:</strong> None.</td>
<td>Non-randomised</td>
<td>Survey of knowledge (25-item)- 16 multiple choice and 9 true/false questions. Frequency of linkages between treatment plan goals and implemented strategies for 2 youths as reported in treatment plans and daily logs (measured by content analysis).</td>
<td>Slight increase in staff knowledge ranging from 24-40% over baseline measurement. Improvement in treatment planning skills with two youths.</td>
<td>N/A</td>
</tr>
<tr>
<td>Hidalgo et al. (2016)</td>
<td>297 staff (Complete data 6-month follow-up- 266; 12 month-280).</td>
<td><strong>Aim:</strong> Assess training impact on quality of relationships among staff, staff beliefs, job satisfaction, job performance (e.g. restraints), and service capacity to address mental health issues. <strong>Design:</strong> Pretest and posttest (no control). <strong>Follow-up:</strong> 6 and 12 months.</td>
<td>Represents service network</td>
<td>Trauma Attachment Belief Scale (TABS). The Mental Health Capacity Instrument (MHCI). The Andrews and Witney Job Satisfaction Questionnaire. Administration records including no. of physical restraints, medications prescribed, mental health interventions, aggression, and behavioural incidents.</td>
<td>Significant improvement in beliefs about safety, trust, intimacy, and control; and staff perception of service capacity to address mental health issues. Significant increase in work satisfaction; and reduction (not significant) in frequency of restraints, psychotropic medication, mental health interventions, aggression and behavioural incidents.</td>
<td>Not calculated (3)</td>
</tr>
<tr>
<td>Author</td>
<td>Sample Size</td>
<td>Aim/Design/Follow-up</td>
<td>Recruitment</td>
<td>Outcomes</td>
<td>Key Findings</td>
<td>Effect Sizes</td>
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<tr>
<td>Holden et al. (2010)</td>
<td>74 staff (Complete data= 41)</td>
<td><strong>Aim:</strong> To increase knowledge and intention to modify practice. <strong>Design:</strong> Pretest and posttest (no control). <strong>Follow-up:</strong> None.</td>
<td>Not reported</td>
<td>Knowledge (25-item test to assess core concepts) and intent to change practice (22-item survey).</td>
<td>Significant increase in knowledge; and significant difference between pre-CARE practice and post-CARE intentions.</td>
<td>Knowledge D= 1.70 (1); Intent to change (3).</td>
</tr>
<tr>
<td>Hurley et al. (2006)</td>
<td>Unclear (staff opinion survey- pre-training 86; post-training 135).</td>
<td><strong>Aim:</strong> Evaluate impact of intervention on youth incidents and staff experience. <strong>Design:</strong> Pretest-posttest (no control). <strong>Follow-up:</strong> None.</td>
<td>Unclear</td>
<td>Monthly critical incident ratio for violence/injury, runaway, response to youth behaviour (e.g. restraint), inappropriate behaviour and other incidents. 49-item staff opinion survey (6-point likert scale).</td>
<td>Significant decrease for critical incidents of responding to behaviour, inappropriate behaviour and other incidents. Significant increase in runaway incidents. Significant increase in staff satisfaction with their proficiency in teaching skills and behaviour management.</td>
<td>Relevant items of staff survey D= 0.39 (2); Critical incidents (3).</td>
</tr>
<tr>
<td>Kirby (1987)</td>
<td>11 staff</td>
<td><strong>Aim:</strong> Increase positive statements between staff and children; decrease criticism by staff. <strong>Design:</strong> A-B single subject for each individual and multiple baseline design (across settings). <strong>Follow-up:</strong> 2 wks.</td>
<td>Non-randomised</td>
<td>Observation 2-4x a week for 15 weeks; mean no. responses per interval. Staff target responses- complete praise, incomplete praise, destructive criticism, informative criticism, neutral interaction; and child behaviour (appropriate or inappropriate).</td>
<td>Minimal effects. Small increase in frequency of informative criticism and small decrease in frequency of destructive criticism.</td>
<td>Not calculated (3)</td>
</tr>
<tr>
<td>Author</td>
<td>Sample Size</td>
<td>Aim/Design/Follow-up</td>
<td>Recruitment</td>
<td>Outcomes</td>
<td>Key Findings</td>
<td>Effect Sizes</td>
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<tr>
<td>Lavizzo (2001)</td>
<td>9 youths</td>
<td><strong>Aim:</strong> Reduce frequency of maladaptive behaviour by increasing frequency of positive interactions.  <strong>Design:</strong> Multiple baseline design (across groups).  <strong>Follow-up:</strong> 12 months.</td>
<td>Non-randomised</td>
<td>Observation (% of intervals of target behaviours and interactions). Daily Behavioural Summary (DBS). The Quality of Life (QoL) Questionnaire.</td>
<td>Increased positive interactions. Moderate reduction maladaptive behaviours - unclear if due to intervention. Modest increase in positive behaviour - not significant. Significant increase QoL.</td>
<td>QoL D = 1.15 (1); Other outcomes (3)</td>
</tr>
<tr>
<td>Moleiro, Marques and Pacheco (2011)</td>
<td>30 staff (14 control; 16 treatment).</td>
<td><strong>Aim:</strong> Evaluate effectiveness of cultural diversity training.  <strong>Design:</strong> Pretest and posttest (with control group).  <strong>Follow-up:</strong> None.</td>
<td>Not reported</td>
<td>Self-report cultural diversity competencies; and content analysis of objective case vignette.</td>
<td>No significant change in self-report competencies. Trend for improved competencies in experimental group.</td>
<td>N/A</td>
</tr>
<tr>
<td>Mueller (1995)</td>
<td>7 staff and 8 youths</td>
<td><strong>Aim:</strong> Increase non-physical de-escalation techniques for aggressive behaviour.  <strong>Design:</strong> Pretest and posttest (no control).  <strong>Follow-up:</strong> None.</td>
<td>Non-randomised</td>
<td>Frequency of physical restraint measured by monthly logs.</td>
<td>Reduced physical restraint by 80% but states this cannot be attributed solely to training intervention.</td>
<td>Not calculated (3)</td>
</tr>
<tr>
<td>Author</td>
<td>Sample Size</td>
<td>Aim/Design/Follow-up</td>
<td>Recruitment</td>
<td>Outcomes</td>
<td>Key Findings</td>
<td>Effect Sizes</td>
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<tr>
<td>Nunno, Holden and Leidy (2003)</td>
<td>120 staff. Knowledge test (Complete data pre 104; post-96; follow-up 23). Confidence test (Complete data pre 44; post 34).</td>
<td><strong>Aim:</strong> Evaluate impact upon staff knowledge, confidence, skills and consistency. Reduce critical incidents and physical restraint. <strong>Design:</strong> Pretest and posttest (no control). <strong>Follow-up:</strong> 9 months.</td>
<td>Non-randomised/unclear</td>
<td>Frequency of critical incidents. Staff knowledge test- 30 multiple-choice items. Staff ratings of confidence on 10-items.</td>
<td>Increase in staff knowledge, sustained at follow-up. Significant increase in confidence levels. Significant reduction in aggressive incidents and physical restraint in Unit B; slight increase in aggressive incidents and physical restraint in Units C and D.</td>
<td>Not calculated (3)</td>
</tr>
<tr>
<td>Santa Lucia (1989)</td>
<td>6 staff (complete data- 4) and 20 youths (complete data- 16).</td>
<td><strong>Aim:</strong> Develop more positive staff attitudes and parenting skills. <strong>Design:</strong> Pretest and posttest (no control). <strong>Follow-up:</strong> None.</td>
<td>Not reported</td>
<td>Positive responses measured by 'questionnaire.' Staff evaluation of democratic parenting skills (based on 4 parenting skills; 4-point likert scale). Children’s attitude survey. Child behaviour log books (focussed upon 6 negative behaviours).</td>
<td>100% increase in 'positive responses.' 75% staff self-report 'more consistently' applying 10/12 parenting skills. 100% children increased in positive responses on attitudes survey. Decline in negative child behaviours.</td>
<td>Not calculated (4)</td>
</tr>
<tr>
<td>Author</td>
<td>Sample Size</td>
<td>Aim/Design/Follow-up</td>
<td>Recruitment</td>
<td>Outcomes</td>
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<tr>
<td>Silva and Gaspar (2014)</td>
<td>47 staff</td>
<td><strong>Aim</strong>: Evaluate any change in parenting competence, staff mood and attitudes. <strong>Design</strong>: Pretest and posttest (2 intervention and 2 comparison groups). <strong>Follow-up</strong>: 12 months.</td>
<td>Non-randomised</td>
<td>Adult-adolescent parenting inventory (AAPI-2) (40-item, self report). Parenting sense of competence (PSOC) (17-item, self report). Beck depression inventory (BDI) depression levels (21-item, self report).</td>
<td>Authors report significant increase in empathy IG1; significant decrease in belief of efficacy of physical punishment and oppressing independence and power IG1; and significant decrease in depression IG2. Decrease in depression IG2 not sustained at follow-up.</td>
<td>After Bonferroni adjustment, all results NS (1).</td>
</tr>
<tr>
<td>Willner et al. (1975)</td>
<td>6 staff</td>
<td><strong>Aim</strong>: Teach practical and preferred youth skills. <strong>Design</strong>: Multiple baseline design (across trainees) with comparison group. <strong>Follow-up</strong>: None.</td>
<td>Not reported</td>
<td>4-6 samples of 'interaction behaviour' (2 x 3 min video-taped role plays) to measure use of 29 youth-preferred behaviours. Youth ratings of trainee behaviour (likert scale).</td>
<td>Percentage of 'liked' behaviour increased for 4/6 trainees, and fell within or just beneath the normative comparison range of the teaching parents.</td>
<td>Not calculated (3)</td>
</tr>
</tbody>
</table>

**Effect sizes**: (1)- calculated by current authors; (2)- calculated by study; (3)- insufficient data; (4)- N too small.

**Table 2** Summary of Study Designs and Findings
<table>
<thead>
<tr>
<th>Author</th>
<th>Aims</th>
<th>Design</th>
<th>Confounds</th>
<th>Sampling</th>
<th>Training</th>
<th>Measures</th>
<th>Outcomes</th>
<th>Analysis</th>
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</thead>
<tbody>
<tr>
<td>Collins et al. (1987)</td>
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<tr>
<td>Crable et al. (2013)</td>
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<td>Adequate</td>
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<tr>
<td>Crosland et al. (2008)</td>
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<tr>
<td>Edens (1998)</td>
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<td>Adequate</td>
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<tr>
<td>Edens and Smit (1992)</td>
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<td>Well covered</td>
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<td>Adequate</td>
<td>Adequate</td>
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<td>Gramling (1994)</td>
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<tr>
<td>Hidalgo et al. (2016)</td>
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<tr>
<td>Hurley et al. (2006)</td>
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<td>Kirby (1987)</td>
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<td>Adequate</td>
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<td>Well covered</td>
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<td>Lavizzo (2001)</td>
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<td>Adequate</td>
<td>Poor</td>
<td>Adequate</td>
<td>Well covered</td>
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<tr>
<td>Moleiro et al. (2011)</td>
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<td>Poor</td>
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<td>Mueller (1995)</td>
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<td>Nunno et al. (2003)</td>
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<tr>
<td>Santa Lucia (1989)</td>
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<td>Not reported</td>
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<td>Wahl-Thouin (2011)</td>
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<tr>
<td>Willner et al. (1975)</td>
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<td>Not reported</td>
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Table 3 Summary of Quality Ratings
3.3 Key Findings *(See Table 2)*

The key findings of included studies were largely mixed across all outcomes. A summary of quality ratings for each study is illustrated in Table 3 (above). The methodological quality of included studies was generally poor, with some areas of strength for different studies in individual criteria.

All included studies outlined aims and objectives, although half of them failed to include a theoretical rationale or provided vague conclusions. Across all study outcomes, no study conducted an appropriate analysis in relation to their study design, sample size and outcome measures, whilst also considering a power analysis and sufficient sample size.

**Staff Skills**

Studies measuring staff skills through observation generally indicate a trend for improved skills. Of nine studies, three found significant improvements (Collins et al., 1987; Edens & Smit, 1992; Edens, 1998) with one sustained at follow-up (Edens, 1998), whilst five found a trend for improvement (Crosland et al., 2008; Gramling, 1994; Lavizzo, 2001; Moleiro et al., 2011; Willner et al., 1975); and one found minimal effects (Kirby, 1987). Studies with significant improvements were strengthened by a well-covered design (e.g. use of a control, comparable groups and random assignment) (Collins et al., 1987) and management of confounding variables (Collins et al., 1987; Edens & Smit, 1992; Edens, 1998). In contrast, the remaining studies were all limited by their design, whereby they only used one or none of the following: a control group, random assignment and directly comparable groups. Issues regarding management of confounds were also a concern (Crosland et al., 2008; Gramling, 1994; Kirby, 1987; Lavizzo, 2001; Moleiro et al., 2011).
All studies using observation of staff skills had limited power and either a potentially biased selection process and/or high attrition. All studies clearly defined outcomes and used appropriate quantitative measures but were limited in reliability or validity. One study, which documented a significant improvement, scored higher on this criterion due to observers’ use of inter-rater reliability (Edens, 1998). Notably, another study which documented significant improvement used a written test of staff skills, potentially less reflective of a real-life setting, as opposed to the simulation method used by the majority of other studies (Collins et al., 1987) Aside from three studies, the majority did not measure any longer-term outcomes (Edens, 1998; Kirby, 1987; Lavizzo, 2001).

The remaining six studies, which examined staff skills through self-report measurement, generally support the notion of improved skills. They evidenced significant improvement in confidence (Nunno et al., 2003); satisfaction with proficiency (Hurley et al., 2006); staff intentions (Holden et al., 2010); and self-reported skills (Edens & Smit, 1992). Findings also highlight improvement in staff perception of applying skills (Santa Lucia, 1989), although one study found no significant change in staff self-report of competencies (Moleiro et al., 2011). Due to the risk of bias from demand characteristics, all of these self-report findings should be treated with caution. The majority of studies which found improvement were limited by poor design and/or failure to control all relevant confounds, such as staff experience.

**Staff Attitudes or Beliefs**

Two studies used a measure of staff attitudes or beliefs (Hidalgo et al., 2016; Silva & Gaspar, 2014). One found significant improvement in beliefs about safety, trust, intimacy, and control; and staff perception of service capacity to address mental health issues (Hidalgo et al., 2016). However, other findings indicate mixed, significant changes in staff empathy and beliefs for both intervention and comparison
group (Silva & Gaspar, 2014). Both studies are limited by the potential bias of self-report measurement; albeit the study with mixed results was strengthened by a slightly more robust design, adequate control of confounds, and use of standardised measures (Silva & Gaspar, 2014).

**Staff Knowledge**

Of the five studies measuring staff knowledge, results are variable. Two found a significant increase (Edens, 1998; Holden et al., 2010) with one also noting an increase at longer-term follow-up (Nunno et al., 2003). One found a minimal increase (Gramling, 1994), whilst one found no significant increase (Crable et al., 2013). The psychometric properties of knowledge tests are questionable, particularly when staff were often given multiple choice questions. These studies were all variable in their sampling and control of confounds, making it difficult to reliably establish the effect of training on knowledge. The study which found no significant increase was the only one in all included papers to use randomised sampling, as well as a control, some management of confounds, and representation of longer-term outcomes (Crable et al., 2013). However, it is worth noting that in contrast to the other studies, it only delivered a single session of training.

**Child Outcomes**

Of eight studies using child behavioural outcomes, one found a significant decrease (Wahl-Thouin, 2011) whilst others report minimal or no significant reductions (Hidalgo et al., 2016; Kirby, 1987; Santa Lucia, 1989); or reductions which could not be attributed solely to the intervention (Lavizzo, 2001; Mueller, 1995). Notably, others report mixed results, including a significant decrease in critical incidents but a significant increase in runaway incidents (Hurley et al., 2006); and a significant reduction in aggressive incidents and physical restraint in one unit but a slight increase in other units (Nunno et al., 2003). Across all findings for child behavioural
outcomes, studies are limited by their designs and risk bias through their sampling and failure to manage all confounds, making it difficult to establish the impact of training on outcomes. Study samples are often small (Kirby, 1987; Lavizzo, 2001; Mueller, 1995; Santa Lucia, 1989) and four studies did not appear to provide any information regarding youth in their sample (Hidalgo et al., 2016; Hurley et al., 2006; Nunno et al., 2003; Wahl-Thouin, 2011). In the three studies using a measure of child attitudes towards staff, all found evidence of improvement but are again limited by demand characteristics (Lavizzo, 2001; Santa Lucia, 1989; Willner et al., 1975).

4. Discussion

4.1 Summary of Findings

This review indicates mixed support for the effectiveness of residential staff training upon staff and/or child psychosocial outcomes. Findings indicate an encouraging impact upon staff skills, although unclear impact upon staff knowledge, attitudes or child outcomes. Similar to existing reviews, these findings should be interpreted with caution due to the methodological limitations and reporting standards of included studies (Everson-Hock et al., 2011; James, 2011; James et al., 2017). On this basis, it is difficult to establish the effectiveness of training or any potential impact of training format and content, until studies improve in their methodology. This finding is paramount due to the ethical and economic implications of staff training on outcomes in residential childcare.

4.2 Limitations of Studies

Staff training interventions are heterogeneous and appear to cluster around themes of attachment/relationships and behavioural theory, similar to milieu-wide interventions (James, 2011; James et al., 2017). This is consistent with existing
guidance and recommendations on staff training, particularly focussed upon attachment-informed care (NICE, 2015; Scottish Executive, 2007; Steels & Simpson, 2017). However, the lack of clarity surrounding core theoretical orientation, potential mechanisms of change and fidelity of training, creates a significant issue in terms of establishing training integrity. Frequent limitations in areas of study design, sampling, and data analysis also largely compromise any existing findings.

Current use of outcome measures may further complicate this issue by failing to capture the true impact of training upon practice. In line with Kirkpatrick’s (1994) model which outlines four levels of training evaluation, studies benefit from their observation of staff skills. This may enhance ecological validity, particularly when inter-rater reliability is established. However, sole reliance upon less direct measures of staff knowledge, attitudes, and skills, results in ambiguity regarding implementation to practice. Interestingly, sparse attention paid to staff attitudes may highlight a lack of consideration for potential barriers to training implementation, such as whether staff believe in the intervention (James et al., 2017).

Despite some exceptions, the poor reporting and management of confounds (e.g. staff education and experience, youth characteristics) reduces the reliability and validity of findings, such as staff knowledge and child behaviour. The current use of inconsistent terminology and samples confounded by different formats and functions of care may also impede the development of a coherent evidence base. Moreover, no included studies were conducted in the UK and it thus remains unclear whether findings generalise to this context. Therefore, existing research is largely exploratory. There are evident gaps in our understanding of the effectiveness of residential staff training, which urgently need to be addressed.
4.3 Strengths and Limitations of Review

This review benefits from efforts to reduce publication bias through inclusion of unpublished theses and no language or date restrictions. Authors sought to increase rigour and reduce duplication through publication of an a priori review protocol. This review also benefits from its efforts to include a more homogenous representation of residential settings, with the function of child welfare. In existing research, there is often limited distinction between different settings, whereby they are aggregated under the title of residential childcare despite key differences in their target population (e.g. welfare, justice, mental health), duration of stay, and restrictiveness (James, 2011; Lee, 2008). This difficulty defining residential childcare is inherently problematic, whereby confounding contextual factors are likely to be missed during the implementation of an intervention. Therefore, this review identifies the importance of moving towards clearer definitions of residential childcare in research literature, to increase our understanding of how interventions work within different settings.

Effort was made to define thorough search terms and conduct a rigorous search including self-audit and inter-rater reliability. Moreover, two authors extracted data and rated quality for a percentage of studies. The main limitation of this review is the difficulty posed by the wider research literature; for example, weak methodology, and the use of inconsistent terminology across literature, which could increase risk of bias.

4.4 Implications for Research

Findings of this review indicate a significant need for improved methodology, including more rigorous research designs, randomised sampling and use of longer-term follow-ups. Future research should be more specific in reporting details of their sample, and the process of their training intervention, including fidelity, dose, potential mechanisms of change, and details of context (Moore et al., 2015). This
would also allow for greater replication of existing evaluations, to improve the limited evidence base. Notably, studies excluded from this review due to no quantitative evaluation highlight the need for greater empirical evidence and the use of pre and post measures as a minimum requirement (Alwon et al., 2000; Carrera & Juliana, 1977; Hunt, 2010; Krenk, 1984; Molina & Soderini, 2003). This review excluded qualitative research, although future research may benefit from mixed methodology to clarify mechanisms of change, training acceptability, and perceived impact upon practice (Collins, Hill & Miranda, 2008; Silva, Gaspar & Anglin, 2016).

It is worth noting that the majority of training was conducted in the USA and therefore further research is required in the UK, to understand any potential implications for staff training and practice within this context. Most training also used a multi-session format, often including some form of follow-up support. It is questionable whether this resource intensive, higher dose format may produce greater effect sizes and higher incentive for publication, thus creating a publication bias. Greater effort is required to publish single session training to establish its effectiveness. Equally, the large effect sizes of some included studies may contribute to publication bias, albeit these may be due to small samples, as opposed to the effectiveness of training. Future research must recognise this issue and complete an adequate power analysis, to avoid potentially misleading findings.

Prior to any future evaluations of residential staff training, it is perhaps necessary to question the aims of staff training, within the context of wider policy, research, and knowledge of poor outcomes for young people. For example, one priority for future evaluations may include training that facilitates interpersonal relationships based upon the recognition of attachment theory. However, studies must recognise the complexity of evaluating training, through combining different outcomes (e.g. knowledge, skills, attitudes), and considering both interaction with context, and how staff actually translate any new knowledge or skills into their practice post training.
This includes consideration of any barriers or facilitators to training implementation, such as time, financial cost, staff attitudes and on-going staff support.

4.5 Implications for Practice

Despite staff training being considered as important within residential childcare, it has received relatively little attention within the research literature (Gharabaghi, 2008; NICE, 2015). Similar to existing findings, this review highlights a need for greater communication between research and practice communities, due to the disparity between use of training in practice and the limited empirical evidence base (James et al., 2017). It is recommended that services consider the ethical dilemma of relying upon an inadequate evidence base, particularly given the recognised vulnerability and poor outcomes of young people within residential care. There is also a strong economic argument for accessing effective staff training, due to the acknowledgement that cost and resources often function as a barrier to training implementation (Gharabaghi, 2008; James et al., 2017). Of particular relevance, it is important to recognise the role of residential staff in translating knowledge into practice, due to their frequent contact with young people.

In conclusion, this review offers tentative support for the positive impact of training upon staff skills, although other outcomes remain unclear. Most importantly, this review highlights the need for significant improvements in training evaluations due to the complexity of interventions, and the ethical and economic concerns of relying upon an inadequate evidence base within residential childcare.
5. References


providers. *International Journal of Behavioral Consultation and Therapy, 7(4),* 30-37.


113-133.


A grounded theory study: How residential childcare staff make sense of, and use, attachment theory in practice

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A grounded theory study: How residential childcare staff make sense of, and use, attachment theory in practice

Abstract

Attachment theory features throughout policy and research for young people in residential care. However, there is limited empirical understanding of how this translates into practice. This research therefore aimed to construct an explanatory theory of how residential staff make sense of, and use, attachment theory in practice. It also aimed to identify whether any components of attachment theory are particularly salient to staff and to what extent their conceptualisations draw upon contemporary attachment theory. Constructivist grounded theory was used in the form of twenty interviews with staff, through an iterative process of data collection and analysis, theoretical sampling, and member reflections. Results indicate that staff focus upon a natural process of building relationships, often without a coherent narrative to describe attachment theory to practice links. This natural process is challenged by tensions within the residential system. Findings are contextualised within existing research and future recommendations are outlined.

Key words: Residential childcare, attachment, staff, looked-after, accommodated

Word count: 7,531 (including quotations and citations).
1. Introduction

1.1 Residential Childcare and Residential Staff

In Scotland, only a small proportion of looked after children reside in residential settings (Milligan & Furnivall, 2011; Scottish Government, 2016). However, these young people experience an array of complex needs and demonstrate higher rates of mental health difficulties compared to the normative population and children in alternative placement types, such as foster care (Audit Scotland, 2010; Ford, Vostanis, Meltzer & Goodman, 2007; Leloux-Opmee, Kuiper, Swaab & Scholte, 2017; McAuley & Davis, 2009; Meltzer, Lader, Corbin, Goodman & Ford, 2004). A national survey for young people within residential care also indicates poorer physical health and educational attainment (Meltzer et al., 2004). Entry to care is often precipitated by early adverse experience, which can then be exacerbated by placement moves (Coman & Devaney, 2011; Milligan & Furnivall, 2011; Unrau, Seita & Putney, 2008). Consequently, these young people can exhibit high rates of trauma related symptoms and attachment difficulties, with their internal representations of unhelpful relationships often played out within the residential setting (Bifulco, Jacobs, Ilan-Clarke, Spence & Oskis, 2017; Howe & Fearnley, 2003; Zegers, Schuengel, van IJzendoorn & Janssens, 2008; Zelechoski et al., 2013).

In this context, residential staff have the most frequent contact with young people, in comparison to other groups, such as clinical staff (Furnivall et al., 2007). The fundamental, yet challenging, role of residential staff is therefore recognised throughout policy and research (Furnivall, 2011; Scottish Executive, 2007). This role is often framed within attachment theory, suggesting that staff can function as a secure base to re-organise attachment behaviours and repair the impact of a young person’s difficult, early experiences (Harder, Knorth & Kalverboer, 2012; Hawkins-Rodgers, 2007; Moses, 2000). Many believe interactions and relationships between staff and young people can facilitate therapeutic change, including attachment security (Cahill,
Holt & Kirwan, 2016; Duppong, Lambert, Gross, Thompson & Farmer, 2017; Garcia Quiroga & Hamilton-Giachritsis, 2017). Certainly, a recent systematic review recommends that residential services should provide attachment-informed care (Steels & Simpson, 2017).

However, there is very limited, empirical understanding of how the interactions and relationships between staff and young people may mediate or moderate outcomes (James, Thompson & Ringle, 2017). Therefore, there is a need to bridge the gap between the perceived value of attachment-informed care and how residential staff make sense of, and use, attachment theory in practice.

1.2 Attachment Theory

Children are biologically predisposed to form interpersonal attachments to others and seek proximity to caregivers, to obtain the comfort of a secure base, from which they can safely explore the world (Bowlby, 1944, 1988). In this cross-cultural framework, attachment theory proposes that children form internal mental representations of their early caregiving experiences, which then function as a template for future relationships (Bowlby 1988; van Ijzendoorn & Sagi-Schwartz, 2008). This can influence their view of themselves and others and may subsequently impact upon their development (Bowlby, 1988). The basis of a child’s attachment style is derived from their caregiver’s ability to identify and respond to their needs (Ainsworth, Blehar, Waters & Wall, 1978; Bowlby 1988). More specifically, secure attachment is nurtured through warm, sensitive and responsive parenting. Conversely, insecure attachment (avoidant or ambivalent) is formed through a caregiver’s inability to identify and respond to a child’s needs (Ainsworth et al., 1978). In instances of early maltreatment, a child may develop a disorganised attachment style, as a result of parenting that is either frightened or frightening (Main & Solomon, 1990; see also Granqvist et al., 2017).
More recent work critiques this original, categorical view of attachment and conceptualises it as a dimensional construct across a continuum of security (Chae et al., 2018; Fraley & Spieker, 2003; Pasco Fearon & Roisman, 2017). It is argued that attachment strategies can change dependent upon context and maturation, and different strategies may be adaptive for individual and group survival (Crittenden, 2006; 2017; Ein-Dor & Herschberger, 2016). Notably, there is limited understanding of attachment theory within the context of multiple caregivers (Howes & Spieker, 2016). It is therefore important to consider how the context of residential childcare may impact upon both attachment security and any resultant interpersonal strategies for young people. Prior to this, there is a need to understand what attachment-informed care looks like within residential settings.

Throughout existing literature, the concept of attachment is referred to in different ways, including as a bond, relationship, behaviours and/or a disorder; and there is recognition that many terms are used without being clearly defined (Chaffin et al., 2006; McLean, Riggs, Kettler & Delfabbro, 2013). Despite attempts to clarify terminology, there is a risk of presuming a shared understanding across different professional groups; and experiencing pitfalls, when applying attachment theory to settings outside the original parent-child context (Salmon & Rapport, 2005; Schuengel & van Ijzendoorn, 2001). The multi-agency nature of residential childcare therefore requires an understanding of different professional viewpoints, in order to facilitate more effective joint-working, including training and support for residential staff (Bazalgette, Rahilly & Trevelyan, 2015).

1.3. Staff Training and Views of Attachment

It is recommended that residential staff receive training on working with ‘attachment difficulties’ (National Institute of Clinical Excellence [NICE], 2015; Scottish Executive, 2007). However, gaps and variations in the provision of training are also acknowledged (Furnivall, McKenna, McFarlane & Grant, 2012; Gharabaghi, 2010;
In recent systematic reviews, the effectiveness of staff training remains largely unclear due to methodological limitations and poor reporting standards of included evaluations (Everson-Hock et al., 2011; Hermenau, Goessmann, Rygaard, Landolt & Hecker, 2016; James et al., 2017; Morison, Taylor & Fawns, 2018). Consequently, despite the perceived value of training on ‘attachment difficulties,’ it remains unclear how staff understand, and translate, this theory into practice.

In a mapping exercise, Furnivall et al. (2012) examine the degree to which attachment theory is taught and used in practice. They indicate a lack of shared language on attachment and a sense that professionals know ‘the word but not the underlying theory’ (Furnivall et al., 2012, p. 29). However, their method and data analysis lack transparency. Other findings highlight that professionals, including residential staff, often attribute challenging behaviour to attachment difficulties, and blur theoretical concepts when transferring them to practice (McLean et al., 2013; McLean, 2011). More specifically, they conceptualise attachment in a way that is not consistent with contemporary theory, such as perceiving attachment to be a close relationship, a transferable skill, and a capacity that is limited, and not desired, by some children (McLean et al., 2013). The salience of these themes for residential staff is unclear due to their use of a heterogeneous sample.

Alternative findings indicate that residential staff are familiar with attachment theory, but may be less acquainted with symptoms indicative of Reactive Attachment Disorder (RAD) (Fergusson, Follan, Macinnes, Furnivall & Minnis, 2011). However, research continues to debate the position of attachment theory in relation to diagnostic categories, such as RAD (Allen, 2011; Zeanah & Gleason, 2015; Zilberstein, 2006). Notably, the low survey response rate increases risk of bias in these findings. On the basis of limited research, an in-depth exploration of how residential staff make sense of, and use, attachment theory in their practice is warranted.
1.4 Justification for Current Study

Although attachment theory features throughout policy and research, there is limited empirical evidence of how it is used in practice. Existing research suggests a lack of shared language between professionals and a blurring of theoretical concepts into practice. To the best of our knowledge, no previous research has focussed solely upon frontline residential staff, who have a fundamental role in supporting young people. Therefore, it is important to understand how they make sense of, and use, attachment theory in practice. This may enhance multi-agency work; stimulate a shared language between professionals; bridge the gap between theory and practice; and help to refine training and support for residential staff.

1.5 Aims

The overall aim of this study is to explore how residential childcare workers make sense of, and use, attachment theory in their practice with looked after children and young people. This study also aims to identify whether any components of attachment theory are particularly salient to residential childcare workers, and to what extent their conceptualisations of attachment draw upon contemporary attachment theory.

2. Method

2.1 Grounded Theory

Qualitative methods were selected due to the limited existing evidence base, and the aim of obtaining a rich and in-depth understanding, which could otherwise be limited by quantitative methods (Corbin & Strauss, 2015; Smith et al., 2015). Grounded theory was considered the most appropriate method for the research aims due to its
focus upon actions and social processes (Charmaz, 2014; Glaser & Strauss, 1967). Indeed, grounded theory tends to ask questions focussed upon ‘what’ and ‘how’ certain processes occur (Sbaraini, Carter, Evans & Blinkhorn, 2011).

Grounded theory aims to develop a theory based within the data, from a set of core procedures, including concurrent data collection and analysis (Charmaz, 2014). Arguably, grounded theory exists in various forms, based upon different philosophical positions and conflicting epistemological and ontological views (Breckenridge, Jones, Elliott & Nicol, 2012; Howard-Payne, 2016; Levers, 2013; Taghipour, 2014). Originally, Glaser and Strauss (1967) assumed an objective reality alongside un-biased researchers, although many now argue that meaning is constructed rather than discovered (Charmaz, 2006; Corbin & Strauss, 2015). To increase transparency, the lead author identifies with a constructivist approach, including a subjective epistemological stance and relativist view (Charmaz, 2006). It is therefore assumed that individual interpretation and co-creation of knowledge can produce multiple realities (Breckenridge et al., 2012; Charmaz, 2014). A statement of reflexivity is included to recognise the potential influence of research process and author characteristics on findings (See Appendix 5) (Mays & Pope, 2000; O’Brien, Harris, Beckman, Reed & Cook, 2014).

2.2 Sampling and Participants

This study initially used purposive sampling, whereby participants were selected based upon particular criteria; in this case, employment as a residential childcare worker. Participants were then selected based upon potentially relevant criteria in the form of theoretical sampling, to test preliminary interpretations of the data. Through member reflections, all participants were given the opportunity via email to provide feedback on early categories and the connections between them (Charmaz, 2014).
Telephone or email contact was made with service managers across three local authorities. Participant information sheets were then disseminated to residential childcare workers and recipients were notified to inform their service manager or the lead author if they wished to participate in the study (See Appendix 6 for information sheet). For inclusion, participants had to be employed either part-time or full-time as a residential childcare worker, for a minimum duration of six months.

In total, twenty participants were interviewed across eight different residential childcare services. All services were funded by local authorities and provided short or long-term care for children and young people. Participants were fourteen females and six males; all Scottish; aged between 24-63 years (M= 45.8, SD= 11.7). All participants were employed full-time. Length of experience within residential childcare ranged from 1-32 years (M= 14.6, SD= 8.9), with 95% detailing previous training on ‘attachment theory’ through a Child and Adolescent Mental Health Service (CAMHS), local authority, or previous qualifications. Eight participants detailed their highest qualification as University degree level, followed by eleven at college level (e.g. Higher National Certificate), and one with Secondary School exam qualifications. Fourteen participants had parenting experience aside from their residential childcare role, including two participants as foster carers.

2.3 Procedure

In accordance with the research aims, a semi-structured interview was used. This aimed to facilitate in-depth exploration of the participants’ perspective, including their meanings and actions regarding attachment theory (Charmaz, 2014). A semi-structured interview schedule with open-ended questions on core topics was therefore constructed (See Appendix 7 for interview schedule). This was discussed with the second author and piloted with one participant, who provided feedback on their experience of the interview process.
All interviews were audio-recorded and conducted one-to-one between December 2016 and March 2017 by the lead author within a private location in the participants’ place of work. Interview duration ranged from 29-109 minutes (M= 49, SD= 18.01). During interviews, the researcher used the interview schedule as a flexible tool for exploration, whilst also taking the participants’ lead and asking follow-up questions, to clarify meanings and obtain further detail (Charmaz, 2014). Interview content evolved in line with emerging ideas and construction of theory (Charmaz, 2014).

After each interview, memos were noted, including observations of staff and interview process (Charmaz, 2014; Sbaraini et al., 2011). Participants completed a written, demographic questionnaire (See Appendix 8 for questionnaire) and a debrief was then provided. Participants were informed that they would be notified of findings upon study completion.

2.4 Ethics

Ethical approval was granted by the University of Edinburgh (See Appendix 9); and three Local Authorities (Anonymised documentation available on request). This study was also registered with the NHS Research and Development department of the primary recruitment site. This study adhered to a data management plan, including principles of data protection and confidentiality. All data was anonymised upon transcription. Participants completed written, informed consent and were aware of their right to withdraw from the study without any adverse effects (See Appendix 10).

2.5 Data Analysis

Interview audio-recordings were transcribed verbatim by the lead author between December 2016 and April 2017. All transcripts were read and then re-read, and audio-recordings were retained to inform analysis (e.g. tone of voice). In constructivist grounded theory, an iterative process of data collection and analysis is used for constructing theory (Charmaz, 2014). Data analysis was supported by the use of
Dedoose software, resulting in an audit-trail (Dedoose Version 8.0.35, 2018). During initial analysis, line-by-line coding was completed, with a particular focus upon actions and processes (Charmaz, 2014) (See Appendix 11 for coding examples). Focussed coding was then conducted using the constant comparative method of comparing data and codes within and between transcripts. Throughout this process, theoretical sampling was used in the form of new interview questions and participant selection based upon potentially relevant criteria, to explore gaps and variations within the data and test preliminary interpretations (Charmaz, 2014).

This enabled theoretical saturation, whereby no new properties of the theoretical categories were found (Charmaz, 2014). The majority of core categories, apart from one (e.g. ‘The role of context’), saturated within the first half of the sample (N=10), with only minor refinements throughout remaining interviews. Full saturation was achieved by the latter quarter of all interviews.

Throughout analysis, memo-writing informed the construction of theoretical categories; for example, documentation of codes, comparisons, assumptions, interpretations and further lines of enquiry (Charmaz, 2014) (See Appendix 12 for memo examples). In line with a constructivist approach, different forms of analysis were used to deepen understanding and identify different viewpoints, with no one genre offering an absolute truth (Ellingson, 2009). As part of the crystallisation process, 50% of transcripts were read by the second and third authors (25% each) and then discussed. Coding was also discussed on a monthly basis with the second author. Findings were sent to all participants (N=20) for reflections, of which six responded from four different services, to refine the final categories (Charmaz, 2014).

3. Results

The primary aim was to generate an explanatory theory of how residential staff make sense of, and use, attachment theory in practice. Secondary aims were to identify
whether any components of attachment theory are particularly salient to residential staff and to what extent their conceptualisations draw upon contemporary attachment theory. Findings indicate that ‘doing it naturally with theory in the background’ is the substantive grounded theory, linked to four other core theoretical categories (See Figure 1). Staff outlined an on-going temporal process of ‘building relationships’ through ‘working in a live space’ between staff and young people. Being in this space helped to strengthen relationships and identify needs, which facilitated ‘steering young people towards independence’. Staff also recognised ‘it’s different’ to parenting in a non-corporate family, due to tensions created by contextual factors. Categories and sub-categories are described in turn using anonymised interview excerpts, with all participants linked to a number. Categories are largely inter-related and overlapping, reflecting the complexity of attachment-informed care within the residential setting.

Figure 1 A Grounded Theory Model of Attachment-Informed Care in Residential Childcare.
3.1 Doing it Naturally with Theory in The Background

All staff described their practice with young people as a natural process, as opposed
to being explicitly theory driven. Staff often referred to building relationships and
parenting as being ‘natural’, ‘automatic’ or ‘common sense’:

“I believe it’s just a natural thing to do... but I never think ‘I’m doing this because of the
attachment’, never, it’s an automatic...” (P07)

Within this natural process, many staff described using themselves- their personality
and experiences- more than theory:

“...our practice isn’t done from reading a journal, it comes from a wee bit kinda deeper
inside...” (P10)

Throughout all interviews, staff had a general awareness of attachment theory and
often reflected gaining a ‘loose’ understanding from it. They often recognised its
value but described it as not being at the forefront of their practice; for example, it
not being ‘up there’ in priorities, not remembering or thinking about theory, or
believing they could use it more:

“...it’s like, it’s there, it’s on the back-burner, you are aware of it, you know about it,
emm...” (P14)

The majority of staff also had difficulty articulating themselves, whilst explicitly
discussing attachment:

“...[long pause] if you took the attachment theory or whatever, he has had like loads
of foster placements cos he just cannae seem to, I don't know, you know that way
[long pause], how he would [pause] know what I mean [mumbles], like, like, if I...” (P06)
Some staff could articulate themselves more clearly when discussing concrete concepts they may use in practice, such as Playfulness, Acceptance, Curiosity and Empathy (PACE) (Becker-Weidman & Hughes, 2008). Interestingly, others described using elements of attachment theory but finding it hard to explain how. Some staff also outlined exceptions where theory comes to the forefront; for example, to consolidate their practice or when the natural process is not working:

“...and until we probably need to look at the theories when things are going wrong, if we are doing something wrong and it's not working, then that's when you would need to dig in and look at the theories...” (P08)

Moreover, staff describe connecting with theory more and seeing its relevance when it can be linked to particular young people. This appeared to help staff translate theory into practice:

“...but if it is relevant and you can relate to it, it has that kinda same effect where you go 'Oh, do you know what actually' and you start thinking about maybe individual young people that you’re working with just now or maybe even somebody that you worked with in the past and you think ‘Oh, right, ok.’” (P18)

3.2 Building Relationships

From early analysis, it was evident that staff rarely spoke about attachment theory unless prompted, yet they had a strong narrative in regards to a core, natural process of building relationships. Occasionally, they used the terms ‘relationship’ and ‘attachment’ interchangeably. Building relationships was often associated with getting to know the young people, both in terms of their current presentation and history:

“...and it really is about building relationships full-time. I believe that relationships, and I have said it for a long time, is the crux of everything that you do...” (P20)
These relationships were often described as being varied with young people, whereby some are closer than others, and young people will often seek out a particular staff member. Staff often attributed varied relationships to different characteristics and personalities, including use of themselves in relationship formation:

“...my relationships with the young people are all kinda different given their personality and their experiences, how just young people get on with you and your personality because it, it can be quite a natural thing...relationships take a lot of work and stuff like that but there is definitely young people that you come across that it is more natural with because of you know maybe similar experiences or personalities, sense of humour, morals or whatever...but I would like to think that I have got...good relationships, stronger ones with certain individuals than others but that's just human nature really...” (P19)

Therefore staff acknowledged that there is not one, prescriptive way of ‘being’ with young people:

“...you are using who you are as well as, you know, whatever skills might be around in your colleagues...so, it’s a collective effort, it’s not about everybody having to be bound by the job description of a residential [staff member]...” (P15)

Alongside varied relationships, the majority of staff recognised that relationships are not always easy. They often referred to young people presenting in conflicting ways with them, whereby every moment and day can be different, even if they have a close relationship with a young person. Staff often described being pushed away and not allowed close to young people, yet also being pulled and tested:

“...she'll kinda push people away if they start getting too close, so, emmm even if you have got a good relationship wae her, doesnae mean it’s always going to be a good day [Laughs]...” (P02)

Staff often made sense of relationships not being easy through using their knowledge of the young people’s backgrounds, particularly placement moves, adults being in and out of their lives, and the associated feelings of rejection, abandonment and loss.
Throughout interviews, there was a salient recognition and understanding of the mistrust that young people may present with:

“...they are wary of people because of their experiences in the past but ehh, they cannae really get close to people or trust people because they will go away and leave them and they will go and see somebody else or whoever it might and they will be left to start off, you know, all over again...” (P11)

In response to making sense of mistrust, staff described being there ‘no matter what’ in their relationships with young people. This included being there regardless of the young person’s presentation and a need to continue being there, despite challenges. This often had a purpose of proving to the young people that they could be trusted, whereby they were not going to be another adult to leave or reject them:

“...because often they will maybe push you to see how far they can push you, to see how far, how much you will take emm, so it’s just about ‘Naw, I’ll be here for you.’” (P01)

3.3 Working in a Live Space

Throughout all interviews, staff provided vast examples of two parallel, overlapping processes, which occur in practice; more specifically, using awareness of their own experience and that of young people, to then work in a live space:

“...but we do work in a live space and it’s that space between where the child is at and the practitioner is at and the working space is inbetween and that’s the space where the work gets done...” (P05)

In order to see behind the young people’s behaviour, staff identified young people’s thoughts, feelings, needs and triggers. These often co-occurred in the data and functioned to try and make sense of the young people’s behaviour. As highlighted by one staff member, “...it’s about meeting the young person at where they are at” (P04). To enable this, many staff spoke about needing to firstly ‘take a step back’:
“...so if you can ascertain what it is they are wanting because behaviour comes from feelings and needs so you'll maybe be seeing behaviour but you'll have to take the step back and go right, what are they really wanting here? They are behaving this way but that's because of what's underneath...” (P01)

It was common for staff to recognise inconsistency between a young person’s behaviour and the emotion underneath:

“...right in your face, grabbing your clothes, [laughs] right up close to you, shouting and bawling, swearing at you, threatening you with, you know, ‘I'm going to do this, I'm going to do that’ but again, they weren't, they were just totally and utterly fearful...” (P05)

One staff member explicitly highlighted how seeing behind a young person’s behaviour can support the process of building relationships:

“...so, what you see is not always what it is and down below, so, that's what you have kinda got to, walk through the door and think ‘...there is something happened,’ not just that they are shouting and bawling for no apparent reason, and once you do that, it kinda helps your relationships more and more....” (P12)

However, a small number of staff members talked about sometimes finding it difficult to see behind behaviour and make sense out of it:

“They would go into tantrums for no reason whatsoever and they always say there is a trigger but sometimes there is nae trigger, there is nothing...” (P07)

In a parallel process to seeing behind young people’s behaviour, some staff described the value of self-awareness, whilst others evidenced this implicitly in their reflections upon incidents with young people. Through self-awareness, staff identified their own feelings, often labelled as ‘being human’:

“You’re tired, you’re a wee bit burnt out yourself, you get a bit crabbit, more crabbit than you would normally be, that sort of thing, you know. End of the day, we’re human beings just the same as anybody else....” (P03)
Staff subsequently spoke about the importance of trying to not take behaviour personally. This was a common strategy for regulating their own emotions; and it helped to both facilitate, and respond to, seeing behind behaviour:

“I think, what you have always gotta try to remember, it might sound some of the most personal, it might feel personal some of the behaviour that they display but it’s no really aimed at you, it’s aimed at the world, it’s aimed at ‘Why, why, why is this? Why am I here? Why has this happened to me?’” (P01)

3.4 Steering Young People Towards Independence

Throughout interviews, staff showed a diverse range of actions towards young people, all of which had a temporal component of trying to move them forward and encourage their development. ‘Using’ relationships often helped to facilitate this process. Staff frequently spoke about the future and young people moving on and therefore needing the skills to become independent. Two staff members used the word ‘steer’ to describe this process, which appeared to encapsulate a mixture of direction and movement, towards moving on:

“...and it's just about trying to steer him in the right way and get the right supports in place before he moves on from here...” (P11)

The process of steering young people was largely underpinned by meeting young people ‘where they are at’, particularly identifying their needs and subsequently responding to them. Needs were often related to knowledge of individual young people’s backgrounds, including gaps in their development. This resulted in a wide variation of staff actions including, but not limited to, teaching new skills (e.g. managing emotions, social skills), giving new experiences, and providing safety, nurture, structure, routine and boundaries. Staff recognised that every young person is different and there is not one approach that works for all young people. All interviews reflected an element of staff explaining and reasoning with young people,
to aid their learning. Moreover, all interviews reflected a core process of identifying and then responding to a need, to advance development:

“...what it is I'm trying to achieve for them as part of their, their care plan to support their safety, their development and eh, their individual needs...” (P05)

In many interviews, staff discussed trying to steer young people, whilst also balancing this with their current development stage. Over three quarters of staff acknowledged a young person’s developmental stage in terms of their functioning, in contrast to their actual chronological age:

“...when [young person] started crying, it's because she’s only 2 or 3 and you have said no to her and she is really disappointed and you know, it's things like that that you have to, you have to give cognisance to but at the same point, you have to equip children for being 15 years old out in the community and so, I think, I think that getting that balance is probably one of the most difficult tasks that we have got...” (P15)

Similarly, staff often recognised a tension between steering young people within a protective environment and the realities of a bigger world:

“...you are there to protect them...it's for their protection and guidance because they will be moving on and it's a big, bad world out there...” (P07)

3.5...But it's Different (The Role of Context)

Alongside evidence that staff are engaged in natural processes of parenting and building relationships, they also highlighted many differences due to the residential context. This category was constructed from a range of different tensions, with staff re-iterating the difficulties and dilemmas of their role in their feedback from member reflections. The following quotation illustrates this sense of difference:
“We try and install that same.... upbringing for our young people that’s in care, as a young person that’s not in care emm...you try and make it a similar upbringing but it’s also very different...” (P04)

Staff often discussed the tension of trying to establish their role. Staff varied both within and between transcripts in terms of how they conceptualised their role, albeit they all moved back and forth along a continuum of being paid but it not being a ‘normal’ job; being different from real-life family; and sometimes being like family (e.g. ‘big sister or auntie-ish kinda role’, ‘daft dad’). Some staff speculated whether young people may also experience this tension:

“...you might see them wanting or looking for a mother or father and wanting you to be that person but knowing that you are not that person cos you work here and that can be really, really difficult for them to manage, knowing that you go home and this is where they are left...” (P16)

Staff also recognised the complexity of trying to parent individual young people in a group-living situation. For example, often having to ‘divide’ themselves between young people and manage group dynamics. In particular, staff articulated efforts to address individual needs, whilst also being aware of the wider group. They also described incidents whereby young people may influence each other, resulting in heightened anxiety and agitation across the group:

“It can be difficult because we have [number] young people, we are not having one young person and we could have [number] of those young people really annoyed at one time or you could have one or you could have the whole house up in arms and feeding off each other...” (P19)

Many staff referred to ‘chipping away’ and making small steps, yet not knowing if change will happen due to the difficulties that young people have experienced. On this basis, they recognised needing to do things differently. At times, noticing small steps of progress appeared to give staff a sense of accomplishment. However, chipping away also sat alongside a sense of hopelessness, whereby staff expressed
concern that they may not be able to fix or change everything and may not be able to make an impact:

“...and her issues are so deep rooted I don't know if we will ever see any kinda outcome or whether it will be, if she does have a positive outcome, it will be a lot further down the line when she's not with us anymore [sigh]...” (P02)

Indeed, staff often reflected on varied outcomes for young people, often with an underlying sense of frustration:

“...emm, that's what we try to do here with them, the youngsters. Some buy in, some don't buy in, for whatever reason it is, and if we had a magic formula, you know, we would be successful...” (P11)

Closely linked to ‘chipping away’ with young people was the difficulty of it taking time. Over three quarters of staff reflected on everything taking more time with young people. However, this appears to create a particular tension in a system where time is uncertain or limited:

“...as I say, their time here is short and we have got to try and cram a lot in if they stay until they’re 16, 17, 18...” (P11)

Certainly, others reflected on the differential impact of having either limited, or more time, to facilitate building relationships:

“...this is like a long-term unit that we are working in, which is quite good because you have that opportunity to build relationships. You can work with some children for many years...” (P17)

“I have never really had too many problems with the kinda building a bit of a relationship with most kids...apart from, at times, you maybe have some kids that come in and they are just a wee bit more short-term and you don’t get that time to really kinda build on it...” (P18)
In a final but predominant tension, many staff talked about the difficulty of creating belonging and claiming young people, alongside the tension of what happens when they need to leave residential care. Many tried to ease this tension through keeping in touch and reminiscing with young people or, as illustrated in the following quotation, creating a gradual separation:

“...but it's been very important as well for the young person to hear that even though you will move out to there, you will still come back for dinners and that could be quite frequently at the beginning and then eventually, you know, as he starts to adapt then he can, that can be less and less but you'll still be welcome to come here and visit, you know, like you would if you were moving on from the family home...” (P04)

However, in other instances, staff spoke about the separation being more difficult, and conflicting with other core, natural processes, such as building relationships:

“...they don’t get to come back to you, they don’t get to come up and visit you, they don’t get to come back in. So, you teach them that this becomes their home and I am a safe person to be with, and there is a lot of automatic bonding, natural bonding happens, within some of the really good relationships, because some of the kids open up and when they open up to you personally and work through a lot of deep things then that bonding automatically happens and then they are told ‘Right, off you go but you know, you need to phone and you can't visit’ and it's awful, awful...” (P20)

4. Discussion

4.1 Summary of Findings

Overall, findings indicate that staff appear to practice in an attachment-informed way. However, they do not always have explicit awareness of theory or a coherent narrative to describe theory to practice links. Instead, they focus upon a core, natural process of building and maintaining relationships. This occurs in a challenging context which can, at times, undermine the natural process. Theory sits in the background but can be drawn upon to address specific difficulties, particularly when there is clear
relevance to a young person. Staff had difficulty articulating attachment theory and therefore, they did not tend to conceptualise attachment in relation to contemporary theory. At times, they considered attachment to be interchangeable with relationships. On this basis, staff did not describe any components of attachment theory as being particularly salient, albeit they recognised the value of relationships with young people.

The importance of relationships is perhaps not surprising given that existing qualitative research highlights relationships as being at the heart of residential childcare practice (Cahill et al., 2016; Steels & Simpson, 2017). The finding of varied relationships is also supported, through young people having the choice of different adults to connect with in the residential setting (Cahill et al., 2016; Furnivall, 2011). However, it is novel to establish that staff narrative is dominated by relationships, in contrast to the language of ‘attachment-informed’ care in policy and research. Findings extend understanding through highlighting that staff have difficulty articulating theory to practice links, yet often demonstrate components of attachment theory in practice. This may reflect the essence of attachment theory as a natural human process, not usually involving explicit theoretical awareness (Bowlby, 1944; 1988). This natural process may be indicative of staff attachment styles and their subsequent influence upon interactions with young people. Existing evidence suggests that client-therapist attachment styles, alongside complexity of client presenting issues, may influence the therapeutic alliance (Bucci, Seymour-Hyde, Harris & Berry, 2016). Moreover, oppositional attachment styles in the client and therapist may produce a better alliance (Bucci et al., 2016). Despite this research not being conducted in residential care, it highlights the potential influence of staff attachment style on relationships with young people.

Staff use of common sense in practice is evident in existing literature but may also be derived from learning within the milieu, particularly when staff are sensitive to their environment (Smith, 2017; Ward, 2004). This re-iterates the importance of
encouraging staff self-awareness and reflective practice. Common sense may contribute to a culture of ordinary living but special considerations are required in residential care (Ward, 2004). It is therefore encouraging to clarify through current findings that staff can bring theory to the forefront. However, findings concur with existing research that theory may be blurred upon translation into practice, such as describing attachment as being interchangeable with relationships (Furnivall et al., 2012; McLean et al., 2013). Therefore, theory could become rhetoric or risk being misused, creating a disconnection from the evidence base. Nevertheless, in line with previous research, staff use knowledge of young people’s backgrounds, to make sense of difficult relationships and conflicting presentations (McLean, 2015; Tomkins, 2014). These findings extend current understanding by highlighting that staff pay particular attention to the impact of repeated loss, separation, and associated mistrust; and young people’s developmental, as opposed to chronological, age. Staff also try to see behind behaviour to establish its meaning and not take it personally (Moses, 2000; Watson, 2002).

Interestingly, inter-related staff actions of working in a live space, consistently being there, and steering young people, resonate with components of attachment theory. In particular, they apply to maternal sensitivity (e.g. identifying and responding to needs) and establishing a secure base (Ainsworth et al., 1978; Bowlby, 1988). However, research critiques maternal sensitivity through the intergenerational transmission of attachment and the ‘transmission gap.’ Arguably, maternal and infant attachment is not fully mediated by maternal sensitivity, and the association between maternal sensitivity and infant attachment is not as strong as previously considered (Pasco Fearon & Roisman, 2017; van Ijzendoorn, 1995; Verhage et al., 2016). The mechanisms of change within clinical interventions, which aim to foster attachment security, therefore remain unclear (Pasco Fearon & Roisman, 2017). However, current findings also resonate with understanding of reflective functioning, whereby staff reflect upon their own and young people’s mental states, to find meaning in behaviour and respond to young people’s needs (Fonagy & Target, 1997). A recent
systematic review concludes that higher maternal reflective functioning is associated with adequate caregiving, and a child’s attachment security (Camoirano, 2017). Whilst this review is not conducted within residential care, it may suggest benefit in supporting staff reflective function.

However, the micro-caregiving environment, including child-caregiver ratio, can also impact upon attachment security in alternative care (Garcia Quiroga & Hamilton-Giachritsis, 2017). Certainly, current findings indicate the likely impact of contextual factors upon relationships and attachment-informed care. Research increasingly outlines staff tension in defining their role; particularly the continuum of being staff but also like family (Fowler, 2015; Kendrick, 2013; McLean, 2015; Steels & Simpson, 2017). Other findings express concern regarding the dynamics of group care, including the impact of young people’s behaviour on each other (McLean, 2015; Mullan, McAlister, Rollock & Fitzsimons, 2007) and balancing the needs of individuals, with those of the wider group (Furnivall et al., 2007; McLean, 2015). Similarly, existing research reflects the issue of having limited or uncertain time with young people in residential care, with a particular focus on the value of time in building relationships (Cahill et al., 2016; Steels & Simpson, 2017; Tomkins, 2014). The importance of creating belonging is also recognised (Skoog, Khoo & Nygren, 2015; Watson, 2002). However, current findings draw attention to the conflict of belonging in a system where young people need to move on.

It is clear from this novel, grounded theory model that staff have a complex and challenging role, fraught with tensions in the residential system. Understandably, staff sometimes feel hopeless and perceive difficulty in making a difference (Furnivall, 2007). The importance of staff support is paramount given the parallels which may be drawn to wider research on staff burnout and traumatic stress in residential settings (Abbate, 2015; Steinlin et al., 2017).
4.2 Strengths and Limitations of Study

Findings inform our understanding of attachment theory implementation into practice, including potential barriers, and implications for staff support. Study rigour is evident through a crystallisation process, including constant comparison between and within the data; theoretical sampling; involvement of three authors during analysis; and member reflections (Mays & Pope, 2000; Tracy, 2010). Detailed memos and a reflexivity statement demonstrate sincerity, alongside the value of congruence between a constructivist position and study aims, method and analysis (O’Brien et al., 2014; Tracy, 2010).

This study was challenged by a rapid uptake of participants and therefore may not have derived full benefit from an iterative process of data collection and analysis. The nature of research aims increased the risk of findings being deduced from existing theory, although the above strengths and retention of staff language, ensured findings were grounded within data. From a constructivist viewpoint of no absolute truth, findings may not generalise to other similar settings or staff groups.

4.3 Implications for Research

Disparity between attachment theory research and the residential staff narrative, illustrates a need for greater communication between different stakeholders. Clearer definitions of both attachment-informed care and relationships are required in research and practice to address the risk of theory becoming rhetoric. Recommendations for attachment-informed care must not overlook the complexity of the residential system and challenges faced by staff. Failure to recognise these inherent tensions is likely to result in over-simplistic references to attachment theory, which do not resonate in practice. To encourage effective transmission of theory into practice, lessons may be learnt from implementation science (Bauer, Damschroder, Hagedorn, Smith & Kilbourne, 2015). Future attachment training evaluations may
benefit from measurement of staff behaviour, alongside learning, and training acceptability (Kirkpatrick, 1994). Use of mixed methods and longer-term outcomes may also help to detect more subtle change in staff practice, if theory is only used when deemed relevant.

Findings highlight the perceived value of relationships between staff and young people. It is therefore recommended that future research develops understanding of interactions between staff, young people and context, to establish how these may influence outcomes (Coman & Devaney, 2011; James et al., 2017). Insight into factors, which could facilitate therapeutic change, may be gained through exploration of staff variables, such as reflective function. Moreover, research would benefit from exploring young people’s views on the tensions reported by staff, such as group dynamics.

4.4 Implications for Practice

Young people value diversity within a care team therefore findings may be considered in relation to staff recruitment. Staff may benefit from reflection upon their own attachment styles and potential practice implications, including how they respond to young people. Although these findings suggest didactic, theory-based training may be less effective, it is nevertheless recommended that residential staff receive training on attachment theory: specifically, training which provides explicit links to examples of young people; limits the use of jargon; creates an individualised, safe space to discuss relationships; and facilitates reflective functioning. Other structures such as on-going supervision, consultation and team meetings, are likely to be paramount in facilitating theory to practice links, and overcoming interpersonal challenges within residential childcare. Support structures may also help to prevent staff burnout; in particular, when there is a focus upon reducing staff negative affect and depersonalisation of young people, and increasing job satisfaction and a sense of
personal accomplishment (Abbate, 2015). Consideration of staff burnout is fundamental given the potential implications for quality of care and staff turnover.

System factors, such as effective matching of keyworkers and young people, adequate child-caregiver ratios and greater certainty around placement length, may ease formation and maintenance of relationships. However, this does not remove the fundamental conflict between attachment-informed, relationship-based practice in a system which is at odds with processes being encouraged; in particular, its inability to provide indefinite relationships for all young people. On this basis, findings highlight support for efforts to increase permanency and reduce placement breakdowns in longer-term care options. In the instance of residential care being the best option for a young person’s needs, increased support and flexibility is required for staff and young people, to manage tensions of moving on and maintaining contact. This is important to avoid a further, difficult loss, which may undermine relationships within residential childcare.

In conclusion, staff practice is often consistent with contemporary attachment theory, yet their narrative focuses upon relationships and does not tend to describe theory to practice links. It is important to consider this finding to bridge the gap between theory and practice, and ensure effective use of staff training and support. Recommendations for attachment-informed care must not overlook the complexity of the residential system and the challenges faced by residential staff.

Conflicts of interest: None.

Funding: This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sector.
5. References


Tomkins, L. (2014). *Consistent inconsistency; The experience of interpersonal relationships from the perspective of residential staff and young people in the looked after system* (Unpublished doctoral thesis). University of Birmingham, UK.


6. Thesis Portfolio References


McCurdy, B.L. & McIntyre, E.K. (2004). ‘And what about residential…?’ Re-
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Santa Lucia, P.M. (1989). *Developing and implementing democratic parenting methods in a group home servicing children ages three to eleven*. (Unpublished


Tomkins, L. (2014). *Consistent inconsistency; The experience of interpersonal relationships from the perspective of residential staff and young people in the looked after system* (Unpublished doctoral thesis). University of Birmingham, UK.


7. Appendices

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Appendix 2: PROSPERO Protocol
Appendix 3: Quality Criteria
Appendix 4: Attachment and Human Development Author Guidelines
Appendix 5: Statement of Reflexivity
Appendix 6: Participant Information Sheet
Appendix 7: Semi-Structured Interview Schedule
Appendix 8: Demographic Questionnaire
Appendix 9: Ethical Approval
Appendix 10: Consent Form
Appendix 11: Examples of Coding
Appendix 12: Examples of Memos
Appendix 1: Children and Youth Services Review Author Guidelines (Relevant sections)

Types of Paper

The journal publishes full-length articles, current research and policy notes, and book reviews.

Ethics in publishing

Authors should include a statement in the manuscript that informed consent was obtained for experimentation with human subjects. The privacy rights of human subjects must always be observed.

Role of the funding source

You are requested to identify who provided financial support for the conduct of the research and/or preparation of the article and to briefly describe the role of the sponsor(s), if any, in study design; in the collection, analysis and interpretation of data; in the writing of the report; and in the decision to submit the article for publication. If the funding source(s) had no such involvement then this should be stated.

References

There are no strict requirements on reference formatting at submission. References can be in any style or format as long as the style is consistent. Where applicable, author(s) name(s), journal title/book title, chapter title/article title, year of publication, volume number/book chapter and the pagination must be present. Use of DOI is highly encouraged.

Formatting requirements

There are no strict formatting requirements but all manuscripts must contain the essential elements needed to convey your manuscript, for example Abstract, Keywords, Introduction, Materials and Methods, Results, Conclusions, Artwork and Tables with Captions. If your article includes any Videos and/or other Supplementary material, this should be included in your initial submission for peer review purposes. Divide the article into clearly defined sections.

Figures and tables embedded in text

Please ensure the figures and the tables included in the single file are placed next to the relevant text in the manuscript, rather than at the bottom or the top of the file.
The corresponding caption should be placed directly below the figure or table.

**Article structure**

**Subdivision - numbered sections**

Divide your article into clearly defined and numbered sections. Subsections should be numbered 1.1 (then 1.1.1, 1.1.2, ...), 1.2, etc. (the abstract is not included in section numbering). Use this numbering also for internal cross-referencing: do not just refer to 'the text'. Any subsection may be given a brief heading. Each heading should appear on its own separate line.

**Essential title page information**

**Title.** Concise and informative. Titles are often used in information-retrieval systems. Avoid abbreviations and formulae where possible. **Author names and affiliations.** Please clearly indicate the given name(s) and family name(s) of each author and check that all names are accurately spelled. Present the authors' affiliation addresses (where the actual work was done) below the names. Indicate all affiliations with a lower-case superscript letter immediately after the author's name and in front of the appropriate address. Provide the full postal address of each affiliation, including the country name and, if available, the e-mail address of each author.

**Corresponding author**

Clearly indicate who will handle correspondence at all stages of refereeing and publication, also post-publication. **Ensure that the e-mail address is given and that contact details are kept up to date by the corresponding author.** **Present/permanent address.** If an author has moved since the work described in the article was done, or was visiting at the time, a 'Present address' (or 'Permanent address') may be indicated as a footnote to that author's name. The address at which the author actually did the work must be retained as the main, affiliation address. Superscript Arabic numerals are used for such footnotes.

**Abstract**

A concise and factual abstract is required. The abstract should state briefly the purpose of the research, the principal results and major conclusions. An abstract is often presented separately from the article, so it must be able to stand alone. For this reason, References should be avoided, but if essential, then cite the author(s) and year(s). Also, non-standard or uncommon abbreviations should be avoided, but if essential they must be defined at their first mention in the abstract itself.
**Highlights**

Highlights are mandatory for this journal. They consist of a short collection of bullet points that convey the core findings of the article and should be submitted in a separate editable file in the online submission system. Please use 'Highlights' in the file name and include 3 to 5 bullet points (maximum 85 characters, including spaces, per bullet point).

**Keywords**

Immediately after the abstract, provide a maximum of 6 keywords, using American spelling and avoiding general and plural terms and multiple concepts (avoid, for example, 'and', 'of'). Be sparing with abbreviations: only abbreviations firmly established in the field may be eligible. These keywords will be used for indexing purposes.
Appendix 2: PROSPERO Protocol

Version 2: 6th March 2018

PROSPERO
International prospective register of systematic reviews

Psychosocial outcomes of staff training in residential childcare: a systematic review
Ailsa Morison, Emily Taylor

Citation

Review question
1. Does staff training improve child and/or carer psychosocial outcomes in residential care settings?
1a. What is the nature of these staff training interventions within residential child care?
1b. How are psychosocial outcomes being measured?

Searches
A search will be conducted in the following electronic bibliographic databases: PsycINFO; MEDLINE; EMBASE; Applied Social Sciences Index and Abstracts (ASSIA); Education Resource Information Center (ERIC); Social Services Abstracts; and ProQuest Dissertation and Theses Global. Reference lists and citations of eligible studies will then be searched; and contact will be made with any relevant authors in the field.
The search strategy will include terms relating to the population (e.g. personnel, homeparent, staff, worker, caregiver), the workplace (e.g. residential care, children’s home, group home, treatment facility) and the intervention (e.g. training, teaching, skills, residential experiences).
There will be no date or language restrictions applied to the search.

Types of study to be included
Inclusion: This review will include any studies that report quantitative data from measures used at more than one time point. Exclusion: Studies that do not report any quantitative data or only report this data at one time point.

Condition or domain being studied
This review will focus upon any measure of psychosocial outcomes for children and/or caregivers. For example, this may include staff knowledge, skills or attitudes; staff or child behaviour and/or psychological well being; and quality of child-caregiver interactions.

Participants/population
Inclusion: Any staff member and/or caregiver working in a residential childcare setting for children and young people, with the predominant function of child welfare. ‘Group homes’ will be included due to their similarity to residential childcare settings (e.g. similar level of permanence and not focussing upon a single caregiver-child dyad).
Exclusion: Staff working in residential services focussed solely upon specialist physical health needs; generic psychiatric care; youth justice; education (e.g. residential schools); or intellectual disability.

Intervention(s), exposure(s)
Inclusion: Any staff ‘training’ for the purposes of improving psychosocial outcomes in children and/or caregivers in residential childcare. This review will define training as any intervention that focuses upon staff members, and involves teaching knowledge or skills. This training may be in a didactic or interactive format.
Exclusion: Any intervention where the unique contribution of staff training is not identifiable.
Appendix 2: PROSPERO Protocol (Cont’d)

PROSPERO
International prospective register of systematic reviews

Comparator(s)/control
Not applicable.

Primary outcome(s)
Quantitative measures of psychosocial outcomes, such as staff knowledge, skills, or attitudes; staff or child behaviour and/or psychological well being; and quality of child-caregiver interactions.

Secondary outcome(s)
None

Data extraction (selection and coding)
The first author will initially screen studies using their titles and/or abstracts, by applying the defined inclusion/exclusion criteria. Full text of remaining articles will then be assessed for eligibility by the first author, with a proportion also reviewed by second and third author. Any disagreements will be resolved through discussion until an agreement is achieved. Extracted data will include the author, year of publication, country, participant characteristics (e.g. job title, gender), setting (e.g. type of residential service), intervention format and content, sample size, study design, assessed outcomes, measures used, data analysis, and key findings. A data extraction form will be used to facilitate this process. Authors of eligible studies will be contacted to provide any missing and/or additional data.

Risk of bias (quality) assessment
All eligible studies for inclusion will be rated on quality and risk of bias by the lead author. A third of included articles will then be independently rated by the third author. Any disagreements between the two raters will be discussed until an agreement is achieved. A new quality tool will be developed to conduct quality ratings, based upon guidance from CRD and SIGN 50. This will include criteria on the study aims, design, confounding variables, sampling strategy, training intervention, outcome measures, and analyses.

Strategy for data synthesis
A narrative synthesis will be conducted due to the heterogeneous nature of studies.

Analysis of subgroups or subsets
None planned.

Contact details for further information
Alisa Morison
s0820733@sms.ed.ac.uk

Organisational affiliation of the review
University of Edinburgh, UK

Review team members and their organisational affiliations
Miss Alisa Morison, University of Edinburgh, UK
Dr Emily Taylor, University of Edinburgh, UK

Anticipated or actual start date
28 November 2016

Anticipated completion date
28 January 2018

Funding sources/sponsors
NES

Conflicts of interest
Appendix 2: PROSPERO Protocol (Cont’d)

PROSPERO
International prospective register of systematic reviews

None known

Language
English

Country
Scotland

Stage of review
Review_Completed_not_published

Subject index terms status
Subject indexing assigned by CRD

Subject index terms
Child; Child Care; Child Health; Humans

Date of registration in PROSPERO
21 December 2016

Date of publication of this version
06 March 2018

Details of any existing review of the same topic by the same authors

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Versions

21 December 2016
06 March 2018

PROSPERO
This information has been provided by the named contact for this review. CRD has accepted this information in good faith and registered the review in PROSPERO. CRD bears no responsibility or liability for the content of this registration record, any associated files or external websites.
Appendix 3: Quality Criteria

Version 6: 23rd August 2017

Quality Criteria

Study Focus

1. Relevant study aims/objectives clearly outlined and addressed.

Internal Validity

2. Study design is appropriate and minimises bias.

3. Potential confounding variables are considered and addressed in the study design and analysis where appropriate.

Participant Selection

4. Sampling strategy minimises the risk of bias and ensures the sample is representative of the wider population of residential staff.

Intervention

5. The staff training intervention demonstrates validity.

Outcomes

6. Outcomes are clearly defined and appropriate measures with robust psychometric properties are employed.

7. Longer-term outcomes are represented through a follow-up evaluation.

Analysis

8. Analyses are appropriate to study design, sample and outcome measures.
### Appendix 3: Quality Criteria (Cont’d)

1 – Relevant study aims/objectives clearly outlined and addressed.

<table>
<thead>
<tr>
<th>Level</th>
<th>Description</th>
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<tr>
<td>Well covered</td>
<td>There is a clear description of the study aims/objectives within the context of a theoretical rationale, and clear conclusions, which fulfil the aims/objectives.</td>
</tr>
<tr>
<td>Adequately addressed</td>
<td>Study aims/objectives are outlined, but theoretical rationale and/or conclusions are vague.</td>
</tr>
<tr>
<td>Poorly addressed</td>
<td>The aims/objectives of the study are unclear, with no theoretical rationale and vague conclusions.</td>
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<td>Not addressed</td>
<td>No aims/objectives addressed.</td>
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<td>Not reported</td>
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2 – Study design is appropriate and minimises bias.

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<td>- Use of a control group</td>
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<td>- Random assignment to groups</td>
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<td>- The selected groups are directly comparable aside from the investigated factor</td>
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<td>Two of the above criteria are met</td>
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110
Appendix 3: Quality Criteria (Cont’d)

3 – Potential confounding variables are considered and addressed in the study design and analysis where appropriate.

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<td>Confounding variables of staff experience, demographics (e.g. gender, age and/or ethnicity), prior training and seniority are identified and considered in study design and/or analysis where appropriate.</td>
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<tr>
<td>Adequately addressed</td>
<td>One or more of the above confounding variables are identified and considered in study design and/or analysis where appropriate.</td>
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<td>Poorly addressed</td>
<td>Described some or all of the above confounding variables but not considered in study design and/or analysis where appropriate.</td>
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<td>Not addressed</td>
<td>No consideration of potential confounding variables.</td>
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4 – Sampling strategy minimises the risk of bias and ensures the sample is representative of the wider population of residential staff.

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<th>Category</th>
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<td>Well covered</td>
<td>Sampling ensures adequate power for statistical analysis to answer the hypotheses and selection process does not introduce any bias and attrition is low (≤20% of total sample) with any attrition over 5% is addressed in analysis.</td>
</tr>
<tr>
<td>Adequately addressed</td>
<td>Sampling ensures adequate power for statistical analysis to answer the hypotheses and either selection process does not introduce any bias or attrition is low (≤20% of total sample) with any attrition over 5% is addressed in analysis.</td>
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<tr>
<td>Poorly addressed</td>
<td>None of the above have been met.</td>
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<td>Not reported</td>
<td>No details of sampling strategy or participant characteristics available or no mention of/unclear whether any participants dropped out.</td>
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### Appendix 3: Quality Criteria (Cont’d)

#### 5 – The staff training intervention demonstrates validity.

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<td>The training is manualised and/or based upon a clear, theoretical or empirical evidence base and/or has a replicable curriculum, with fidelity addressed.</td>
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<tr>
<td><strong>Adequately addressed</strong></td>
<td>The training is manualised and/or based upon a clear, theoretical or empirical evidence base and/or has a replicable curriculum or fidelity is addressed.</td>
</tr>
<tr>
<td><strong>Poorly addressed</strong></td>
<td>The training intervention is not manualised and the theoretical or empirical evidence base is unclear and there is no replicable curriculum, with fidelity not addressed.</td>
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<td><strong>Not addressed</strong></td>
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<tr>
<td><strong>Not reported</strong></td>
<td>No details of training intervention reported.</td>
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#### 6 – Outcomes are clearly defined and appropriate measures with robust psychometric properties are employed.

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<th>Description</th>
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<tr>
<td><strong>Well covered</strong></td>
<td>Outcomes are clearly defined and quantitative measures are appropriate, reliable and independently validated (by different authors).</td>
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<tr>
<td><strong>Adequately addressed</strong></td>
<td>Outcomes are clearly defined and quantitative measures are appropriate but limited in validity or reliability.</td>
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<tr>
<td><strong>Poorly addressed</strong></td>
<td>Outcomes are not clearly defined or quantitative measures are likely to be ineffective in measuring the intended outcomes.</td>
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Appendix 3: Quality Criteria (Cont’d)

7 – Longer-term outcomes are represented through a follow-up evaluation

<table>
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<tr>
<th>Well covered</th>
<th>Longer-term outcomes are represented through a follow-up evaluation and attrition rates are outlined and considered in analyses where appropriate.</th>
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<tr>
<td>Adequately addressed</td>
<td>Longer-term outcomes are represented through a follow-up evaluation but attrition rates not outlined or not considered in analyses where appropriate.</td>
</tr>
<tr>
<td>Poorly addressed</td>
<td>No longer-term outcomes are represented through a follow-up evaluation or attrition is at a level that makes statistical analysis unreliable or not possible.</td>
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<tr>
<td>Not addressed</td>
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<td>Not reported</td>
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<td>Not applicable</td>
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</table>

8 – Data analysis is appropriate to study design, sample and outcome measures

<table>
<thead>
<tr>
<th>Well covered</th>
<th>Analyses are appropriate in relation to study design, sample size and outcome measures employed. Power analysis reported and sample size sufficient for analysis.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adequately addressed</td>
<td>Main analyses are appropriate in relation to study design, sample size and outcome measures, but some minor details or secondary analyses are not appropriate. Power analysis not reported but likely that sample size sufficient for analysis.</td>
</tr>
<tr>
<td>Poorly addressed</td>
<td>Majority of analyses are not appropriate. Power analysis not reported and sample size likely to be insufficient to power analysis.</td>
</tr>
<tr>
<td>Not addressed</td>
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<td>Not applicable</td>
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Appendix 4: Attachment and Human Development Author Guidelines
(Relevant sections)

Empirical Reports, Theory/Review Papers and Clinical Case Studies
Should be written with the following elements in the following order: title page; abstract; keywords; main text introduction, materials and methods, results, discussion; acknowledgments; declaration of interest statement; references; appendices (as appropriate); table(s) with caption(s) (on individual pages); figures; figure captions (as a list)

Should be between 6000 and 7500 words, inclusive of the abstract.

Style Guidelines
Any spelling style is acceptable so long as it is consistent within the manuscript. Please use double quotation marks, except where “a quotation is ‘within’ a quotation”. Please note that long quotations should be indented without quotation marks.

Formatting and Templates
Papers may be submitted in Word format. Figures should be saved separately from the text. To assist you in preparing your paper, we provide formatting template(s).

References
Please use this reference guide [APA] when preparing your paper.

Checklist: What to Include

1. **Author details.** Please include all authors’ full names, affiliations, postal addresses, telephone numbers and email addresses on the cover page. Where available, please also include ORCIDs and social media handles (Facebook, Twitter or LinkedIn). One author will need to be identified as the corresponding author, with their email address normally displayed in the article PDF (depending on the journal) and the online article. Authors’ affiliations are the affiliations where the research was conducted. If any of the named co-authors moves affiliation during the peer-review process, the new affiliation can be given as a footnote. Please note that no changes to affiliation can be made after your paper is accepted. Read more on authorship.

2. You can opt to include a video abstract with your article. Find out how these can help your work reach a wider audience, and what to think about when filming.

3. **Funding details.** Please supply all details required by your funding and grant-awarding bodies as follows:

   For single agency grants
This work was supported by the [Funding Agency] under Grant [number xxxx].

For multiple agency grants

This work was supported by the [Funding Agency #1] under Grant [number xxxx]; [Funding Agency #2] under Grant [number xxxx]; and [Funding Agency #3] under Grant [number xxxx].

4. **Disclosure statement.** This is to acknowledge any financial interest or benefit that has arisen from the direct applications of your research. Further guidance on what is a conflict of interest and how to disclose it.

5. **Data availability statement.** If there is a data set associated with the paper, please provide information about where the data supporting the results or analyses presented in the paper can be found. Where applicable, this should include the hyperlink, DOI or other persistent identifier associated with the data set(s). Templates are also available to support authors.

6. **Data deposition.** If you choose to share or make the data underlying the study open, please deposit your data in a recognized data repository prior to or at the time of submission. You will be asked to provide the DOI, pre-reserved DOI, or other persistent identifier for the data set.

7. **Supplemental online material.** Supplemental material can be a video, dataset, fileset, sound file or anything which supports (and is pertinent to) your paper. We publish supplemental material online via Figshare. Find out more about supplemental material and how to submit it with your article.

8. **Figures.** Figures should be high quality (1200 dpi for line art, 600 dpi for grayscale and 300 dpi for colour, at the correct size). Figures should be supplied in one of our preferred file formats: EPS, PS, JPEG, GIF, or Microsoft Word (DOC or DOCX). For information relating to other file types, please consult our Submission of electronic artwork document.

9. **Tables.** Tables should present new information rather than duplicating what is in the text. Readers should be able to interpret the table without reference to the text. Please supply editable files.

10. **Equations.** If you are submitting your manuscript as a Word document, please ensure that equations are editable. More information about mathematical symbols and equations.

11. **Units.** Please use SI units (non-italicized).
Appendix 5: Statement of Reflexivity

The following statement written in October 2016 by the lead researcher aims to enhance the transparency of this project:

Throughout Clinical Psychology training, I have encountered many adults with adverse childhood experiences, who continued to have difficulty in later life. I notice my belief that things may have been better if they had experienced even one stable, secure figure earlier in life. On this basis, I presume that staff can positively influence the futures of young people in residential care. I notice my frustration in regards to limited research with staff, particularly when they have the most frequent contact with young people. I therefore believe that their voices are important and that they are the main link between theory and practice. This starting point has shaped my research questions and my method of using interviews.

I notice my bias of expecting some staff to potentially be more aware of, or interested in, theory than others. However, I also notice my anxiety about not wanting to reflect staff in a potentially negative light if they don’t ‘know’ attachment theory. I am conscious about not doing them a dis-service, particularly in response to their time and trust. I don’t want interviews to become a test of their knowledge. I notice my desire to move away from conceptualisations of right or wrong, to really understand how they work. However, I also notice the assumption within my research aims that staff will have some awareness of ‘attachment.’ This concern has influenced my initial interview schedule, whereby I have been tentative in asking staff a lot of direct questions about components of attachment theory.

In relation to staff, I am aware that my status as a clinician in CAMHS may impact upon interviews. I know staff may have received training/consultation from CAMHS, which could create a power imbalance, whereby staff provide the information they think I may be looking for. However, I am in my 20s and could be perceived more as a University student? Or as ‘separate’ to staff due to not having worked in their position within residential care?

I am also conscious of my own tension in regards to adopting the position of a researcher, as opposed to a clinician. I am trained to hypothesise and to make sense out of behaviour. I spend a lot of time speculating and combining information to build a picture, and whilst this may be helpful in constructing theory, I notice the importance of making sure that I stay grounded within data and do not lose the participants’ voices.

In terms of attachment theory, I believe I am still learning to make sense of, and use it, in my own practice. I do not have any previous research background in attachment theory but have been exposed to theory throughout lectures, reading and clinical practice. This has largely centred around the work of early theorists including Bowlby and Ainsworth. At the stage of commencing this project, I am less aware of recent attachment research.

I often use the language of people having different attachment styles, all of which I believe have an adaptive function and can change over time. From my perspective, the most salient parts of attachment theory are being attuned and consistently responsive to needs; with mentalisation being a fundamental part of this process. Over recent years, I have noticed my own process of learning to put theory into practice. Whilst I am trained to do this, I also believe that textbooks do not always provide the answers. Ultimately, I believe that building relationships is the foundation of any therapeutic work.
Appendix 6: Participant Information Sheet

Version 7: 26th October 2016

How do Residential Childcare Workers talk about attachment-informed care?

You are invited to take part in a short interview study, which aims to explore how you think about, and apply, attachment principles in practice.

Why is this study needed?

Children in residential care often experience disrupted attachment; and residential staff have a key role in improving outcomes.

However, there is very limited research on children’s attachment in residential settings; or of the experience of Residential Childcare Workers.

This study aims to interview Residential Childcare Workers from across Scotland to explore how they think about, and apply, attachment principles in practice.

What are the benefits of taking part?

Contribute to a limited understanding of attachment-informed practice in residential childcare.
Improve future training, supervision and consultation for residential staff.
Inform future attachment-based interventions, and improve outcomes for children.
Create a shared language on ‘attachment’ between different agencies.
Develop our current understanding of attachment.

What does taking part involve?

1. You will be asked to participate in a one-to-one, informal interview, lasting approx. 45 minutes at a suitable location (e.g. your place of work or a nearby NHS base). This can be completed during or out with working hours.

Discussion will be audio-recorded and will focus on how you think about, and apply, attachment principles in your work.

2. Complete a brief questionnaire detailing some information about you.

Can I take part?

You can take part if you:
Are employed as a Residential Childcare Worker.
Have been employed for at least 6 months in this role.

P.T.O.
Appendix 6: Participant Information Sheet (Cont’d)

Are there any risks in taking part?
There are NO risks to taking part.
The purpose of this study is NOT to test you, but to listen to your views of attachment in your day-to-day work.

What will happen to my information?
Confidentiality of data will be maintained at all times.
All of your information will be anonymised so that you, your service, and local authority, are not identifiable.
Published material will contain anonymous excerpts from interviews, but no identifiable information.

What if I change my mind?
Your participation is voluntary.
You are free to withdraw from the study at any time, without giving any reason.

How will I find out about the results?
This research will finish in May 2018.
Results will then be fed back in verbal and/or written format, to participating residential services.
The results of this study will be submitted as part of the lead researcher’s doctorate in Clinical Psychology, and may also be submitted to an academic journal for publication.

CONTACT DETAILS
For further information or to take part in this research, please contact:

Alisa Morison (Trainee Clinical Psychologist/Lead Researcher)
Email: a.morison@sms.ed.ac.uk
Telephone: 01236 703010

Or

Dr Emily Taylor
Email: Emily.Taylor@ed.ac.uk
Telephone: 0131 6503892

If you wish to discuss this project with someone independent to the research team, please contact Angus MacBeth (Ethics Tutor) on Angus.Macbeth@ed.ac.uk. If you would like to make a formal complaint, please contact Charlotte Garke (Head of School) on Charlotte.Garke@ed.ac.uk.
Appendix 7: Semi-Structured Interview Schedule

Version 6: 30th September 2016

Semi-Structured Interview Schedule

NB. Please note that in grounded theory research, the exact detail of questions may change as the study progresses, although will remain focussed on the topic of attachment.

1. Can you please tell me what brought you into this area of work?

2. Can you please tell me a bit about what your job involves?

3. Tell me about your relationships with the young people that you work with.

4. What sort of presentation makes you think of attachment when working with a young person?

5. Tell me about a particular young person where attachment is relevant?

6. Can you give me an example of a situation which was challenging with a child or young person?

7. Tell me about a time you feel your practice has been attachment-informed?

8. Tell me about any training you have had on attachment theory.

9. How do you feel about using attachment theory in your work?

10. Is there something else you think I should know to understand your work, and your experience of attachment theory, better?
Appendix 8: Demographic Questionnaire

Version 5: 30\textsuperscript{th} September 2016

**Demographic Questionnaire**
(If you decline to answer a question, please leave a blank space)

1. What is your age? 

2. How long have you been employed as a Residential Childcare Worker? 

3. In your current post, are you...? 
   Full-Time [ ] Part-Time [ ]
   Please tick (✓) the appropriate box

4. What is your sex? 
   Male [ ] Female [ ] Other [ ]
   Please tick (✓) the appropriate box

5. How would you describe your nationality? 
   Please tick (✓) all that apply
   Scottish [ ] English [ ] Welsh [ ] Northern Irish [ ]
   British [ ] Other [ ]
   (Please specify)

6. Do you now, or have you ever had, a parenting role? 
   Yes [ ] No [ ]
   Please tick (✓) the appropriate box

   If ‘Yes’, how would you describe your role? 
   Please tick (✓) all that apply
   Biological Parent [ ] Step-Parent [ ] Adoptive Parent [ ] Foster Carer [ ]
   Kinship Carer [ ] Other [ ]
   (Please specify)

[Please turn over...]
Appendix 8: Demographic Questionnaire (Cont’d)

7. Which of these best describes the level of your qualifications?
   Please tick (☑) all that apply
   - O Grade, S Grade, National 4/5, GCSE or equivalent
   - Higher Grade, Advanced Higher, A Level or equivalent
   - SVQ 3, Scotvec, City and Guilds or equivalent
   - HNC, HND, SVQ4 or equivalent
   - Degree, Post Graduate, SVQ 5 or equivalent
   - Other school qualifications (including those from abroad)
   - Other post-school education (including abroad)
   - No formal qualifications

8. Which of your qualifications would you say relate to child care?
   (e.g. SVQ in childcare; degree in nursing/psychology/social work).
   Please give details in the box below.

   ![Box for details]

9. Have you had training in ‘attachment theory’ or ‘principles’ of attachment?
   Please tick (☑) the appropriate box
   - Yes
   - No
   - If ‘Yes’, please give details in the box below.

   ![Box for details]

Thank you for completing this questionnaire!
Appendix 9: Ethical Approval

23 November 2016

Dear Ailsa,

Application for Level 2 Approval

Reference: CLIN324
Project Title: How do Residential Childcare Workers Talk About Attachment-Informed Care?
Academic Supervisor: Emily Taylor

Thank you for submitting the above research project for review by the Department of Clinical and Health Psychology Ethics Research Panel. I can confirm that the submission has been independently reviewed and was approved on the 31st October 2016.

Should there be any change to the research protocol it is important that you alert us to this as this may necessitate further review.

Yours sincerely,

Kirsty Gardner
Administrative Secretary
Clinical Psychology
Appendix 10: Consent Form

Version 4: 26th October 2016

Consent Form

Title of Project: How do residential childcare workers talk about attachment-informed care?

Name of Researcher: Ailsa Morison (Trainee Clinical Psychologist)

1. I confirm that I have read and understood the participant information sheet for the above study. I have had the opportunity to ask questions and I am satisfied with the answers.

2. I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason, without any adverse consequences.

3. I understand that my interview will be treated confidentially. However, any issues relating to child protection may need to be shared with relevant authorities and any disclosures of potentially unsafe practice will be discussed with residential managers. This will usually be done with my knowledge.

4. I understand that anonymised excerpts from this interview may be presented in published materials.

5. I understand that the information collected about me may be used to support other research in the future, and may be shared anonymously with other researchers. I could not be identified in any shared data.

6. I agree to take part in the above study.

________________________________________  ___________  __________________________
Name of Participant  Date  Signature

________________________________________  ___________  __________________________
Name of Researcher  Date  Signature

1
Appendix 11: Examples of Coding

The following excerpt is taken from one transcript (P08) to evidence a mix of line-by-line and focused coding, alongside abbreviated memos.

<table>
<thead>
<tr>
<th>Transcript P08</th>
<th>Coding</th>
<th>Notes (from memos)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A: ... and what does your job involve doing? P: I personally, I'm there for the kids. I'm not in it to, some people want to build, go up to management but I don't. I just love the ground. I like having relationships [pause] I'm, I'm quite lucky cos I can build relationships up very quickly with the kids emm I just love helping them. I even enjoy the, it sounds silly, the anger that shows because you know that it's no directed at you [pause] it might be at you but it's no at you [pause] it's the anger that they are feeling inside, so I can cope with it all. It's just a job that I have really enjoyed...</td>
<td>Being there for YP, Differing work motives, Loving the ground, Liking relationships, Being lucky with relats, Building relats. quickly, Enjoying helping, Identifying YP anger, Not taking it personally, Seeing behind behaviour, Coping by making sense, Enjoying job</td>
<td>Use of word ‘personally’- recognising staff differences others have spoken about? Continued importance of relationships and being there... being genuine? Concern of sounding silly? Do others feel this? Links seeing behind behaviour/not taking personally to → coping</td>
</tr>
<tr>
<td>A: You said that you can build up relationships quickly. Can you tell me a bit more about that? P: I'm easy going, I'm no threatening emm the kids all seem to be able to come to me. They might no come with 'right, see....' but they can come and they can talk to me, they know that I'm no going to be down on them and if I've to tell them off, if I have to give them a reason 'no, no', they know that's it dealt with. It's no going on for the next day. I deal with it there and then and half an hour later we will be talking about it so they understand that emm some of the kids say that it's because I'm a big kid myself [laughs] which could be the case [laughs] ehh but I don't know what, I don't know why it is, I seem to be able to build relationships dead quick with the kids. I've no had one that I've not managed to build some sort of relationship with, might not be close but I can build relationships up [pause] and I just think it's me [laughs]...’</td>
<td>Using own traits, Being approachable, Not being threatening, Being predictable to YP, Dealing with things quickly, Explaining to YP? Moving on after incidents, Being a big kid, Naturally building relats, Building relats. quickly, Having varied relats, Using self in relats.</td>
<td>Using own traits in relationships. States ‘I just think it’s me.’ Using similarities with YP (‘big kid’). Bit like other staff talking about taking on family member roles? Seems natural in relationships- not conscious actions? Sense of being predictable? Similar to previous transcripts. Idea of varied relationships coming up a lot- some closer than others.</td>
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<tr>
<td>A: What do you think is important in terms of building that relationship? P: Trust...they need to know that there is someone there that they can trust, they need to know that. It’s like the attachment thing itself, a secure base. ‘[name] is going to be there the morning, he's going to be there next week, he's going to be there until I'm away’ [pause] they need to know that you are going to be there...</td>
<td>Establishing trust, Identifying YP need trust, Linking to theory, Providing a secure base? Continuing to be there, Identifying YP need to know will be there</td>
<td>Identifying needs → followed by action(s) (on-going pattern throughout data) Attachment ‘thing’- difficulty articulating? Being there ← → Being predictable?</td>
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Appendix 12: Examples of Memos

Memos were written from June 2016 until March 2018. This encompassed the initial phase of research design, followed by data collection and analysis. Following each interview and transcription, a memo was completed which included observations of staff, interview process and interpretations of the data. The following excerpt illustrates how the interview experience contributed to the core category of “doing it naturally with theory in the background”:

**Memo 12, March 2017: Reflections after interviews with P13 and P14**  
P13 and P14 both appeared anxious whenever I asked about attachment theory. They were more relaxed talking about ‘relationships.’ P13 referred to [attachment] training at one point and then off-tape, she stated that she had been ‘kicking herself’ for saying that in case I asked a further question about it or asked her what it meant... P14 referred to wishing that she had studied prior to the interview. I felt more reluctant to ask questions directly on attachment as the interview continued and I notice I changed my language to match hers- talking more about ‘relationships’ instead. The experience of these interviews resonates with previous interviews; e.g. P07 talking about ‘desperately’ trying to recall theory prior to the interview and P03 appearing confused in response to attachment theory questions. Alongside my existing analysis, this continues to strengthen my interpretation that theory is in the background and staff often have difficulty articulating it.

Memos sometimes highlighted the interactions between staff and the lead author, including subsequent assumptions and interpretations. The following excerpt was written following a similar pattern of interactions, across different services within a close space of time:

**Memo 13, March 2017: Reflections after visiting another different service**  
After interviews, I was invited to join the staff for lunch. I notice this pattern of invitations occurring in a lot of services. It made me think of someone who previously described care leavers dropping in for a catch-up or lunch. Maybe they are used to people coming and going? It felt spontaneous and flexible. Could this reflect their wider practice? As with previous services, the conversation over lunch felt very easy, as though we had known each other for a long time. It is interesting how quickly rapport seems to build with staff. I wonder if this reflects part of their role building relationships? I assume from this action that they are comfortable in my presence and eager to show me the wider service. Although, I wonder if staff feel it’s difficult for others to understand their work through an interview, without observing some of it too?

Many other memos described documentation of codes, comparisons within and between transcripts, and potential lines of further enquiry to refine theoretical categories and the connections between them. The following excerpt is from a memo on the focused coding of ‘identifying feelings’, which later became part of the sub-category ‘seeing behind behaviour’ and core category of ‘working in a live space’:

**Memo 47, December 2017: Identifying young people’s (YP) feelings**  
Staff talk about needing to identify young people’s feelings and repeatedly demonstrate this action in their narrative. Within transcripts, staff use a range of words to describe different feelings. Across transcripts, I notice they are mainly negative feelings...Child codes include identifying: anger, feeling they have nothing, everything is damaged, un-contained, hurt, regret, rejected, guilt, shame, anxious, unhappy, unloved, unwanted, broken, distressed, deflated, distraught, insecure, and frustrated. I also currently have coding on ‘labelling feelings’ and ‘normalising feelings’ but these are much less salient across the data. My focussed code of ‘identifying YP feelings’ is difficult to distinguish from ‘identifying YP thoughts.’ I suppose this makes sense due to thoughts and feelings often sitting so closely together. I wonder if ‘Identifying needs’ fits here too? And/or staff identifying triggers behind behaviour? These actions appear to share the function of seeing behind the young people’s behaviour? This coding often co-occurs with coding under ‘meeting YP where they are at.’ I currently believe staff identify thoughts and feelings in order to see behind young people behaviour, and this forms part of a wider process of ‘meeting young people where they are at.’