



Problematic Eating Interventions in Out-of-Home Care: The Need for a Trauma-Informed, Attachment-Focused Approach

Melissa Savaglio, Heidi Bergmeier, Rachael Green, Renee O'Donnell, Bengianni Pizzirani, Lauren Bruce & Helen Skouteris

To cite this article: Melissa Savaglio, Heidi Bergmeier, Rachael Green, Renee O'Donnell, Bengianni Pizzirani, Lauren Bruce & Helen Skouteris (2021) Problematic Eating Interventions in Out-of-Home Care: The Need for a Trauma-Informed, Attachment-Focused Approach, Australian Social Work, 74:3, 361-372, DOI: [10.1080/0312407X.2019.1641528](https://doi.org/10.1080/0312407X.2019.1641528)

To link to this article: <https://doi.org/10.1080/0312407X.2019.1641528>



Published online: 01 Aug 2019.



Submit your article to this journal [↗](#)



Article views: 780



View related articles [↗](#)



View Crossmark data [↗](#)



Citing articles: 3 View citing articles [↗](#)



Problematic Eating Interventions in Out-of-Home Care: The Need for a Trauma-Informed, Attachment-Focused Approach

Melissa Savaglio, Heidi Bergmeier, Rachael Green, Renee O'Donnell, Biaggianni Pizzirani, Lauren Bruce, and Helen Skouteris

Monash Centre for Health Research and Implementation, School of Public Health and Preventive Medicine, Monash University, Clayton, Victoria, Australia

ABSTRACT

Problematic eating interventions targeting young people living in out-of-home care (OoHC) have been neglected. Therefore, the aim of this narrative literature review was threefold: (1) to identify the state of the literature regarding interventions that address subclinical and clinical problematic eating behaviours among young people in OoHC; (2) to evaluate problematic eating interventions that have been developed for young people in the general population; and (3) to assess the extent to which these general interventions can be translated and implemented for young people in OoHC. This study found no interventions specifically designed for young people in OoHC. While there is the potential for current problematic eating interventions to be translated for this cohort, major adaptations are required in which both trauma-informed and attachment-focused perspectives are seen as central factors to problematic eating interventions in OoHC.

IMPLICATIONS

- There are significant practical and theoretical limitations of administering current problematic eating interventions to young people living in OoHC.
- Interventions combining the theoretical underpinnings of Cognitive Behavioural Therapy and Mentalisation-Based Therapy for Eating Disorders may begin to address the risk factors for problematic eating among young people in OoHC.
- A trauma-informed, attachment-focused problematic eating intervention is needed for young people in OoHC.

ARTICLE HISTORY

Received 27 May 2018
Accepted 25 February 2019

KEYWORDS

Out-of-home Care;
Attachment; Trauma; Eating
Disorders; Intervention

Young people living in out-of-home care (OoHC, i.e., foster, kinship, or residential care) are more likely to exhibit problematic behaviours (i.e., substance use, delinquent behaviour) than young people who are not in care (Raviv, Taussig, Culhane, & Garrido, 2010). Specifically, the presence of problematic eating behaviours among young people in OoHC has become an increasingly predominant health issue (Kelly & Ogden, 2016; Tarren-Sweeney, 2006). Problematic eating encompasses: (1) clinical eating disorders that warrant a diagnosis according to the *Diagnostic and Statistical Manual of Mental Disorders* (American Psychiatric Association, 2013), such as anorexia nervosa, bulimia nervosa, or binge-eating disorder; (2) subclinical disordered eating patterns that do not

meet the criteria for a formal diagnosis, such as restrictive eating, binge eating, emotional eating, compulsive eating, or pica (eating non-food items); and (3) problematic food-related behaviours, such as food contamination, hoarding, or stealing food (Casey, Cook-Cottone, & Beck-Joslyn, 2012).

Young people in OoHC exhibit higher rates of both clinical and subclinical problematic eating behaviours than their peers of similar socioeconomic and maltreatment backgrounds who are not in OoHC (Kelly & Ogden, 2016). In an Australian sample, a quarter of children in foster care displayed problematic eating patterns, and 77% of foster parents reported subclinical eating problems among the children they care for, including hoarding food, pica, and excessive eating (Tarren-Sweeney, 2006). In comparison to their peers, young people in OoHC are more likely to be picky eaters, engage in compulsive eating, and binge (Casey et al., 2012; Kelly & Ogden, 2016). The rate of bulimia nervosa is seven times higher among young people in OoHC (Pecora et al., 2005), and binge eating disorder is also more prevalent among this cohort (Casey et al., 2012; Hadfield & Preece, 2008). This is concerning as young people in OoHC are more likely to be overweight compared to young people with similar maltreatment backgrounds not living in care (Cox, Skouteris, Hemmingsson, Fuller-Tyszkiewicz, & Hardy, 2015; Hadfield & Preece, 2008). Specifically, 35% of young people become overweight or obese within a year of entering OoHC, which is greater than the prevalence of 27% in the population of young people (Australian Institute of Health and Welfare, 2017). Further, eating disorders have significantly high rates of suicide, with individuals suffering from anorexia nervosa at greatest risk (Arcelus, Mitchell, Wales, & Nielsen, 2014).

There are key factors that place young people in OoHC at higher risk of engaging in problematic eating than young people without an experience of OoHC. First, young people in OoHC have experienced significant trauma (either before and possibly also during their time in OoHC), including physical or emotional abuse, neglect, inconsistent care, or sudden separation from family and loss of all that is familiar (Fratto, 2016; Raviv et al., 2010). Cumulative experiences of chronic trauma exposure can adversely impact a child's physical health and development, including an increased risk of obesity (Cox et al., 2015), diabetes (Rebee, Nurius, Courtney, & Ahrens, 2018), cardiovascular conditions (Rebee et al., 2018), stunted brain development (De Bellis & Zisk, 2014), and heightened biological sensitivity to stress (De Bellis & Zisk, 2014). Trauma also disrupts a child's psychological and socioemotional development, often resulting in insecure attachment (Quiroga & Hamilton-Giachritsis, 2016), emotion dysregulation (Villalta, Smith, Hickin, & Stringaris, 2018), negative beliefs of the self and significant others (Fratto, 2016), deficits in mentalisation (Jewell et al., 2015), and increased risk of developing various mental disorders (Raviv et al., 2010). Specifically, trauma is a significant predictor of problematic eating among young people (Kong & Bernstein, 2009; Pignatelli, Wampers, Lorio, Biondi, & Vanderlinden, 2017).

Second, a predominant impact of trauma on a child's social and emotional functioning is the development of an insecure attachment style as experiences of abusive, neglectful, or inconsistent parenting may prevent children from establishing a sense of safety and a secure attachment with a caregiver (Raviv et al., 2010). High rates of insecure attachment are observed among young people in OoHC. McWey (2004) found that 85.5% of American children in foster care were insecurely attached, reflecting previous harmful or

neglectful parenting, yet placement instability tends to exacerbate these attachment difficulties (Osborn, Delfabbro, & Barber, 2008). This is concerning as insecure attachment is a well-established risk factor for problematic eating, placing young people in OoHC at greater risk than young people living with their biological families (Jewell et al., 2015; Quiroga & Hamilton-Giachritsis, 2016; Tasca & Balfour, 2014). Specifically, young people who exhibit clinical and subclinical problematic eating behaviours are more likely to demonstrate insecure attachment than those who do not engage in such behaviours (Milan & Acker, 2014), and insecurely attached young people report more weight and eating concerns than their securely attached peers (Kong & Bernstein, 2009).

Finally, it is well established that children who are insecurely attached are either not easily comforted by their caregivers when they feel distressed, or they try to comfort and soothe themselves in a self-reliant manner (Bovenschen et al., 2016; Quiroga & Hamilton-Giachritsis, 2016). These experiences often translate into negative internal working models (i.e., schemas) of the self and significant others, which may manifest as emotion dysregulation (i.e., the inability to self-soothe and appropriately regulate one's emotions, Michopoulos et al., 2015) or deficits in mentalisation (i.e., the inability to understand one's own and others' behaviour in terms of their underlying thoughts, feelings, and beliefs, Jewell et al., 2015). Emotion dysregulation has been consistently found to mediate the association between insecure attachment and problematic eating behaviours (Mallorqui-Bague et al., 2017; Michopoulos et al., 2015). Emotion dysregulation is highly prevalent among clinical samples of young people with anorexia or bulimia compared to non-clinical samples, and among young people engaging in subclinical disordered eating patterns, such as hoarding food or restrictive eating (Mallorqui-Bague et al., 2017; Weinbach, Sher, & Bohon, 2018). Further, recent studies have found that young people with clinical eating disorders consistently demonstrate mentalising difficulties (Jewell et al., 2015; Kelton-Locke, 2016). Specifically, adolescents with anorexia tend to be slower and less accurate in recognising emotions than controls (Cate, Khademi, Judd, & Miller, 2013).

In summary, previous traumatic experiences and related attachment difficulties prevent young people in OoHC from learning how to effectively regulate and manage their emotions (Villalta et al., 2018). Instead, they engage in maladaptive coping strategies (i.e., problematic eating) to self-soothe or alleviate overwhelming negative emotions (Han & Lee, 2017). Also, young people in OoHC lack a sense of security that their needs will be met, so may seek to achieve a sense of control through food restriction (Weinbach et al., 2018). Alternatively, they may engage in compulsive eating to compensate for feelings of insecurity (Han & Lee, 2017), or binge and hoard food in response to past experiences of neglectful parenting and inconsistent or lack of food provision (Pignatelli et al., 2017).

Rationale

Literature searches revealed that there are currently no interventions that target either clinical or subclinical problematic eating for young people in OoHC. Those who have experienced childhood trauma have the highest probability of poor treatment outcomes for eating disorders (Kong & Bernstein, 2009). Around 80% of all adolescents with problematic eating never receive treatment and long-term recovery rates (more than 12 months) for those who engage in psychological therapeutic approaches is less than 50%

(Lock et al., 2013; Pennesi & Wade, 2015). Therefore, there is a clear need to (1) increase the accessibility of treatment to all young people, and (2) develop novel or improved problematic eating interventions that target both clinical and subclinical behaviours for young people in and out of care. Although previous reviews have examined the efficacy of various eating disorder interventions for young people in the general population, interventions for young people living in OoHC have been neglected in both clinical research and practice to date (Kelton-Locke, 2016; Skarderud & Robinson, 2012).

Aims

The aims of this narrative literature review were threefold: (1) to identify the state of the literature regarding interventions that address subclinical and clinical problematic eating behaviours among young people in OoHC; (2) to evaluate problematic eating interventions that have been developed for young people in the general population; and (3) to assess the extent to which these general interventions can be translated and implemented for young people in OoHC.

Method

Articles were identified by searching five electronic databases accessed through EBSCOhost: PsycINFO, Psychology and Behavioural Science Collection, Social Work Abstracts, SocINDEX, and MEDLINE Complete. The search was conducted using variations and combinations of the following key terms: eating disorder, problematic eating, disordered eating, anorexia, bulimia, treatment, intervention, therapy, young people in out-of-home care, looked-after young people, vulnerable young people, disadvantaged young people, and at-risk young people. From this search, a total of 32 selected papers were included in this narrative review as they met the following inclusion criteria:

- (1) All study participants were young people under 18 years of age experiencing at least one of the following problematic eating behaviours: anorexia, bulimia, binge eating, restrictive eating, emotional eating, compulsive eating, or hoarding food.
- (2) The paper reviewed or evaluated a psychological intervention, therapy, or treatment that aimed to address clinical or subclinical problematic eating behaviours among young people.
- (3) The study was published in a peer-reviewed journal within the last ten years from January 2008 to January 2018 inclusive, and was written in English.

Results and Discussion

Interventions Addressing Problematic Eating

Family-based Therapy

A number of systematic reviews have concluded that Family-based Therapy (FBT) is the most established and effective intervention for young people in the general population with clinically diagnosed anorexia (Brockmeyer, Friederich, & Schmidt, 2017; Jewell, Blessitt, Stewart, Simic, & Eisler, 2016; Lock, 2015). FBT focuses primarily on weight

restoration, as parents or caregivers are empowered to manage their child's eating to restore weight in the early stages of recovery without the young person's input (Medway & Rhodes, 2016). Alternatively, a more collaborative approach is required to address the secretive and covert behaviours associated with clinical bulimia, such as binge-eating and purging, as treatment relies on the young person sharing their experiences and triggers (Brauhardt, de Zwaan, & Hilbert, 2014). FBT has the strongest evidence of efficacy for young people with anorexia aged between 12 and 18, yielding a 50% remission rate and higher rates of recovery following six- and 12-months follow-up when compared to individual therapy (Jewell et al., 2016; Lock, 2015). Reviews of the usefulness of FBT for young people with bulimia, although less extensive, have also yielded better outcomes than individual therapy and 30% remission rate (Brauhardt et al., 2014; Kass, Kolko, & Wilfley, 2013). Engaging the young person's family in treatment yields the most efficient outcomes when addressing clinical eating disorders among adolescents (Brockmeyer et al., 2017).

However, there are a number of factors that need to be considered if FBT is to be implemented with young people in OoHC. A search of the literature revealed that there is no evidence of using FBT to address subclinical problematic food-related behaviours that are often prevalent among vulnerable young people in OoHC, such as hoarding food, contaminating food, compulsive eating, or subclinical levels of restricting or binge eating. Additionally, for young people in OoHC, it is also often not feasible or appropriate for the young person's family to be involved in treatment. The nature of entering OoHC involves family separation and a damaged relationship with at least one primary caregiver, often due to parental mental or physical illness, substance dependence, incarceration, poverty, or death (McWey, 2004). In these circumstances, the disrupted parent-child relationship and attachment insecurity of the young person may contraindicate the use of FBT (Kelton-Locke, 2016). The active family involvement that FBT requires would be particularly difficult to implement in the residential care setting due to reduced parent contact, carers' transience, lack of consistency of care, and subsequent disruptions in relationships between children and carers following multiple placement changes and placement instability.

Nonetheless, FBT could be suitable for young people in kinship or foster care, as a family structure is present, and the nature of care is more stable and consistent. However, in a qualitative meta-synthesis of adolescents' experiences of FBT for anorexia, most participants felt that exploring the aetiology of their problematic eating was missing from treatment, neglected in favour of addressing the overt symptoms, such as weight restoration (Medway & Rhodes, 2016). Participants noted that this exclusive focus on the observable behavioural symptoms meant that related personal or familial problems the young person may be experiencing were neglected, and adolescents reported that they would have liked to explore these potential perpetuating factors further (Medway & Rhodes, 2016). This has important implications for clinicians working with young people in the child protection system as a deeper exploration of the possible underlying factors maintaining problematic eating is required.

Cognitive Behavioural Therapy

Enhanced cognitive behavioural therapy (CBT-E) for adolescents has received support as a transdiagnostic approach to treating clinical and subclinical problematic eating among

young people. CBT-E addresses the distorted cognitions that maintain problematic eating behaviours, including body dissatisfaction, low self-esteem, and weight preoccupation (Schlegl et al., 2015; Tchanturia, Giombini, Leppanen, & Kinnaird, 2017). By working collaboratively with the young person to identify, change, and monitor their perpetuating maladaptive thoughts, feelings, and attitudes, CBT-E empowers the young person to develop more effective coping strategies (Murphy, Straebl, Cooper, & Fairburn, 2010). CBT-E is most effective for reducing subclinical binge eating and compulsive eating behaviours that are indicative of bulimia or binge eating disorder (Wilfley, Kolko, & Kass, 2011), which are most prevalent among the OoHC population (Casey et al., 2012). There is also increasing evidence of its usefulness for adolescents with subclinical restrictive eating patterns (Kass et al., 2013; Wilfley et al., 2011). In a systematic review of Cognitive Remediation Therapy (CRT), which aims to reduce cognitive deficits and improve executive functioning, young people who were restricting were able to gain awareness of their cognitive styles, reflect on their maladaptive schemas, and develop new strategies to elicit changes in their eating behaviours (Tchanturia et al., 2017). Addressing the perpetuating cognitions and helping the young person develop coping strategies for relapse prevention are pivotal strengths of CBT-E (Kass et al., 2013).

According to cognitive dissonance theory, people experience psychological discomfort when they are required to act in a way that contradicts their beliefs, which motivates them to alter their cognitions (Stice, Rohde, Butryn, Shaw, & Marti, 2015). Cognitive dissonance-based universal interventions for problematic eating engage young people in a critique of the thin-ideal and encourage participation in body acceptance exercises to improve their self-esteem, body image, and relationships with food (Stice, Becker, & Yokum, 2013). The core aim is to help young people become aware of the disconnect between their problematic eating behaviours and their beliefs about what a healthy relationship with food looks like. To illustrate, The Body Project and My Body My Life interventions seem to be efficient in reducing the risk of eating disorders among young people exhibiting early symptoms of problematic eating (subclinical behaviours) and body dissatisfaction (Richardson & Paxton, 2012; Stice et al., 2013). Thin-ideal internalisation, body dissatisfaction, dieting, and problematic eating behaviours significantly improved among young people in the cognitive dissonance-based intervention compared to control participants from baseline to 1-year, 2-year and 3-year follow ups (Stice et al., 2013; Stice et al., 2015).

Although these cognitive interventions are not specifically designed for implementation with young people in OoHC, Stice et al. (2015) propose that The Body Project may be translatable to vulnerable populations as it is easily accessible, practical, and amenable to different environments. Therefore, it may be suitable for the OoHC population accustomed to placement instability and transience. Cognitive-based interventions are well supported in correcting a young person's maladaptive cognitions about food, self-esteem, and body image to reduce problematic eating behaviours (Murphy et al., 2010; Tchanturia et al., 2017). This would be beneficial to young people in OoHC who often exhibit pervasive negative self-beliefs and distorted internal working models (i.e., schemas) stemming from their attachment insecurity. The unreliable or lack of food provision that is characteristic of neglectful parenting may lead to disrupted meanings associated with food and subsequent engagement in hoarding, restricting, or binge eating among young people in OoHC (Kelly & Ogden, 2016). To improve the suitability of CBT, it is imperative to address the related

complexities of young people in OoHC experiencing problematic eating, such as attachment insecurity, emotion dysregulation, and mentalisation difficulties.

Mentalisation-based Therapy

One review has proposed the application of Mentalisation-based Therapy for the treatment of clinical eating disorders (MBT-ED) among children and adolescents in the general population (Kelton-Locke, 2016). The underlying assumption of MBT-ED is that problematic eating among young people may be a manifestation of deficits in emotion regulation and mentalisation abilities, which stem from insecure attachment (Jewell et al., 2015). Young people with attachment insecurity may have difficulty regulating their own emotions, which poses challenges to recognising and managing one's and others' emotions, beliefs, needs, and desires (Skarderud & Robinson, 2012). Therefore, the primary aim of MBT-E is to strengthen the young person's ability to understand mental states in themselves and others and to develop mentalising interactions that increase emotional regulation skills. This is achieved by stimulating and strengthening mentalisation in the context of emotionally charged attachment relationships (Skarderud & Robinson, 2012). Specifically, the therapist consistently asks the young person to pause and consider their viewpoint on the subject at hand and to reflect on other possible perspectives that the therapist may suggest (Kelton-Locke, 2016). Preliminary studies have found that MBT-ED may reduce the presence of clinical eating disorders (i.e., anorexia, bulimia, or binge eating disorder) among adolescents as repeated instances of reflective practice help the young person to develop basic skills for effective interpersonal interactions that encourage trust, security, attachment, and better communication (Kelton-Locke, 2016).

MBT-ED could be suitable for vulnerable young people in OoHC as it seeks to address predominant risk factors for problematic eating that may stem from attachment insecurity: emotion dysregulation and poorly established mentalisation skills. Young people in OoHC would benefit from MBT-ED as they tend to engage in problematic eating to manage their overwhelming or distressing emotions, often stemming from their previous experiences of trauma and inability to effectively control and regulate their emotions (Cox et al., 2015; Kelly & Ogden, 2016). Further, improvements in interpersonal relationships, through the capacity to understand others' perspectives, are often associated with long-term recovery from eating disorders (Kelton-Locke, 2016). However, there is no evidence at this stage for the effectiveness of MBT-ED in reducing subclinical problematic eating behaviours, which are highly prevalent in OoHC. Although there is some promise of adapting MBT-ED to address eating disorders among young people in OoHC by restoring interpersonal relationships and emotion regulation through mentalisation, a more trauma-informed approach is required to address the cumulative effects of psychological distress and disruptions in attachment among young people in OoHC.

The Need for a Trauma-informed, Attachment-focused Problematic Eating Intervention

Despite the established high rates of problematic eating among young people in OoHC compared to young people not in care with similar histories of maltreatment, the current review of the literature did not reveal the existence of any problematic eating

interventions that are specifically designed for implementation with young people in OoHC. This review identified that current interventions for young people with problematic eating in the general population predominantly implement FBT and CBT-based approaches (Kass et al., 2013; Stice et al., 2013). However, there are significant practical and theoretical limitations to administering current interventions to young people in OoHC. Firstly, the instability and unpredictability of living in OoHC, particularly residential care, poses challenges to these young people accessing and engaging in current universal interventions (Kelly & Ogden, 2016). They face many systemic barriers to engaging in treatment, such as FBT, due to separation from parents, multiple placement changes, continual disruptions in relationships with carers, carer transience, and time restriction of care. Secondly, these current interventions tend to target clinical eating disorders, such as anorexia or bulimia, and neglect subclinical problematic eating behaviours that are highly prevalent among young people in OoHC. Thirdly, in isolation, these intervention approaches do not address all of the multiple complexities that seem to precipitate and maintain the problematic eating behaviours of young people in OoHC.

Nonetheless, the findings of this review demonstrate the potential applicability of combining the therapeutic strategies of CBT-E and MBT-ED to address problematic eating among young people in OoHC. In combination, these approaches seek to address the associated risk and perpetuating factors of problematic eating, such as negative self-beliefs, body dissatisfaction, emotion dysregulation, and deficits in mentalisation capabilities, which may all stem from attachment insecurity. This approach would (1) help young people to identify, critique, and change their perpetuating negative self-beliefs, and (2) engage young people in mentalisation and reflective thinking to develop more effective coping strategies and emotion regulation skills. In gaining a greater understanding of their own and others' thoughts and feelings, this combination therapy approach would improve their interpersonal experiences and begin to restore safety and security in relationships. However, a more attachment-focused and trauma-informed approach is needed for young people in OoHC in terms of fostering healthier relationships among young people and their carers, conceptualising their problematic eating behaviours within the context of the trauma they have experienced, and providing them with real therapeutic opportunities to explore and heal from their traumatic experiences while being sensitive or amenable to the unstable and transient OoHC context. These factors are necessary to not only successfully treat the symptomatic behaviours of young people in OoHC, but to also address the underlying impact of their previous traumatic experiences.

One intervention that has been implemented in the OoHC system is the Healthy Eating Active Living (HEAL) program (Cox et al., 2017; Skouteris et al., 2014). After a randomised trial and substantial stakeholder feedback, including feedback from young people with lived experience and carers of OoHC, HEAL has recently been redeveloped into the Healthy Eating Active Living Matters (HEALing Matters) program. HEALing Matters, like HEAL, aims to improve the eating and physical activity habits of young people living in OoHC. However, unlike HEAL that was focused only on a behavioural approach to obesity prevention (Skouteris et al., 2014), HEALing Matters is underpinned by a trauma-informed approach and the ethos that the care environment and interpersonal relationships that exist between OoHC staff and the young people are crucial in both the recovery process *and* in initiating and maintaining healthy lifestyle choices (Black &

Woodworth, 2012). HEALing Matters is currently delivered as a web-based portal that provides professional development and resources to assist carers to better understand how food and physical activity can be used to strengthen relationships and provide young people in their care with a sense of value and belonging.

From a trauma-informed and attachment-based perspective, HEALing Matters focuses on the symbolic meaning of food and the processes around it (Emond, McIntosh, & Punch, 2013). This aims to encourage carers to move away from a conceptualisation of food as simply a commodity or tool for reinforcement and punishment, and instead, to understand food and food processes as important factors in a young person's recovery and development (Emond et al., 2013). Residential care staff need to be "in tune" or emotionally "in sync" (i.e., attuned caring, Emond, Steckley, & Roesch-Marsh, 2016) with the young people they support in order to improve health-related outcomes and develop relationships with them. HEALing Matters also conceptualises "difficult" or "challenging" behaviour not as a reflection of the young person but as a consequence or manifestation of the trauma they have experienced; such interactions with the young people are referred to as "pain-based" behaviours in order to draw attention to—and be appreciative of—the fact that these behaviours come from a place of emotional or physical pain (Emond et al., 2016).

This discussion of HEALing Matters provides an example of some trauma- and attachment-based adaptations that eating disorder interventions (that target young people in OoHC) would need to make. However, HEALing Matters is still in its infancy and is restricted as an online resource for carers, so this program is not generalisable or applicable to all young people in OoHC, particularly those with clinically diagnosed eating disorders who require more intensive intervention. Therefore, it is crucial that a suitable trauma- and attachment-based intervention for these young people involves face-to-face therapeutic work and provides opportunities within that work for the young person to explore and heal from their specific traumatic experiences (Black & Woodworth, 2012). This may help young people in OoHC to develop security, trust, and positive relationship experiences with OoHC carers, which may begin to restore previous disruptions in attachment. It is also important that each young person's unique complexities are acknowledged, recognised, and are at the forefront of an individualised trauma-informed approach. Indeed, an appropriate intervention would be tailored to the young person's specific problematic eating behaviours (e.g., subclinical or clinical), unique traumatic experiences, and other complexities (e.g., personality factors, support system, and other risk-taking behaviours or mental health issues). Using the Adverse Childhood Experiences questionnaire (Felitti et al., 1998) may assist in understanding the needs of young people in OoHC and tailoring a trauma-based intervention to this cohort. However, more efficacy research is required to inform the development of a trauma-informed and attachment-focused problematic eating intervention for young people in OoHC.

The findings of this review provide support for an intervention that uses the combined therapeutic strategies of CBT-E and MBT-ED but also adopts an attachment-focused and trauma-informed approach to address problematic eating among young people in OoHC. This approach may account for a young person's unique history of trauma, provide opportunities to heal from past pain, foster the development of secure relationships with significant others, respond to the instability and transience of the OoHC context, and address the risk and perpetuating factors for problematic eating among young people in OoHC.

Trauma- and attachment-based perspectives need to be front and centre in the development and delivery of a problematic eating intervention for young people living in OoHC to treat their symptomatic behaviours *and* to address the underlying impact of their previous traumatic experiences.

Disclosure Statement

No potential conflict of interest was reported by the authors.

References

- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Washington, DC: American Psychiatric Association Publishing.
- Arcelus, J., Mitchell, A., Wales, J., & Nielsen, S. (2011). Mortality rates in patients with anorexia nervosa and other eating disorders. *Archives of General Psychiatry*, 68(7), 724–731.
- Australian Institute of Health and Welfare. (2017). *A picture of overweight and obesity in Australia*. Retrieved from <https://www.aihw.gov.au/getmedia/172fba28-785e-4a08-ab37-2da3bbae40b8/aihw-phe-216.pdf.aspx?inline=true>
- Black, P., & Woodworth, M. (2012). A review of trauma-informed treatment for adolescents. *Canadian Psychology*, 53(3), 192–203. doi:10.1037/a0028441
- Bovenschen, I., Lang, K., Zimmermann, J., Forthner, J., Nowacki, K., Roland, I., & Spangler, G. (2016). Foster children's attachment behaviour and representation: Influence of children's pre-placement experiences and foster caregiver's sensitivity. *Child Abuse and Neglect*, 51, 323–335. doi:10.1016/j.chiabu.2015.08016
- Brauhardt, A., de Zwaan, M., & Hilbert, A. (2014). The therapeutic process in psychological treatments for eating disorders: A systematic review. *International Journal of Eating Disorders*, 47(6), 565–584. doi:10.1002/eat.22287
- Brockmeyer, T., Friederich, H., & Schmidt, U. (2017). Advances in the treatment of anorexia nervosa: A review of established and emerging interventions. *Psychological Medicine*, 48(8), 1228–1256.
- Casey, C. M., Cook-Cottone, C., & Beck-Joslyn, M. (2012). An overview of problematic eating and food related behaviour among foster children: Definitions, aetiology, and intervention. *Child and Adolescent Social Work Journal*, 29(4), 307–322. doi:10.1007/s10560-012-0262-4
- Cate, R., Khademi, M., Judd, P., & Miller, H. (2013). Deficits in mentalization: A risk factor for future development of eating disorders among pre-adolescent girls. *Advances in Eating Disorders*, 1, 187–194.
- Cox, R., Skouteris, H., Fuller-Tyszkiewicz, M., McCabe, M., Watson, B., Fredrickson, J., ... Hardy, L. L. (2017). A qualitative exploration of coordinators and carers perceptions of the healthy eating, active living (HEAL) programme in residential care. *Child Abuse Review*, 27(2), 122–136.
- Cox, R., Skouteris, H., Hemmingsson, E., Fuller-Tyszkiewicz, M., & Hardy, L. L. (2015). Problematic eating and food related behaviours and excessive weight gain: Why children in out-of-home care are at risk. *Australian Social Work*, 69(3), 338–347. doi:10.1080/0312407X.2015.1024267
- De Bellis, M. D., & Zisk, A. (2014). The biological effects of childhood trauma. *Child and Adolescent Psychiatric Clinics of North America*, 23(2), 185–222. doi:10.106/j.chc.2014.01.002
- Emond, R., McIntosh, I., & Punch, S. (2013). Food and feelings in residential childcare. *British Journal of Social Work*, 44(7), 1840–1856. doi:10.1093/bjsw/bct009
- Emond, R., Steckley, L., & Roesch-Marsh, A. (2016). *A guide to therapeutic child care: What you need to know to create a healing home*. London, UK: Jessica Kingsley Publishers.
- Felitti, V., Anda, R., Nordenberg, D., Williamson, F., Spitz, M., Edwards, V., ... Marks, S. (1998). Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults. *American Journal of Preventive Medicine*, 14(4), 245–258.

- Fratto, C. M. (2016). Trauma-informed care for youth in foster care. *Archives of Psychiatric Nursing*, 30(3), 439–446. doi:10.1016/j.apnu.2016.01.007
- Hadfield, S. C., & Preece, P. M. (2008). Obesity in looked after children: Is foster care protective from the dangers of obesity? *Child: Care, Health and Development*, 34(6), 710–712.
- Han, S., & Lee, S. (2017). College student binge eating: Attachment, psychological needs satisfaction, and emotion regulation. *Journal of College Student Development*, 58(7), 1074–1086.
- Jewell, T., Blessitt, E., Stewart, C., Simic, M., & Eisler, I. (2016). Family therapy for child and adolescent eating disorders: A critical review. *Family Process*, 55(3), 577–594. doi:10.1111/famp.12242
- Jewell, T., Collyer, H., Gardner, T., Tchanturia, K., Simic, M., Fonagy, P., & Eisler, I. (2015). Attachment and mentalization and their association with child and adolescent eating pathology: A systematic review. *International Journal of Eating Disorders*, 49(4), 354–373. doi:10.1002/eat.22473
- Kass, A., Kolko, P., & Wilfley, E. (2013). Psychological treatments for eating disorders. *Current Opinion in Psychiatry*, 26(6), 549–555. doi:10.1097/YCO.0b013e328365a30e
- Kelly, R., & Ogden, J. (2016). The effects of perceived early childhood attachment and care status on young people's eating behaviour. *Adoption and Fostering*, 40(3), 234–246. doi:10.1177/0308575916663561
- Kelton-Locke, S. (2016). Eating disorders, impaired mentalisation, and attachment: Implications for child and adolescent family treatment. *Journal of Infant, Child, and Adolescent Psychotherapy*, 15(4), 337–356. doi:10.1080/15289168.2016.1257239
- Kong, S., & Bernstein, K. (2009). Childhood trauma as a predictor of eating psychopathology and its mediating variables in patients with eating disorders. *Journal of Clinical Nursing*, 18(13), 1897–1907.
- Lock, J. (2015). An update on evidence-based psychosocial treatments for eating disorders in children and adolescents. *Journal of Clinical Child & Adolescent Psychology*, 44(5), 707–721. doi:10.1080/15374416.2014.971458
- Lock, J., Agras, W. S., Fitzpatrick, K., Jo, B., Bryson, S., & Tchanturia, K. (2013). Addressing treatment dropout in anorexia expression among young women. *International Journal of Eating Disorders*, 43, 187–189.
- Mallorqui-Bague, N., Vintro-Alcaraz, C., Sanchez, I., Riesco, N., Aguero, N., Granero, R., ... Fernandez-Aranda, F. (2017). Emotion regulation as a transdiagnostic feature among eating disorders: Cross-sectional and longitudinal approach. *European Eating Disorders Review*, 26, 53–61. doi:10.1002/erv.2570
- McWey, L. M. (2004). Predictors of attachment styles of children in foster care: An attachment theory model for working with families. *Journal of Marital and Family Therapy*, 30(4), 439–452. doi:10.1111/j.1752-0606.2004.tb01254.x
- Medway, M., & Rhodes, P. (2016). Young people's experience of family therapy for anorexia nervosa: A qualitative meta-synthesis. *Advances in Eating Disorders*, 4(2), 189–207. doi:10.1080/21662630.2016.1164609
- Michopoulos, V., Powers, A., Moore, C., Villarreal, S., Ressler, K. J., & Bradley, B. (2015). The mediating role of emotion dysregulation and depression on the relationship between childhood trauma exposure and emotional eating. *Appetite*, 91, 129–136. doi:10.1016/j.appet.2015.03.036
- Milan, S., & Acker, J. C. (2014). Early attachment quality moderates eating disorder risk among adolescent girls. *Psychology & Health*, 29(8), 896–914. doi:10.1080/08870446.2014.896463
- Murphy, R., Straebl, S., Cooper, Z., & Fairburn, C. G. (2010). Cognitive behavioural therapy for eating disorders. *Clinical Psychiatry*, 33(3), 611–627.
- Osborn, A. L., Delfabbro, P., & Barber, J. G. (2008). The psychosocial functioning and family background of children experiencing significant placement instability in Australian out-of-home care. *Children and Youth Services Review*, 30(8), 847–860.
- Pecora, P., Williams, J., Kessler, R., Downs, C., O'Brien, K., Hiripi, E., & Morello, S. (2005). *Assessing the effects of foster care: Mental health outcomes from the Casey National Alumni Study*. Seattle, WA: The Casey Foundation.
- Pennesi, J., & Wade, T. (2015). A systematic review of the existing models of disordered eating: Do they inform the development of effective interventions? *Clinical Psychology Review*, 43, 175–192. doi:10.1016/j.cpr.2015.12.004

- Pignatelli, A., Wampers, M., Lorieo, C., Biondi, M., & Vanderlinden, J. (2017). Childhood neglect in eating disorders: A systematic review and meta-analysis. *Journal of Trauma and Dissociation*, 18(1), 100–115. doi:10.1080/15299732.2016.1198951
- Quiroga, M. G., & Hamilton-Giachritsis, C. (2016). Attachment styles in children living in alternative care: A systematic review of the literature. *Children Youth Care Forum*, 45(4), 625–653. doi:10.1007/s10566-015-9342-x
- Raviv, T., Taussig, H. N., Culhane, S. E., & Garrido, E. F. (2010). Cumulative risk exposure and mental health symptoms among maltreated youths placed in out-of-home care. *Child Abuse and Neglect*, 34(10), 742–751. doi:10.1016/j.chiabu.2010.02.001
- Rebee, R., Nurius, P. S., Courtney, M. E., & Ahrens, K. R. (2018). Adverse childhood experiences and young adult health outcomes among youth aging out of foster care. *Academic Pediatrics*, 18(5), 502–509.
- Richardson, S. M., & Paxton, S. J. (2012). An evaluation of a body image intervention based on risk factors for body dissatisfaction: A controlled study with adolescent girls. *International Journal of Eating Disorders*, 43(2), 112–122.
- Schlegl, S., Diedrich, A., Neumayr, C., Fumi, M., Naab, S., & Voderholzer, U. (2015). Inpatient treatment for adolescents with anorexia nervosa: Clinical significance and predictors of treatment outcome. *European Eating Disorders Review*, 24, 214–222. doi:10.1002/erv.2416
- Skarderud, F., & Robinson, P. (2012). Eating disorders. In A. Bateman, & P. Fonagy (Eds.), *Handbook of mentalizing in mental health practice*. (2nd ed.; pp. 369–386). Washington, DC: American Psychiatric Publishing.
- Skouteris, H., Fuller-Tyszkiewicz, M., McCabe, M., Cox, R., Miller, R., & Jones, A. (2014). Addressing risk factors of overweight and obesity among adolescents in out-of-home care: The healthy eating and active living (HEAL) study. *International Journal of Adolescence and Youth*, 19(4), 536–548.
- Stice, E., Becker, C., & Yokum, S. (2013). Eating disorder prevention: Current evidence-base and future directions. *International Journal of Eating Disorders*, 46(5), 478–485. doi:10.1002/eat.22105
- Stice, E., Rohde, P., Butryn, M., Shaw, H., & Marti, C. (2015). Effectiveness trial of a selective dissonance-based eating disorder prevention program with female college students: Effects at 2- and 3-year follow-up. *Behaviour Research and Therapy*, 71, 20–26.
- Tarren-Sweeney, M. (2006). Patterns of aberrant eating among pre-adolescent children in foster care. *Journal of Abnormal Child Psychology*, 34(5), 621–632. doi:10.1007/s10802-006-9045-8
- Tasca, G. A., & Balfour, L. (2014). Attachment and eating disorders: A review of current research. *International Journal of Eating Disorders*, 47(7), 710–717. doi:10.1002/eat.22302
- Tchanturia, K., Giombini, L., Leppanen, J., & Kinnaird, E. (2017). Evidence for cognitive remediation therapy in young people with anorexia nervosa: Systematic review and meta-analysis of the literature. *European Eating Disorders Review*, 25, 227–236.
- Villalta, L., Smith, P., Hickin, N., & Stringaris, A. (2018). Emotion regulation difficulties in traumatized youth: A meta-analysis and conceptual review. *European Child and Adolescent Psychiatry*, 27, 527–544. doi:10.1007/s00787-018-1105-4
- Weinbach, N., Sher, H., & Bohon, C. (2018). Differences in emotion regulation difficulties across types of eating disorders during adolescence. *Journal of Abnormal Child Psychology*, 46, 1351–1358. doi:10.1007/s10802-017-0365-7
- Wilfley, D., Kolko, R., & Kass, A. (2011). Cognitive-behavioural therapy for weight management and eating disorders in children and adolescents. *Child and Adolescent Psychiatric Clinics of North America*, 20(2), 271–285. doi:10.1016/j.chc.2011.01.002