Abstract

Chairwork represents an assembly of creative experiential interventions which have been incorporated into many evidence-based psychotherapies. This narrative review explores the applications, efficacy and mechanisms of action of chairwork techniques utilised in cognitive and behavioural therapies. Relevant literature was acquired through research database searches and manual reviews of leading cognitive behavioural manuals. The clinical literature indicates that chairwork has multifarious applications in second-wave, third-wave and integrative cognitive therapies, and provides a powerful medium within which the tasks of CBT can be achieved. Preliminary research also suggests that chairwork is an effective therapeutic technique although limited evidence currently exists for its efficacy in CBT. Based upon these findings, and drawing upon theories of cognitive science, possible mechanisms of action underlying chairwork in CBT are presented. Preliminary guidelines for implementing cognitive behavioural chairwork and future directions for research are proposed.
**Introduction**

“Chairwork” refers to a collection of experiential interventions which utilise chairs and their relative positions for therapeutic purposes. Such interventions have been referred to by various titles including (re)enactments, dramatisations, role-plays and dialogues. Since its original development within the school of psychodrama (Moreno, 1948; Fox, 1987) and later elaboration in gestalt therapy (Perls, 1973), chairwork has been adopted into numerous psychotherapies including cognitive behavioural therapy (CBT). Research suggests that it is an effective intervention both as an ingredient of psychotherapy (Paivio & Greenberg, 1995) and as a stand-alone intervention (Greenberg & Dompierre, 1981; Shahar et al., 2011). Such techniques have been applied to the treatment of multifarious pathologies including anxiety (Robinson, McCague & Whissell, 2014), depression (Greenberg & Watson, 1998), eating disorders (Dolhanty & Greenberg, 2007), psychosis (Chadwick, 2003), post-traumatic stress disorder (Butollo, Karl, Konig & Rosner, 2016), substance misuse (Kellogg, 2015), personality disorders (Pos & Greenberg, 2012), childhood trauma (Paivio, Jarry, Chagigiorgis, Hall & Ralston, 2010) and unresolved grief (Klingspon, Holland, Neimeyer & Lichtenthal, 2015).

Despite such legacy and a growing interest in the utility of experiential interventions in cognitive therapy (Holmes & Mathews, 2010), chairwork has received comparatively little empirical attention in CBT. This paper provides an overview of key chairwork interventions utilised in cognitive and behavioural therapies. Based upon theories of cognitive science, the paper will go on to propose mechanisms through which chairwork may achieve therapeutic effects. It is hoped that these suggestions will not only render chairwork more comprehensible to practising cognitive behavioural therapists, but also encourage further empirical analysis of this technique; research which is unfortunately lacking. Recommendations for future studies and suggestions as to how chairwork can be most effectively applied in CBT are lastly provided.
What is chairwork?

Chairwork can be differentiated into three overlapping forms. In two-chair dialogues, the client is asked to move between chairs representing different perspectives or aspects of the self (for example, the part of the self which wants to change a behaviour and the part which does not). In empty chairwork, the client is asked to engage in a dialogue with an imagined “other” who is placed in an empty chair (for example, a past abuser). Finally, in chairwork role-plays, the therapist and the client (re-)enact specific problematic interactions (for example, a situation where the client has struggled to assert themselves). Kellogg (2004) has gone on to differentiate two broader typologies of chairwork: interventions in which the individual interacts with parts of the self (internal chairwork dialogues) or with other individuals (external chairwork dialogues). In clinical practice chairwork tends to be applied in complex and integrated ways which blend or sequence different techniques in a single intervention (Kellogg, 2015).

Chairwork in cognitive behavioural therapies

It is generally accepted that the therapeutic effects of chairwork are partially mediated by cognitive mechanisms (Edwards, 1989; Greenberg, 1983; Kellogg, 2004). Accordingly, this technique appears compatible with the principles of CBT. It is unsurprising then, that chairwork has a rich history of applications in CBT. The following section explores how chairwork has been applied within cognitive behavioural therapies, including “third-wave” and integrative forms of CBT.

Chairwork in traditional cognitive behavioural therapy

Reference to chair-based techniques appear throughout the cognitive behavioural literature including early texts for cognitive therapy (Beck, Rush, Shaw & Emery, 1979). As
with other experiential interventions (Hackmann, Bennett-Levy & Holmes, 2011), cognitive behavioural interest in chairwork has grown over the last three decades, likely stemming from the emergence of proponents such as Goldfried (1988) and the development of integrative cognitive therapies such as schema therapy (Young, Klosko & Weishaar, 2003). Compared to imagery however, chairwork is distinctly under-represented in the literature. Reference to chairwork as a distinct intervention in CBT has appeared in recent years (e.g. Leahy, 2003) and and often bares considerable resemblance to techniques originating in emotion-focused therapy (EFT) (Greenberg, Rice & Elliott, 1993). This may reflect the development of a more principle-based - rather than technique-focused - approach to CBT (Goldfried & Pawader, 1982) or perhaps a greater appreciation for the role of emotion-focused interventions in ameliorating pathology (Thoma & Greenberg, 2015).

The following section reviews how chairwork has been utilised within traditional CBT. Chairwork interventions have been categorised according to their primary target (behavioural, cognitive or emotional modification) although overlap between these foci is accepted in-line with the cognitive behavioural model.

**Behaviour.** The development of new behavioural repertoires is probably the most obvious application of chairwork in CBT; what some researchers have described as “behaviouristic psychodrama” (Wolpe, 1982, cited in Kellogg, 2012). However, chairwork has not been limited to just the rehearsal of behaviours but also their assessment. For example, the client may be asked to enact their usual response styles in chairwork role-plays with the therapist to identify possible interpersonal deficits (Beck et al., 1979). On the basis of therapist feedback, or by reversing roles (i.e. the therapist re-enacting the client’s behaviour), insight into the interpersonal effects of behaviour can be garnered (Beck, Freeman & Davis, 2004; Butler, 1989). New behavioural strategies can be elaborated and practised through chairwork role-play, supplemented by direction and feedback from the therapist (Dancu & Foa, 1992).
Beck, Emery and Greenberg (1985) have recommended “exaggerating” the content of such role-plays so that the client can feel confident managing the most challenging situations. Alongside modelling new behaviours, the therapist may choose to enact several different response styles (ideally using different chairs) so that the client is able to observe how such behaviours are performed and assess their relative utility (Beck, 2005; Hawthorne & Kirk, 1989). Encouraging the client to change chairs and behave “as if” they feel less fearful, for example, also provides a creative avenue for practicing new behavioural strategies (Beck et al., 2004). An alternative means to generating new repertoires, the client can be encouraged to enact the behaviour of an individual who epitomises the interpersonal style they wish to absorb (Beck et al., 1985). If particular interpersonal scenarios are feared or avoided, chairwork role-plays may also provide a preliminary means of facilitating exposure and habituation such interactions (Wells, 1997). Lastly, chairwork may be operationalised as a measure of treatment outcome; Kirk (1989) has suggested that by repeating specific role-plays pre- and post-treatment, chairwork can provide an ecologically valid measure of behavioural change.

**Cognition.** Chairwork has been used to modify cognition in many creative ways and is typically employed when working with schema-level beliefs (Beck, 1995) or complex and longstanding disorders (Beck et al., 2004). These cognition-focused chairwork techniques have collected various titles over time including “rational-emotive” and “lawyer-prosecutor” role-plays, and are often recommended when cognitive change is experienced at an intellectual, rather than affective, level (“heart-head” lag) (Beck, 1995; Goldfried, 2013). This is because chairwork exercises are theorised to provide more direct access to “hot” cognitive material than verbal discussion alone (Goldfried, 1988; Safran & Greenberg, 1982; Samilov & Goldfried, 2000).

Chairwork role-plays with the therapist can be a helpful preliminary method for eliciting cognitions which tend to accompany problematic behaviours or interactions. This can
be especially useful if the client struggles to recall thoughts arising in challenging situations. When restructuring cognition through chairwork, a two-chair format is typically used: one chair which represents the evidence for a thought or belief, and a second which represents disconfirmatory evidence. Depending upon the level of conviction and affect associated with a belief, the sequence of two-chair cognitive restructuring varies (Pos & Greenberg, 2012). Initially the client may be asked to provide evidence supporting a negative belief from chair one, whilst the therapist responds with counter-evidence from chair two (Beck et al., 1979; Beck et al., 1985). Later the client may be asked to move back and forth between both chairs, responding and counter-responding, or instead provide counter-evidence for the therapist who adopts a self-debasing role similar to the client (Beck et al., 1979; Leahy, 2003). Towards the end of two-chair cognitive restructuring, the therapist may occupy the chair which represents the negative belief and actively challenge disconfirmatory evidence provided by the client (Beck, 2005). Beck and colleagues (1979) also highlight the value of adding a third “empathic” chair to such exercises which embodies a care-focused attitude, particularly if the client tends to invalidate their emotional responses or if self-directed care is impoverished. It is worth noting that two-chair cognitive restructuring exercises are likely to require repetition to allow sufficient socialisation and achieve full effects.

A more elaborate procedure for two-chair cognitive restructuring has been outlined by de Oliveira (2008, 2015). Chairwork here is presented as analogous to a courtroom trial and is divided into six stages. In the first stage, the client is asked to reconceptualise negative cognition as an “allegation” which has been made by an internal “prosecutor”. The client is then asked to change chairs and, in stages two and three, enact the roles of internal “persecutor” and internal “defence-attorney” who each outline evidence confirming or disconfirming the allegation made against the client. In stages four and five, the client is asked to re-enact these roles once more and present counter-arguments to the evidence presented thus far. In the final
stage of the simulated trial, both the client and the therapist change chairs and adopt the roles of objective “jurors” responsible for assessing the accuracy of the arguments presented and rendering a decision as to the validity of the original allegation. The trial is then concluded with the client re-appraising the accuracy of their original cognition from the initial chair.

Less common than the two-chair technique has been the use of the empty chair technique in cognitive restructuring. Here, the therapist (sometimes accompanied by the client) may challenge a negative belief which is placed in an empty chair. Alternatively, the client may be asked to imagine that the empty chair holds a symbolic representation of negative cognition (for example, the “inner critic”) or a particular individual associated with the development of a self-belief (for example, an abusive other) which is again challenged (Beck et al., 2004; Leahy, 2003).

Two-chair interventions have not only been used to test the accuracy of beliefs but also to resolve polarities in cognition. For example, an ambivalent client may be asked to speak from chairs which represent the advantages (chair one) and the disadvantages (chair two) of particular beliefs or behaviours. After both sides have fully expressed themselves, the client may reach a point of decision or greater certainty (Dugas & Robichaud, 2007; Goldfried, 2013; Kellogg, 2004). In addition to resolving ambivalence, Safran and Greenberg (1982) have recommended the use of two-chairs to elicit and differentiate rationally-held beliefs (cold cognitions) from emotionally-held beliefs (hot cognitions) in order to facilitate the application of appropriate interventions.

Lastly, chairwork role-plays have been used to modify distressing child memories (“historical role-plays”; Arntz & Weertman, 1999; Beck, 1995; Beck et al., 2004). In this intervention, the therapist and the client utilise chairs to collaboratively re-enact troubling interactions from childhood. In the first stage of historical role-play, the client (enacting their
child self) recreates the interaction with the parental antagonist (enacted by the therapist). Roles are then reversed in the second stage and the interaction repeated. In adopting the parental role, new insights into the behaviours, underlying motivations and/or validity of distressing messages conveyed by others is acquired by the client. In addition, the therapist is provided an opportunity to begin challenging toxic messages from the position of the client’s child self. In the third and final stage of historical role-play, the client is asked to enact their child self once more and experiment with responding to their parent in more satisfying and therapeutic ways.

**Emotion.** It has been argued that CBT tends to deprioritise affect relative to cognitive and behavioural processes (Coombs, Coleman & Jones, 2002; Samoilov & Goldfried, 2000). However, affect and associated meta-experiential appraisals of emotions are increasingly recognised as important to positive therapeutic outcomes in therapy (Castonguay, Pincus, Agras & Hines, 1998; Hofmann, 2016; Leahy, 2015). For example, emotional arousal is critical to successful exposure-based techniques (Foa & Kozak, 1986), whilst enhanced emotional processing has been associated with improved outcomes in CBT for depression (Hunt, 1998). Accordingly, most contemporary CBT therapists would agree that emotions “must be experienced before [they] can be reduced or eliminated” (Rachman, 1980).

Chairwork is often an emotive intervention and so is well suited to raising awareness of emotional states. For example, chairwork role-plays can be utilised to identify emotions which accompany problematic thoughts, behaviours or interpersonal interactions (Kouimtsidis. Reynolds, Drummond, Davis & Tarrier, 2007). By eliciting high levels of affect, chairwork can also provide opportunities for exposure and habituation to distressing emotional states (Beck et al., 2004; Dolhanty & Greenberg, 2007). This is often useful in cases where emotion is feared or avoided. Encouraging the client to switch to the “empathic chair” (Beck et al., 1979) following emotional expression can provide opportunities for practicing the validation of emotional responses. Similarly, chairwork can be operationalised as an “experiment” to test
out fears about the perceived consequences of coming into closer contact with affect. Lastly, the empty-chair technique can be used to facilitate the expression and processing of emotions linked to particular individuals or events. For example, Beck and colleagues (2004) describe how, following therapist modelling, a client was able to express and eventually resolve resentments towards a parental figure which had previously been denied.

**Clinical supervision.** Before concluding this section, it is worth outlining how chairwork has been utilised in cognitive behavioural supervision. As with clinical chair-based role-plays, chairwork provides an experiential method for modelling, rehearsing and evaluating therapeutic techniques (Milne, 2009). Safran, Muran, Stevens and Rothman (2007) suggest that supervisory chairwork may also help facilitate insights into challenging clinical encounters. For example, the supervisee may be encouraged to re-create difficult interactions by speaking from chairs representing the client and therapist’s perspectives (the two-chair technique). By embodying both positions, awareness of previously unnoticed emotions, cognitions and communications on behalf of the client may be acquired. Lastly, chairwork role-plays can be used to generate more accurate therapist empathy. This can be particularly helpful if the client elicits negative feelings within the therapist. For example, Beck and colleagues (1979) recommend role-playing challenging clients in simulated interviews with the supervisor to better understand the client’s perspective, whilst “trying on” the client’s negative cognitions can also help generate fruitful counterarguments to problematic cognitions.

**Chairwork in third-wave cognitive behavioural therapies**

Many third-wave cognitive therapies have embraced a more multifarious model of the self than is typically associated with CBT. Facilitating dialogues between these “selves” within chairwork has been described in some approaches. Compassion-focused therapy (CFT) (Gilbert, 2009) has utilised chairwork to enhance awareness and expression of different
affective states which might normally be silenced or ignored (for example, using chairs to encourage the expression of angry, anxious and sad emotions) (Gilbert, 2010). Like EFT, CFT has also used chairwork to address self-criticism (albeit with some important adjustments). To begin with, the client is invited to change seats and enact their typical self-critical thoughts, delivering these to an empty chair. Switching to the empty chair and taking the position of the attacked self, the client can reflect on their physical and emotional responses to being the object of self-criticism (e.g. shame, slumping, and averted gaze) (Gilbert & Irons, 2005). This technique can be particularly helpful in re-evaluating the effects and perceived benefits of self-criticism (Gilbert, personal communication). Gilbert and Irons (2005) also describe how chairwork can provide opportunities for the functional analysis of self-criticism. By role-playing one’s “inner critic” in simulated interviews with the therapist, the client can be helped to explore the origins and purpose of self-attacking, as well as fears associated with reducing this behaviour. Finally, the authors expand upon typical two-chair interventions for self-criticism by advocating the use of a third ‘compassionate’ chair, which expresses empathy towards both the attacking and attacked parts of the self, as well as generating compassionate counter-responses to self-critical thoughts (Gilbert, 2010). After switching back into their original ‘attacked’ chair, the client can experience receiving compassion from the self (Welford, 2012). It is important to note, however, that compassion-based chairwork is likely to require considerable preliminary work to build motivation to accessing care-focused mentalities.

**Chairwork in integrative cognitive behavioural therapies**

Integrative forms of CBT are generally rooted in a principle-focused approach to treatment, insofar as techniques drawn from other psychotherapies may be used to reach common therapeutic goals (Goldfried, 2006; Thoma & Greenberg, 2015). In relation to chairwork, this has typically involved augmenting CBT with chair-based techniques developed
in other psychotherapies such as EFT. For example, Borkovec, Newman and Castonguay (2003) have advocated the use of emotion-focused chairwork to help facilitate emotional processing in disorders associated with affective avoidance. Preliminary studies have provided limited support for this recommendation (Newman et al., 2011), although further guidance is needed regarding when and how chairwork is applied in this form of CBT.

Chadwick (2003) has also recommended the use of emotion-focused chairwork in treatments for psychotic disorders. Based on the observation that negative schemas are experienced as stable and global, it has been suggested that chairwork may be used to construct alternative schema and foster a more complex representation of the self. Chairwork here is divided into four steps: firstly, the negative schema is expressed in chair one; secondly, an alternative positive schema is elicited, elaborated and expressed in chair two; thirdly, acceptance of both schema is achieved through reflection and discussion; and finally, a newly constructed model of the self as complex and diverse is reinforced. Whilst this intervention is yet to be tested empirically, Chadwick (2003) provides compelling post-intervention feedback from participants highlighting the “felt truth” of self-beliefs developed using this intervention.

Perhaps the most well-established form of integrative CBT is schema therapy, which combines techniques drawn from cognitive, behavioural, gestalt and psychoanalytic therapies (Young et al., 2003). Chairwork is regarded as a core experiential intervention in both schema-focused and mode-focused forms of therapy (Kellogg, 2012). As in two-chair cognitive-restructuring, chairwork in schema-focused therapy is used to modify early maladaptive schemas. This typically involves the schema being stated in one chair and counter-evidence presented from the other (“schema dialogues”) (Young et al., 2003). Depending upon the strength of the schema and stage of treatment, counter-evidence is typically presented first by the therapist and later by the client. Within mode-focused schema therapy, chairwork techniques are used to strengthen the healthy adult mode, heal vulnerable child modes,
minimise maladaptive coping modes, and silence dysfunctional parent modes (Arntz & Jacob, 2013). Chairwork with punitive parent modes typically begins with the therapist (enacting the healthy adult mode) confronting the mode which has been placed in an empty chair. As therapy progresses, the client is encouraged to adopt the healthy adult role and challenge parent modes with support from the therapist. When working with maladaptive coping modes, chairwork is used to explore their developmental origins and functions. For example, the therapist may “interview” the coping mode (enacted by the client) so as to explore its origins, functions and intentions. Alternatively, two-chair decisional dialogues can be used to examine the utility of particular coping strategies, wherein the client is asked to speak from separate chairs representing the costs and benefits of a particular method of coping (Kellogg, 2012). When working with child modes, chairwork is used to facilitate the expression angry child modes and heal vulnerable child modes through limited reparenting. More detailed descriptions of chairwork in mode-focused schema therapy are provided by Kellogg (2012) and Arntz and Jacob (2013). It is important to note, however, that schema therapy is somewhat unique in using many chairs simultaneously; complex dialogues using four or more chairs are not uncommon in this approach (Arntz & Jacob, 2013).

Finally, Goldfried (2006; 2013) has outlined a cognitive-affective-relational-behaviour model of treatment, grounded in the principle that both experiential and cognitive behavioural interventions share common principles of change (namely the restructuring of cognition through the arousal and processing of affect). Chairwork here is used to achieve tasks which are typical of CBT. For example, Goldfried (2006) describes how empty chair dialogues with significant others may be used to both elicit cognitions linked to problematic relationship styles (e.g. “I must not assert myself with others”) and develop new, more adaptive attributions for distressing childhood experiences (see Arntz & Weertman, 1999). Goldfried also suggests that the emotive nature of chairwork may provide valuable opportunities to challenge and test out
beliefs about emotions in-situ; for example, one’s ability to express, tolerate and regulate emotion.

**Is chairwork clinically effective?**

Chairwork has been incorporated into a number of evidence-based psychotherapies, many of which have produced outcomes equivalent to CBT in preliminary studies (Beutler et al., 1991; Butollo et al., 2016; Hamamci, 2006; Kipper & Giladi, 1978; Watson, Gordon, Stermac, Kalogerakos, & Steckley, 2003). Experiential therapies which utilise chairwork have also outperformed comparison treatments such as group psychoeducation (Greenberg, Warwar & Malcolm, 2008; Paivio & Greenberg, 1995) and wait-list controls (Paivio & Nieuwenhuis, 2001). Whilst these findings point towards the efficacy of chairwork, they tell us little about chairwork techniques utilised in CBT. Unfortunately, research exploring the effectiveness of cognitive behavioural chairwork is limited to just small number of studies (for example, de Oliveira et al., 2012a). However, chairwork has been a focus for considerable research in other fields, both as a standalone intervention (Shahar et al., 2011) and in comparison to other therapeutic techniques (Conoley, Conoley, McConnell & Kimzey, 1983). Attention has also been paid to the processes through which chairwork achieves therapeutic effects in process-oriented therapies such as EFT (Greenberg, 1979, 1983; Greenberg & Webster, 1982). Such research may provide indirect but informative evidence regarding the potential efficacy of chairwork in CBT.

The following section reviews studies which have examined the effectiveness of chairwork as a clinical intervention. Post-intervention feedback is also included as this provides valuable insights into potential advantages and disadvantages of this technique, as well as potential mechanisms of action.

**Component studies**
Dismantling studies attempt to associate the effects of psychotherapies to specific treatment components (Ahn & Wampold, 2001). Two such studies have compared EFT against person-centred therapy to determine whether the experiential interventions unique to EFT (such as chairwork) build upon the curative effects of the therapeutic relationship. In the first of these, Greenberg and Watson (1998) compared the effects of person-centred psychotherapy against process-experiential psychotherapy. Whilst both treatments were comparable in reducing depression, process-experiential therapy was superior in raising self-esteem and interpersonal functioning as well as in the speed of symptom reduction. Similar findings are reported in a later study (Goldman, Greenberg & Angus, 2006) wherein EFT demonstrated superiority both in terms of reduced depressive symptoms and global distress. Combined results for both studies has yielded a medium effect size of 0.52 (Elliott, Greenberg & Lietaer 2004) although allegiance effects and relatively small sample sizes limit these findings. Whether the relative advantage of EFT can be linked directly and specifically to chairwork alone is also questionable.

The efficacy of chairwork has also been explored in EFT applied to childhood trauma. Paivio and colleagues (2010) compared the effects of EFT incorporating imaginal confrontation of past abusers (using the empty chair technique) against EFT combined with empathic exploration of past traumas. Results indicated that a larger proportion of individuals experienced clinically significant change and were reliably recovered in the EFT plus imaginal confrontation group. However, this advantage was reduced at follow-up (79% versus 77%).

Finally, Newman et al. (2011) explored whether experiential techniques (including chairwork) can augment the effects of CBT for GAD. Participants were randomised to either CBT plus experiential and interpersonal interventions or CBT plus supportive listening. Whilst no significant differences in outcome were found, there was a (non-significant) trend towards greater clinically significant change and end state functioning in the experiential-interpersonal
CBT group. These preliminary findings suggest that experiential interventions such as chairwork may to a limited extent enhance the effects of CBT when applied to disorders associated with affective avoidance. Whether these benefits are linked to chairwork alone is questionable and require replication in further studies.

Stand-alone studies

A limited number of studies have assessed efficacy of chair-based techniques applied as stand-alone interventions. Within CBT, such research is limited to studies exploring the trial-based method (de Oliveira, 2008; 2015). For example, preliminary research indicates that single-session trial-based chairwork is capable of producing significant reductions in negative core beliefs and associated emotions (de Oliveira, 2008; de Oliveira et al., 2012b). Additional studies have assessed the effectiveness of chairwork techniques developed in other psychotherapies. Preliminary research suggests that two-chair techniques are effective in reducing self-criticism, depression and anxiety at both post-intervention and six month follow-up (Shahar et al., 2011). Similar findings have been reported in other studies, with beneficial reductions in global distress, shame, rumination and thought suppression following chairwork, as well as enhanced self-compassion (Kramer & Pascual-Leone, 2015; Neff, Kirkpatrick & Rude, 2007; Shahar et al., 2011). Unfortunately many of these studies have relied upon analogue groups and small sample sizes which limits their generalisability. It should also be noted that these studies have measured the effects of chairwork techniques developed in EFT (for example, two-chair interventions for self-evaluative splits) rather than two-chair cognitive restructuring more commonly used in CBT (Beck et al., 1979; Goldfried, 1988).

Technique comparison studies

A small number of studies have compared the effects of chairwork against other therapeutic techniques. For example, the two-chair technique decisional balance technique
(Greenberg, 1979) has been shown to outperform empathic reflections (Greenberg & Dompierre, 1981) and problem-solving (Clarke & Greenberg, 1986) in resolving indecision. However, chairwork was found to be equally effective as the decision-cube technique (i.e. listing costs and benefits) and emotion focusing in other research (Greenberg & Higgins, 1980; Trachsel, Ferrari & Holtforth, 2012).

The efficacy of chairwork has also been tested against other cognitive interventions. In a recent randomised clinical study, de Oliveira and colleagues (2012b) compared the effects of trial-based chairwork against the seven-column thought record and positive data logging in a sample of socially anxious individuals. Both treatments aimed to reduce symptoms of social anxiety and the severity of associated core beliefs. Significantly greater reductions in fears of negative evaluation, social avoidance, and life impairment were found in the chairwork condition, whilst reductions in social anxiety were found to be equivalent (de Oliveira et al., 2012a; Powell et al., 2013). These findings would suggest that chair-based cognitive restructuring may be advantageous relative to some pen-and-paper cognitive interventions. However, it is important to note the small sample utilised in these studies and a lack of fidelity checks.

Lastly, Conoley and colleagues (1983) compared the effects of the empty-chair technique against chain analysis and cognitive restructuring for reducing anger. Whilst both interventions performed better than a control condition (active listening), neither technique was favoured. Unfortunately, the longer-term effects of each intervention were not reported in this study.

**Participant feedback**

Whilst participant feedback does not provide direct evidence for chairwork, it does provide insights into the potential benefits of such interventions beyond measured changes in
pathology. Participant feedback indicates that chairwork is a valued and often transformative intervention (Chadwick, 2003; Greenberg & Dompierre, 1981; Robinson, McCague, & Whissell, 2014). Reported benefits include an increased capacity to tolerate high levels of emotion (Ellison, Greenberg, Goldman & Angus, 2009), reduced tendency towards self-criticism (Dolhanty & Greenberg, 2007), increased intrapersonal awareness (Greenberg & Watson, 1998), greater metacognitive insight (Chadwick, 2003), and high memorability for such exercises (Ellison, Greenberg, Goldman, & Angus, 2009; Schimmel & Jacobs, 2013). In addition, cognitive modifications generated through chairwork are often described as more meaningful and authentic than those produced through discussion alone (Chadwick, 2003).

Participant feedback has also identified some disadvantages for chairwork. For example, it has been noted that the high level of emotion elicited may be difficult to tolerate for some clients (Sutherland, Perakyla & Elliott, 2014) and can disrupt task focus (Clarke & Greenberg, 1986). Consistent with other studies in CBT (Castonguay, Goldfried, Wiser, Raue, & Hayes, 1996), these findings would suggest an optimal level of arousal wherein affect is high but not overwhelming during chairwork (Carryer & Greenberg, 2010).

In summary, research suggests that chairwork techniques may be effective in ameliorating a range of pathologies including self-criticism, rumination, shame, indecision and unresolved feelings towards significant others. Preliminary studies also indicate that chairwork may be as (or potentially more) effective than some traditional cognitive behavioural interventions. However, most studies have tended to utilise small analogue samples and details regarding randomisation and fidelity procedures are frequently lacking. Replication studies are needed. In addition, most research has examined forms of chairwork developed within EFT, whilst chairwork techniques developed in CBT remain largely untested. As such, conclusions regarding the efficacy of chairwork must be accepted with caution. Finally, it remains unclear if CBT would benefit most from incorporating chairwork techniques developed in other
psychotherapies or if more purist cognitive behavioural forms of this intervention (for example, the trial-based method) are advantageous. In light of these shortcomings, further research exploring the effectiveness of cognitive behavioural chairwork is warranted.

**Theoretical mechanisms of action**

Echoing the range of psychotherapies which have incorporated chairwork, disparate theories have been provided as to the mechanisms underlying its therapeutic effects. Depending upon the therapy in question, several causal pathways have been proposed including the resolution of internal conflicts (Perls, 1973), facilitating improved intrapersonal dialogue (Stone & Stone, 1989), and the transformation of pathological affect (Greenberg, 2002). Whilst these explanations are not entirely incompatible with CBT, they do not map directly onto the principles of therapy. Hypothesises regarding potential cognitive behavioural processes underlying the effects of chairwork are now presented.

**Interacting Cognitive Subsystems (ICS; Teasdale & Barnard, 1993)**

The ICS is a comprehensive information-processing account of mental processes grounded in cognitive behavioural principles. The ICS has been applied to numerous pathologies including depression (Teasdale, 1999) and eating disorders (Park, Dunn & Barnard, 2011), and has informed the development of novel cognitive behavioural treatments (Segal, Williams & Teasdale, 2002). ICS identifies two distinct levels of knowledge. The propositional code is concerned with information that is specific and consciously “known”. Concepts at this level are typically semantic, language-correspondent, logically verifiable, and associated with “head-level” intellectual beliefs. This kind of meaning can be equated with explicit or declarative knowledge (Teasdale, 1999). The second level of meaning is represented by an implicational code, which operates at a more generic and holistic level. Meanings at this level are thematic, intuitive, difficult to convey, and are associated with “heart-level” emotional
beliefs (‘felt senses’) (Teasdale, 1997). The implicational code is theorised to have direct links with emotion and proprioceptive cues (for example, bodily sensations) whilst the propositional code does not. Therapeutic change is theorised to occur when information is transferred from the ‘cold’ propositional meaning subsystem and modification occurs within the ‘hot’ implicational meaning subsystem.

The ICS account has highlighted the importance of working with implicational knowledge structures in CBT (typically manifest as ‘hot’ cognitive material) via “experiences in which new or modified models are created” (Teasdale, 1997, p.90). As opposed to language-based forms of cognitive restructuring such as thought records (which are theorised to act primarily on propositional knowledge), experiential interventions such as behavioural experimentation (Bennett-Levy, 2003) and imagery modification and rescripting (Hackmann et al., 2011) are theorised to share more direct links with the implicational code. Increasing both sensory and emotional experiencing in-session (Samoilov & Goldfried, 2000) and facilitating the encoding of new information in multisensory formats (e.g. using visual, auditory, motor and kinaesthetic systems) (Engelkamp, 1998) have also been cited as additional means of modifying implicational meanings.

It can be hypothesised that chairwork is an effective means of modifying implicational forms of knowledge (Samoilov & Goldfried, 2000). As with other experiential interventions (Wild, Hackmann, & Clark, 2008), chairwork is capable of accessing implicational meanings through the simultaneous activation of multiple sensory channels. For example, imaginal confrontation requires the recall of past traumas (autobiographical memory), imaging the protagonist in the empty chair (visualisation), focusing on one’s immediate emotional reaction to this presence (affect), and the expression of affective responses through both dialogue (verbalisation) and gesture (movement). New information is subsequently introduced into the
implicational subsystem through the process of challenging the abuser and validating unmet personal needs.

Emotional arousal is a further means of accessing the implicational code (Epstein, 1998; Bennett-Levy, 2003) and has been identified as a marker of activation within the implicational knowledge subsystem (Teasdale & Barnard, 1993). Supporting the importance of affect in psychotherapy (Epstein, 1998; Samoilov & Goldfried, 2000), research has associated positive therapy outcomes in CBT with higher levels of emotional exploration, reflection and arousal (Castonguay et al., 1996; Castonguay et al., 1998; Coombs et al., 2002; Fitzpatrick, Peternelli, Stalikas & Iwakabe, 1999; Watson & Bedard, 2006). Chairwork is widely recognised as a deeply evocative intervention (Narkiss-Guez, Zichor, Guez & Diamond, 2015), the therapeutic effects of which may partially derive from the high levels of arousal elicited therein. Research has lent support to this assertion by identifying positive correlations between level of expressed emotion during chairwork and therapeutic outcomes (Carryer & Greenberg, 2010; Greenberg & Malcolm, 2002).

It is generally accepted that imagery also shares a special relationship with implicational knowledge insofar as emotionally charged material is preferentially accessed by perceptual processes (Conway, 2001; Hackmann et al., 2011; Salas-Auvert & Felgoise, 2003). Like imagery, chairwork may be effective in activating basic emotion-related brain systems which are theorised to have evolved prior to the development of language-based representations (Holmes & Mathews, 2010). Furthermore, chairwork often incorporates imagery to facilitate emotional arousal and processing. For example, the client may be asked to imagine their “inner critic” in an empty chair during chair-based cognitive restructuring. Given that many such images will overlap with actual autobiographical experiences, it seems likely that chairwork will activate related memory structures and so provide direct access to
associated affects (Hackmann et al., 2011). In this way, elements of emotion-laden memories may be incorporated into some forms of chairwork dialogue.

In summary, there are several possible mechanisms through which chairwork may access implicational meaning subsystems. These include multisensory activation; heightened affect; the activation of affect-laden memories and associated emotional states; and significant overlap between chair-based dialogues and relevant autobiographical memories.

Retrieval Competition (Brewin, 2006)

Like the ICS, Brewin (1996) has argued that cognition draws upon multiple knowledge stores which vary in accessibility to introspection. It has been proposed that whilst verbally accessible memories (VAMs) may be consciously accessed and modified, situationally accessible memories (SAMs) are not available to introspection but are instead elicited in response to relevant cues (for example, situations which share features with autobiographical events). In order for modification to occur, SAMs must be brought into conscious awareness. Whilst SAMs may be relatively easy to elicit in certain disorders (e.g. phobias), representations underlying more generalised disorders such as depression may be harder to access due to their greater levels of abstraction. For example, repeated experiences of inadequate parenting are likely to lead to more complex and diffuse representations rooted in multiple historical events. Furthermore, clinicians will likely struggle to recreate features of such events to elicit relevant SAMs. Given that failure to deactivate or change unconscious representations (e.g. SAMs) may imbue greater sensitivity to relapse, considerable interest has been directed towards cognitive behavioural treatments which target both conscious representations and situationally accessible knowledge (e.g., Teasdale & Barnard, 1993; Brewin, 1996).

Based upon these observations, Brewin (2006) has proposed that psychological therapies achieve therapeutic effects via adjustments in the relative accessibility of memory
representations, insofar as new adaptive representations out-compete negative representations for recall. Crucially, it has been argued that the adaptive representations generated in therapy must be sufficiently memorable, distinctive and attention grabbing to successfully compete for retrieval. These assertions are consistent with the use of traditional cognitive interventions which seek to elaborate more “rational” competitor cognitions through cognitive restructuring, and have encouraged the development of novel treatments which aim to strengthen the retrieval of functional knowledge representations (Korrelboom, van der Weele, Gjaltema & Hoogstraten, 2009).

Preliminary research suggests that the efficacy of chairwork may be partly linked to the memorability of such interventions and, relatedly, the salience of representations generated therein (Chadwick, 2003). The memorability of chairwork may be linked to high levels of affect elicited during dialogues, its multisensory format, and/or the sheer novelty of speaking to parts of oneself or imagined others (Greenberg, 1979, Thoma & Greenberg, 2015). In addition, chairwork is consistent with the assumptions of retrieval competition in not being constrained by the boundaries of logic or reality. Dialogues with the deceased, imagined others and personified aspects of the self are not uncommon (Kellogg, 2015). Without deference to rationality or temporality, chairwork creates opportunities for facilitating creative and distinctive imaginal interactions, which may in turn help facilitate access to pathology related SAMs. This raises an interesting question as to whether some cognitive behavioural interventions (for example, cognitive restructuring) could prove more effective when applied through the medium of chairwork rather via pen-and-paper tasks.

Other mechanisms of action

Decentring. Decentring is defined as the capacity to “step outside of one’s immediate experience” (Safran & Segal, 1990) so as to dispassionately and non-judgementally observe
the contents of consciousness. Gaining psychological distance from one’s thoughts has long been recognised as therapeutic in CBT and has been associated with reductions in emotional distress (Beck, 1976; Shapiro, Carlson, Astin, & Freedman, 2006). Many third-wave cognitive therapies identify dis-identification from internal experiences as a core therapeutic target which is achieved through interventions such as mindful meditation, cognitive defusion and metacognitive awareness training.

Several authors have noted that chairwork often produces beneficial changes in how individuals relate to internal events. When thoughts, feelings and perspectives are placed in chairs, greater distance from these states is achieved, both physically and psychologically (Chadwick, 2003). In addition, the repeated enactment of distressing thoughts and feelings through chairwork, followed by reflection upon these states from other spatial locations (i.e. chair two), may help foster decentring from such experiences. Finally, by encouraging differentiation of the self into parts and facilitating dialogue between these selves, chairwork may also help enhance one’s capacity to observe particular internal states (Dimaggio & Stiles, 2007).

**Exposure and emotional processing.** Emotional processing is defined as, “the process whereby emotional disturbances are absorbed and decline to the extent that other experiences and behaviour can proceed without disruption” (Rachman, 1980, p.51). The process of experiencing and accepting distressing affective states is accepted as a curative in many psychotherapeutic orientations whilst deficiencies in emotional processing have been associated with psychopathology (Baker et al., 2012). For example, exposure to distressing stimuli is recognised as critical to the processing, absorption and amelioration of anxiety in CBT (Foa and Kozak, 1986). Preliminary research also suggests that effective cognitive restructuring requires arousal of dysphoric affective states in depression (Hunt, 1998) and that
emotional processing techniques may be more effective than distraction or cognitive disputation for improving low mood (Hunt, Schloss, Moonat, Poulos, & Wieland, 2007).

These findings suggest that emotional processing is a key process in cognitive behavioural interventions such as exposure, either by providing access to underlying cognitive structures, enabling habituation to distressing emotional states, or both (Hunt et al., 2007). By generating intense emotion, chairwork can be particularly effective in allowing exposure to distressing affective states and facilitating emotional processing. Chairwork can also allow exposure to other internal representations. Empty-chair interventions such as imaginal confrontation may be in part conceptualised as a form of imaginal exposure to trauma-related material (Diamond, Rochman & Amir 2010). Supporting this assertion, empty-chair interventions for “unfinished business” have been shown to elicit high levels of anxiety for participants, which are presumably linked to fears of rejection or attack by the significant other placed in the empty chair (Diamond et al., 2010). These findings suggest that unfinished business may not only facilitate the expression of unmet needs, but also provides opportunities for habituation and heightened tolerance of attachment-related emotions.

**Attention.** Attention relates to the selection of information for cognitive processing and the subsequent application of behaviour repertoires (Wells & Matthews, 1996). Many emotional disorders have been associated with repetitive and perseverant attentional processes (Wells & Matthews, 1994). Accordingly, it has been suggested that improving regulation over attention may be a valuable clinical intervention which is enhanced through practices such as mindful meditation (Holzel et al., 2011; Shapiro et al., 2006) and attentional retraining (Wells, 2002; Wells, White & Carter, 1997). These techniques are theorised to achieve therapeutic effects by improving capacity to interrupt negative patterns of thinking (such as rumination) and enhancing metacognitive flexibility (Wells et al., 1997).
It is proposed that some formats of chairwork may serve to enhance attentional control. Interventions such as two-chair cognitive restructuring require individuals to repeatedly switch perspectives and retrieve information from opposing knowledge stores. This process may be advantageous not only in terms of interrupting perseverant patterns of thinking but also in enabling purposeful and flexible adjustments in attention. Concurrent spatial changes (changing seats) and proprioceptive feedback (movement) may also be an effective means to encourage re-deployments in attention, thereby enhancing metacognitive control.

**Internal complexity.** It has been argued that psychopathology is characterised by the presence of fixed and global negative evaluations of the self, others and events. Based upon this premise, it has been suggested that effective cognitive behavioural treatments should seek to foster more elaborate metacognitive models of the self as varied, complex and dynamic (Chadwick, 2003). This is compatible with the theory of retrieval competition (Brewin, 2006) which grounds the effects of psychotherapies in the construction of new competitor representations rather than the modification of existing cognitive structures.

The therapeutic effects of chairwork may be partly related to the creation of greater self-complexity. New and competing perspectives can be elaborated, enacted and integrated through chairwork dialogues, thereby challenging the monological qualities of pathological cognition (Strong, Lysack & Sutherland, 2008). As different “voices” exchange information during chairwork, a greater complexity of self is naturally created (Hermans, Kempen & van Loon, 1992; Kellogg, 2015). In addition, by transforming cognition into an utterance made by or from an “other” position, a multifarious model of self is automatically created between expressive and receptive positions (Hermans et al., 1992). As Chadwick (2003) has argued, clients are often better able to construct alternative schematic representations of the self through interventions such as chairwork as these reinforce a multifarious model of the self.
Discussion

This paper has explored how chairwork has been applied in cognitive and behavioural therapies. Research suggests that such techniques may represent an efficacious collection of interventions although further studies are now needed to confirm these preliminary findings. How chairwork has been utilised in CBT has varied: it has been used as a dramatised method for restructuring cognition and modifying behaviour; an emotion-focused augmentation to therapy; and an experiential method for clinical assessment and supervision. Chairwork has also afforded opportunities to tackle issues not readily addressed by more typical cognitive behavioural interventions such as unresolved attachment-based needs and emotions. How far chairwork interventions can be differentiated from certain other cognitive and behavioural techniques is at times unclear, however. This raises an interesting question as to whether additional empirical support for the use of chairwork might be found within the evidence-base for other more established techniques. Whether chairwork represents an extension of CBT or an integrative approach to therapy is also debatable, although both perspectives can still remain compatible with a purist approach to therapy (Petrik, Kazantzis, & Hofmann, 2013). Theories of cognitive science have provided some explanation as to why chairwork is capable of achieving therapeutic effects within a cognitive-behavioural framework and point towards a range of possible underlying causal mechanisms.

Despite preliminary evidence for its clinical utility, chairwork remains a neglected intervention in both cognitive behavioural practice and research. Given the relative infancy of chairwork-related research in CBT, two important areas for further investigation are apparent. Firstly, further studies are needed to ratify whether chairwork is an effective augmentation to current cognitive behavioural practice. Preliminary studies also suggest that chairwork may be a viable alternative to some established techniques. For example, might imaginal confrontation (utilising the empty-chair technique) be an effective alternative to imaginal exposure in the
treatment of trauma-based disorders (Butollo et al., 2016)? Such research would help go some way towards broadening the range of evidence-based techniques available to clinicians.

Secondly, research should seek to elucidate the mechanisms of action underlying cognitive behavioural chairwork. Possible causal pathways posited in this paper include enhanced emotional processing, exposure, improved attentional regulation, and capacity to decentre from internal events. Process-related variables such as the level of expressed emotion, therapist stance, depth of chairwork dialogues, and the memorability of interventions may also influence responses to chairwork and could be explored using task analysis studies (see Greenberg, 2007). Such research would not only benefit clinical practice by refining chairwork techniques but also help inform best practice guidance for their implementation.

**Clinical implications**

Limited evidence exists for the use of chairwork in CBT. Accordingly such techniques might be best viewed as an augmentation to traditional cognitive and behavioural strategies at present. When should therapists consider using chairwork? Possible indications include limited response to traditional techniques; when cognitive modification is experienced at an intellectual rather than affective level; and when working with pathologies not readily addressed by traditional interventions (for example, lingering resentments and attachment-related distress).

Unfortunately, little guidance exists as to how to apply chairwork most effectively in CBT. Recommendations for implementing chairwork have been outlined in other schools of psychotherapy (Arntz & Jacob, 2013; Elliott et al., 1993; Kellogg, 2004, 2015), much of which also appears relevant to cognitive behavioural chairwork. Based upon these points and drawing from clinical practice, preliminary guidance for implementing chairwork in CBT is now
provided. However, clinicians should note that these suggestions remain tentative in light of limited research within this area.

- Cognitive techniques (e.g. thought records, decisional balances and no-send letters) can be a useful prelude to chairwork by familiarising both parties with relevant material and priming key emotions and beliefs.

- As with other CBT techniques, pre- and post-intervention ratings are a useful means of determining the impact of chairwork on target areas (for example, the degree of change in relevant beliefs, emotions or level of ambivalence).

- Given that spatial change has been linked to better responses to cognitive behavioural chairwork (Delavechia, Velasquez, Duran, Matsumoto, & de Oliveira 2016), clients should be encouraged to change seats during interventions. The client’s original chair can also serve as a useful metacognitive position for reflecting upon dialogues post-intervention.

- Roles may leak into one another during chairwork. For example, the client may express reasons for change whilst occupying the chair representing “not changing”. Alternatively, they may direct statements towards the therapist rather than the empty chair. If leaks do occur, the therapist should re-direct the client’s attention to the opposite chair or invite them to switch chairs if another perspective feels more dominant.

- As with other experiential interventions such as behavioural experiments (Bennett-Levy et al., 2004), therapists should aim to raise affect to a high, but tolerable, level during chairwork. Verbal methods for heightening emotion include empathic reflections (“you sound sad as you say that”), invitations (“put that feeling into words”), and repetition (“say that again”).
• Imagery is another well-known method for amplifying affect (Hackmann et al., 2011). When engaging in empty-chair exercises, the client should be invited to imagine the “other” in the opposite chair (“What are they wearing? What is their posture? What is their expression?”). Alternatively, beliefs, cognitions and perspectives may be personified in chairwork (“Imagine your inner critic in the other chair. Challenge what it says from this rational side”).

• Audio- and proprioception can be another method for raising affect and modifying implicational knowledge (Teasdale & Barnard, 1993). Therapists should invite clients to experiment with changes in vocal tone (“Say that louder”), body positions (“Stand as you say that”) and gestures.

• Emotional arousal may impair clients’ capacity to access rational-analytic modes of information processing (Salas-Auvert & Felgoise, 2003). Accordingly, therapists should offer the client prompts to repeat aloud when needed, such as relevant counter-evidence or empathically accurate statements. When offering prompts, these should be framed as suggestions rather than directions (“If it fits with your experience, try saying…”).

• As with any experiential technique, sufficient time should be set aside to thoroughly explore the client’s experience of chairwork post-intervention.

• Chairwork often requires repetition and therapists should not be afraid of repeating exercises if needed. In addition, clients often find it helpful to review audio-recordings of chairwork to consolidate progress made.

• Clinicians should be cautious using chairwork when treating disorders characterised by high levels of affective dysregulation (for example, unemotionally unstable personality disorder). Suggestions as to how chairwork can be adjusted in such cases is provided elsewhere (Arntz & Jacob, 2013; Pos & Greenberg, 2012).
Conclusion

There exists sufficient evidence to hypothesise that chairwork is a versatile and powerful therapeutic technique. Within CBT, chairwork has proved to be a valuable tool for assessment, cognitive and behavioural modification, emotional transformation, and measurement of treatment outcome. Theories of cognitive science highlight several pathways through which chairwork may achieve therapeutic effects. However, these remain speculative in light of the limited research in this area. Studies are now needed to ratify the efficacy of cognitive behavioural chairwork and further inform best guidance for its implementation.

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Ethical approval

This article does not contain any studies with human participants or animals performed by any of the authors.

References


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