Chapter 2

Research Support for Schema Therapy

Introduction

From its inception, Jeffrey Young has actively and consistently sought to establish schema therapy as an empirically supported therapy, having worked alongside Aaron Beck to build the evidence base for cognitive therapy. Schema therapy research was bolstered in the late 1990s and early 2000s when a group of Dutch researchers, led by Arnoud Arntz, collaborated with Young on the first of several clinical investigations into the efficacy of schema therapy for borderline personality disorder (BPD). This body of research has grown substantially over the past 20 years; we estimate there to be hundreds of empirical studies that now support various aspects of the schema therapy model and which have investigated the efficacy of schema therapy, the most important of which will be summarised in this chapter.

Research Supporting the Schema Therapy Conceptual Model

Evidence for the Existence of Universal Core Emotional Needs

When Young, Klosko, and Weishaar [1] identified the five *core emotional needs* they saw as universal (see Chapter 1), they acknowledged that the list of needs was drawn from existing theory and clinical observation but had limited empirical support at that time. Since then, multiple factor analyses have been undertaken of the various versions of the Young Schema Questionnaire (YSQ) which provide indirect support for the basic schema therapy model; if early maladaptive schemas (EMS) arise from a core set of unmet emotional needs, the EMS proposed to result from a common unmet need should correlate more highly together than EMS from different domains (related to different unmet needs). For example, the EMS thought to arise from disrupted and deprived attachments within the Disconnection and Rejection domain – Abandonment, Emotional Deprivation, Social Isolation, Mistrust/Abuse, and Defectiveness/Shame – should correlate more closely with each other than those thought to arise from deprivation of limit setting: Entitlement/Grandiosity and Insufficient Self-Control/Self-Discipline. Principal component and factor analyses from across countries over the last 15 years have found differing optimal component structures but more consistently supported a four-factor structure, which has become regarded as more theoretically coherent than the original five-domain grouping [2]. Thus, the currently favoured taxonomy of the need deficits arising from inadequate parenting consists of Disconnection and Rejection; Impaired Autonomy and Performance, Excessive Responsibility and Standards, and Impaired Limits. However, research into the precise number of EMS and their factor structure remains ongoing, with recent research supporting

an alternative 4-factor structure [3], and some authors arguing for a fifth *Emotional Dysregulation* domain [4]. The number of EMS and factors obtained from the YSQ appear to be influenced by whether the short or long form is used, which language version is used, whether the sample is predominantly clinical or non-clinical [4], and whether items are presented in random order or grouped according to their presumed EMS [5]. In summary, correlation patterns between EMS provide one line of support for the idea within the schema therapy model that a certain type of need frustration will have predictable effects. The results of factor analyses are relatively consistent with Young's model – especially for the EMS associated with disconnection and rejection – but nevertheless vary sufficiently between studies that, together with proposals to investigate new EMS [3], further studies will be needed to solidify our understanding of unmet need–EMS relations.

Although much of the schema therapy literature has focused on elucidating need deficits and the resulting damage – which was understandable given the primary aim of understanding severe psychopathology – complete evidence for the existence of needs requires demonstrating that need *fulfilment* also produces psychological well-being. In the past 10 years, measures of early adaptive schemas – positive counterparts to EMS – have been developed [6]. Recently, Louis, Davidson, Lockwood and Wood's [7] confirmatory factor analysis of the Young Positive Schema Questionnaire (YPSQ) across cultures supported a four-factor structure mirroring that of the YSQ, consisting of domains of Connection and Acceptance, Healthy Autonomy and Performance, Realistic Standards and Reciprocity, and Reasonable Limits.

Most of the research that is recognisably focused on the schema therapy model has employed retrospective self-report designs with adult participants. Longitudinal research studying children would provide stronger evidence for the role of thwarted core emotional needs on the development of EMS. Recently, an international schema therapy workgroup [3] endorsed Carol Dweck's [8] taxonomy of needs, providing explicit recognition that the broader developmental psychology literature provides relevant evidence for the existence of core psychological needs as understood in schema therapy.

Dweck [8] organised her taxonomy of needs to both bridge disparate theoretical research programmes and to reflect the sequence in which different needs emerge during early childhood development. This extends the precision and specificity with which needs have been discussed in the schema therapy literature to date. Dweck [8] argued that there were three basic needs which are present at birth or very early in infancy: needs for acceptance, optimal predictability, and competence. Dweck also outlined four 'compound' needs produced from combinations of basic needs after greater cognitive development has occurred: the need for trust (which emerges from needs for acceptance and predictability), the need for control (which develops from needs for competence and predictability), the need for self-esteem or status (which grows from needs for acceptance and competence), and the need for self-coherence (a stable and integrated sense of self, which emerges from monitoring whether all other needs are being met). Much of the evidence Dweck [8] cites to support the existence of these basic needs consists of observations that the stimuli infants are most attentive to, and the learning infants most readily achieve, is consistent with humans having innate propensities to form attachments, learn causal relations and operate on the environment.

The clearest correspondence between Dweck's and Young's catalogue of needs is that of Dweck's need for acceptance, which overlaps largely with Young and colleagues' [1] need for secure attachment, which is met when caregivers provide acceptance, predictability, and

trustworthiness [3]. Labelled as 'acceptance', Dweck saw this need as overlapping with what others had labelled 'relatedness' [9], 'belongingness' [10], 'attachment' [11]; [12], 'warmth and comfort' [13], 'affection' [14], 'affiliation' [15], and 'love' [16]. Elsewhere, Young's needs straddle developmental periods according to Dweck's system. Young's autonomy, competence, and sense of identity entails both the basic need for competence – to build basic skills for acting on or in the world – and the more developed sense of personal agency and autonomy in the needs for control and for experiencing self-worth and social standing from Dweck's model. Young's freedom to express needs, opinions, and emotions is seen to overlap with basic needs for competence and acceptance as well as the more developed sense of self-esteem/status in Dweck's system. Young's need for spontaneity and play was seen by the schema therapy workgroup as a specific means of meeting Dweck's basic need for competence. Young's needs for realistic limits and self-control were seen to be captured by Dweck's needs for competence, optimal predictability (to understand the orderly way that events connect in the world), and control. To reiterate, schema therapy experts view Young et al.'s core emotional needs as fully encapsulated by the list of needs which have been subject to research in the broader psychological literature, which we will now review.

Although Young and colleagues [1] did not define how 'needs' might differ from other psychological constructs, Baumeister and Leary [10] provided a widely accepted definition, wherein needs:

> a) produce effects readily under all but adverse conditions; b) have affective consequences; c) direct cognitive processing; d) lead to ill effects (such as on health or adjustment) when thwarted; e) elicit goal-oriented behaviour designed to satisfy it; f) [are] universal in the sense of applying to all people; g) [are] not be derivative of other motives; h) affect a broad variety of behaviours; and i) have implications that go beyond immediate psychological functioning. (p. 498)

The challenge for needs research is that needs cannot be directly demonstrated; they must be inferred from the consequences that result from different conditions and behaviours which aim to meet the hypothesised needs.

The need for acceptance or secure attachments is supported by attachment theory research. Ainsworth and colleagues' [11] strange situation studies provided a means to assess the different attachment consequences of how well caregivers have been meeting their infants' needs. During these studies, an infant's mother temporarily left the infant in a new room full of toys, with an unfamiliar adult, before returning. The period of separation from their mother was usually a stressful experience. Infants who were 'securely attached' to their mothers sought comfort from them upon their return, and after a couple of minutes of close bodily contact were soothed and ready to resume exploration of the toys. Mothers were then observed in their homes. Mothers of securely attached infants appeared more sensitive and responsive to their infants' communications; they were quicker to pick them up when they cried; they handled their babies tenderly and carefully and for longer periods than parents of children who were not securely attached; they were quicker to feed their infants when showing signs of hunger and kept feeding until their infant appeared satiated. This style of parenting has come to be called *sensitive parenting*. In contrast to infants whose mothers provide less warm comforting physical contact, who are less facially expressive, and who do not time their care provision according to the infant's signals, securely attached infants thrive, becoming more exploratory, more cooperative, and show more positive affect and

less frustration. Caregiver sensitivity has shown small to medium effects on attachment by preschool, measured prospectively or concurrently [17].

Mapping the need for reasonable limits to the broader psychological literature is increasingly challenging. Although there is widespread agreement that authoritative parenting is associated with superior well-being in children and adolescents compared to authoritarian parenting [18], the components of effective limit setting within authoritative parenting have often been inconsistently or inaccurately conceptualised [19]. Permissive parenting, which is characterised by low limit-setting [20], is generally associated with poorer outcomes for children than authoritative parenting, including higher substance abuse; school misconduct and lower school engagement [21]; greater affiliation with delinquent peers and associated externalising symptoms in adolescence [22]; and academic entitlement, poorer well-being, and increased depressive symptoms among college students [23]. On the other hand, a three-year longitudinal study found that permissive parenting was not associated with poor adjustment in fifth graders, although the authors expressed concerns about the quality of the permissiveness measure [24].

Nevertheless, the evidence seems reasonably consistent that limit setting, when done in a way that does not compromise the fulfilment of other core emotional needs (e.g., acceptance), is associated with increased childhood well-being. Gray and Steinberg [25] found that the extent of parental supervision and limit setting had a medium–large effect on fewer behaviour problems in adolescents (e.g., stealing, carrying a weapon) and was more related to number of behaviour problems than autonomy-granting or acceptance. In the self-determination theory literature, limit setting is part of parents providing structure: teaching children how their actions affect outcomes (which in Dweck's terminology would be an example of how a parent might contribute to meeting the child's need for optimal predictability) through clear consistent rules; guidelines and expectations; and clear, consistent consequences contingent on actions [26]. Children of parents who provided more structure for unsupervised time felt more competent and in control of outcomes in their lives [27]. Seventh and eighth grade children whose parents provided more structure perceived themselves to have more control over their academic success or failure, were more competent at school, were more engaged, and achieved better grades according to school records [26]. Simultaneously meeting children's needs for autonomy while meeting their need for realistic limits appears especially important. When parents attempted to set limits on who their adolescent children associated with in a controlling way, their children were more likely to associate with deviant peers than when the parents communicated their prohibition in an autonomy-supporting manner [28].

Although needs as a topic of psychological research has come in and out of vogue over time, substantial support has amassed for the existence of several psychological needs, especially belongingness/secure attachment [29, 30], competence, and autonomy [19]. Both maladaptive and adaptive schemas appear to cluster according to themes of whether or not early experiences provided connection, autonomy, and reasonable limits. Research continues to explore and refine how many psychological needs must be adequately met to ensure healthy psychological development, but as a plank of schema theory model development there appears to be adequate support for the existence of basic psychological needs [31].

Evidence that Schemas Result from Unmet Needs

A key hypothesis of the schema therapy model is that EMS occur when basic needs are inadequately met during childhood. Accordingly, Pilkington, Bishop, and Younan [32] conducted multiple meta-analyses of available studies ($k = 33$) investigating the association between EMS and two types of childhood adversity: toxic frustration of needs and traumatisation or victimisation. All but one study measured childhood adversity via adults' retrospective self-reports and approximately one-third of studies employed clinical samples. Consistent with Young and Klosko's [33] hypothesis that the Emotional Deprivation EMS often has its origins in insufficient maternal nurturance, the strongest correlation between a form of childhood adversity and an EMS was between maternal emotional neglect (which in these studies was indicated by low endorsement of questionnaire items measuring amount of parental warmth, interest, and attention) and Emotional Deprivation ($r = 0.51$, $k = 9$).

Emotional abuse – being ridiculed, insulted, shamed, and 'destructively' criticised – might be expected to correlate most strongly with Defectiveness/Shame and Mistrust/Abuse [33]. However, Pilkington et al. [32] found emotional abuse was most strongly associated with Emotional Deprivation ($r = 0.44$ [0.35, 0.51]), and also had moderate correlations of similar strength (~0.3 – 0.35) with Mistrust/Abuse, Social Isolation/Alienation, Defectiveness/Shame, Failure, Vulnerability to Harm and Subjugation. It was also perhaps surprising that the correlations between other types of abuse and the Mistrust/Abuse EMS were not higher, with $r = 0.25$ (0.14, 0.35) for physical abuse and $r = 0.25$ (0.13, 0.38) for sexual abuse. Also, somewhat surprisingly, the EMS most associated with sexual and physical abuse was Social Isolation/Alienation. Overall, approximately half of the adversity–EMS correlations aggregated across studies were significant. Only Entitlement/Grandiosity did not appear associated with toxic frustration of needs or traumatisation, which is consistent with Young and Klosko's [33] hypothesis that Entitlement/Grandiosity results from being over-indulged or receiving insufficient limit setting and coaching in frustration tolerance and impulse control. Establishing empirical support for unmet need–EMS links is a formidable exercise and retrospective reports are not the ideal methodology to test these hypotheses. The heterogeneity of effect sizes in the meta-analyses was also found to be large, suggesting several unaccounted-for moderators. This body of studies is supportive of a central tenet of schema therapy theory: that the thwarting of basic needs in childhood (childhood adversity) increases the strength of most EMS, although the pattern of relationships between specific needs and specific EMS is not always consistent with predictions.

The schema therapy model would predict that the effects of unmet needs in childhood on later psychopathology should be mediated by maladaptive schemas or schema modes. Mertens, Yilmaz, and Lobbestael [34] found partial support for this idea. In their study, of the different types of adversity measured, only emotional abuse had effects on personality disorder that were mediated by schema modes. The effect of emotional abuse on BPD symptom severity was mediated by child modes and coping modes. The effect of emotional abuse on antisocial personality disorder (ASPD) severity was mediated by parent modes, and the effect of emotional abuse on avoidant and dependent personality disorders (AvPD and DPD) severity was mediated by healthy modes (Healthy Adult and Happy Child). The authors interpreted these relationships as follows: In BPD, emotional abuse leads to the development of vulnerable and angry modes and the need to develop maladaptive coping

strategies; In AvPD and DPD, the stronger the healthy modes, the less intense are Cluster C symptoms in response to emotional abuse; and in ASPD, the more overdeveloped the Demanding Critic, the less ASPD develops from emotional abuse. These may be reasonable explanations, but they await prospective testing. It should be noted that the study was underpowered to detect more complex relationships and so the 14 modes of the schema mode inventory (SMI) needed to be collapsed into only four categories. In an earlier study of incarcerated females looking at EMS, associations between childhood adversity and BPD symptoms were no longer significant when controlling for Disconnection and Rejection and Impaired Limits EMS, consistent with the idea that EMS mediate the relationship between childhood adversity and BPD symptoms [35]. Elsewhere, The Punitive Critic and Angry Child modes were found to mediate the effect of low parental care on early age of onset and longer duration of non-suicidal self-injury in psychiatric outclients [36]. More theoretically predictable relationships were obtained in a sample of depressed adolescents [37]. The association between emotional maltreatment and anxious arousal was mediated by the Vulnerability to Harm EMS, a threat-related schema, whereas the effect of emotional maltreatment on anhedonic depression was mediated by Self-Sacrifice and Social Isolation/Alienation EMS. The association between physical abuse and anxious arousal was also mediated by Vulnerability to Harm, but the effect of physical abuse on anhedonic depression was mediated by Emotional Deprivation. In summary, there is ample evidence that various forms of childhood adversity reflecting inadequate need fulfilment are associated with various symptoms of psychopathology, and a portion of this relationship can consistently be accounted for by one or more EMS or maladaptive modes, although the specific EMS or modes involved can vary considerably between studies.

Specific Schema and Mode Profiles and Their Relationship to Psychopathology

Several studies have been carried out with the primary aim of establishing the schema and mode profile of BPD. These have generally yielded consistent results. Bach and Farrell [38] compared large samples of clients with BPD, personality disorders other than BPD, and healthy non-clients and found that BPD clients showed higher scores on measures of Mistrust/Abuse and Defectiveness/Shame EMS, and Angry Child and Impulsive Child modes, and lower Happy Child mode scores than non-BPD personality disordered participants. BPD clients also showed higher Insufficient Self-Control/Self-Discipline EMS and Vulnerable Child and Enraged Child mode scores than non-clients. Bach and Lobbestael [39] examined unique associations between self-reported schemas and modes and specific BPD symptoms identified by diagnostic interview within a sample of mixed personality disorder outpatients. Although most specific BPD symptoms had unique associations with one or more specific modes, 43% variance in the total BPD criteria count was accounted for by Abandonment and Mistrust/Abuse EMS alone when just considering EMS as predictors. When just considering modes, 46% variance in total BPD symptom count was accounted for by Angry Child and Impulsive Child modes. Similar results were obtained in a study of 220 Iranians with Cluster B personality disorders from psychiatrists' and psychologists' clinics: Vulnerable Child and Impulsive Child modes were associated with BPD but not ASPD or NPD [39]. Potentially, this is because ASPD and NPD involve strong overcompensator modes which may block awareness of underlying child modes. Furthermore, clients often confuse overcompensatory modes for Healthy Adult mode, which may explain why ASPD

clients reported higher Healthy Adult mode scores. An earlier study contradicted these more recent findings, with the only significant difference between BPD and ASPD being that Healthy Adult mode scores were relatively high in ASPD and low in BPD; however, this study should perhaps be given less weight as it employed a more primitive version of the SMI [40]. In summary, Mistrust/Abuse EMS, Impulsive Child modes and low Healthy Adult modes appear characteristic of BPD, although other schemas and modes may be more or less prominent for any individual.

Bamelis and colleagues [41] aimed to elucidate the distinct mode profiles of individuals with Cluster C, Paranoid, Narcissistic or Histrionic personality disorders using a newly expanded Schema Mode inventory (SMI-2). Personality disorder status was determined both by self-report and clinician interview, and the authors reported the modes which had high partial correlations with personality disorder pathology after controlling for the effect of all other personality disorders: Paranoid PD was characterised by Angry Child and Suspicious Overcontroller modes; Histrionic PD characterised by Attention and Approval Seeker mode; Narcissistic PD by Undisciplined Child, Self-Aggrandiser, and Attention and Approval Seeker modes; Avoidant PD by Lonely Child, Abandoned Child, Compliant Surrenderer, Detached Protector, and Avoidant Protector modes; DPD by Abandoned Child, Dependent Child, Compliant Surrenderer, Punitive Critic, and a weak Healthy Adult mode; and OCPD by Perfectionistic Overcontroller and Demanding Critic modes. It should be noted that the use of partial correlations has been criticised for attenuating relationships and making the patterns less interpretable [41].

Jacobs, Lenz, Wollny, and Horsch [42] demonstrated that the schema modes could be conceptualised as driven by three higher-order factors: internalisation (low Healthy Adult mode, high Vulnerable Child and Compliant Surrenderer modes); externalisation (high Bully and Attack, Impulsive Child, and Enraged Child modes), and compulsivity (high Demanding Critic and Detached Self-Soother modes). This somewhat approximates the hierarchical structure of personality disorders: internalising (BPD), externalising (BPD, NPD, HPD, ASPD, PPD) [43]. In a study of 70 forensic mental health inpatients with BPD, NPD, or ASPD, Keulen-de Vos et al. [44] found that ASPD was distinguished by the combination of low internalising modes and high externalising modes, whereas BPD was associated with high internalising modes.

In summary, distinct combinations of modes for specific forms of psychopathology have been found in various studies; however, to date there has been considerable variation between studies in the mode profile found for a specific personality disorder. Allowing the emerging consensus on the taxonomy of psychopathology [43] to guide mode model specification is likely to produce more consistent findings in the future.

Research Supporting the Efficacy of Schema Therapy

Borderline Personality Disorder

The effectiveness of schema therapy has most often been investigated in the treatment of BPD. A number of early uncontrolled trials established that participation in schema therapy was associated with improvements in BPD symptomatology [45], and stronger evidence has accumulated since. The first randomised controlled trial by Giesen-Bloo and colleagues [46] assigned 86 participants (93% female) to three years of two individual sessions per week of either schema therapy or transference-focused psychotherapy (TFP). Schema therapy

followed the approach manualised by Arntz and van Genderen [47]. More people dropped out of TFP (51%) than schema therapy (26%), and those who quit schema therapy completed significantly more sessions (*Mdn* = 98) than those who quit TFP (*Mdn* = 34). This has been a feature of schema therapy outcome studies generally; drop out is low, suggesting a high level of acceptability. Intent-to-treat (ITT) analyses showed that participants in both groups made significant improvements which were evident by the end of the first year, but schema therapy achieved greater reductions in BPD symptoms, general psychopathology, and personality disorder beliefs and 'defence styles'. At four-year follow-up, more schema therapy recipients (52%) no longer met BPD diagnostic criteria than TFP recipients (27%), and a higher proportion had achieved reliable change on BPD symptom measures. Interestingly, those who had recovered within schema therapy at three-year follow-up achieved normal hypervigilance responses to negative emotional stimuli whereas those not recovered maintained high hypervigilance, suggesting that schema therapy potentially alters an important causal mechanism of BPD pathology [48]. Furthermore, schema therapy was later found to also be more cost effective, mainly due to less use of informal care supports [49].

The Giesen-Bloo efficacy study was followed by a large-scale implementation study which tested whether schema therapy could be delivered more efficiently and remain effective when delivered by mental health clinicians in routine practice. Individual 45-minute sessions were delivered twice per week for only the first year, and once per week thereafter, to 62 clients diagnosed with BPD. After 18 months, 42% had recovered according to having Borderline Personality Disorder Severity Index scores below diagnostic threshold [50].

The next major randomised controlled trial evaluated a group schema therapy protocol as described by Farrell and Shaw [51]. Participants (all female) were assigned to either [1] treatment as usual (TAU), which was primarily supportive psychotherapy or [2] Group Schema Therapy (30 weekly 90-minute group schema therapy sessions over 8 months) plus TAU. Farrell and colleagues' approach to group schema therapy was notably distinct from previous group schema therapy formats: it emphasised ensuring that all group members remained involved throughout each session and were not merely watching the therapist work with one of the members at a time; there were more group rules to enhance feelings of safety and security; more structure; written psychoeducation materials; homework assignments; and more attention to the Happy Child mode [52]. Remarkably, at post-treatment there was 100% retention in the schema therapy group and 94% no longer met diagnostic criteria for BPD. By contrast, 25% had dropped out of TAU and only 16% no longer met criteria for BPD. The schema therapy group also achieved large reductions in general psychopathology. Attempts to replicate and further understand these results are underway. A 3-year uncontrolled study has begun in Germany with 10 BPD clients with frequent psychiatric hospital admissions. Results from the first year showed that weekly group schema therapy programme members experienced a reduction in BPD symptoms, schema mode activation, and hospitalisations [52]. Finally, a 15-site, 5-country RCT involving 495 participants has just been completed comparing two years of treatment with a predominantly group schema therapy and a balanced individual plus group schema therapy with TAU [53]. Although all groups achieved large reductions in BPD symptom severity, the schema therapy groups achieved greater reduction than TAU, which was statistically significant by 18 months of treatment. Furthermore, the

balanced individual/group condition produced greater reductions than the predominantly group format which was statistically significant by 6 months post-treatment and had higher retention rates.

Recent studies have aimed to explore how briefly schema therapy for BPD can be delivered whilst retaining efficacy. Dickhaut and Arntz [52] piloted a 2-year-long combined weekly 60-minute individual plus 90-minute group schema therapy session programme. This study involved two cohorts (all female) and altered the form of group therapy the second cohort received to incorporate Farrell and Shaw's [51] practises. These changes were associated with a higher immediate recovery rate at the end of 24 months in the second cohort (66.5%, n = 10, no longer met BPD criteria) compared to the first (18.7%, n = 8). Combining the cohorts at 30 months, 77% no longer met BPD criteria and achieved large reductions in BPD symptoms, as well as improvements in happiness and quality of life. Hilden and colleagues [54] randomised 42 clients (83% female) to receive either a 20-session group schema therapy programme plus TAU (consisting of psychiatric consultations plus monthly therapy sessions from a psychiatric nurse) or TAU alone. The programme shortened Farrell and Shaw's [51] protocol by reducing the cognitively focused content. At 5-month follow-up there was no difference between BPD symptoms as measured by the Borderline Symptom List (BSL-23) [54] and the means for both groups were in the 'moderate' range at both baseline and post-treatment. Hamid and colleagues [56] randomly assigned 45 BPD clients (100% male) to 12 – presumably, individual – sessions of schema therapy, Dialectical Behaviour Therapy (DBT), or no treatment. After 6 months, both DBT and schema therapy had produced equivalent reductions in emotional and behavioural dysregulation symptoms compared to no treatment, but DBT produced significantly greater reductions in disrupted communication symptoms. The results of this study are somewhat difficult to compare with previous studies as a more limited range of measures was used and the percentage who no longer met criteria for BPD was not reported. Nevertheless, the reductions in BPD symptomatology in response to a relatively brief intervention are encouraging.

In summary, there is reasonably strong support for the idea that long-term individual schema therapy for females with BPD is efficacious in reducing BPD symptomatology and comorbid psychopathology. There is encouraging evidence that group schema therapy does likewise; however, critics might argue that comparisons with bona fide psychotherapies, employing assessors blind to treatment condition, would be needed to demonstrate efficacy conclusively. With the exception of Hamid et al. [56], the efficacy of schema therapy for men with BPD has received little investigation. Future studies should also continue to explore the efficacy of shorter forms of schema therapy, and it has been recognised that there is a need to compare schema therapy against the best alternative specific therapies for BPD such as DBT, with several trials underway to address these gaps. Fassbinder et al. [57] are undertaking an extensive comparison of 18-month schema therapy and DBT interventions.

Other Personality Disorders

Several uncontrolled trials have investigated brief forms of group schema therapy for mixed personality disorder populations. An abbreviated 20-session group schema therapy protocol, Group Schema Cognitive-Behavioural Therapy (SCBT-g), was tested in a mixed outpatient sample of 63 people (73% female), in which 75% were assessed as having personality disorders [58]. SCBT-g is condensed by concentrating on the application of schema therapy

methods to recent and present situations rather than past events. Results showed that half of the participants achieved clinically significant reductions in general psychopathology, and maladaptive schema and mode activation, while 34% remained unchanged and 13% showed significant worsening, with 24% dropping out. Skewes, Samson, Simpson, and van Vreeswijk [59] adapted SCBT-g to increase the experiential exercises and mode-focused content with a single outpatient group containing six people with AvPD and two with BPD. At the end of treatment, four members no longer met diagnostic threshold according to the Millon Clinical Multiaxial Inventory (MCMI-III) at post-treatment and five were subthreshold by six-month follow-up. Schaap, Chakhssi, and Westerhof [60] conducted an uncontrolled trial of twice per week group schema therapy for 12 months in an inpatient setting with 65 people (72% female), 79% of which had at least one personality disorder (47% of which was personality disorder not otherwise specified). All clients had more than 3 months of previous treatment, 92% in outpatient settings and 42% in inpatient settings. The programme was not manualised but based on an earlier version of Farrell and Shaw's [51] approach. Following group schema therapy there were significant mean reductions at post-treatment and 6-month follow-up in general psychopathology, EMS, and mode frequency/intensity. As might be expected in a severe sample, there was a 35% dropout rate; however, effect sizes were substantially larger for those who completed treatment. Finally, Schema Mindfulness-Based Cognitive Therapy (SMBCT) consists of 8 weekly 90-minute group sessions which educate clients about schema modes experientially through mindfulness exercises. Van Vreeswijk, Spinhoven, Zedlitz, and Eurelings-Bontekoe [61] randomised 58 outpatient clients (76% female) with personality disorders (43% Cluster C, 22% BPD) to either SMBCT plus TAU (medication and psychiatrist consults) or TAU plus an 8-week competitive memory therapy (COMET) intervention, which involved clients bringing unhelpful personal images to mind while stimulating positive emotions through posture, facial expressions, and self-talk. Both groups achieved symptomatic improvements with no significant differences between groups. SMBCT produced improvement or recovery from general psychopathology in 37% recipients, while 40% were unchanged and 23% showed reliable deterioration. On average, there were also small improvements in self-esteem, Disconnection and Rejection EMS, Other Directedness EMS, Overvigilance and Inhibition EMS and Critic modes, but no significant improvements in mindfulness, Impaired Limits schemas, or child modes. Personality disorders are typically challenging to treat. These findings are promising but further research is needed to ascertain whether group schema therapy is more effective than any other manualised approach for mixed personality disorders.

The largest completed randomised controlled trial of schema therapy involved 323 people (57% female) with a range of personality disorders other than BPD (and not including ASPD, schizotypal, or schizoid personality disorder) [62]. At three of the 12 sites, people were randomised to either individual schema therapy or clarification-oriented psychotherapy (COP), a non-directive insight-oriented psychotherapy designed for personality disorders; at the remaining nine sites, people were randomised to schema therapy or TAU. Schema therapy was delivered according to Arntz and Jacob's [63] protocol over 40 weekly sessions plus 10 monthly booster sessions. At 3-year follow-up, a higher proportion of those who received schema therapy no longer met criteria for their primary personality disorder diagnosis (82%), compared to TAU groups (55%). Those who received schema therapy also had significantly higher rates of recovery than COP when controlling for personality disorder type, although this difference did not hold when recovery was defined

as the absence of subthreshold symptoms (79% [0.65, 0.88] ST v 59% [0.40, 0.75] COP). Although there were few differences between groups on other measures, there was a lower rate of depressive disorders and higher social functioning among schema therapy recipients at three-year follow-up. The study has been criticised for the lack of generalised improvement across measures and the use of an arguably uncommon or weak control condition [64]. Nevertheless, given the severity of these disorders and the dearth of empirical evaluations of psychotherapies for these conditions, the study represents an important step in the development of more effective approaches for working with those affected by personality disorder.

Personality Disorders in Forensic Settings

Bernstein and colleagues [65] randomly assigned 103 male offenders from 8 high-security forensic hospitals in the Netherlands to 3 years of either schema therapy or TAU. This represented a severe sample and a stringent test of the efficacy of schema therapy; 54% were admitted for physically violent offences, 26% for sexually violent offences, and 16.5% for threats or coercion. The psychiatric profile was arguably more severe than had been seen in any previous psychotherapy study: 60% met criteria for ASPD, 21% NPD, and 17% BPD. Randomisation was effective: the distribution of crime and PD was effectively identical between conditions. No external incentives for participation were provided. Schema therapy was provided twice per week until participants began obtaining leave to reintegrate into the community, at which point frequency reduced to once per week. TAU received weekly individual psychotherapy (group therapy at one site) but overall 'attention' was matched by TAU participants receiving more hours of ancillary therapy (e.g., art therapy).

Results indicated that both groups improved, with statistically significant advantages for schema therapy recipients. A higher proportion of schema therapy recipients were granted both supervised and unsupervised leave throughout each year. Self-reported PD symptoms decreased faster over time among schema therapy recipients than in TAU alone. Schema therapy participants also made greater reductions in EMS scores over the study, and faster reductions in maladaptive schema mode scores and faster increases in healthy mode scores, although TAU participants had mostly 'caught up' by the end of the study. There was a significant difference in treatment retention during the first year favouring schema therapy (93% schema therapy v 80% TAU remained in treatment), but no significant difference at 3 years (75% schema therapy, 68% TAU). Arguably, the most important findings of the study were that almost all forensic mental health clients in the study were able to achieve supervised leave within 3 years (97% schema therapy, 91% TAU) and the majority achieved unsupervised leave (67% schema therapy, 59% TAU). The differences between groups were reported as small to moderate, but nevertheless favoured schema therapy. The authors speculated that the differences between groups early in the study may have diminished because as schema therapy recipients achieved leave sooner, they may have encountered a greater range of challenges and setbacks than the TAU group. The authors acknowledged that group outcome differences could be due to schema therapy being delivered more intensively rather than to its content per se, so further studies comparing schema therapy with a bona fide therapy are required to speak more conclusively to its efficacy. Readers should also be aware that the study did not include clients who displayed psychotic symptoms; who met criteria for schizophrenia, bipolar disorder, current substance dependence, or autism spectrum disorder; who had an IQ below 80 or serious

neurological impairment (which are common exclusion criteria in psychotherapy studies); or whose offending was exclusively related to paedophilia. Nevertheless, the study demonstrates that positive outcomes using the schema therapy approach are possible even with a severely violent and psychiatrically disabled sample.

Personality Disorders in the Elderly

The application of schema therapy to elderly people is especially worth highlighting, given the limited efficacy of psychotherapies in this population and the relatively lower rate of research in this area. A multiple-baseline study demonstrated the promise of individual schema therapy. Eight people aged over 69 with Cluster C personality disorders were provided 40 weekly sessions of schema therapy plus 10 booster sessions over 6 months using the Young et al. [1] manual. Results showed that improvement trends were evident during the treatment phase but not the baseline or follow-up phase. All but one participant no longer met diagnostic criteria according to the SCID-II and achieved improved quality of life scores, while five produced significantly improved YSQ scores [66]. Previously, an uncontrolled trial of the 20-session SCBT-g intervention was undertaken with 42 people aged 60–78 (74% female) whom a multidisciplinary team agreed had either a chronic mood or adjustment disorder with comorbid personality disorder traits [67]. Although 26% dropped out, those who completed therapy achieved medium effect size reductions in general psychopathology, EMS, and mode activation. A multi-centre randomised controlled trial is now underway to compare the cost-effectiveness of 20 sessions combining 2 hours of schema therapy and an additional hour of psychomotor therapy group programme to TAU for elderly adults with Cluster B or C personality disorders [68].

Anxiety and Related Disorders

To our knowledge, only two historical comparisons and no randomised controlled trials have evaluated schema therapy for anxiety disorders. Gude and Hoffart [69] compared two sequential cohorts treated for 12 weeks as inpatients for agoraphobia; one received psychodynamic TAU (n = 18, 67% female) and the other TAU plus schema-focused cognitive therapy (n = 24, 71% female). The programme consisted of five weeks of daily group CBT focusing on behavioural experiments to test fears about anxiety and EMS-driven beliefs, followed by six weeks consisting of eight group sessions and 9–10 individual sessions focusing on changing EMS. Controlling for the effects of phobic avoidance, those who received schema therapy–informed CBT showed greater reductions in interpersonal problems. Cockram, Drummond, and Lee [70] compared a historical cohort (n = 127) of male Vietnam veterans who received a 190-hour CBT-only PTSD group plus individual treatment programme with a cohort (n = 54) who received a version that substituted a focus on EMS for six of its fifteen 90-minute cognitive restructuring sessions. Those whose treatment included schema therapy components experienced greater reductions in PTSD symptoms, anxiety and depression symptoms, and YSQ scores. Finally, an open trial of schema therapy-enhanced exposure and response prevention for obsessive compulsive disorder (OCD) has been evaluated in ten inpatients (50% female) who had failed to respond to CBT [71]. The programme consisted of twice-weekly individual sessions for 12 weeks. A schema mode conceptualisation and limited reparenting-style guided preparation for and execution of exposure exercises. Schema therapy interventions – for example, chair mode dialogues – might have been used to ensure that clients undertook exposure exercises

in a 'Healthy Adult mode' state of mind. As clients became able to undertake self-guided exposure, therapeutic focus shifted more to schema therapy. The group achieved large reductions in observer-rated and self-reported OCD symptoms and depressive symptoms, maintained at 6-month follow-up. Although randomised controlled trials are needed to establish its efficacy, these studies suggest that schema therapy interventions may be helpful for people with chronic anxiety-related problems, especially if they have not responded to first-line evidence-based therapies.

Eating Disorders

An uncontrolled study of an adapted form of SCBT-g for a group of eight women with mixed eating disorders (75% Eating Disorder Not Otherwise Specified) was conducted by Simpson, Morrow, van Vreeswijk, and Reid [72]. Sessions were lengthened to two hours and focused on a mode conceptualisation and mode-based treatment focus of eating behaviour and negative body image. Although two dropped out, the remaining six members achieved a 43% reduction in EMS severity post-treatment and a 59% reduction by 6-month follow-up. Four of the completers achieved clinically significant change in EMS activation, anxiety and depression symptoms, and eating disorder symptoms. A similar trial which evaluated a 25-session group schema therapy programme for eating disorders is currently nearing completion, with the protocol published by Calvert and colleagues in 2018 [73]. In a case report, Simpson and Slowey [74] described a brief mode formulation-informed therapy delivered via videconferencing for a 39-year-old woman with Eating Disorder Not Otherwise Specified characterised by a 15-year history of yoyo dieting and daily self-induced vomiting. Following one telephone and seven video appointments over 11 weeks, she achieved a 77% improvement in eating disorder symptoms, 28 days abstinence from vomiting, and improvements in general psychopathology, distress, and self-esteem. Finally, 112 females were randomly assigned to 6 months of individual weekly sessions plus 6-monthly booster sessions of either CBT, appetite-focused CBT, or schema therapy for reducing binge eating [75]. There were no differences between groups; by post-treatment, 49% of participants had abstained from binge eating and were within one standard deviation of the mean on a measure of eating disorder symptoms. Although we would not yet recommend schema therapy as a first-line treatment for anorexia nervosa or bulimia nervosa, these studies suggest schema therapy may be used to improve binge eating and transdiagnostic eating disorder symptoms, particularly if first-line evidence-based therapies had been first tried with limited success.

Other Applications

Research continues to explore applications of schema therapy for a myriad of concerns. Mohtadijafari, Ashayeri, and Banisi [76] compared a 10 × 2-hour session group schema therapy intervention to a no-treatment control group for Iranian women with premenstrual dysphoric disorder and found improvements in quality of life and reduced distress in the schema therapy group. Nameni, Saadat, Afshar, and Askarabady [77] compared 11 sessions of a weekly 2-hour group schema therapy programme plus TAU (33 sessions of counselling) to TAU only for Iranian women seeking divorce, which was a relatively new opportunity in that country, but which brought additional challenges. The schema therapy programme was associated with improvements in resilience (hardiness) and differentiation, and the ability to balance one's own identity with maintaining relationships with others.

Caveats for Readers When Applying Schema Therapy in Their Own Work

Conducting psychotherapy treatment outcome studies is an expensive and labour-intensive task. Schema therapy researchers are especially heroic in working with severe populations, intensively, and over long timeframes. The outcomes achieved are truly encouraging and are providing clinicians with optimism and direction for providing services with clients that have traditionally been viewed as being 'treatment resistant'. Notwithstanding this progress, it has been our experience that clinicians learning new psychotherapy approaches can hold unrealistic expectations not only of themselves, but also of what can be achieved even with the best interventions in the hands of the world's best therapists, so we would like to highlight a couple of things about the schema therapy literature so the reader can manage their expectations.

Unless clinicians are working in specialised services with strict eligibility criteria, they may not choose – or be able – to practise much systematic selection over the clients they see. As described herein, most schema therapy efficacy studies – as is common practice in most psychotherapy research – have purposely excluded people with comorbid problems that include bipolar disorder, psychotic disorder, ASPD, dissociative identity disorder (DID), attention deficit hyperactivity disorder (ADHD) and substance use disorders requiring detoxification. In Farrell et al. (2009) [78], the schema therapy group had a lower proportion of people with a recent suicide plan, step, or attempt at baseline, despite randomisation. If the reader is considering applying schema therapy to a client who does have one or more of these disorders, it may not be reasonable to expect similar rates of improvement to highly controlled published studies. In Giesen-Bloo et al. [46] only 50.9% of those screened for the study were eligible and participated. In Farrell et al. [78] all participants were to remain in weekly outpatient psychotherapy for six months prior to being enrolled and be willing to remain in weekly therapy for a further eight months. Further studies of the effectiveness of schema therapy with these complex presentations (as opposed to highly controlled studies of efficacy) are needed to understand how well schema therapy performs in routine clinical practice where such comorbidity is the norm. In our experience, clinicians new to schema therapy are often excited to apply this new approach with clients in their caseload who have been least responsive to their existing repertoire of interventions. While such energy is probably useful in a lot of respects in treating such 'tough cases', therapists should be aware of the potential limitations in the evidence and adjust their expectations accordingly.

Evidence That Schema and Mode Change Mediates Psychopathology Improvements Resulting from Schema Therapy

Yakın et al. [79] examined changes in mode frequency within Bamelis and colleagues' [62] study and their relationship to outcomes. Across both psychotherapies, self-reported increased frequency in Healthy Adult mode and decreased frequency in Vulnerable Child, Impulsive Child, and Avoidant Protector modes prospectively predicted improved PD pathology. Increases in Healthy Adult mode and decreases in Self-Aggrandiser Mode frequency predicted improvements in social and occupational functioning. Schema therapy was no more effective than COP in changing Healthy Adult, Vulnerable Child, Impulsive

Child, and Avoidant Protector mode frequency. However, schema therapy was more effective than COP at reducing Self-Aggrandiser mode frequency and, in turn, in improving social and occupational functioning. Importantly, while decreased Vulnerable Child and increased Healthy Adult mode frequency prospectively predicted decreased PD pathology, decreased PD pathology did not prospectively predict decreased Vulnerable Child mode and increased Healthy Adult mode frequency. These results suggest that schema modes are a potentially important treatment target: reductions in maladaptive modes and increases in adaptive modes led to reductions in psychopathology, irrespective of whether current schema therapy methods are especially optimised to change their frequency.

Evidence Supporting the Efficacy of Specific Components of Schema Therapy

Imagery Rescripting

Outside of schema therapy, a large and growing number of studies have evaluated imagery rescripting (ImRS) as a stand-alone intervention for a range of conditions, including PTSD, depression, social anxiety, OCD, and body dysmorphic disorder. A meta-analysis of 19 such studies found a large within-group effect of ImRS on symptoms of the primary disorder at post-treatment (g = 1.22 [1.00, 1.43]), and larger at follow-up, typically 3 months later (g = 1.79 [1.54, 2.03]) [80]. Only five studies at that time had used a control condition (2 wait list, 3 attention placebos); however, within this set of studies, ImRS still produced a large between-group effect (g = 1.00 [0.27, 1.74]).

Since this meta-analysis, at the time of writing, at least 28 further studies have quantitatively evaluated the impact of ImRS on key outcomes; only 16 were randomised controlled trials and only 6 of these involved clinical populations. Results mirror most psychotherapy studies whereby specific interventions out-perform no-treatment or wait-list controls by large effect sizes but produce equivalent outcome changes to bona fide interventions. In recent ImRS studies, the bona fide comparisons were typically either imaginal exposure or cognitive restructuring. However, although ImRS may not produce superior changes in outcomes, there has been some evidence that ImRS produces its outcomes via different processes to comparison interventions. For example, in a comparison of a single session of ImRS or cognitive restructuring, despite there being no consistent differences on self-report measures, ImRS uniquely produced reductions in heart rate variability measures [80]. Furthermore, in a study of their efficacy to reduce nightmare frequency and distress, ImRS and imaginal exposure were equally effective, but were mediated via different mechanisms; ImRS exerted half of its effect through increasing mastery over nightmare content, whereas imaginal exposure exerted its effects via emotional tolerance [81]. Finally, Romano, Moscovitch, Huppert, Reimer, and Moscovitch [82] examined the relative impact of ImRS, imaginal exposure (IE), and supportive counselling on representations in memory of the event targeted by these interventions among people with social anxiety disorder. Memory descriptions were elicited via structured interviews 1 week, 2 weeks, and 3 months after receiving one of the three interventions. ImRS was found to only enhance recall of positive and neutral details about the event, whereas IE enhanced recall of both positive and negative details about the event, and supportive counselling had no effect on memory detail. Furthermore, at the end of each intervention session, participants were asked to revise their core belief (assessed pre-intervention); ImRS participants were more likely to 'update'

this belief (i.e., generate a new more positive and/or realistic statement about themselves or others). Researchers continue to work on elucidating exactly how ImRS works [81], but the emerging evidence suggests it has distinct effects which do not merely represent a placebo effect.

A particularly relevant study was a large randomised controlled trial comparing twelve 90-minute sessions of eye movement desensitisation reprocessing therapy (EMDR) compared with ImRS delivered twice per week to 155 people with PTSD associated with childhood sexual abuse [83]. Both conditions produced equivalent large improvements in the primary outcome (PTSD symptoms) after 8 weeks (d = 1.7), which were sustained at 1-year follow-up, with very low drop out (7.7%). There was a non-significant trend for EMDR to have its effects a little faster, and for the superiority of ImRS at the 1-year follow-up mark, suggesting the two trauma-processing methods may work through separate mechanisms. Further analyses based on this study are currently underway to compare mechanisms of change and predictors of improvement. Based on the evidence to date, ImRS compares very well to established treatments for PTSD (e.g., prolonged exposure and EMDR).

A final study worth highlighting, given the severity of symptoms and the poverty of empirically supported interventions to treat them, is Paulik, Steel, and Arntz's [84] case series of twelve individuals with PTSD who experienced auditory hallucinations thematically related to traumatic events. Participants received a 10-session intervention involving eight sessions of ImRS in routine private practice and achieved significant mean reductions in voice distress and frequency, and trauma intrusions. Significantly, most of the sample met diagnostic criteria for a psychotic disorder (e.g., schizophrenia, schizoaffective disorder). This study provides initial evidence for the acceptability and potential effectiveness of ImRS with this population.

Evidence Regarding Therapist-led vs Client-led Rescripting

One of the decisions schema therapists may contend with in ImRS is whether to ask the client to imagine their present-day self intervening to protect and comfort their past self in a schema-relevant memory, or to imagine a third-party helper intervening to protect their past self (see Chapter 8: Intervention Strategies for Schema Healing 3: Experiential Techniques for an overview). At present, there are no studies employing clinical clients as participants, but a recent analogue study may be informative. University students were exposed to a traumatic movie clip and then randomly assigned to either (1) ImRS-A, where they were taught to imagine themselves intervening to disempower the perpetrator and save the victim in the aversive film scene; (2) ImRS-P, where they were taught to imagine a trustworthy other person intervening to disempower the perpetrator and help the victim; (3), Imagery rehearsal,where they were asked to recall the aversive film scene; and (4) no intervention control. Both ImRS conditions were less distressing than reimagining the aversive film scene, with the passive form (ImRS-P) less distressing than the active form (ImRS-A); however, only the ImRS-A condition was associated with increased positive affect [85]. It was noteworthy that there were no differences between ImRS conditions in participants' levels of self-efficacy. Overall, the findings support the common schema therapy practice of guiding clients toward imagining third-party helpers as their first ImRS step because it is the easier task, but also supports the additional value of transferring agency within ImRS exercises to the client.

Chairwork Exercises

Part of the rationale for using chairwork rather than traditional counselling dialogues is to intensify activation of schemas – thoughts and emotions – which in turn is thought to lead to greater schema change in both explicit and implicit memory systems [86]. Some support for these ideas came from early small, randomised trials with students [87] and clinical clients [88, 89] in which exploration of inner conflict via two-chair dialogues led to greater depth of feeling and perspective shifts than in empathic counselling. Emotional intensity was also a key theme of participants' experience of chairwork in a recent qualitative study of compassion-focused therapy [90]. When a single session of either a two-chair decision-making dialogue or another CBT strategy have been compared, there have been equivalent improvements on primary outcome measures (e.g., Conoley, Conoley, McConnell, and Kimzey [91]), with inconsistent additional benefits to chairwork. For example, Greenberg and Clarke [87] found the two-chair dialogue produced greater reductions in ambivalence than problem-solving therapy. Trachsel, Ferrari, and Holtforth [92] found no differences in indecisiveness but found chairwork produced higher self-reported and observer-rated emotional activation than a decision cube task. Compared with ImRS, there are relatively fewer evaluations of chairwork as a stand-alone procedure and no meta-analyses that we are aware of.

A further source of evidence for the efficacy of chairwork comes from studies evaluating emotion-focused therapy (EFT). One of the key two-chair dialogues used in EFT is between the 'Critic' and the 'Criticised Self'. Early studies identified characteristics of participants who resolved inner conflicts through chairwork as those who demonstrated a 'softening' of the Critic part, which changed from lecturing at the Criticised part, to describing its own feelings and sharing a similar depth of experience to the Criticised part, and then toward empathy, self-compassion, and discussion of mutual understanding [93]. Those who experienced resolution improved their indecisiveness and made more progress with their target complaints than those who did not [94]. In a multiple-baseline study, a five-session phase of the two-chair Critic–Criticised dialogue was associated with more change in anxiety and depression symptoms than the baseline phase [95]. In a study of people with major depressive disorder, people were randomised to receive either 16 weeks of Process-Experiential Therapy (PET, a precursor to EFT that contained significant amounts of chairwork) or CBT [96]. Both groups experienced equivalent improvements in all outcomes, except that the PET group achieved a significantly greater reduction in interpersonal problems.

For clients with trauma symptoms from childhood sexual abuse, EFT often employs a two-chair dialogue between the client and the perpetrator (in the empty chair). Clients are encouraged to voice their thoughts and feelings about the traumatic events and their consequences directly to the perpetrator. Greenberg and Malcom [97] studied those who had completed a course of EFT for childhood maltreatment and/or interpersonal problems and found that clients who had been able to express unmet needs through chair dialogues achieved larger reductions in general psychopathology and interpersonal problems than those who had not. Paivio, Harry, Chagigiorgis, Hall, and Ralston [98] compared two forms of EFT ($M = 17$ sessions); one involved the perpetrator-confrontation chair dialogue and the other involved addressing the consequences of traumatic events by simply exploring the client's feelings and meanings via empathic counselling. There were no significant differences between the groups in trauma symptom change, but there was higher attrition in the

group that involved perpetrator-confrontation chairwork (20%) than empathic counselling alone (7%).

The implications of this research for schema therapy are arguably modest given that the use of chair dialogues in EFT diverges in important ways from their use in schema therapy. Nevertheless, schema therapists can be assured that the use of chairwork as a means to effect change has received at least some empirical scrutiny. There is evidence that chairwork achieves greater emotional activation, which is its intended purpose in schema therapy: to bypass avoidant coping modes. As a means of cognitive change, chairwork appears to work at least as well as more 'rational' cognitive restructuring methods. This initial research also suggests that the benefits of this component are not so profound that a schema therapist ought to feel compelled to use them, although the study by Paivio and colleagues [98] provides some caution that there are risks in pursuing emotional stimulation too aggressively. It should be noted that none of these chairwork studies has assessed for DSM personality disorder diagnoses. To date, the evidence for the safety and effectiveness of chairwork with cases of severe psychiatric disability (e.g., BPD) comes from evaluations of complete integrated courses of schema therapy, rather than stand-alone or dismantled designs.

Concluding Remarks

In this chapter, we aimed to provide an overview of the research studies to date that support schema therapy theory and treatment. The strongest evidence for the efficacy of schema therapy is for the treatment of personality disorders, especially BPD, but there is preliminary support for its use in a range of other conditions, especially if they have not responded to CBT (e.g., Eating Disorders, ImRS for PTSD). We hope that the evidence reviewed here, gives schema therapists confidence in the basic theory and treatment model, and knowledge about those presentations for which schema therapy has proven most helpful to date, while also providing some realistic boundaries and expectations for those cases that are not yet represented well by the evidence base.

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