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The outcomes of imagery-focused interventions in relation to distress in people with delusions: a systematic literature review

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Abstract

Background: Imagery-focused therapies within cognitive behavioural therapy are growing in interest and use for people with delusions.

Aims: This review aimed to examine the outcomes of imagery-focused interventions in people with delusions.

Method: PsycINFO, PubMed, MEDLINE, Web of Science, EMBASE and CINAHL were systematically searched for studies that included a clinical population with psychosis and delusions who experienced mental imagery. The review was informed by the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines and quality appraisal of all included papers was completed using the Crowe Critical Appraisal Tool. Information from included texts was extracted and collated in Excel, which informed the narrative synthesis of results.

Results: Of 2,736 studies identified, eight were eligible for inclusion and rated for quality with an average score of 70.63%. These studies largely supported their aims in reducing levels of distress and intrusiveness of imagery. Four of the eight studies used case series designs, two were randomised controlled trials, and two reported single case studies. It appears that interventions targeting mental imagery were acceptable and well tolerated within a population of people experiencing psychosis and delusions.

Conclusions: Some therapeutic improvement was reported, although the studies consisted of mainly small sample sizes. Clinical implications include that people with a diagnosis of psychosis can engage with imagery-focused therapeutic interventions with limited adverse events. Future research is needed to tackle existing weaknesses of design and explore the outcomes of imagery interventions within this population in larger samples, under more rigorous methodologies.

Keywords: delusions; imagery; mental imagery; psychosis; schizophrenia

Introduction

Background

People with psychosis are known to experience a broad range of symptoms such as hallucinatory experiences, delusional beliefs, thought disorder, paranoia and anhedonia (World Health Organisation, 2019). Bentall's (2006) complaint-orientated approach suggests that separate mechanisms underlie each of these symptoms and promotes the development of specific psychological treatments to address the cognitive processes underlying these experiences.

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Similarly, Freeman (2016) suggests considering these symptoms on a more individual level, as psychotic experiences each require explanation, research, and tailored interventions. Diagnostic categories continue to be widely used; however, research suggests they interfere/obstruct the advancement of our understanding and treatment of psychotic experiences (Freeman and Garety, 2014; Ronald *et al.*, 2013). Therefore, the study of individual experiences of psychosis has gained ground; this research corresponds to clinical need and aims to alleviate the experiences that people find most distressing (Freeman, 2016). Paranoia is one of these experiences, and is a prevalent experience, at a clinical level and in the general population (Freeman *et al.*, 2011). It is thought to exist on a spectrum and encompasses anything from general suspiciousness to persecutory delusions (Freeman *et al.*, 2005). An updated review suggests future treatments for psychosis, and delusions more specifically, and focuses on understanding and treating individual experiences with an overall aim of reducing the distress and impact of each (Garety and Freeman, 2013).

A potential area of focus could be the experience of mental imagery. Mental imagery is generally understood as ‘seeing with the mind’s eye’, and can involve all five senses; however, visual mental imagery is the most commonly experienced and researched (Kosslyn *et al.*, 2001; p. 635). Within psychosis, experienced clinicians and researchers report that mental imagery content is often associated with voice content (e.g. voice telling him to attack others, image of a tattooed, shaven-headed, muscular thug; Turkington *et al.*, 2016) and delusions (e.g. images of being attacked; Morrison *et al.*, 2002). It does not typically require external sensory input (Pearson *et al.*, 2015) and can be triggered by internal and situational stimuli (Çili and Stopa, 2015). Mental images can be mental representations of places, objects or events (Stopa, 2009), may be experienced when craving food (Kemps and Tiggemann, 2015) or imagining potential future events (Berntsen and Jacobsen, 2008). Mental images can be experienced as life-like and result in physiological responses such as increased heart-rate (Cuthbert *et al.*, 2003).

Two highly cited studies found that the majority of participants with psychosis experienced intrusive images (Morrison *et al.*, 2002; Schulze *et al.*, 2013). Morrison *et al.* (2002) interviewed 35 people with psychosis spectrum diagnoses about their experience of mental images that accompanied any psychotic symptoms, and 74.3% ($n = 26$) reported experiencing an image connected to their symptoms. Of these 26, 25 participants linked the image to a particular emotion or belief, and 17 associated the image with a memory of a past event. Participants who experienced persecutory delusions reported images related to these feared events (e.g. being attacked with axes, as well as memories of traumatic life events). These results were largely replicated a decade later by Schulze *et al.* (2013) in a sample of people experiencing persecutory delusions. Of the 40 participants recruited, 72.5% reported intrusive images when they thought, or felt anxious, about their persecutory beliefs. Of this 72.5%, 82.8% rated these images as negative, and 71.4% rated images as distressing. Research has shown that the distressing nature of this imagery could negatively affect psychological wellbeing in people with psychosis (Freeman *et al.*, 2014a, 2014b). Both studies are limited by small sample sizes, lack of comparison group and lack of assessment of co-morbid experiences such as trauma or anxiety. Importantly, imagery-based experiences that are not directly related to the delusional content may also be a causal factor in the maintenance and subsequent distress.

Imagery-focused interventions

Mental imagery interventions have been a longstanding feature of cognitive behavioural therapy (CBT; Beck, 1976) and in psychotherapy more generally (Edwards, 2007; Singer, 2006). Research suggests that mental imagery is an important feature across all cognitive processes (Kosslyn *et al.*, 1995; Pearson *et al.*, 2015). It has been theorised to have a powerful impact on emotion (Holmes *et al.*, 2008; Holmes *et al.*, 2009; Holmes and Mathews, 2010), with empirical evidence indicating that it can elicit stronger emotional responses compared with similar information represented verbally (Pearson *et al.*, 2015). Mathews and MacLeod (2002) suggested that emotions (e.g. anxiety

and fear) are likely to be induced by imagery as the system which generates emotional states evolved prior to language, and therefore is more responsive to sensory-perceptual representations such as imagery. Therefore, our rationale for using imagery-focused intervention is to build on these hypotheses that imagery-focused interventions can reduce the impact of distressing imagery on emotion.

The manipulation of mental images happens frequently, for example, within everyday problem solving such as mental rotation (Shepard and Metzler, 1971) and creative thinking (Pearson *et al.*, 2013). However, before developments in our understanding of imagery and its link to behaviour and emotion, professional training on imagery techniques and interventions was largely absent for clinicians (Saulsman *et al.*, 2019). A range of imagery techniques can be applied therapeutically; enhancing emotional engagement in thought record work (McEvoy *et al.*, 2018), behavioural experiments (McEvoy *et al.*, 2015), using positive imagery regarding future behaviour to influence actual behaviour (Renner *et al.*, 2017), and imaginal exposure (Foa *et al.*, 1980). Imagery-focused techniques have been supported by a limited, but growing, body of research (Holmes *et al.*, 2016a; Pile *et al.*, 2021). Interest in another technique, imagery rescripting (Edwards, 2007; van der Hart *et al.*, 1989), has grown rapidly, with it being integrated into treatment across diagnoses and investigated as a stand-alone intervention (Arntz, 2012). Imagery rescripting is frequently introduced as a technique to modify the meaning and emotion attached to a distressing memory; however, it is not restricted to memories and can also be used for imagined future events, i.e. events that have not yet happened (Landkroon *et al.*, 2022). It involves the therapist asking the individual to imagine a traumatic memory or aversive event. The therapist then helps the person rewrite it using a safer narrative (Ehlers and Clark, 2000; Ehlers *et al.*, 2005). An example of integration was researched by Kindt *et al.* (2008) in a sample of 71 participants with chronic PTSD. Imagery rescripting in conjunction with imaginal exposure led to significantly greater reductions in anger, shame and guilt compared with scores for the imaginal exposure alone condition and the waiting list condition. A single session of imagery rescripting reportedly reduced distress associated with memories for a small sample ($n = 14$) of people with social phobia, and these improvements were maintained at 1 week follow-up (Wild and Clark, 2011). Multiple systematic reviews report the effectiveness of imagery rescripting in reducing distressing intrusive cognitions such as voices, thoughts and images, across disorders (Morina *et al.*, 2017; Saulsman *et al.*, 2019).

However, clinicians report a hesitancy to incorporate imagery-focused techniques into their interventions; barriers include lack of training, and concerns that imagery techniques may be destabilising for clients (Bell *et al.*, 2015). Whilst the aforementioned research findings are limited by the focus on newly qualified staff, a similar concern is reported by more experienced colleagues. In a single case study, Newman-Taylor (2020), aimed to overcome the concerns of a staff team and client regarding the use of imagery rescripting for psychotic symptoms by creating a sense of 'felt security'. Felt security embodies an attachment relationship, a sense of interpersonal safety that is associated with secure, protective relationships (Sasaki and Overall, 2020). Whilst the felt security imagery task may not be necessary for all clients, it demonstrated a simple way of regulating emotion, increasing acceptability of imagery rescripting and decreasing the hesitancy that surrounds offering imagery-focused techniques to people with symptoms of psychosis.

Within a non-clinical sample of students with high levels of trait paranoia, a single session of imagery rescripting reduced paranoia scores and distress, with most participants also reporting 'positive' emotions of 'relief and calmness'. Despite the lack of control group and largely female sample, results suggest that imagery techniques, specifically rescripting, may be beneficial to people with clinical levels of delusions (Newman-Taylor *et al.*, 2020).

Building upon the success of studies in non-clinical samples, Clarke *et al.* (2021) explored the feasibility, safety and acceptability of a brief imagery rescripting for self-referential distressing appraisals (e.g. I am vulnerable) associated with trauma memories in people with psychosis. The protocol was built on several imagery rescripting protocols and targeted trauma memories.

Participants experienced reliable change on measures of PTSD and wellbeing, with 58.3% of participants meeting criteria for clinically significant improvements of PTSD symptoms. Despite these promising results, delusions were only measured at baseline, and therefore without a post-intervention score for comparison it is not possible to comment on the effectiveness of this imagery-focused intervention on delusions.

With more papers in the area of psychosis and imagery being published, alongside an increased clinical interest in the area, a review to establish the evidence base would be helpful and timely. A review to collate studies that focus on imagery interventions for people with psychosis and delusions provides the opportunity to understand what research has been carried out to date, and to what extent these interventions have been helpful.

Aims

The main aim of the review was to examine the outcomes of imagery-focused interventions in people with delusions. Delusions are the only experience of psychosis explored due to their prevalence and distressing nature. They are thought to be distinct from other experiences of psychosis in terms of their phenomenology and aetiology and warrant a specific review (Freeman and Garety, 2014). A secondary outcome regarding acceptance and feasibility of imagery-focused interventions within this population will also be considered.

Method

This review was informed by the PRISMA statement (Page *et al.*, 2021; see Supplementary material, section A). The protocol was registered on the international database of prospectively registered systemic reviews, PROSPERO (registration number: CRD42022322584) and can be accessed at: https://www.crd.york.ac.uk/prospero/display_record.php?ID=CRD42022322584.

Search strategy

An electronic search for eligible articles was conducted on 24 March 2022 in the following databases: PsycINFO, PubMed, MEDLINE, Web of Science, EMBASE and CINAHL. The search strategy was developed by the review team and consisted of two search strings. The first search included: 'psychosis OR schizophrenia OR delusion OR psychotic disorder', the second included: 'imagery OR mental image'. Searches were predominantly keyword searches with truncation around terms associated with mental imagery and psychosis and connected by Boolean operators (Supplementary material, section B). Following full text screening, forward citation and reference list searches were conducted using Google Scholar on included texts.

Inclusion and exclusion criteria

As no existing systematic literature review was found, inclusion criteria were kept purposefully broad. This was to increase the potential of all relevant research being included. No restriction was placed on publication date, and papers were included from earliest date to date of extraction. However, only papers in English language were included, due to lack of resources for translation.

Inclusion criteria consisted of the following: (1) adults (i.e. over 18 years old); (2) diagnosis relating to paranoid beliefs; (3) identification of such diagnoses through *Diagnostic and Statistical Manual of Mental Disorders (DSM)*, *International Classification of Diseases (ICD)*, medical records or clinician reports; (4) a measure of delusion pre- and post-intervention (standardised or idiosyncratic); (5) publications focused on mental imagery and imagery techniques; and (6) peer-reviewed publications with samples from community, in-patient (or a mix of both) forensic and psychiatric intensive care were included.

Papers were excluded if: (1) participants were under 18 years old; (2) participants had existing neurological disorders; (3) studies focused on hallucinations alone; (4) there were no measure of delusions pre- and post-intervention; or (5) peer-reviewed research focused on functional magnetic resonance imaging, body image, flashbacks and eye-movement desensitisation and reprocessing (EMDR).

Study selection

The first author assessed the titles and abstracts of potentially relevant papers. They then reviewed full-text papers against the inclusion and exclusion criteria. Decisions regarding full-text inclusion were discussed and agreed with all authors.

Data extraction

Relevant demographic, methodological and summary data were extracted and collated using Microsoft Excel (Microsoft Corporation, 2018). To support the aims of the review, key outcomes will be reported, namely changes on measures of delusion and imagery.

Study quality

All studies were assessed for risk of bias using the Crowe Critical Appraisal Tool (CCAT v1.4; Crowe *et al.*, 2011; Supplementary material, section C). Assessing for risk of bias allows evidence to be distinguished from assumptions and misreporting. It also enables results to be interpreted based on the overall quality of the methodology and context in which they were found. The CCAT consists of 22 items across eight categories, and is reported as having a good degree of construct validity (Crowe and Sheppard, 2011). Items for scoring include rationale for intervention/treatment/exposure, potential sources of bias/confounding variables, sampling method and its suitability, and ethical matters. Categories are scored independently using a 6-point scale, from 0 to 5, with higher scores representing high quality within that individual category. Items that are not applicable to the design of the study are excluded. Summary scores are provided; however, these can be misleading and hide very poor scores in one or more categories, therefore, scores across all categories are reported for all included papers.

Results

Study selection

In line with PRISMA guidelines, Fig. 1 outlines the selection process of this review. A total of 2736 studies were identified through database searches; 1070 duplicates were removed, and 1666 papers were screened at title and abstract level. Twenty-eight papers were included for full text review, and eight papers met all inclusion criteria; 50% of papers were independently co-rated by a colleague. No further studies were identified from forward citation and reference list searching and screening.

Study characteristics and participants

The eight studies were published between 2004 and 2022, and assessed a total of 102 participants. Table 1 summarises study characteristics. Two were single case studies (Morrison, 2004; Serruya and Grant, 2009). Two studies were randomised controlled trials (RCTs; Ascone *et al.*, 2017; Sheaves *et al.*, 2019) and the remaining four studies used case series designs (Forkert *et al.*, 2021; Pitfield *et al.*, 2020; Sheaves *et al.*, 2015; Taylor *et al.*, 2020). Six studies were conducted in the United Kingdom, one in Germany (Ascone *et al.*, 2017) and one in the USA (Serruya and Grant,

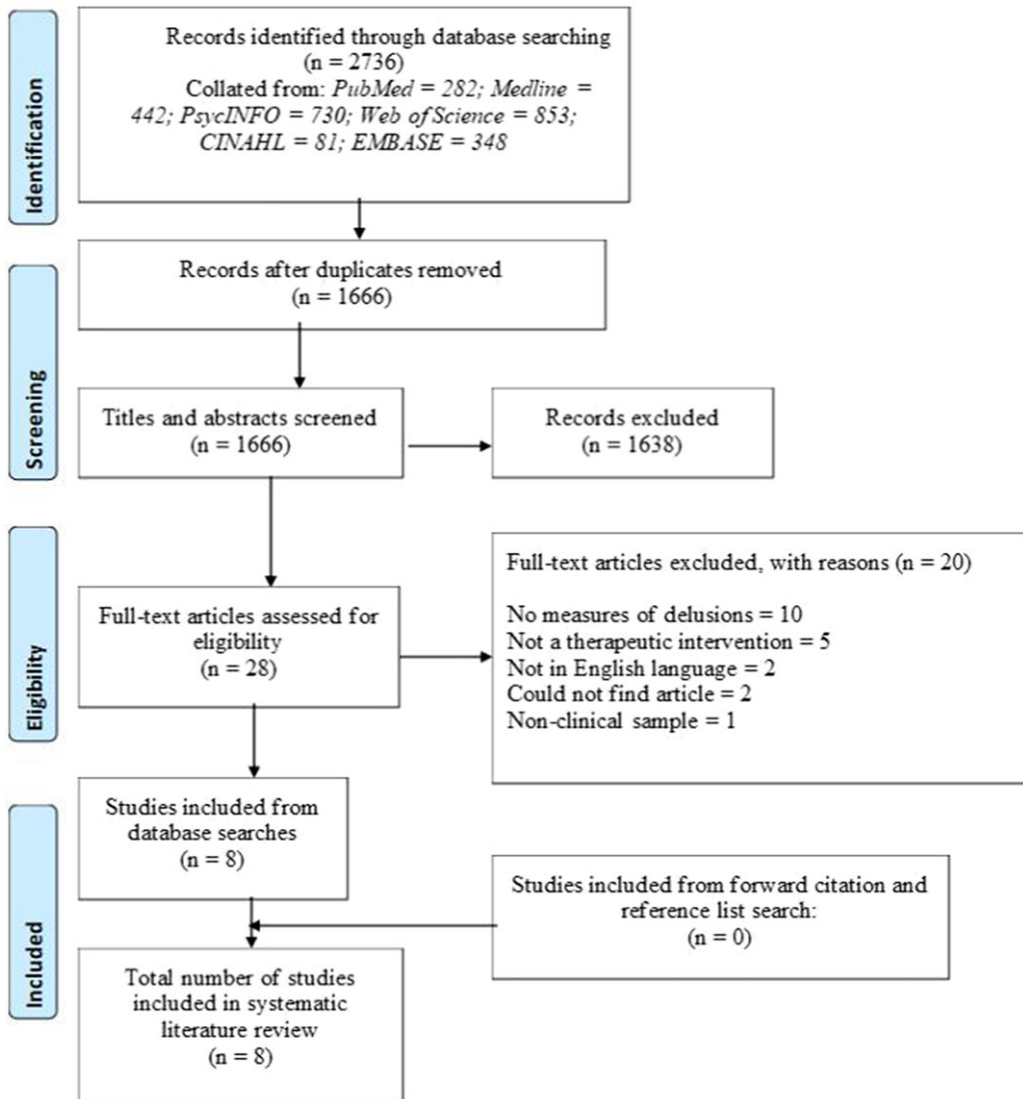


Figure 1. PRISMA flow diagram.

2009). Four studies included follow-ups within their design. Forkert *et al.* (2021) report a follow-up length of 1 month, as did Sheaves *et al.* (2019); Serruya and Grant (2009) had a follow-up length of 1 year. Pitfield *et al.* (2020) had a follow-up length of either 2 weeks or 3 weeks, dependent upon participant baseline length.

Participants were a mean of 36.97 years; 64% ($n = 65$) were male, and 36% ($n = 37$) were female. A range of schizophrenia-spectrum diagnoses were included; however, the majority of participants (58%; $n = 59$), were assessed as having, or reported a diagnosis of schizophrenia.

Quality appraisal

Quality appraisal scores from the CCAT (Crowe and Sheppard, 2011) are reported in Table 2, with scores out of 5 reported across all categories, a total score (maximum = 40) and corresponding total percentage stated. There is no cut-off to specify if papers were high, average, or low quality

Table 1. Studies utilising an imagery-focused intervention in a population of people with psychosis and delusions

Authors and country	Diagnoses	Mean age (SD)	N	Sex	Design	Imagery intervention	Measures of delusions	Other measures	Results
Ascone <i>et al.</i> (2017) Germany	SZ = 34, SZ non-specified = 5, SA = 4, drug induced paranoid delusions = 2, BPA with psychotic symptoms = 1	Control group = 36.2 (10.1) Experimental group = 40.2 (12.9)	51	Control group; M = 19, F = 6 Experimental group; M = 17, F = 9	Repeated measures, randomised controlled design	Compassion focused imagery techniques (Gilbert, 2010)	18-PC	FSCRS; NaPA; SAM; S-CS; skin conductance levels	No group × time effect on paranoia ($p = 0.532$). Significant main effect for time ($p = 0.017$) Overall decreases in paranoid ideation independent of group allocation No significant effect size found
Forkert <i>et al.</i> (2021) UK	SZ = 9, FEP = 1, PNOS = 2	42 (13.1)	12	M = 7, F = 5	Uncontrolled feasibility study	Four-session compassionate imagery intervention (Gilbert, 2005, 2010; Kolts, 2012; Lee and James, 2011; Neff, 2011; Welford, 2012)	GPTS	BCSS; S-CS, SCS, RSE	Medium effect size, post-treatment in delusions (change score 10.08, 95% CI 3.47, 16.69, $d = 0.61$) Improvements were maintained at follow-up
Morrison, 2004 UK	DD = 1	30	1	M = 1	Case example	Imagery techniques within cognitive therapy (Ehlers and Clark, 2000; Hackmann, 1997)	PSYRATS	None	Pre-occupation, conviction and distress as measured by PSYRATS delusions subscale all reduced Pre-occupation and distress reduced from 3 to 0, conviction reduced from 4 to 0
Pitfield <i>et al.</i> (2020) UK	SZ = 2	52 (male), 49 (female)	2	M = 1, F = 1	A-B-A design with matched follow-up length	Attachment based guided imagery (Bullock <i>et al.</i> , 2016)	GPTS; PC-5	PAM; PANAS	Variable levels of delusions over baseline which reduced during intervention phase but returned to baseline scores at follow-up
Serruya and Grant, 2009 USA	PSz = 1	25	1	M	Single case study	Imagery techniques within CBT therapy (Holmes <i>et al.</i> , 2007)	PSYRATS	BAI; BDI-II; SANS	PSYRATS delusion at baseline, 17; at end of treatment (6 months), 14; at follow-up (12 months), 0
Sheaves <i>et al.</i> , 2015	PSz = 3, SZ = 1, PNOS = 1, BPA = 1	39.67 (12.53)	6	M = 2, F = 4	A-B case series	Imagery rescripting for nightmares (Nappi <i>et al.</i> , 2010)	PSYRATS	DASS-21; Dream Log (Levin and Fireman, 2002); CORE-10; PDS; PPD; PSQI; VPD	PSYRATS delusion scores decreased for 4/5 participants. Baseline mean = 18.00 ($SD = 1.87$); post intervention mean = 16.20 ($SD = 2.77$)

(Continued)

Table 1. (Continued)

Authors and country	Diagnoses	Mean age (SD)	N	Sex	Design	Imagery intervention	Measures of delusions	Other measures	Results
Sheaves <i>et al.</i> (2019) UK	Experimental condition/ TAU condition SZ = 6/3, SA = 5/4, DD = 0/1, PNOS = 1/4	43/39	24	M = 7/7, F = 5/5	Parallel group pilot randomised control trial	Imagery rescripting for nightmares (Hackmann <i>et al.</i> , 2011)	GPTS	BSS; CAPS; DASS-21, DDNSI; DES-B; SCI, PSQI, TBQ, WEMWBS	Experimental condition led to moderate reductions in delusions at weeks 4 and 8 compared with TAU Experimental condition/TAU Week 0 mean (SD) = 101.2 (35.7)/109.8 (33.9) Week 4, mean (SD) = 75.3 (37.0)/109 (32.3), $d = 0.60$ Week 8, mean(SD), 68.5(39.4)/100.7(35.5), $d = 0.54$
Taylor <i>et al.</i> (2020) UK	SZ = 1, DD = 1, SA = 1, receiving care for FEP team = 2	23.40 (6.42)	5	M = 3, F = 2	Randomised multiple baseline case series	iMAPS Taylor <i>et al.</i> practice guide	PANSS; PSYRATS	AEP; BCSS; CDSS, MIPQ; SMI; SUIS; YSQ-S; WAI-SR	PSYRATS delusions reduced, 16.60 (0.89) at initial assessment, 15.80 (2.28) at last baseline, 8.25 (9.00) at end of treatment. Large effect size found, $d = 0.96$ Scores for two participants suggested much improved clinically significant change PANSS positive subscale decreased by 17.1%, a large effect size, $d = 1.45$

Diagnoses abbreviations: BPA, bipolar affective disorder; DD, delusional disorder; FEP, first episode psychosis; PNOS, psychosis not otherwise specified; PSz, paranoid schizophrenia; SA, schizoaffective disorder; SZ, schizophrenia; TAU, treatment as usual. Sex abbreviations: F, female; M, male. Measures of delusions abbreviations: 18-PC, 18-item Paranoia Checklist (Freeman *et al.*, 2005); GPTS, Green *et al.* Paranoid Thought Scales (Green *et al.*, 2008); PANSS, Positive and Negative Syndrome Scale (Kay *et al.*, 1987); PC-5, Paranoia Checklist 5-item state version (Schlier *et al.*, 2016); PSYRATS, Psychotic Symptom Rating Scales (Haddock *et al.*, 1999). Other measures abbreviations: AEP, Adverse Effects in Psychotherapy (Hutton, 2016); BAI, Beck Anxiety Inventory (Beck *et al.*, 1988); BCSS, Brief Core Schema Scale (Fowler *et al.*, 2006); BDI-II, Beck Depression Inventory II (Beck *et al.*, 1996); BSS, Beck Suicide Scale (Beck *et al.*, 1979); CAPS, Cardiff Anomalous Perceptions Scale (Bell *et al.*, 2006); CDSS, Calgary Depression Rating Scale for Schizophrenia (Addington *et al.*, 2014); CORE-10, Clinical Outcomes in Routine Evaluation (Connell and Barkham, 2007); DASS-21, Depression, Anxiety and Stress Scales (Lovibond and Lovibond, 1995); DDNSI, Disturbing Dream and Nightmare Severity Index (Krakow, 2006); DES-B, Brief Dissociative Experiences Scale (Dalenberg and Carlson, 2010); FSCRS, Forms of Self-Criticism and Reassurance (Gilbert *et al.*, 2004); MIPQ, Mental Imagery in Psychosis Questionnaire (adapted from Holmes *et al.*, 2016a); NaPA, Negative and Positive Affect (Stemmler *et al.*, 2001); PANAS, Positive and Negative Affect Scale (Watson *et al.*, 1988); PAM, Psychosis Attachment Measure (Berry *et al.*, 2007); PDS, Posttraumatic Diagnostic Scale (Foa *et al.*, 1997); PPD, Persecutor Power Differential (adapted from VPD; Birchwood *et al.*, 2000); PSQI, Pittsburgh Sleep Quality Index (Buysse *et al.*, 1989); RSE, Rosenberg Self-Esteem Scale (Rosenberg, 1965); SAM, Self-Assessment Manikin (Bradley and Lang, 1994); SANS, Scale for the Assessment of Negative Symptoms (Andreasen, 1989); S-CS, Self-Compassion Scale (Neff, 2003); SCI, Sleep Condition Indicator (Espie *et al.*, 2014) SCS, Social Comparison Scale (Allan and Gilbert, 1995; adapted by Freeman *et al.*, 2014a); SMI, Schema Mode Inventory (Lobbestael *et al.*, 2010); SUIS, Spontaneous Use of Imagery Scale (Nelis *et al.*, 2014); TBQ, Time Budget Questionnaire (Jolley *et al.*, 2006); VPD, Voice Power Differential (Birchwood *et al.*, 2000); WAI-SR, Working Alliance Inventory (Hatcher and Gillaspay, 2006); WEMWBS, Warwick-Edinburgh Mental Well-being Scale (Tennant *et al.*, 2007); YSQ-S, Young Schema Questionnaire-Short Form (Young and Brown, 2003).

Table 2. Quality appraisal CCAT scores for included papers

Reference	Preliminaries	Introduction	Design	Sampling	Data collection	Ethical matters	Results	Discussion	Total score	Corresponding total (%)
Ascone <i>et al.</i> (2017)	4	3	5	4	5	3	3	4	31	78
Forkert <i>et al.</i> (2021)	4	4	4	3	3	4	4	5	31	78
Morrison (2004)	3	3	2	1	2	1	2	2	16	40
Pitfield <i>et al.</i> (2020)	5	4	4	4	3	5	4	4	33	83
Serruya and Grant (2009)	2	3	2	0	1	0	2	3	13	33
Sheaves <i>et al.</i> (2015)	5	5	3	4	3	3	5	4	32	80
Sheaves <i>et al.</i> (2019)	4	5	4	4	5	5	4	4	35	88
Taylor <i>et al.</i> (2020)	5	5	4	4	4	4	4	4	34	85

and no papers were excluded on the basis of quality; however, results and conclusions drawn have been weighted accordingly. Total percentages ranged from 33% (Serruya and Grant, 2009) to 88% (Sheaves *et al.*, 2019), with a mean percentage score of 70.63%. All papers were independently scored by the first author. To improve the reliability of the quality appraisal, a sample of papers were independently rated by a colleague. Minor discrepancies were resolved using the manual and further consideration of the paper. Scores were then agreed by both appraisers.

Ethical matters, defined by the tool as encompassing ethical behaviour towards participants and by the researcher, were a shortcoming for many papers as they failed to report if and how informed consent was obtained or explicitly stated how participants' confidentiality and anonymity were maintained. Design and sampling categories also saw lower scores due to inadequate information on the validity, reliability and rationale for measures and interventions, alongside lack of information on sampling methods, why they were chosen and the suitability of these methods. A more general weakness was the lack of service user/patient involvement in the design of studies, with only one paper including experts by experience (Taylor *et al.*, 2020). This potentially undermines the extent to which the research conducted to date is relevant to the needs of the population in which it is conducted (National Institute for Health Research, 2021). Confidence in the acceptability of psychometric measures and recruitment strategy is also reduced.

Main outcomes

Reported changes on measures of delusions

Seven of the included studies reported decreases in delusions for people with psychosis with delusions following an imagery-focused intervention. However, one study (Ascone *et al.*, 2017) reported no specific interventions effects sizes regarding the reduction of delusions for the group that received the compassion focused intervention. Nevertheless, there was an overall decrease in delusions for participants irrespective of group allocation. Participants were randomised to a control imagery condition or compassion focused imagery condition and consisted of both in-patients and out-patients.

Morrison (2004) reported a case example of a participant experiencing persecutory delusions and intrusive images about people assaulting him. The participant engaged in a cognitive therapy assessment and verbal reattribution methods before participating in 14 sessions of cognitive therapy, with imagery techniques implemented in sessions 7 and 8. The remaining sessions focused on consolidation of gains. PSYRATS (Haddock *et al.*, 1999) was used as a weekly measure

of delusions throughout the intervention. Scores on conviction dropped from 4 to 0, and scores for pre-occupation and distress fell from 3 to 0 from initial to last session.

According to the PSYRATS user manual (Haddock, 2009) items scored as a '4' are beliefs that cause complete disruption of daily life, a score of 3 is given if beliefs cause severe disruption but the participant is able to maintain some daily activities or self-care, and a '0' is no disruption to life, able to maintain independent living with no problems. In session 7, when imagery technique was introduced, conviction was 4, pre-occupation and distress were 3, and the following week all three of these items were rated as 0. Imagery was also said to be the focus of session 8 and in session 9 an increase in pre-occupation and conviction of 1 point on each is reported. However, it is not clear if the PSYRATS was completed prior to the session or at the end. Furthermore, not all items of the PSYRATS delusions subscale are reported and remain unclear.

Similarly to Morrison (2004), Serruya and Grant (2009) reported a single case where six guided imagery sessions were completed within a longer piece of therapy consisting of a total of 38 CBT sessions. At baseline, the participant reported 100% conviction in persecutory delusions. Six months later, at the end of treatment, delusion as scored by the PSYRATS delusion subscale had dropped from 17 to 14, and then to 0 at 12-month follow-up. The authors reported that approximately 16% of the intervention used imagery techniques, with the majority of the intervention focused on other CBT techniques. It is therefore difficult to attribute improvement in the participants delusion solely to the use of imagery techniques.

The remaining studies used more methodologically rigorous designs with all six papers scoring above average in the quality appraisal tool; however, sample sizes were still small and conclusions must be considered cautiously. Pitfield *et al.* (2020) reported that delusions reduced for both participants in the two-person case series but was not maintained at follow-up. One participant completed a 2-week baseline, whilst the other completed a 3-week baseline. Both reported high and variable levels of delusions. The intervention phase of 1 week required participants to listen to a personalised, guided imagery recording and complete measures daily. Ratings of delusions reduced for both participants throughout the intervention, supporting the hypothesis that secure attachment imagery could reduce delusions. However, delusions scores increased again during the follow-up period. Other studies found reductions in delusions could be maintained at follow-up. Forkert *et al.* (2021) conducted an uncontrolled feasibility trial that explored the impact of a single technique, self-compassionate imagery, for patients with persecutory delusions. Assessments of delusions were completed before and after the 4-session intervention, and again at 1-month follow-up. Results indicated medium effect sizes in delusions, which was maintained at follow-up.

Taylor *et al.* (2020) used a randomised multiple baseline case series design. Results indicated that three of five participants experienced reductions in delusions, with two achieving much improved clinically significant change as rated by the PSYRATS delusion subscale.

The final two papers meeting inclusion criteria focused on nightmares and imagery-focused therapy to reduce the distress. Sheaves *et al.* (2015) conducted a case series of between four and six sessions of imagery rehearsal therapy with five participants. All participants experienced either persecutory or grandiose delusions. PSYRATS delusion score decreased for four of the five participants and increased for one; for two participants reductions in delusional beliefs were significant. Following the case series, a pilot RCT was conducted (Sheaves *et al.*, 2019). Participants were successfully randomised to intervention or treatment as usual conditions and assessments were blinded. The experimental condition experienced moderate reductions in delusions compared with the control group which received treatment as usual. The intervention focused on imagery rescripting of nightmares and behavioural tests of persecutory beliefs were absent; however, delusions still reduced.

Reported changes on measures of imagery

Only one paper (Taylor *et al.*, 2020) used psychometric measures to assess mental imagery. Intrusive images were reported to be compelling, absorbing, vivid and pre-occupying, as well as

highly distressing. ‘Much improved’ clinically significant changes were reported for two participants, with a third experiencing a small decrease. The two remaining participants showed increase in scores. Imagery distress reduced by 50% between initial assessment and the final end-of-therapy assessment with a medium effect size ($d = 0.67$).

Other papers reported changes of imagery anecdotally and were based on participants reporting which may be more likely to be biased by demand characteristics. Participants from the single case examples reportedly found certain imagery techniques most useful in reducing distress. One participant stated that a technique similar to traditional exposure techniques reduced their anxiety connected to the image from 8, to 4 out of 10 (Serruya and Grant, 2009). Another reported that manipulating the image and adding humour was most effective in reducing distress caused by the image (Morrison, 2004).

Secondary outcomes

Acceptance and feasibility of interventions

Where data were available, studies appeared to be acceptable and feasible. For the two single case examples, participants engaged with the therapeutic interventions that contained imagery-focused techniques and no serious adverse events were reported (Morrison, 2004; Serruya and Grant, 2009). Pitfield *et al.* (2020) also reported no adverse events but further information on acceptability and feasibility was not available. A 4-session compassionate imagery intervention reported medium to large effect sizes on all clinical outcome measures and reported the intervention to be feasible and acceptable, with no adverse events reported (Forkert *et al.*, 2021). Of all potential participants, 86% gave consent to take part in the research. Throughout the intervention all sessions were attended, and all measures were completed.

Several studies also reported recruitment rates. In their case series, Sheaves *et al.* (2015) recruited from a group of participants from a previous study that experienced weekly nightmares ($n = 22$). Of these 22, 20 agreed to be contacted with 18 meeting inclusion criteria. Seven participants were invited to take part and six consented. Taylor *et al.* (2020) reported that 62.5% of those eligible consented to participate. All participants exceeded the 3-session attendance threshold that had been pre-set as a reasonable level of attendance, and no participant withdrew during therapy. Ascone *et al.* (2017) asked 56 participants to participate, with 51 being included in the final sample, a recruitment rate of 91.07%.

In their one-session, brief intervention, Ascone *et al.* (2017) reported that working with imagery in people experiencing delusions was considered largely positive by participants. However, some adverse effects were reported such as increases in shame. Two patients who expressed high levels of mistrust withdrew from the study and further information on recruitment numbers is not available, therefore conclusions on feasibility cannot be made. Five of six participants completed all sessions of the case series of Sheaves *et al.* (2015). One participant withdrew, stating that their nightmares had stopped occurring. The remaining participants continued to experience nightmares but noted reduced distress and an increased ability to cope. On average, participants reported the satisfaction for intervention to be 9.2 out of 10. The randomised controlled trial that followed, reported 100% completion rates of therapy and similarly high therapy satisfaction rates (Sheaves *et al.*, 2019). Whilst results were mostly positive, an unexpected finding was that recovery of suicidal ideation was better for the treatment as usual group compared with the CBT group. Effect sizes from small numbers of participants should be treated with caution; however, it is important to monitor for adverse effects in larger trials.

Discussion

The primary aim of this review was to examine the outcomes of imagery-focused interventions in people with psychosis and delusions. A secondary outcome of the review was to explore the

acceptance and feasibility of imagery-focused interventions. Eight papers were included after a thorough systematic search following PRISMA guidelines. Both aims of the review were achieved. Regarding the primary aim, seven papers reported a decrease in delusions following an imagery-focused intervention. Ascone *et al.* (2017) reported an overall decrease in delusions irrespective of imagery condition; they had hypothesised that the compassion focused intervention would lead to larger therapeutic gains compared with a control imagery condition. Outcomes related to changes in imagery were more difficult to ascertain as only one paper (Taylor *et al.*, 2020) measured mental imagery using psychometric measures. Both psychometric and anecdotal data indicated that imagery-focused interventions had reduced the distress caused by intrusive images.

Regarding the secondary aim, from the available data, studies indicated that imagery-focused interventions are acceptable and feasible for people with psychosis who experience delusions. No adverse events were reported, and recruitment and completion rates of the interventions were high across studies.

All eight papers included within this review reported reductions in delusions following imagery intervention and suggest that such interventions are acceptable and feasible. However, there were a number of limitations with regard to each study, which limited the conclusions that could be drawn. For example, in the Ascone *et al.* (2017) study, a reduction in delusions was not found as a group difference but overall, across both a compassionate imagery condition and control imagery condition. The authors hypothesised that the calm breathing baseline or soft tone of voice used in both conditions may have accounted for changes in both groups. Furthermore, this is the only sample to recruit participants from both an in-patients and a community setting, which may have impacted results (Ascone *et al.*, 2017). Both single case studies included reported that the participant experienced a decrease in their delusional beliefs (Morrison, 2004; Serruya and Grant, 2009). The authors attribute this reduction, in part, to the use of imagery-focused techniques within a larger piece of cognitive therapy work. As noted, imagery was omnipresent in the development of cognitive and behavioural therapies (Edwards, 2007) and was employed in a range of therapeutic techniques (McEvoy *et al.*, 2015). Both Morrison (2004) and Serruya and Grant (2009) clearly demonstrated how imagery-focused techniques could be implemented within an extended piece of therapy. However, results from both case examples should be considered with caution given the methodological limitations of single case study research and below average quality scores, which would make replication difficult and weakens the generalisability of results.

Another area to consider was if the reported reductions in delusions could be sustained beyond the intervention phase of research. Effects were maintained at 1-month follow-up after a standalone compassionate imagery intervention (Forkert *et al.*, 2021); however, in another study, both participants scores on delusion measures returned to baseline levels at follow-up (Pitfield *et al.*, 2020). A follow-up of 1 year from baseline assessment saw a continued drop in delusions to a score of 0; however, as imagery was only part of the longer therapeutic intervention, its role in this reduction cannot be differentiated from other confounders (Serruya and Grant, 2009). Medium effect sizes 1 month after intervention were reported in Sheaves *et al.* (2019), with high follow-up rates of 83.33%. Repeating measures at follow-up overcame a limitation of Sheaves *et al.* (2015) which did not retest measures at follow-up. Other studies were also limited by the lack of a follow-up period (Ascone *et al.*, 2017; Morrison, 2004; Taylor *et al.*, 2020). It appeared that reductions in delusions were maintained when the intervention actively involved the participant and therapist and was utilised as a predominantly standalone therapeutic protocol. Delusions scores in Pitfield *et al.* (2020) may have returned to baseline following intervention for a number of reasons. For example, the changeable and high levels of delusions at baseline for both participants suggested a level of chronicity in their experience of delusions. It is important to note that one participant inadvertently reduced their follow-up period as they continued using the guided imagery recording longer than the stipulated timeframe due to forgetting to stop and finding the intervention useful. Given the hypothesis that attachment-based imagery may supplement trauma

interventions for people with psychosis and persecutory delusions (Pitfield *et al.*, 2020) and alleviate some clinicians' distress about offering these interventions, further research into the feasibility of continued use is warranted.

Despite the small sample size, a range of psychosis-spectrum diagnoses were included, and some participants were reported to have experienced chronic and complex mental health problems. Given the therapeutic gains and limited adverse events, clinicians' hesitancy about using imagery-focused techniques with this population may be somewhat alleviated (Gairns *et al.*, 2015; Sin *et al.*, 2017). Furthermore, as reported in Table 2, a range of imagery techniques contributed to these therapeutic gains. The most prevalent imagery technique was imagery rescripting used by Sheaves *et al.* (2015, 2019) and Taylor *et al.* (2020). Ascone *et al.* (2017) and Forkert *et al.* (2021) both used compassionate imagery as the basis for their interventions. Pitfield *et al.* (2020) was the only study to use attachment based imagery, and as previously reported Morrison (2004) and Serruya and Grant (2009) incorporated imagery techniques into cognitive therapy. This demonstrates that a range of imagery-focused interventions can be used within a sample of people with psychosis.

Methodological considerations

The CCAT (Crowe and Sheppard, 2011) identified areas of strength within the included papers. There was clear reporting of aims and hypotheses, the inclusion of key information and summary of current knowledge alongside clear rationales for the studies' focus. Discussion sections were also strong with clear summaries of findings that were further explored within the context of the available literature.

Most studies failed to report clear processes on ethical matters such as how informed consent was obtained and how confidentiality and privacy were maintained. These are particularly important to address given the clinical nature and vulnerable population studies were conducted with. Further weaknesses related to the lack of rationale for authors' use of designs, measures and interventions, whilst sometimes addressed by stating the exploratory nature of the study, was frequently left to be assumed rather than explicitly stated. Finally, only one study reported the consultation of service users (Taylor *et al.*, 2020). Service user involvement in research and healthcare has increased rapidly, with multiple studies reporting benefits such as service users' greater sense of control over services they have received, improved care co-ordination and positive clinical outcomes (Laitila *et al.*, 2018; Omeni *et al.*, 2014). However, the service user voice is absent in the majority of research designs, methods and interventions that this review covers.

Only one study (Serruya and Grant, 2009) reported a definition of mental imagery. Further clarification and an agreement on a broad description of the experience we are trying to explore could only be useful. Alongside the lack of definitions is the absence of clear measures to quantify or describe a person's experience of mental imagery. No clear preference for an imagery assessment tool was evident, with only one paper reporting the use of imagery measures (Taylor *et al.*, 2020). Without an understanding of the participants' propensity for mental imagery, the frequency of which they experience it and the characteristics of their imagery (e.g. intrusiveness, vividness, emotional nature), it is difficult to compare and generalise findings, however positive they may seem. Measures of delusions also varied, however; four of the papers reported PSYRATS (Haddock *et al.*, 1999) scores that allowed for comparison of the clinical severity of people's experiences.

General methodological weaknesses were the research designs and small number of participants. Only two RCTs, Ascone *et al.* (2017) and Sheaves *et al.* (2019), were included alongside several case series and two individual case presentations. It is important to understand the lack of more robust research designs in the context of the infancy of this research area. Furthermore, potential confounding variables were frequently unreported, for example medication use. Most studies did not control for demographic variables; Ascone *et al.* (2017)

used a randomisation procedure that resulted in samples roughly equivalent to each other. Sheaves *et al.* (2019) also randomised participants and whilst gender was matched on both groups, other variables were not (e.g. ethnicity and diagnosis).

Strengths and limitations

This is the first review that we are aware of to investigate studies of mental imagery and delusions. This broadness also pertained to research designs, with a range of designs included, allowing important findings to be discussed regardless of sample size and participant experience. This review forms a base for future research in this area and contributes to suggestions that a move from diagnostic based interventions, towards symptom or experience-based interventions may help alleviate distress for people transdiagnostically.

Limitations are similar to those found across systematic reviews (Garg *et al.*, 2008). There is a risk, despite a rigorous search strategy, that studies have been unintentionally missed or excluded. This risk has been alleviated as much as possible by employing thorough scoping searches, the piloting of search terms and consultation with a librarian. Whilst small sample sizes and case presentations were included in this review, publication bias may still have affected the results as these types of studies are less likely to be published. Furthermore, some papers explore delusions as a single construct; however, differences between subtypes of delusions and the role imagery plays may exist. Finally, the heterogeneity of included research regarding the measures used, interventions delivered and settings makes it difficult to draw more firm conclusions.

Clinical implications

This is a growing area of research and notwithstanding the limitations noted above, several potentially important clinical implications are noteworthy. Perhaps the most notable clinical implication that the included research provides is that people with a psychosis diagnosis can engage with imagery-focused therapeutic interventions. The available information indicates there were limited adverse events as a direct result of imagery interventions which may alleviate some of the caution expressed by clinicians considering the use of imagery-focused techniques within this population (Gairns *et al.*, 2015).

Intrusive and negative mental imagery was reported to be emotionally distressing by the recruited participants. Furthermore, it appeared to be widely experienced across diagnostic groups, genders and age, supporting the important findings of Morrison *et al.* (2002) and Schulze *et al.* (2013). Given the distressing nature of some participants' mental imagery, and its connection to their psychotic symptoms or previous trauma, it appears to be an important area for clinicians to assess and explore with their clients. Failure to assess for the presence of mental imagery may mean clinicians are missing opportunities to alleviate a distressing experience for people experiencing psychosis with delusions.

Future directions

This area would benefit from greater consistency in the definition, reporting and assessment of mental imagery. This would allow for a more reliable and valid replication of methodologies as well as enhancing the comparability of data. Psychometric measures may play a role in this, in particular the use, or creation of, a measure to identify the meaning and emotion attached to imagery. Furthermore, existing research indicates a connection between mental imagery and emotion. It remains unclear the extent to which mental imagery plays a causal role in emotions within people with psychosis or those experiencing psychotic symptoms, in part due to studies identifying a causal role within the general population not being replicated within these populations. This requires further exploration.

The papers included in this review lay an important foundation for future research. Given the early stage of research in this area, case series designs, convenience sampling and unmatched control groups are suitable designs. However, future research would benefit from more RCTs as these are considered the most rigorous methodology (Akobeng, 2005) when considering the causal relationship between an intervention, such as imagery-focused therapy, and an outcome (e.g. reduction in delusions). Adequately powered samples and the matching of intervention and control groups on potential confounding variables (e.g. age, gender, medication, would further add to design rigor). Assessments completed by a researcher blind to group allocation completed at multiple time points would also be beneficial. Whilst establishing a stable baseline is difficult within a clinical sample, especially where symptoms such as delusions can be extremely distressing; it is invaluable when researching the impact of an intervention. Regarding design, longer follow-up periods with blinded assessors, would allow for the exploration of what interventions create lasting change. Another important consideration is the involvement of those with lived experience, in the conceptualisation, design and delivery of research interventions.

Finally, whilst results are promising despite the limitations discussed, it is important to consider whose experiences are missing from this body of research. Whilst not an aim of the review a brief exploration of the included studies demographics indicate that all but one study, Morrison (2004), reported the ethnicity of their participants. However, no study considered the collected ethnicity data in their interpretation of results as suggested by Ross *et al.* (2020). Future research would benefit from consultation with Black African, Black Caribbean, South Asian, White Other and Mixed Ethnicity people. Racial inequality exists within mental health services (Koodun *et al.*, 2021) and has been connected with worse social and service use outcomes for Black African and Black Caribbean service users with psychosis, compared with White British service users (Morgan *et al.*, 2017). Therefore, it is paramount that research meaningfully includes these service users to ensure their voices and experiences are heard and considered within the development of new therapeutic interventions.

Conclusions

Despite a limited number of papers and their methodological limitations, it appears that imagery-focused interventions are tolerable and beneficial to people with psychosis and delusions. Whilst further research is needed to build upon these findings, there are clear and positive clinical implications.

Supplementary material. The supplementary material for this article can be found at <https://doi.org/10.1017/S1352465824000237>

Data availability statement. Data available on request due to privacy/ethical restrictions.

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References

- Addington, J., Shah, H., Liu, L., & Addington, D. (2014). Reliability and validity of the Calgary Depression Scale for Schizophrenia (CDSS) in youth at clinical high risk for psychosis. *Schizophrenia Research*, 153, 64–67. <https://doi.org/10.1016/j.schres.2013.12.014>
- Akobeng, A. K. (2005). Understanding randomised controlled trials. *Archives of Disease in Childhood*, 90, 840–844. <https://doi.org/10.1136/adc.2004.058222>
- Allan, S., & Gilbert, P. (1995). A social comparison scale: psychometric properties and relationship to psychopathology. *Personality and Individual Differences*, 19, 293–299. [https://doi.org/10.1016/0191-8869\(95\)00086-L](https://doi.org/10.1016/0191-8869(95)00086-L)
- Andreasen, N. C. (1989). The Scale for the Assessment of Negative Symptoms (SANS): conceptual and theoretical foundations. *British Journal of Psychiatry*, 155, 49–52. <https://doi.org/10.1192/S0007125000291496>
- Arntz, A. (2012). Imagery rescripting as a therapeutic technique: review of clinical trials, basic studies, and research agenda. *Journal of Experimental Psychopathology*, 3, 189–208. <https://doi.org/10.5127/jep.024211>
- Ascone, L., Sundag, J., Schlier, B., & Lincoln, T. M. (2017). Feasibility and effects of a brief compassion-focused imagery intervention in psychotic patients with paranoid ideation: a randomized experimental pilot study. *Clinical Psychology & Psychotherapy*, 24, 348–358. <https://doi.org/10.1002/cpp.2003>
- Beck, A. T. (1976). *Cognitive Therapy and the Emotional Disorders* (p. 356). International Universities Press.
- Beck, A. T., Epstein, N., Brown, G., & Steer, R. A. (1988). An inventory for measuring clinical anxiety: psychometric properties. *Journal of Consulting and Clinical Psychology*, 56, 893–897. <https://doi.org/10.1037/0022-006X.56.6.893>
- Beck, A. T., Kovacs, M., & Weissman, A. (1979). Assessment of suicidal intention: the Scale for Suicide Ideation. *Journal of Consulting and Clinical Psychology*, 47, 343–352. <https://doi.org/10.1037//0022-006x.47.2.343>
- Beck, A. T., Steer, R. A., & Brown, G. K. (1996). *Beck Depression Inventory (BDI-II)* (vol. 10). Pearson. <http://www.psychvisit.com/Scales/BDI-2.html>
- Bell, T., Mackie, L., & Bennett-Levy, J. (2015). ‘Venturing towards the dark side’: the use of imagery interventions by recently qualified cognitive-behavioural therapists. *Clinical Psychology & Psychotherapy*, 22, 591–603. <https://doi.org/10.1002/cpp.1920>
- Bell, V., Halligan, P. W., & Ellis, H. D. (2006). The Cardiff Anomalous Perceptions Scale (CAPS): a new validated measure of anomalous perceptual experience. *Schizophrenia Bulletin*, 32, 366–377. <https://doi.org/10.1093/schbul/sbj014>
- Bentall, R. (2006). Madness explained: why we must reject the Kraepelinian paradigm and replace it with a ‘complaint-orientated’ approach to understanding mental illness. *Medical Hypotheses*, 66, 220–233.
- Berntsen, D., & Jacobsen, A. S. (2008). Involuntary (spontaneous) mental time travel into the past and future. *Consciousness and Cognition*, 17, 1093–1104. <https://doi.org/10.1016/j.concog.2008.03.001>
- Berry, K., Band, R., Corcoran, R., Barrowclough, C., & Wearden, A. (2007). Attachment styles, earlier interpersonal relationships and schizotypy in a non-clinical sample. *Psychology and Psychotherapy: Theory, Research and Practice*, 80, 563–576. <https://doi.org/10.1348/147608307X188368>
- Birchwood, M., Meaden, A., Trower, P., Gilbert, P., & Plaistow, J. (2000). The power and omnipotence of voices: subordination and entrapment by voices and significant others. *Psychological Medicine*, 30, 337–344. <https://doi.org/10.1017/S0033291799001828>
- Bradley, M. M., & Lang, P. J. (1994). Measuring emotion: the self-assessment manikin and the semantic differential. *Journal of Behavior Therapy and Experimental Psychiatry*, 25, 49–59. [https://doi.org/10.1016/0005-7916\(94\)90063-9](https://doi.org/10.1016/0005-7916(94)90063-9)
- Bullock, G., Newman-Taylor, K., & Stopa, L. (2016). The role of mental imagery in non-clinical paranoia. *Journal of Behavior Therapy & Experimental Psychiatry*, 50, 264–268. <https://doi.org/10.1016/j.jbtep.2015.10.002>
- Buysse, D. J., Reynolds, C. F., Monk, T. H., Berman, S. R., & Kupfer, D. J. (1989). The Pittsburgh Sleep Quality Index: a new instrument for psychiatric practice and research. *Psychiatry Research*, 28, 193–213. [https://doi.org/10.1016/0165-1781\(89\)90047-4](https://doi.org/10.1016/0165-1781(89)90047-4)
- Çili, S., & Stopa, L. (2015). Intrusive mental imagery in psychological disorders: is the self the key to understanding maintenance? *Frontiers in Psychiatry*, 6. <http://search.ebscohost.com/login.aspx?direct=true&db=psyh&AN=2015-36004-001&site=ehost-live&authtype=ip,shib&user=s1523151>
- Clarke, R., Kelly, R., & Hardy, A. (2021). A randomised multiple baseline cases series of a novel imagery rescripting protocol for intrusive trauma memories in people with psychosis. *Journal of Behavior Therapy and Experimental Psychiatry*, 101699. <https://doi.org/10.1016/j.jbtep.2021.101699>
- Connell, J., & Barkham, M. (2007). *Core-10 User Manual, Version 1.1*. CORE System Trust & CORE Information Management Systems Ltd.
- Crowe, M., & Sheppard, L. (2011). A general critical appraisal tool: an evaluation of construct validity. *International Journal of Nursing Studies*, 48, 1505–1516. <https://doi.org/10.1016/j.ijnurstu.2011.06.004>
- Crowe, M., Sheppard, L., & Campbell, A. (2011). Comparison of the effects of using the Crowe Critical Appraisal Tool versus informal appraisal in assessing health research: a randomised trial. *JBI Evidence Implementation*, 9, 444–449. <https://doi.org/10.1111/j.1744-1609.2011.00237.x>
- Cuthbert, B. N., Lang, P. J., Strauss, C., Drobos, D., Patrick, C. J., & Bradley, M. M. (2003). The psychophysiology of anxiety disorder: fear memory imagery. *Psychophysiology*, 40, 407–422. <https://doi.org/10.1111/1469-8986.00043>

- Dalenberg, C., & Carlson, E. (2010). Severity of dissociative symptoms – Adult (Brief Dissociative Experience Scale [DES-B]-Modified). https://www.psychiatry.org/File%20Library/Psychiatrists/Practice/DSM/APA_DSM5_Severity-of-Dissociative-Symptoms-Adult.pdf
- Edwards, D. (2007). Restructuring implicational meaning through memory-based imagery: some historical notes. *Journal of Behavior Therapy and Experimental Psychiatry*, 38, 306–316. <https://doi.org/10.1016/j.jbtep.2007.10.001>
- Ehlers, A., & Clark, D. M. (2000). A cognitive model of posttraumatic stress disorder. *Behaviour Research and Therapy*, 38, 319–345. [https://doi.org/10.1016/s0005-7967\(99\)00123-0](https://doi.org/10.1016/s0005-7967(99)00123-0)
- Ehlers, A., Clark, D. M., Hackmann, A., McManus, F., & Fennell, M. (2005). Cognitive therapy for post-traumatic stress disorder: development and evaluation. *Behaviour Research and Therapy*, 43, 413–431. <https://doi.org/10.1016/j.brat.2004.03.006>
- Espie, C. A., Kyle, S. D., Hames, P., Gardani, M., Fleming, L., & Cape, J. (2014). The Sleep Condition Indicator: a clinical screening tool to evaluate insomnia disorder. *BMJ Open*, 4, e004183. <https://doi.org/10.1136/bmjopen-2013-004183>
- Foa, E. B., Cashman, L., Jaycox, L., & Perry, K. (1997). The validation of a self-report measure of posttraumatic stress disorder: the Posttraumatic Diagnostic Scale. *Psychological Assessment*, 9, 445–451. <https://doi.org/10.1037/1040-3590.9.4.445>
- Foa, E. B., Steketee, G., Turner, R. M., & Fischer, S. C. (1980). Effects of imaginal exposure to feared disasters in obsessive-compulsive checkers. *Behaviour Research and Therapy*, 18, 449–455. [https://doi.org/10.1016/0005-7967\(80\)90010-8](https://doi.org/10.1016/0005-7967(80)90010-8)
- Forkert, A., Brown, P., Freeman, D., & Waite, F. (2021). A compassionate imagery intervention for patients with persecutory delusions. *Behavioural and Cognitive Psychotherapy*. <https://doi.org/10.1017/S1352465821000229>
- Fowler, D., Freeman, D., Smith, B., Kuipers, E., Bebbington, P., Twiddy, H., Coker, S., Hodgkins, J., Gracie, A., Dunn, G., & Garety, P. (2006). The Brief Core Schema Scales (BCSS): psychometric properties and associations with paranoia and grandiosity in non-clinical and psychosis samples. *Psychological Medicine*, 36, 749–759. <https://doi.org/10.1017/S0033291706007355>
- Freeman, D. (2016). Persecutory delusions: a cognitive perspective on understanding and treatment. *The Lancet Psychiatry*, 3, 685–692. [https://doi.org/10.1016/S2215-0366\(16\)00066-3](https://doi.org/10.1016/S2215-0366(16)00066-3)
- Freeman, D., & Garety, P. (2014). Advances in understanding and treating persecutory delusions: a review. *Social Psychiatry and Psychiatric Epidemiology*, 49, 1179–1189. <https://doi.org/10.1007/s00127-014-0928-7>
- Freeman, D., Garety, P. A., Bebbington, P. E., Smith, B., Rollinson, R., Fowler, D., Kuipers, E., Ray, K., & Dunn, G. (2005). Psychological investigation of the structure of paranoia in a non-clinical population. *British Journal of Psychiatry*, 186, 427–435. <https://doi.org/10.1192/bjp.186.5.427>
- Freeman, D., McManus, S., Brugha, T., Meltzer, H., Jenkins, R., & Bebbington, P. (2011). Concomitants of paranoia in the general population. *Psychological Medicine*, 41, 923–936. <https://doi.org/10.1017/S0033291710001546>
- Freeman, D., Pugh, K., Dunn, G., Evans, N., Sheaves, B., Waite, F., Černis, E., Lister, R., & Fowler, D. (2014a). An early Phase II randomised controlled trial testing the effect on persecutory delusions of using CBT to reduce negative cognitions about the self: the potential benefits of enhancing self confidence. *Schizophrenia Research*, 160, 186–192. <https://doi.org/10.1016/j.schres.2014.10.038>
- Freeman, D., Startup, H., Dunn, G., Wingham, G., Černis, E., Evans, N., Lister, R., Pugh, K., Cordwell, J., & Kingdon, D. (2014b). Persecutory delusions and psychological well-being. *Social Psychiatry and Psychiatric Epidemiology*, 49, 1045–1050. <https://doi.org/10.1007/s00127-013-0803-y>
- Gairns, S., Alvarez-Jimenez, M., Hulbert, C., McGorry, P., & Bendall, S. (2015). Perceptions of clinicians treating young people with first-episode psychosis for post-traumatic stress disorder. *Early Intervention in Psychiatry*, 9, 12–20. <https://doi.org/10.1111/eip.12065>
- Garety, P. A., & Freeman, D. (2013). The past and future of delusions research: from the inexplicable to the treatable. *British Journal of Psychiatry*, 203, 327–333. <https://doi.org/10.1192/bjp.bp.113.126953>
- Garg, A. X., Hackam, D., & Tonelli, M. (2008). Systematic review and meta-analysis: when one study is just not enough. *Clinical Journal of the American Society of Nephrology*, 3, 253–260. <https://doi.org/10.2215/CJN.01430307>
- Gilbert, P. (2005). *Compassion: Conceptualisations, Research and Use in Psychotherapy*. Routledge.
- Gilbert, P. (2010). *Compassion Focused Therapy: Distinctive Features*. Routledge. <https://doi.org/10.4324/9780203851197>
- Gilbert, P., Clarke, M., Hempel, S., Miles, J. N. V., & Irons, C. (2004). Criticizing and reassuring oneself: an exploration of forms, styles and reasons in female students. *British Journal of Clinical Psychology*, 43, 31–50. <https://doi.org/10.1348/014466504772812959>
- Green, C. E. L., Freeman, D., Kuipers, E., Bebbington, P., Fowler, D., Dunn, G., & Garety, P. A. (2008). Measuring ideas of persecution and social reference: the Green et al. Paranoid Thought Scales (GPTS). *Psychological Medicine*, 38, 101–111. <https://doi.org/10.1017/S0033291707001638>
- Hackmann, A. (1997). The transformation of meaning in cognitive therapy. In M. Power & C. R. Brewin (eds), *Transformation of Meaning in Psychological Therapies*. Wiley. <https://www.wiley.com/en-us/The+Transformation+of+Meaning+in+Psychological+Therapies%3A+Integrating+Theory+and+Practice-p-9780471970057>
- Hackmann, A., Bennett-Levy, J., & Holmes, E. A. (2011). *Oxford Guide to Imagery in Cognitive Therapy*. Oxford: Oxford University Press.

- Haddock, G. (2009). *The Psychotic Symptom Rating Scales: User Manual* [unpublished manual].
- Haddock, G., McCARRON, J., TARRIER, N., & FARAGHER, E. B. (1999). Scales to measure dimensions of hallucinations and delusions: the Psychotic Symptom Rating Scales (PSYRATS). *Psychological Medicine*, 29, 879–889. <https://doi.org/10.1017/S0033291799008661>
- Hatcher, R. L., & Gillaspay, J. A. (2006). Development and validation of a revised short version of the working alliance inventory. *Psychotherapy Research*, 16, 12–25. <https://doi.org/10.1080/10503300500352500>
- Holmes, E. A., Arntz, A., & Smucker, M. R. (2007). Imagery rescripting in cognitive behaviour therapy: images, treatment techniques and outcomes. *Journal of Behavior Therapy and Experimental Psychiatry*, 38, 297–305. <https://doi.org/10.1016/j.jbtep.2007.10.007>
- Holmes, E. A., Blackwell, S. E., Burnett Heyes, S., Renner, F., & Raes, F. (2016a). Mental imagery in depression: phenomenology, potential mechanisms, and treatment implications. *Annual Review of Clinical Psychology*, 12, 249–280. <https://doi.org/10.1146/annurev-clinpsy-021815-092925>
- Holmes, E. A., Geddes, J. R., Colom, F., & Goodwin, G. M. (2008). Mental imagery as an emotional amplifier: application to bipolar disorder. *Behaviour Research and Therapy*, 46, 1251–1258. <https://doi.org/10.1016/j.brat.2008.09.005>
- Holmes, E. A., Lang, T. J., & Deeproose, C. (2009). Mental imagery and emotion in treatment across disorders: using the example of depression. *Cognitive Behaviour Therapy*, 38, 21–28. <https://doi.org/10.1080/16506070902980729>
- Holmes, E. A., & Mathews, A. (2010). Mental imagery in emotion and emotional disorders. *Clinical Psychology Review*, 30, 349–362. <https://doi.org/10.1016/j.cpr.2010.01.001>
- Hutton, P. (2016). Positive clinical psychology and the promotion of happiness, compassion, and autonomy in people with psychosis. In A. M. Wood & J. Johnson (eds), *The Wiley Handbook of Positive Clinical Psychology* (pp. 245–260). Wiley.
- Jolley, S., Garety, P. A., Ellett, L., Kuipers, E., Freeman, D., Bebbington, P. E., Fowler, D. G., & Dunn, G. (2006). A validation of a new measure of activity in psychosis. *Schizophrenia Research*, 85, 288–295. <https://doi.org/10.1016/j.schres.2006.03.012>
- Kay, S. R., Fiszbein, A., & Opler, L. A. (1987). The Positive and Negative Syndrome Scale (PANSS) for schizophrenia. *Schizophrenia Bulletin*, 13, 261–276. <https://doi.org/10.1093/schbul/13.2.261>
- Kemps, E., & Tiggemann, M. (2015). A role for mental imagery in the experience and reduction of food cravings. *Frontiers in Psychiatry*, 5, 193. <https://doi.org/10.3389/fpsy.2014.00193>
- Kindt, M., Buck, N., Arntz, A., & Soeter, M. (2008). Perceptual and conceptual processing as predictors of treatment outcome in PTSD. *Journal of Behavior Therapy and Experimental Psychiatry*, 38, 491–506. <https://doi.org/10.1016/j.jbtep.2007.10.002>
- Kolts, R. (2012). *The Compassionate Mind Approach to Managing Your Anger*. Hachette UK. <https://www.hachette.co.uk/titles/russell-kolts/the-compassionate-mind-approach-to-managing-your-anger/9781849015592/>
- Koodun, S., Dudhia, R., Abifarin, B., & Greenhalgh, N. (2021). *Racial and Ethnic Disparities in Mental Health Care*. The Pharmaceutical Journal. <https://pharmaceutical-journal.com/article/research/racial-and-ethnic-disparities-in-mental-health-care>
- Kosslyn, S. M., Ganis, G., & Thompson, W. L. (2001). Neural foundations of imagery. *Nature Reviews Neuroscience*, 2, 635–642. <https://doi.org/10.1038/35090055>
- Kosslyn, S. M., Thompson, W. L., Klm, I. J., & Alpert, N. M. (1995). Topographical representations of mental images in primary visual cortex. *Nature*, 378, 496–498.
- Krakow, B. (2006). Nightmare complaints in treatment-seeking patients in clinical sleep medicine settings: diagnostic and treatment implications. *Sleep*, 29, 1313–1319. <https://doi.org/10.1093/sleep/29.10.1313>
- Laitila, M., Nummelin, J., Kortteisto, T., & Pitkänen, A. (2018). Service users' views regarding user involvement in mental health services: a qualitative study. *Archives of Psychiatric Nursing*, 32, 695–701. <https://doi.org/10.1016/j.apnu.2018.03.009>
- Landkroon, E., Meyerbröcker, K., Salemink, E., & Engelhard, I. M. (2022). Future-oriented imagery rescripting facilitates conducting behavioral experiments in social anxiety. *Behaviour Research and Therapy*, 155, 104130.
- Lee, D., & James, S. (2011). *The Compassionate-Mind Guide to Recovering from Trauma and PTSD*. New Harbinger Publications. <https://cmc.marmot.org/Record/b3596103x>
- Levin, R., & Fireman, G. (2002). Nightmare prevalence, nightmare distress, and self-reported psychological disturbance. *Sleep: Journal of Sleep and Sleep Disorders Research*, 25, 205–212.
- Lobbetael, J., van Vreeswijk, M., Spinhoven, P., Schouten, E., & Arntz, A. (2010). Reliability and validity of the short Schema Mode Inventory (SMI). *Behavioural and Cognitive Psychotherapy*, 38, 437–458. <https://doi.org/10.1017/S1352465810000226>
- Lovibond, P. F., & Lovibond, S. H. (1995). The structure of negative emotional states: Comparison of the Depression Anxiety Stress Scales (DASS) with the Beck Depression and Anxiety Inventories. *Behaviour Research and Therapy*, 33, 335–343. [https://doi.org/10.1016/0005-7967\(94\)00075-U](https://doi.org/10.1016/0005-7967(94)00075-U)
- Mathews, A., & MacLeod, C. (2002). Induced processing biases have causal effects on anxiety. *Cognition & Emotion*, 16, 331–354. <https://doi.org/10.1080/02699930143000518>
- McEvoy, P. M., Erceg-Hurn, D. M., Saulsman, L. M., & Thibodeau, M. A. (2015). Imagery enhancements increase the effectiveness of cognitive behavioural group therapy for social anxiety disorder: a benchmarking study. *Behaviour Research and Therapy*, 65, 42–51. <https://doi.org/10.1016/j.brat.2014.12.011>

- McEvoy, P. M., Saulsman, L. M., & Rapee, R. M. (2018). *Imagery-Enhanced CBT for Social Anxiety Disorder*. Guilford Publications.
- Microsoft Corporation (2018). *Microsoft Excel*. <https://office.microsoft.com/excel>
- Morgan, C., Fearon, P., Lappin, J., Heslin, M., Donoghue, K., Lomas, B., Reininghaus, U., Onyejiaka, A., Croudace, T., Jones, P. B., Murray, R. M., Doody, G. A., & Dazzan, P. (2017). Ethnicity and long-term course and outcome of psychotic disorders in a UK sample: the ÆSOP-10 study. *British Journal of Psychiatry*, 211, 88–94. <https://doi.org/10.1192/bjp.bp.116.193342>
- Morina, N., Lancee, J., & Arntz, A. (2017). Imagery rescripting as a clinical intervention for aversive memories: a meta-analysis. *Journal of Behavior Therapy and Experimental Psychiatry*, 55, 6–15. <https://doi.org/10.1016/j.jbtep.2016.11.003>
- Morrison, A. (2004). The use of imagery in cognitive therapy for psychosis: a case example. *Memory*, 12, 517–524. <https://doi.org/10.1080/09658210444000142>
- Morrison, A. P., Beck, A. T., Glentworth, D., Dunn, H., Reid, G. S., Larkin, W., & Williams, S. (2002). Imagery and psychotic symptoms: a preliminary investigation. *Behaviour Research and Therapy*, 40, 1053–1062. [https://doi.org/10.1016/S0005-7967\(01\)00128-0](https://doi.org/10.1016/S0005-7967(01)00128-0)
- Nappi, C. M., Drummond, S. P. A., Thorp, S. R., & McQuaid, J. R. (2010). Effectiveness of imagery rehearsal therapy for the treatment of combat-related nightmares in veterans. *Behavior Therapy*, 41, 237–244. <https://doi.org/10.1016/j.beth.2009.03.003>
- National Institute for Health Research (2021). *Briefing Notes for Researchers – Public Involvement in NHS, Health and Social Care Research*. https://www.nihr.ac.uk/documents/briefing-notes-for-researchers-public-involvement-in-nhs-health-and-social-care-research/27371#NIHR_information
- Neff, K. (2011). *Self-Compassion*. Hachette UK. <https://www.yellowkitebooks.co.uk/titles/kristin-neff-2/self-compassion/9781444738186/>
- Neff, K. D. (2003). The development and validation of a scale to measure self-compassion. *Self and Identity*, 2, 223–250. <https://doi.org/10.1080/15298860309027>
- Nelis, S., Holmes, E., Griffith, J., & Raes, F. (2014). Mental imagery during daily life: psychometric evaluation of the Spontaneous Use of Imagery Scale (SUIS). *Psychologica Belgica*, 54, 19–32. <https://doi.org/10.5334/pb.ag>
- Newman-Taylor, K. (2020). ‘Felt security’ as a means of facilitating imagery rescripting in psychosis: a clinical protocol and illustrative case study. *Cognitive Behaviour Therapist*, 13, e24. <https://doi.org/10.1017/S1754470X20000288>
- Newman-Taylor, K., McSherry, P., & Stopa, L. (2020). Imagery rescripting in non-clinical paranoia: a pilot study of the impact on key cognitive and affective processes. *Behavioural and Cognitive Psychotherapy*, 48, 54–66. <https://doi.org/10.1017/S1352465819000419>
- Omeni, E., Barnes, M., MacDonald, D., Crawford, M., & Rose, D. (2014). Service user involvement: impact and participation: a survey of service user and staff perspectives. *BMC Health Services Research*, 14, 491. <https://doi.org/10.1186/s12913-014-0491-7>
- Page, M. J., McKenzie, J. E., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., Shamseer, L., Tetzlaff, J. M., Akl, E. A., Brennan, S. E., Chou, R., Glanville, J., Grimshaw, J. M., Hróbjartsson, A., Lalu, M. M., Li, T., Loder, E. W., Mayo-Wilson, E., McDonald, S., . . . & Moher, D. (2021). The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. *BMJ*, 372. <https://doi.org/10.1136/bmj.n71>
- Pearson, D. G., Deeprose, C., Wallace-Hadrill, S. M. A., Heyes, S. B., & Holmes, E. A. (2013). Assessing mental imagery in clinical psychology: a review of imagery measures and a guiding framework. *Clinical Psychology Review*, 33, 1–23. <https://doi.org/10.1016/j.cpr.2012.09.001>
- Pearson, J., Naselaris, T., Holmes, E. A., & Kosslyn, S. M. (2015). Mental imagery: functional mechanisms and clinical applications. *Trends in Cognitive Sciences*, 19, 590–602. <https://doi.org/10.1016/j.tics.2015.08.003>
- Pile, V., Williamson, G., Saunders, A., Holmes, E. A., & Lau, J. Y. F. (2021). Harnessing emotional mental imagery to reduce anxiety and depression in young people: an integrative review of progress and promise. *The Lancet Psychiatry*, 8, 836–852. [https://doi.org/10.1016/S2215-0366\(21\)00195-4](https://doi.org/10.1016/S2215-0366(21)00195-4)
- Pitfield, C., Maguire, T., & Newman-Taylor, K. (2020). Impact of attachment imagery on paranoia and mood: evidence from two single case studies. *Behavioural and Cognitive Psychotherapy*, 48, 572–583. <https://doi.org/10.1017/S1352465820000351>
- Renner, F., Ji, J. L., Pictet, A., Holmes, E. A., & Blackwell, S. E. (2017). Effects of engaging in repeated mental imagery of future positive events on behavioural activation in individuals with major depressive disorder. *Cognitive Therapy and Research*, 41, 369–380. <https://doi.org/10.1007/s10608-016-9776-y>
- Ronald, A., Sieradzka, D., Cardno, A., Haworth, C., McGuire, P., & Freeman, D. (2013). Characterization of psychotic experiences in adolescence using the Specific Psychotic Experiences Questionnaire (SPEQ): findings from a study of 5000 16 year old twins. *Schizophrenia Bulletin*. doi:10.1093/schbul/sbt106
- Rosenberg, M. (1965). *Rosenberg Self-Esteem Scale in Society and the Adolescent Self-image*. Princeton, NJ: Princeton University Press.
- Ross, P. T., Hart-Johnson, T., Santen, S. A., & Zaidi, N. L. B. (2020). Considerations for using race and ethnicity as quantitative variables in medical education research. *Perspectives on Medical Education*, 9, 318–323. <https://doi.org/10.1007/s40037-020-00602-3>

- Sasaki, E., & Overall, N. (2020). A dyadic perspective of felt security: does partners' security buffer the effects of actors' insecurity in daily commitment. *International Journal of Environmental Research and Public Health*, 17. <https://doi.org/doi.org/10.3390/ijerph17207411>
- Saulsman, L. M., Ji, J. L., & Mcevoy, P. M. (2019). The essential role of mental imagery in cognitive behaviour therapy: what is old is new again. *Australian Psychologist*, 54, 237–244. <https://doi.org/10.1111/ap.12406>
- Schlier, B., Moritz, S., & Lincoln, T. M. (2016). Measuring fluctuations in paranoia: validity and psychometric properties of brief state versions of the Paranoia Checklist. *Psychiatry Research*, 241, 323–332. <https://doi.org/10.1016/j.psychres.2016.05.002>
- Schulze, K., Freeman, D., Green, C., & Kuipers, E. (2013). Intrusive mental imagery in patients with persecutory delusions. *Behaviour Research and Therapy*, 51, 7–14. <https://doi.org/10.1016/j.brat.2012.10.002>
- Serruya, G., & Grant, P. (2009). Cognitive-behavioral therapy of delusions: mental imagery within a goal-directed framework. *Journal of Clinical Psychology*, 65, 791–802. <https://doi.org/10.1002/jclp.v65:810.1002/jclp.20616>
- Sheaves, B., Holmes, E. A., Rek, S., Taylor, K. M., Nickless, A., Waite, F., Germain, A., Espie, C. A., Harrison, P. J., Foster, R., & Freeman, D. (2019). Cognitive behavioural therapy for nightmares for patients with persecutory delusions (Nites): an assessor-blind, pilot randomized controlled trial. *Canadian Journal of Psychiatry*, 070674371984742. <https://doi.org/10.1177/0706743719847422>
- Sheaves, B., Onwumere, J., Keen, N., & Kuipers, E. (2015). Treating your worst nightmare: a case-series of imagery rehearsal therapy for nightmares in individuals experiencing psychotic symptoms. *the Cognitive Behaviour Therapist*, 8, e27. <https://doi.org/10.1017/S1754470X15000665>
- Shepard, R. N., & Metzler, J. (1971). Mental rotation of three-dimensional objects. *Science*, 171, 701–703. <https://doi.org/10.1126/science.171.3972.701>
- Sin, J., Spain, D., Furuta, M., Murrells, T., & Norman, I. (2017). Psychological interventions for post-traumatic stress disorder (PTSD) in people with severe mental illness. *The Cochrane Database of Systematic Reviews*, CD011464. <https://doi.org/10.1002/14651858.CD011464.pub2>
- Singer, J. L. (2006). *Imagery in Psychotherapy*. American Psychological Association. <https://doi.org/10.1037/11366-000>
- Stemmler, G., Heldmann, M., Pauls, C. A., & Scherer, T. (2001). Constraints for emotion specificity in fear and anger: the context counts. *Psychophysiology*, 38, 275–291. <https://doi.org/10.1111/1469-8986.3820275>
- Stopa, L. (2009). Imagery and the threatened self: an introduction. In *Imagery and the Threatened Self*. Routledge.
- Taylor, C. D. J., Bee, P. E., Kelly, J., Emsley, R., & Haddock, G. (2020). iMAGery focused psychological therapy for persecutory delusions in PSYchosis (iMAPS): a multiple baseline experimental case series. *Behavioural and Cognitive Psychotherapy*, 48, 1–545. <https://doi.org/10.1017/S1352465820000168>
- Tennant, R., Hiller, L., Fishwick, R., Platt, S., Joseph, S., Weich, S., Parkinson, J., Secker, J., & Stewart-Brown, S. (2007). The Warwick-Edinburgh Mental Well-being Scale (WEMWBS): development and UK validation. *Health and Quality of Life Outcomes*, 5, 63. <https://doi.org/10.1186/1477-7525-5-63>
- Turkington D., Lebert L., & Spencer H. (2016). Auditory hallucinations in schizophrenia: Helping patients to develop effective coping strategies. *BJ Psych Advances*, 22, 391–396. <https://doi.org/10.1192/apt.bp.115.015214>
- van der Hart, O., Brown, P., & Van der Kolk, B. A. (1989). Pierre Janet's treatment of post-traumatic stress. *Journal of Traumatic Stress*, 2, 379–395. <https://doi.org/10.1002/jts.2490020404>
- Watson, D., Anna, L., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: the PANAS Scales. *Journal of Personality and Social Psychology*, 54, 1063–1070. [https://doi.org/0022-3514/88/\\$00.75](https://doi.org/0022-3514/88/$00.75)
- Welford, M. (2012). *The Compassionate Mind Approach to Building Self-Confidence* (series editor, Paul Gilbert). Hachette UK.
- Wild, J., & Clark, D. M. (2011). Imagery rescripting of early traumatic memories in social phobia. *Cognitive and Behavioral Practice*, 18, 433–443. <https://doi.org/10.1016/j.cbpra.2011.03.002>
- World Health Organisation (2019). *International statistical classification of diseases and related health problems* (11th edn). <https://icd.who.int/>
- Young, J. E., & Brown, G. (2003). *Young Schema Questionnaire – L3a*. Cognitive Therapy Centre of New York.

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