The role of goal-conflict and awareness in psychological distress and recovery: A Perceptual Control Theory (PCT) perspective

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List of Contents

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Abstract

This thesis consists of three papers, a systematic scoping review, an empirical study, and a critical appraisal of the research process.

Paper one provides a systematic scoping review that sought to map out the key properties of goal conflict related to psychological distress that have been implicated in the literature. Fifty-two articles were included and a qualitative conventional content analysis identified six overarching categories. The concepts to have received the most research attention to date, in relation to goal conflict and psychological distress were, awareness, hierarchical organisation, psychological flexibility and goal integration. Both awareness and psychological flexibility have been considered in relation to increases and decreases in psychological distress. Therefore, such properties seem fruitful avenues for future research.

Paper two is a randomised pilot study to assess the feasibility of a protocol to evaluate whether Method of Levels (MOL) increases awareness of higher-level goals more than other psychological therapies. The study also aimed to examine the feasibility of a novel self-report measure, the Goal-level Awareness Questionnaire (GAQ), to determine its utility for future trials. Forty participants were recruited and 87.5% were retained, exceeding planned recruitment and retention rates. The interventions were deemed acceptable by participants and the credibility and satisfaction ratings were equivalent between groups, indicating that Brief Behavioural Activation (BBA) is a suitable control condition for a future trial. However, the feasibility of delivering MOL via video-therapy and the feasibility of administering the GAQ remains to be established. Revisions to the GAQ are proposed however, validation is required prior to use in a future definitive trial.

Paper three is a critical evaluation of the design and implementation of the research process. Clinical implications and personal reflections are also presented.

Declaration

No portion of the work referred to in the thesis has been submitted in support of an application for another degree or qualification of this or any other university or other institute of learning.

Copyright Statement

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I am honoured to have had such a kind-hearted, supportive cohort, and I would like to thank them for their relentless enthusiasm and motivation. Despite not being able to see them in person since the COVID-19 pandemic, sharing this experience has brought a sense of calm and solidarity to the research process.

A very special thank you goes to my friends, family, and my partner who have provided endless support, understanding and encouragement throughout the process. They have had continued faith and belief in my ability to prosper and achieve this work. Thank you.

Paper 1: Systematic Scoping Review

Properties of goal conflict related to psychological distress

Word count: 11,125 (complete text excluding references) 245 (abstract) 8465 (main text excluding tables, figures and references)

The following paper has been prepared for submission to *Psychological Bulletin*. Author guidelines are provided in Appendix A. Please note, there have been deviations from the guidelines to ensure adherence to thesis submission requirements.

Abstract

Background: Goal conflict is widely recognised as contributing to psychological distress however, clarity regarding the specific elements that influence the relationship is lacking.

Objective: This systematic scoping review aimed to integrate the literature to map out what properties of goal conflict in relation to psychological distress have been considered.

Method: Searches were conducted in PsycInfo, Web of Science, Applied Social Sciences Index and Abstracts (ASSIA), Embase, CINAHL Plus, Evidence-Based Medical Reviews and Google Scholar from inception to April 2021. Articles were included if they proposed and/or evaluated an explicit link between goal conflict and psychological distress, and if they were a review article. Articles that focused on single goal pursuit, interpersonal goal conflict, organisational goal conflict; or physical health, behavioural, or intellectual difficulties; or were an empirical study were excluded. Data was charted and analysed using qualitative conventional content analysis.

Results: A total of 3276 abstracts were screened and 52 articles were included. The analysis revealed six main categories: 1) properties of goal conflict associated with increased psychological distress, 2) properties of goal conflict resolution, 3) sources of goal conflict, 4) external contributing factors, 5) internal contributing factors, and 6) maintaining factors.

Conclusion: The properties that have received the most research attention to date were awareness, hierarchical organisation, psychological flexibility, and integration. Awareness and psychological flexibility have both been considered in association with increases and decreases in goal conflict and subsequent psychological distress and therefore, seem suitable factors to be explored in future research.

Keywords: *Goal conflict, psychological distress, awareness, psychological flexibility*

Introduction

Internal conflict is a struggle within a person's mind over a problem. This has been an integral part of the human experience since the beginning of time. As noted by McReynolds (1991), internal conflict is depicted in the first book of the bible and it is an essential component to the writings of poets and novelists going back to ancient times such as, Homer's Iliad. Within such narratives, internal conflict evokes an inner turmoil that is detrimental to a character's mental state. However, as internal conflict can be minor and transient, arising in everyday decisions and dilemmas (McReynolds, 1991), the question remains when, and how does it lead to psychological distress?

Numerous terms are used to describe internal conflict including, inner conflict, intrapsychic conflict, personal conflict, intrapersonal conflict, striving conflict, motivational conflict, and goal conflict. Furthermore, oppositional tendencies in the mind have been described as discrepancies, incongruence, imbalances, and incompatibilities (Emmons & Kaiser, 1996). Within this review terms will be used interchangeably but, the focus is on goal conflict. According to Powers (1973), "a person is said to be "in conflict" when he wants two incompatible goals to be realised at once" (*p*. 253). Goal conflict is implicit across a range of psychological theories but, the literature is remarkably fragmented. A review was therefore, deemed necessary to assimilate the literature and to determine the factors that influence the relationship between goal conflict and psychological distress. This review will begin with an overview of the literature.

Historically, intrapsychic conflict was recognised as the core of psychoanalysis. Freud (1926) theorised that the id (unconscious, primitive drives) is in constant conflict with the ego (conscious self), and the superego (internalised cultural values and rules). Thoughts, desires, and feelings deemed unacceptable by the ego are repressed in the unconscious mind, resulting in unresolved conflicts and symptomology. Furthermore, Freud's (1961) dualistic theory proposed that basic human instincts are either life instincts or death instincts, inferring that inner conflict is inherent to human existence. Rooted in psychoanalysis is the

concept of ambivalence. Bleuler (1911; 1950) identified three types of ambivalence, voluntary, intellectual, and emotional. It has since been broadly defined as, “overlapping approach-avoidance tendencies, manifested behaviourally, cognitively, or affectively, and directed toward a given person, experience, or other object, as well as toward a set of objectives” (Sincoff, 1990, *p*. 43). Sincoff (1990) notes that ambivalence is a subset of conflict, not the conflict itself.

In contrast to psychoanalytic views, the humanistic tradition assumes that humans enter the world as integrated organisms with cohesive desires. It is assumed that internalised social values, particularly conditional positive regard (Rogers, 1959) causes goals to become estranged and conflicted. Rogers (1959) posits that incongruence between the perceived-self and actual experience lead to tension and internal confusion. Like the psychoanalytic perspective, Rogers (1959) concurs that incongruence between the self and experience can exist outside of awareness, and that psychological maladjustment occurs when significant experiences are denied or distorted in awareness as this prevents integration within the self-structure.

Goal conflicts are also embedded within social and cognitive theories. Cognitive dissonance theory (Festinger, 1957) stipulates that inconsistent cognitions cause psychological discomfort. However, this has been disputed by self-consistency theory (Aronson, 1968), self-affirmation theory (Steele, 1988) and new look theory (Cooper & Fazio, 1984) which suggest that inconsistent cognitions and associated behaviours induced in experimental research only cause discomfort because they conflict with a positive self-concept. Similarly, personal construct theory (Kelly, 1955) implies that disruptions to identity induces mental health difficulties. Additionally, Beck (1983) suggests that interpretations of life events create internal conflict, the primary cause of negative affect.

Another form of goal conflict is approach-avoidance conflict, initially explored within early theories of motivation and personality. Miller (1944) differentiated three types of conflict, approach-approach conflict, the conflict between two desired end-states; avoid-

avoid conflict, the conflict between two undesirable end-states; and double approach-avoid conflicts, where there are both positive and negative aspects of each goal. This has been advanced by Reinforcement Sensitivity Theory (RST; Gray & McNaughton, 2000) which emphasises that the motivation to approach or avoid is determined by evaluation of stimuli that is deemed appetitive (attractors), aversive (repulsors), or of no motivational significance. Such valuations serve as proximal inputs to the goal system. Depending on the strength of a goal, determined by drive, content and the relationship with previously existing goals, neuropsychological systems are engaged to regulate behaviour. The Behavioural Approach System (BAS) is activated by rewarding or pleasurable stimuli and initiates and controls reward-seeking, approach behaviours. The Fight, Flight, Freeze System (FFFS) is activated by punishing or fearful stimuli and induces avoidance behaviours. During approach-avoidance conflict the BAS and FFFS are simultaneously and (approximately) equally activated, resulting in the activation of the Behavioural Inhibition System (BIS) (Gray, 1977). The BIS is responsible for detecting and resolving goal conflicts. It achieves this via several psychological processes such as, behavioural inhibition and risk assessment.

In many psychological theories lies the idea that behaviour follows perceptual inputs that begin in the environment or the brain. For example, behaviourism views behaviour as the result of stimulus-response. Although, many scholars reject the mechanistic formalisations of behaviourism, they tend to adhere to its basic concepts such as cause and effect (i.e., external stressors cause anxiety), which is widely used within psychological research and practice (Powers, 1973). However, an alternate idea offered by Perceptual Control Theory (PCT; Powers et al., 1960; Powers, 1973) views behaviour as controlling perceptual inputs. PCT provides a self-regulatory framework derived from control system engineering and physiology. PCT proposes that control, hierarchical organisation, conflict, and reorganisation are the key principles of human functioning and behaviour. Control is defined as the “achievement and maintenance of a preselected perceptual state in the controlling system, through actions on the environment that also cancel the effects of

disturbances" (Powers, 1973, *p*. 283). This suggests that humans engage in a constant process of attempting to keep experiences "just right". According to PCT, this is achieved by a negative feedback loop between the perceived environment and an internal reference value. How things are, are compared to how we want them to be. If there is a discrepancy (error) between what is perceived and the reference value, loss of control is experienced and action is taken to minimise the error. Behaviour is therefore, purposive and goal-directed (Powers, 1973).

PCT proposes that individuals have multiple references values for perceptions of themselves and the world which are constantly changing depending on priorities and circumstances. As people control multiple variables simultaneously, most of which occur outside of awareness, it is suggested that control systems are organised hierarchically. Concrete, malleable variables (goals) are towards the bottom and the more abstract, fundamental variables are towards the top (Powers, 1973). Concrete goals refer to specific, often time-limited programmes of behaviour (i.e., to go to the gym), while abstract goals contain broad values and self-ideals (i.e., to be loved) (Powers, 1998).

According to PCT, psychological distress is the result of loss of control due to conflicting goals (Powers, 1973). Goal conflict occurs when a higher-level goal sets incompatible reference values for the same variable (Powers, 1973). For example, one might have a higher-level goal 'to be a caring person' creating two competing reference values, 'to spend time with my parents', vs. 'to spend time with my children'. Goal conflict becomes more problematic when a goal is ignored due to the sole pursuit of another goal, this is known as arbitrary control (Powers, 1973). For example, in a case of agoraphobia one may achieve goals of feeling safe and calm by avoiding leaving their home but, goals of independence and success are prevented. Goal conflict can occur horizontally between goals at the same level within a goal hierarchy and, vertically between goals at different levels in the hierarchy (Emmons, 1986; 1989). The self-concordance model (Sheldon & Elliot, 1999) suggests that self-determined goals that are consistent with fundamental,

intrinsic values are more likely to be achieved, and engagement with needs-based activities during goal pursuit enhances wellbeing.

PCT asserts that goal conflict is resolved by reorganisation, a learning algorithm that works through a 'trial-and-error' process to restore control (Powers, 1973). Properties of the control systems (i.e., perceptions and reference values) are randomly altered until error is reduced (Marken & Powers, 1989). This may be experienced as gaining insight, changing priorities, or shifting perspectives (Alsawy et al., 2014). Reorganisation is a constant process therefore, if goal conflict persists, reorganisation is occurring in the wrong place. Individuals often focus on symptoms of distress, where conflict manifests. Reorganisation aimed at such levels will not result in enduring psychological change as awareness needs to be shifted and sustained on higher-level control systems that are creating the conflict (Carey 2008; Mansell et al., 2012). Reorganisation has been modelled mathematically and has shown reductions in goal conflict and improvements in functioning (Marken & Powers, 1989; Powers, 2008).

Similarly to PCT, self-discrepancy theory (SDT; Higgins, 1987) assumes that discrepancies between a current and a desired state are reduced via a negative feedback process (Higgins, 1989). SDT proposes that psychological distress arises from discrepancies between the actual self, defined as the attributes an individual believes they possess, and two self-guides, the ideal self and the ought self. The ideal self refers to a representation of attributes that someone would like to possess (i.e., hopes, wishes and aspirations). The ought self refers to a representation of attributes that someone believes they should possess (i.e., duties, obligations and responsibilities). There are two standpoints, your own point of view and the views of significant others, yielding six self-state representations. SDT goes beyond previous theories as it stipulates specific relationships between the type of discrepancy and associated emotional experience. It is proposed that actual-ideal discrepancies are associated with a dejected motivational state (i.e., depression), and actual-ought discrepancies are associated with an agitated motivational state (i.e., anxiety). However, such associations have not been consistently supported

(Mason et al., 2019). SDT mirrors Rogers (1959) proposition of incongruence between actual experience and the perceived-self, and it is reflective of conflict with the self-concept as described by the social and cognitive approaches. However, it is critical to emphasise that from a PCT perspective a difference between what is perceived in the environment and an internal reference value (i.e., self-guide) is an error. This is not considered goal conflict as there is only one desired end-state. Discrepancies between self-guides (ideal-self vs. ought-self) would be indicative of conflicting goals, which have been associated with psychological distress (Van Hook & Higgins, 1988).

Research has demonstrated a relationship between increased goal conflict and greater psychological distress (e.g., Emmons & King, 1986; Perring et al., 1988; Boudreaux & Ozer, 2013; Gray et al., 2017). Moreover, Moberly & Dickson (2018) found goal conflict and ambivalence towards goal attainment were associated with anxiety and depression. The authors suggested that this may indicate motivational conflicts occurring at different levels within the goal hierarchy, with goal conflict occurring at lower levels and ambivalence occurring at a higher level. This is consistent with the hierarchical model of motivational concepts proposed by Kelly et al. (2015), definitions are provided in Table 1. Each level of conflict was associated with increased psychological distress and reduced wellbeing (Kelly et al., 2015).

Table 1

Motivational Conflicts Defined by Kelly et al. (2015, p. 213)

Motivational conflict	Definition
Goal conflict (low-level conflict)	When pursuit of one goal undermines or precludes the goals, plans successful pursuit of another
Ambivalence (mid-level conflict)	When a person both wants and doesn't want to pursue or achieve a goal
Self-discrepancy (high-level conflict)	When a person's actual, ideal, and ought selves or senses of self are different or incompatible

It is evident that there is vast diversity, not only in the terms used to describe goal conflict but, in how it is conceptualised. This is concerning as it is stifling research into what could be a transdiagnostic cause of psychological distress. PCT appears to provide the most comprehensive framework however, it does not specify the factors that increase susceptibility to goal conflict, or the factors that influence reorganisation. To begin to address this problem, a review was considered essential to integrate the literature and to map out what properties of goal conflict in relation to psychological distress have been considered.

Research question:

What properties of goal conflict in relation to psychological distress are implicated in the literature?

Due to the wide range of sources relating to goal conflict and psychological distress, this question was not amenable to the rigorous methods used in a systematic review (Peters et al., 2015), nor was it conducive to the aims of a systematic review which are to address the feasibility, appropriateness, meaningfulness, or effectiveness of a specific intervention to inform clinical decision-making regarding current practice or policy (Munn et al., 2018). A narrative synthesis was considered however, the research question did not fulfil the general framework proposed by the Economic and Social Research Council (Popay et al., 2006), primarily because it did not intend to develop a theory of how or why an intervention works. Scoping reviews are, "a form of knowledge synthesis that addresses an exploratory research question aimed at mapping key concepts, types of evidence, and gaps in research related to a defined area or field by systematically searching, selecting, and synthesizing existing knowledge" (Colquhoun et al., 2014, *p*.1292-1294). This was deemed the most appropriate approach to answer the current research question as the aim is to capture the essence of a large diverse body of evidence via 'reconnaissance', a synthesising construct involving the systematic identification of key characteristics related to a concept, providing meaning and clarity to a complex or heterogenous topic area (Davis et al., 2009; Peters et al., 2015; Munn et al., 2018).

Method

Defining the research question

In accord with definitions by Kelly et al. (2015), outlined in Table 1, goal conflict is conceptualised as: 1) The pursuit of a valued goal hindered by the pursuit of at least one other valued goal that a person simultaneously wishes to achieve; 2) ambivalence towards pursing a valued goal; 3) self-discrepancies between the ideal and ought self.

Psychological distress is conceptualised as: 1) “Where some aspect of associated negative affect is clear, and 2) it is inferred that an aspect of change is desired” (Warwick et al., 2019, *p*. 109).

Eligibility

Inclusion criteria

- Proposal and/or evaluation of an explicit link between goal conflict and psychological distress
- Published and unpublished review articles including, but not limited to, systematic, literature, narrative, scoping, integrative, theoretical reviews, meta-analyses, opinion articles and book chapters

Exclusion criteria

- A focus on a single goal pursuit, interpersonal goal conflict or organisational goal conflict
- A focus on physical health, behavioural, or intellectual difficulties
- Single empirical studies containing either quantitative or qualitative data

Search strategy

Developing search terms

Titles, abstracts, and index terms of relevant articles known to the research team and articles identified in an initial search of PsycInfo using keywords, ‘goal conflict’,

'psychological distress' and 'review', were analysed to identify synonyms for the components of the research question. Provisional search terms were discussed and agreed within the research team and pilot searches were conducted in PsycInfo. Findings of the pilot search were discussed and adjustments were made to reach a consensus of appropriate search terms, outlined in Table 2.

Table 2

Search Terms Utilised in Database Searches

	Goal conflict	**Psychological distress**	**Review**
Search terms	Goal conflict	Psychological distress	Review
	Striving conflict	Psychological stress	Synthesis
	Personal conflict	Mental health	Conceptual
	Motivation conflict	Psychological disorder	Integrative
	Internal conflict	Mental disorder	Meta-analysis
	Intrapersonal conflict	Anxiety	Theoretical
	Intraindividual conflict	Depression	Scoping
	Approach-avoidance conflict	Psychosis Psychopathology	
	Ambivalence	Transdiagnostic	
	Goal incongruence		
	Goal discrepancy		
	Self-discrepancy		
	Dissonance		

Database search

University library subject guides were searched to identify key databases within the psychological and social sciences. Electronic databases were chosen based on their relevance to the research question. Searches were conducted in, PsycInfo, Web of Science

Core Collection, Applied Social Sciences Index and Abstracts (ASSIA), Embase, CINAHL Plus and Evidence-Based Medical (EBM) Reviews. A search was also undertaken in Google Scholar because of its coverage of grey literature, and it searches within the full text of publications. However, only keywords ‘goal conflict’ and ‘psychological distress’ were used as Google Scholar does not have the functionality to combine multiple search terms with Boolean operators (AND, OR, NOT).

The electronic database search was completed on 24/12/2020 and updated on 10/04/2021, which included all articles to this date. Due to translation costs all database searches were limited to articles written in English language. The search terms for each component of the research question were searched using “OR” and then combined using “AND”. The search strategy used for databases contained within the Ovid platform (PsycInfo, Embase, Medline and EBM reviews) is provided in Appendix B. Citations retrieved from the database search were imported to reference managing software Mendeley (version 1.19.8) and duplications were removed. Titles and abstracts of identified studies were screened in accordance with the eligibility criteria. Full texts of articles that appeared to meet the eligibility criteria were retrieved and reviewed to determine eligibility.

Hand search

Reference lists of retained articles were hand-searched for studies not identified by the database search. Article titles were used to assess relevance to the research question. Full texts of articles that were considered relevant were retrieved and reviewed in accord with the eligibility criteria.

Contacting experts

The list of identified papers and eligibility criteria was circulated to experts in the field to ask if they were aware of any other relevant articles. Academic experts were contacted on the basis they had an active email address and were either, the first author of more than one of the included articles; or the first author of one of included articles, plus two or more

articles that had been excluded solely on the basis that it was an empirical study. This was to ensure authors who had conducted empirical studies were not overlooked. Eleven experts were contacted via email and seven responded. The full texts of suggested articles were retrieved and reviewed in accordance with the eligibility criteria.

Data analysis

A data charting table was developed to extract data from the included studies. Fields included, author/year of publication, title, source, origin, review type, theoretical underpinnings, association between goal conflict and psychological distress, and properties of goal conflict. Data charting was conducted independently by the researcher.

Descriptive numerical summaries of the included sources are reported. A qualitative content analysis was conducted as it is the recommended approach for scoping reviews (Peters et al., 2020). A conventional (inductive) approach (Hsieh & Shannon, 2005) was chosen as it enables subjective interpretation of the contextual meaning of text through systematically coding data and identifying themes, rather than basing codes on pre-conceived categories or theoretical perspectives. The researcher conducted the analysis by reading the full texts of the included articles and highlighting text that appeared to capture key factors related to the research question. Codes were derived through immersion with the text which were subsequently organised into subcategories and then grouped into larger, overarching categories.

Results

Reliability analysis

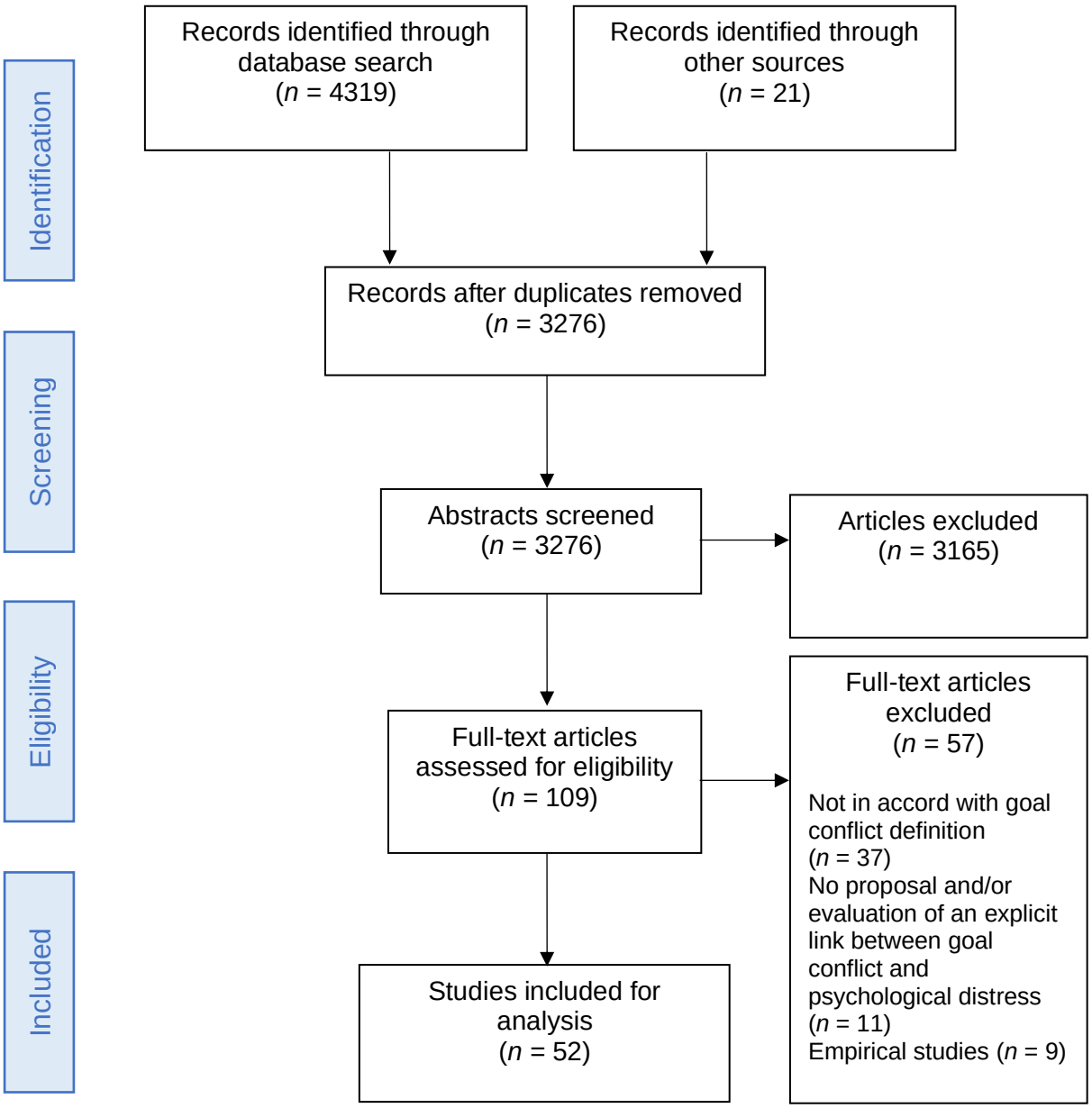
An independent reviewer screened 10% (n = 326) of the articles identified by the database search to determine reliability of the eligibility criteria. Cohen's kappa was calculated as .51 (94% agreement) indicating moderate reliability.

Study selection

Database searches identified 3255 potentially relevant articles, after duplicates were removed. The reference list search retrieved 7 articles and consultation with experts retrieved 14 articles. The flow of studies through the review process is illustrated in Figure 1. See Appendix C for the list of articles excluded at the full-text level.

Figure 1

PRISMA Diagram



Article characteristics

The metadata for each included article is presented in Table 3 and a summary of article characteristics is provided in Table 4. Three articles described the relationship between goal conflict and psychological distress but, did not provide an explanatory hypothesis and were therefore, excluded from the qualitative conventional content analysis.

Table 3

Metadata for Included Articles

No.	Author/s	Year of publication	Article title	Source	Origin	Review type	Theoretical perspective
1.	Alsawy et al.	2014	Science and practice of transdiagnostic CBT: A Perceptual Control Theory (PCT) approach	International Journal of Cognitive Therapy	UK/Australia	Integrative theoretical framework	Perceptual Control Theory
2.	Austin & Vancouver	1996	Goal constructs in psychology: Structure, process, and content	Psychological Bulletin	USA	Theoretical review	Control Theory
3.	Barker et al.	2019	Approach, avoidance, and the detection of conflict in the development of behavioral inhibition	New Ideas in Psychology	USA	Literature review	Reinforcement Sensitivity Theory
4.	Barone et al.	1997	Goals in personality, emotion, and subjective well-being	Social Cognitive Psychology	USA	Book chapter	Social Cognitive Psychology
5.	Bryant & Barker	2020	Arbitration of approach-avoidance conflict by ventral hippocampus	Frontiers in Neuroscience – Decision Neuroscience	USA	Literature review	Reinforcement Sensitivity Theory
6.	Carey et al.	2014	Conflicted control systems: The neural architecture of trauma	Lancet Psychiatry	Australia/UK	Personal view	Perceptual Control Theory
7.	Cooper	2012	A hierarchy of wants: Towards an integrative framework for counselling, psychotherapy and social change	Unpublished monograph	UK	Monograph Integrative framework	Humanistic Psychology

No.	Author/s	Year of publication	Article title	Source	Origin	Review type	Theoretical perspective
8.	Cooper	2013	The intrinsic foundations of extrinsic motivations and goals: Towards a unified humanistic theory of wellbeing and change	Journal of Humanistic Psychology	UK	Literature review	Humanistic Psychology
9.	Cooper	2019	Synergies are good	Integrating Counselling and Psychotherapy Directionality, Synergy & Social Change	UK	Book chapter	Humanistic Psychology
10.	Cornwell et al.	2015	Distress from motivational dis-integration: When fundamental motives are too weak or too strong	Behavioural Neuroscience of Motivation	USA/Canada/ Amsterdam	Book chapter	Motivational Theory
11.	Corr	2010	The psychoticism-psychopathy continuum: A neuropsychological model of core deficits	Personality and Individual Differences	UK	Integrative model	Reinforcement Sensitivity Theory
12.	Corr & Krupić*	2017	Motivating personality: Approach, avoidance, and their conflict	Advances in Motivation Science	UK/Croatia	Book chapter	Reinforcement Sensitivity Theory
13.	Corr & McNaughton	2012	Neuroscience and approach/avoidance personality traits: A two stage (valuation-motivation) approach	Neuroscience & Biobehavioral Reviews	UK/New Zealand	Integrative model	Reinforcement Sensitivity Theory
14.	Davis	2018	Is there a relationship between intrinsic/autonomous and/or controlled motivation for personal goals and	Unpublished doctoral thesis	UK	Systematic review	Self-Determination Theory

No.	Author/s	Year of publication	Article title	Source	Origin	Review type	Theoretical perspective
			depressive symptoms? A systematic review				
15.	Deary & Johnson	2009	Looking for the fundamentals of human nature	Journal of Mental Health	UK	Literature review	Reinforcement Sensitivity Theory
16.	Einstein & Mansell	2016	The relevance of uncertainty and goal conflict to mental disorders, their prevention and management: A unifying approach	The Cognitive Behaviour Therapist	UK	Integrative model	Control Theory
17.	Emmons & Kaiser	1996	Goal orientation and emotional well-being: Linking goals and affect through the self	Striving and Feeling: Interactions Among Goals, Affect, and Self-regulation	USA	Book chapter	Multiple
18.	Fricke & Vogel*	2020	How interindividual differences shape approach-avoidance behavior: Relating self-report and diagnostic measures of interindividual differences to behavioral measurements of approach and avoidance	Neuroscience and Biobehavioral Reviews	Germany	Systematic review	Reinforcement Sensitivity Theory
19.	Gonen et al.	2014	Moods as ups and downs of the motivation pendulum: revisiting Reinforcement Sensitivity Theory (RST) in bipolar disorder	Frontiers in Behavioural Neuroscience	USA	Integrative model	Reinforcement Sensitivity Theory
20.	Gorges & Grund	2017	Aiming at a moving target: theoretical and methodological considerations in the study	Frontiers in Psychology – Personality and Social Psychology	Germany	Systematic review	Multiple

No.	Author/s	Year of publication	Article title	Source	Origin	Review type	Theoretical perspective
			of intraindividual goal conflict between personal goals				
21.	Gray et al.	2017	Goal conflict and psychological well-being: A meta-analysis	Journal of Research in Personality	USA	Meta-analysis	Motivational theories
22.	Higginson et al.	2011	An integrative mechanistic account of psychological distress, therapeutic change and recovery: The Perceptual Control Theory approach	Clinical Psychology Review	UK	Integrative review	Perceptual Control Theory
23.	Hirsh et al.	2012	Psychological entropy: A framework for understanding uncertainty-related anxiety	Psychological review	Canada	Integrative theoretical framework	Thermodynamics and Information Theory
24.	Inzlicht et al.	2015	Emotional foundations of cognitive control	Trends in Cognitive Sciences	Canada/USA	Literature review	Cybernetics Animal research Cognitive neuroscience Social & Personality psychology
25.	Johnson	2009	The intrapersonal civil war	BPS The Psychologist	UK	Opinion article	Perceptual Control Theory
26.	Karoly	1999	A goal systems – self-regulatory perspective on personality, psychopathology, and change	Review of General Psychology	USA	Integrative framework	Motivational theories
27.	Kelly et al.	2015	Goal conflict and well-being: A review and hierarchical model of goal conflict,	Personality and Individual Differences	UK	Integrative framework	Perceptual Control Theory

No.	Author/s	Year of publication	Article title	Source	Origin	Review type	Theoretical perspective
			ambivalence, self-discrepancy and self-concordance				
28.	Kung & Scholer	2020	The pursuit of multiple goals	Social and Personality Psychology Compass	USA/Canada	Literature review	Lay Theory Control Theory Cognitive and Social theories Goal Systems Theory
29.	Kung & Scholer	2021	Moving beyond two goals: An integrative review and framework for the study of multiple goal	Personality and Social Psychology Review	USA/Canada	Integrative review and framework	Social Network theories Goal Systems Theory Control Theory
30.	Large & Marcussen	2000	Extending identity theory to predict differential forms and degrees of psychological distress	Social Psychology Quarterly	USA	Integrative review	Identity theory & Self-Discrepancy Theory
31.	Macintyre et al.	2021	The psychological pathway to suicide attempts: A strategy of control without awareness	Frontiers in Psychology - Psychopathology	UK	Narrative review - Theoretical framework	Perceptual Control Theory
32.	Mansell	2005	Control theory and psychopathology: An integrative approach	Psychology and Psychotherapy: Theory, Research and Practice	UK	Integrative review	Perceptual Control Theory
33.	Mansell & Carey	2009	A century of psychology and psychotherapy: Is an understanding of 'control' the missing link between theory, research, and practice	Psychology and Psychotherapy: Theory, Research and Practice	UK/Australia	Integrative review	Perceptual Control Theory

No.	Author/s	Year of publication	Article title	Source	Origin	Review type	Theoretical perspective
34.	McGregor et al.	2019	Dissonance now how accessible discrepancies moderate distress and diverse defenses	Cognitive Dissonance	USA	Book chapter	Reactive Approach-Motivation Theory
35.	McGregor et al.	2012	Approaching relief: Compensatory ideals relieve threat-induced anxiety by promoting approach-motivated states	Social Cognition	Canada	Literature review	Dissonance theory
36.	McNaughton	2014	Development of a human anxiety syndrome theoretically-derived biomarker	Translation Neuroscience	New Zealand	Literature review	Reinforcement Sensitivity Theory
37.	McNaughton et al.	2016	Approach/avoidance	Neuroimaging, Personality, Social Cognition and Character	New Zealand/ USA/UK	Book chapter	Reinforcement Sensitivity Theory
38.	McReynolds	1991	The nature and logic of intrapsychic conflicts	Stress and Anxiety	USA	Book chapter	Multiple
39.	Michalak & Holtforth	2006	where do we go from here? The goal perspective in psychotherapy	Clinical Psychology: Science and Practice	Germany/ Switzerland	Literature review	Motivational theories
40.	Michalak et al.	2004	goal conflicts: Concepts, findings and consequences for psychotherapy	Handbook of Motivational Counseling: Concepts, Approaches, and Assessment	Germany	Book chapter	Motivational theories
41.	Michalak et al.	2011	Goal conflicts and goal integration: Theory, assessment, and clinical implications	Handbook of Motivational Counseling: Goal-Based Approaches	Germany	Book chapter	Motivational theories

No.	Author/s	Year of publication	Article title	Source	Origin	Review type	Theoretical perspective
				to Assessment and Intervention with Addiction and Other Problems			
42.	Montesano et al.	2015	A review of cognitive conflicts research: A meta-analytic study of prevalence and relation to symptoms	Neuropsychiatric Disease and Treatment	Spain	Meta-analysis	Personal Construct Theory
43.	Morris & Mansell	2018	A systematic review of the relationship between rigidity/flexibility and transdiagnostic cognitive and behavioral processes that maintain psychopathology	Journal of Experimental Psychopathology	UK	Systematic review	Perceptual Control Theory
44.	Patrick et al.*	2019	Brain activation during human defensive behaviour: A systematic review and preliminary meta-analysis	Neuroscience and Biobehavioral Reviews	UK	Systematic review & meta-analysis	Reinforcement Sensitivity Theory
45.	Riediger	2007	Interference and facilitation among personal goals: Age differences and associations with wellbeing and behavior	Personal Project Pursuit: Goals Action and Human Flourishing	USA	Book chapter	Motivational theories
46.	Silva & McNaughton	2019	Are periaqueductal gray and dorsal raphe the foundation of appetitive and aversive control? A comprehensive review	Progress in Neurobiology	New Zealand	Literature review	Reinforcement Sensitivity Theory
47.	Sincoff	1990	The psychological characteristics of ambivalent people	Clinical Psychology Review	USA	Literature review	Psychoanalytic Sociological,

No.	Author/s	Year of publication	Article title	Source	Origin	Review type	Theoretical perspective
							Cognitive, Developmental
48.	Street	2002	Exploring relationships between goal setting, goal pursuit and depression: A review	Australian Psychologist	Australia	Theoretical review	Conditional Goal Setting Theory
49.	Trower & Jones	2015	Demanded wants and oughts: An overlooked distinction in REBT	Journal of Rational - Emotive & Cognitive - Behavior Therapy	UK	Literature review	Rational Emotive Behaviour Therapy
50.	Varese	2014	Voices, conflict and personal goals: A Perceptual Control Theory perspective on auditory verbal hallucinations	Unpublished doctoral thesis	UK	Integrative framework	Perceptual Control Theory
51.	Watkins	2011	Dysregulation in level of goal and action identification across psychological disorders	Clinical Psychology Review	UK	Integrative review	Response Styles Theory Control Theory
52.	Watkins & Roberts	2020	Reflecting on rumination: Consequences, causes, mechanisms and treatment of rumination	Behaviour Research and Therapy	UK	Integrative theoretical framework	Control Theory Action Identification Theory

Note. Articles are listed alphabetically by first author. The numbers in the first column correspond to the numbers found in Tables 5-11.

*Articles that describe a relationship between goal conflict and psychological distress but do not provide an explanatory hypothesis.

Table 4

Summary of Article Characteristics

Variable	N	%
Origin		
UK	18	35
USA	13	25
Germany	4	8
UK/Australia	3	6
USA/Canada	3	6
Canada	2	4
New Zealand	2	4
Australia	1	2
Spain	1	2
USA/Canada/Amsterdam	1	2
UK/Croatia	1	2
UK/New Zealand	1	2
New Zealand/USA/UK	1	2
Germany/Switzerland	1	2
Review type		
Integrative frameworks/models	13	25
Literature reviews	12	23
Book chapters	11	21
Integrative reviews	5	10
Systematic reviews	4	8
Meta-analyses	3	6
Theoretical reviews	2	4
Opinion articles	2	4
Theoretical perspective		
Reinforcement Sensitivity Theory	12	23
Multiple	11	21
Perceptual Control Theory	10	19
Motivational theories	7	13
Humanistic psychology	3	6
Control theory	2	4
Social Cognitive Psychology	1	2
Self-Determination Theory	1	2
Rational Emotive Behaviour Therapy	1	2
Conditional Goal Setting Theory	1	2
Reactive Approach-Motivation Theory	1	2
Dissonance theory	1	2
Personal Construct Theory	1	2

Qualitative conventional content analysis

The qualitative conventional content analysis demonstrated 16 different forms of psychological distress and/or problems associated with goal conflict, as shown in Table 5. Three properties of goal conflict associated with increased psychological distress were implicated in the literature, as shown in Table 6. Five additional categories were identified, properties of goal conflict resolution; sources of conflict; external contributing factors; internal contributing factors; and maintenance factors, as shown in Tables 7-11. Each subcategory will be described in turn and interactions between properties will be outlined.

Tables 5-11 are organised in descending order by the number of citations. The numbers listed in the 'articles' column correspond to the article number in Table 2. Many articles referenced more than one property of goal conflict and/or multiple forms of psychological distress. Therefore, the numbers in the 'number of citations' column often exceeds the total number of included articles (*N* = 52).

Table 5

Types of Psychological Distress Related to Goal Conflict

Type of psychological distress	Number of citations	Articles
Anxiety	22	1, 2, 4, 8, 10, 12, 13, 15, 16, 18, 22, 23, 30, 35, 36, 38, 42, 44, 45, 46, 49, 51
Unspecified (i.e., psychological distress/disorders, psychopathology)	16	2, 7, 9, 11, 20, 21, 26, 27, 28, 29, 32, 33, 34, 40, 41, 43,
Depression	15	1, 4, 8, 10, 14, 15, 22, 30, 42, 45, 46, 47, 48, 49, 51
Psychosis (i.e., schizophrenia, hallucinations, delusions)	5	1, 8, 22, 47, 50
Bipolar disorder	4	1, 6, 19, 51
Negative affect	4	4, 17, 24, 45
Dissociative disorders	3	1, 6, 25
Personality disorder	3	6, 10, 47
Social anxiety	2	2, 51
Post-traumatic stress disorder (PTSD)	1	23
Obsessive compulsive disorder (OCD)	1	1
Phobias	1	1
Neuroticism	1	37
Bulimia	1	42
Rumination	1	52
Suicide	1	31
Psychopathy	1	11

Table 6

Properties of Goal Conflict Associated with Increases in Psychological Distress

Property of goal conflict	Brief description	Number of citations	Articles
Limited awareness	Lack of awareness of goals in conflict and/or the source of goal conflict	10	1, 6, 7, 9, 27, 30, 33, 38, 43, 49
Higher-level goals	Abstract, fundamental goals containing broad values and self-ideals	10	1, 2, 9, 16, 17, 21, 27, 29, 31, 48
Severity	The magnitude, salience, and durability of the goal conflict	9	2, 4, 9, 20, 29, 30, 34, 38, 50

Properties of goal conflict

Limited awareness. Goal conflict existing outside of awareness was also referred to as unconscious conflict (Cooper, 2019) and unidentified conflict (Carey et al., 2014). It was recognised that goal conflict can occur where one side is conscious, and the other side is unconscious (McReynolds, 1991). It was hypothesised that conflict between higher-level goals that are outside awareness is a transdiagnostic mechanism underpinning psychological distress (Alsawy et al., 2014), and that a lack of awareness of the source of conflict maintains distress (Mansell & Carey, 2009).

Higher-level goals. Articles indicated that conflict occurring between more abstract or important goals is associated with greater psychological distress than conflict occurring at lower-levels. Alsawy et al. (2014) reported findings by Kelly et al. (2011) that ambivalence had a stronger positive relationship with depression than goal conflict. Similarly, Kelly et al. (2015) demonstrated small effect sizes for the association between psychological distress and goal conflict, whereas effect sizes were small to medium for relationships between psychological distress and ambivalence and self-discrepancies. Moreover, Gray et al. (2017) found varying effect sizes for goal conflict and psychological distress depending on the form of assessment. Larger effect sizes were reported for “alternative” methods (i.e., Computerized Intrapersonal Conflict Assessment (CICA) and Repertory Grid Technique (RGT)), than goal matrix methods (r = 0.28 and r = 0.18, respectively). The CICA and RGT measure more abstract goals, suggesting that there is a stronger relationship between psychological distress and more abstract goals. Conversely, Gorges and Grund (2017) reported findings from a study suggesting that goals produced at lower levels generate more conflict (Freitas et al., 2009). However, in sum their review stipulated that conflict between highly valued goals is detrimental to wellbeing.

Severity. Increased psychological distress was associated with greater magnitude, the degree of divergence between goals; salience, the accessibility of conflict; durability, the persistence of conflict; and the degree of organisation of goal conflict which refers to the

habitually of the goal. (McReynolds, 1991; Large & Marcussen, 2000). Two articles (Barone et al., 1997; Gorges & Grund, 2017) reported that increased awareness of goal discrepancies and thinking about unattained goals increases psychological distress and reduces goal-directed activity. Additionally, McGregor et al. (2019) suggested that accessible cognitive conflict is a fundamental element in psychological threats, and that self-related inconsistent cognitions are more likely to be simultaneously accessible and consequently more distressing. Moreover, it was suggested that the existence of conflict and associated symptoms of distress can conflict with higher-level goals (i.e., to be normal), exacerbating psychological distress (Varese, 2014; Cooper, 2019). Furthermore, the greater number and complexity of goals increases the propensity of conflict due to more links between goals (Austin & Vancouver, 1996; Kung & Scholer, 2021).

Table 7

Properties of Goal Conflict Resolution

Properties	Brief description	Number of citations	Articles
Reorganisation	To resolve the conflict between control systems and avoid intrinsic error, reference values are altered, leading to a change in output function	13	2, 7, 8, 16, 22, 25, 28, 29, 31, 33, 40, 41, 50
Increased awareness	Heightened awareness of goals in conflict, and awareness is shifted to higher levels, the source of the conflict	12	1, 4, 6, 7, 31, 32, 39, 40, 41, 43, 47, 50
Integration	Goals are organised into a coherent structure	12	7, 8, 10, 17, 20, 27, 29, 39, 40, 41, 46, 49
Meta-flexibility	Flexibility in meeting all important goals	5	7, 26, 28, 43, 51

Properties of goal conflict resolution

Reorganisation. Articles proposed that the process of reorganisation is essential to resolve goal conflict and reduce associated distress. Reformulation (Michalak et al., 2004; 2011), reconfiguration (Cooper et al., 2012; Cooper, 2013) and evaluation (Austin & Vancouver, 1996) were terms also used to describe modifications to the goal hierarchy to achieve a more synergetic arrangement and appropriate selection of subgoals. Similarly, Kung and Scholer (2020; 2021) denote resolving conflict by prioritising goals that are important to individual identities, inferring the reorganisation of goal systems.

Increased awareness. It was acknowledged that exploration and increased awareness of conflicting goals, that may be unconscious, is required to facilitate conflict resolution. However, what appeared more significant was that increased awareness of higher-level goals, above the level of conflict is necessary to identify the origin of the conflict. This prompts re-evaluation of the means to achieve such goals (reorganisation) (Cooper et al., 2012; Varese, 2014; Macintyre, 2021), and to employ flexible transdiagnostic processes (Morris & Mansell, 2018). Moreover, Mansell (2005) suggested that increased awareness of both, higher and lower-level goals is needed to detect arbitrary control.

Integration. The importance of integrating goals and motives across levels of abstraction to resolve goal conflict was recognised. Furthermore, Kelly et al. (2015) demonstrated that self-concordance (agreement throughout the goal hierarchy) was positively associated with subjective wellbeing and negatively associated with psychological distress. Moreover, Emmons and Kaiser (1996) proposed that it is the role of the organising principle (i.e., the self or identity) to combine goals in accord with desired future self-representations. However, integration needs to be considered in accord with the resources available, and an individual's capacity to engage in reflective thinking and complex information processing (Gorges & Grund, 2017; Kung & Scholer, 2021). Silva and McNaughton (2019) proposed that neurological regions involved in higher cognitive functioning such as, the anterior cingulate cortex and the dorsal pre-mammillary neurons

could support the dorsomedial periaqueductal gray to resolve conflict by integrating the relevant affective and contextual cues.

Meta-flexibility. Some articles suggested that flexible goal systems enable selection of suitable goals that are consistent with the current context, resolving goal conflict. Furthermore, Watkins (2011) reported that in non-clinical samples goal/action identification is flexibly regulated in response to the current circumstances.

Table 8

Sources of Goal Conflict Associated with Increases in Psychological Distress

Sources	Brief description	Number of citations	Articles
Arbitrary control	The attempt to make behaviour conform to one set of goals without regard to other goals (control systems) that may already be controlling that behaviour	11	1, 6, 7, 9, 22, 29, 31, 32, 34, 43, 50
Extrinsic goals	Goals that are incongruent with inherent fundamental needs	8	8, 14, 20, 32, 39, 47, 50, 52
Limited resources	Limited availability of resources to attain multiple goals	6	7, 8, 9, 20, 28, 29
Incompatible strategies	Contradictory strategies needed to attain different goals	6	2, 7, 8, 28, 32, 43
Perceived loss	Resistance to acknowledge or resolve goal conflicts due fear of loss of self-identity and/or connection to others	3	32, 42, 47
Avoidance goals	A positive feedback loop which acts to increase, rather than decrease, the discrepancy between the input function and reference value.	2	32, 39

Sources of goal conflict

Arbitrary control. Arbitrary control was cited as rogue (Cooper, 2019), dominant (Kung & Scholer, 2021) and rigid goals (Mansell, 2005). Arbitrary control occurs when lower-

order goals become autonomous without reference to higher-order goals (Cooper 2019). This contributes to conflict as unpursued goals remain active (Higginson et al., 2011). Macintyre et al. (2021) postulated suicide attempts occur when an individual solely focuses on suicide as a goal, failing to recognise the impact on other important goals. Arbitrary control is also exerted at interpersonal and societal levels where people and organisations attempt to control the behaviour of others and disregard others' goals (Cooper et al., 2012).

Arbitrary control is equivalent to the rigid application of goal relevant processes (Morris & Mansell, 2018), also known as compensatory strategies (i.e., thought suppression, experiential avoidance, alcohol and substance misuse and self-harm), used to reduce unwanted thoughts and feelings (Alsawy et al., 2014; Macintyre et al., 2021). However, persistent avoidance of conflict results in chronic psychological distress (Carey et al., 2014). Varese's (2014) PCT based framework of hallucinations stipulates that there are different modes of functioning that change how information is transmitted between levels of the hierarchy. One mode is the imagination mode where reference values set by higher levels are rerouted to the same level within the hierarchy, rather than to the levels below. This results in internally generated perceptions that are involved in mental processes such as, planning, memory, and mental simulations. However, it may also create unwanted sensory phenomena (i.e., hallucinations). It is suggested that switching to imagination mode is a compensatory mechanism for conflict as it provides short-term perceptual control but, continued engagement will likely maintain conflict (Varese, 2014).

Reactive approach motivation (RAM) is the engagement in behaviours to relive goal conflict and anxiety by muting the salience of discrepancies. RAM can be achieved via compensatory conviction of personal goals, opinions and values, self-worth, and by engaging with meaningful ideals and worldviews in imagination, thereby avoiding further conflict (McGregor et al., 2012; McGregor, 2019).

Extrinsic goals. Extrinsic goals are those set or shaped by others, also referred to as interpersonal control (Sincoff, 1990; Mansell, 2005; Varese, 2014; Gorges & Grund,

2020), and goals pursued for external approval and rewards, or due to internal pressures (i.e., feelings of guilt or embarrassment) (Watkins & Roberts, 2020). Goals pursued for extrinsically motivated reasons are more likely to evoke goal conflict as they are less effective in attaining higher-level goals (Cooper, 2013). In Davis' (2018) systematic review four of six studies demonstrated a negative association between depressive symptoms and autonomous motivation. Moreover, three studies demonstrated a positive association between depressive symptoms and controlled motivation, and one found that action crises (decisional conflict) mediated the relationship.

Limited resources. Resource goal conflicts occur when multiple goals compete for the same means (Cooper, 2013; Gorges & Grund 2017; Kung & Scholer, 2020; 2021) e.g., time, money, mental energy, love, respect, and social context (Cooper, 2019). Resource conflicts differ to inherent conflicts in that the end-states or strategies to attain different goals are not necessarily incompatible (Kung & Scholer, 2021). However, Cooper et al. (2012) suggests that societal views can inhibit unique goal pursuit due to fears of judgement and rejection therefore, resources are limited in terms of a valuing, non-judgemental society.

Incompatible strategies. Goal conflict persists when individuals employ goal attainment methods that are counterproductive and/or prevent achievement of another goal (Cooper, 2013; Kung & Scholer, 2020). This can occur when individuals attempt to use unsuitable strategies that have been overgeneralised and are ineffective in the current context (Mansell, 2005).

Perceived loss. Individuals are resistant to acknowledge or resolve goal conflicts if they believe them to be preventing a loss (Sincoff, 1990). Perceived loss of love and connection may occur if a person believes their own goals will separate them from others and societal norms. Individuals may believe that implementing change may invalidate core aspects of their identity. They may also experience a loss of clarity as conflict induces complicated, unfamiliar emotions, thoughts, and behaviours.

Avoidance goals. Avoidance goals, termed anti-goals (Mansell, 2005) are achieved via positive feedback loops that produce movement away from a reference value to avoid an aversive outcome. Conflict emerges when the reference values of a positive feedback loop and a negative feedback loop are the same (Mansell, 2005). Michalak & Holtforth (2006) describe empirical findings that avoidance goals correlate with goal incongruence (Holtforth et al., 2004). Additionally, psychotherapy patients pursue more avoidance goals than controls, and the intensity of avoidance goals is associated with psychopathology severity (Holtforth & Grawe 2002).

Table 9

External Contributing Factors to the Relationship Between Goal Conflict and Increases in Psychological Distress

Factors	Brief description	Number of citations	Articles
	External		
Environmental influences	Individual surroundings and social context	10	6, 7, 8, 9, 17, 20, 30, 31, 47, 49
Aversive experiences	Exposure to aversive life experiences	5	6, 25, 32, 50, 52
Uncertainty	Unfamiliar environments and social contexts, and changes to the environment.	4	3, 16, 23, 32

External contributing factors

Environmental influences. Goals do not exist in isolation, they are embedded in a social, psychological, biological context (Cooper et al., 2012). Therefore, goal attainment will only contribute to psychological wellbeing if they are in accord with the social context (Emmons & Kaiser, 1996). Large and Marcussen (2000) integrate identity interruption theory

(Burke, 1996) and SDT (Higgins, 1987) to propose a predictive theory of distress based on discrepant self-guides and discrepancies between the individual and the social environment.

Chronic conflict can arise due to a loss of control caused by environmental factors (Carey et al., 2014; Macintyre, 2021). Moreover, the degree of goal conflict has been associated with optimism, suggesting that current circumstances may influence the perception of conflict (Gorges & Grund, 2017). It is proposed that the environment can shape goal attainment strategies. As people aim to maintain a consistent worldview, they may fail to recognise when the context changes and their strategies become outdated or ineffective. Additionally, the availability of resources is context dependent (Cooper et al., 2012; Cooper, 2013, 2019). Social context is also central to the role of interpersonal control. It is posited that goal conflict and ambivalence are a result of internalised societal norms that prevent pursuit towards wants (Sincoff, 1990; Trower & Jones, 2015).

Adverse experiences. Prolonged exposure to adverse experiences involving high levels of interpersonal control such as, abuse, neglect and controlling environments prevents fulfilment of fundamental goals (Mansell, 2005; Varese, 2014). It is postulated that traumatic experiences lead to psychological distress when a person is conflicted about the trauma (Carey et al., 2014). Moreover, Deary and Johnson (2009) suggested that early adverse experiences can interrupt the development of hierarchical control, hindering the ability to endure and resolve goal conflicts. This may lead to automatic and chronic employment of arbitrary control in response to goal conflict (Varese, 2014). The H-EX-A-GO-N (Habit development, EXecutive control, Abstract processing, GOal discrepancies, Negative bias) model (Watkins & Roberts 2020) stipulates that repeated exposure to adverse events increases the propensity of goal conflict, triggering rumination and low mood. Thereby, rumination becomes a habitual automatic response to negative affect.

Uncertainty. Entropy is disorganisation within cybernetic information systems (self-regulatory systems) (Wiener, 1961). The entropy model of uncertainty (EMU; Hirsh et al., 2012) suggests that uncertainty emerges due to conflict between perceptual and behavioural

affordances, subjectively experienced as anxiety. As uncertainty poses an adaptive challenge, individuals strive to constrain it. In uncertain situations where there are no predefined goal structures to determine appropriate action Behavioural Inhibition System (BIS) activation and anxiety will be amplified (Hirsh et al., 2012). Traumatic events involve extremely high levels of uncertainty, which can become chronic if they disrupt higher-level goals. PTSD symptom severity increases when trauma entails a greater degree of uncertainty (Hirsh et al., 2012). Moreover, intolerance of uncertainty can lead to difficulties in adapting to novel situations (Mansell, 2005; Hirsh et al., 2012). Einstein and Mansell (2016) propose a transdiagnostic model of uncertainty that stipulates that during uncertain situations individuals make a threat estimate which is compared to internal reference values. Emotional arousal is triggered when the threat estimate conflicts with important goals.

Table 10

Internal Contributing Factors to the Relationship Between Goal Conflict and Increases in Psychological Distress

Factors	Brief Description	Number of citations	Articles
	Internal		
Psychological inflexibility	Reduced ability to adapt responses to meet goals and situational demands.	8	1, 7, 11, 26, 31, 41, 43, 51
Dysfunctional motivational processes	Unusual activity in systems responsible for regulating motivation	8	3, 10, 11, 15, 19, 36, 37, 49
Cognitive constraints	Limited cognitive abilities to enable successful conflict resolution	5	11, 24, 26, 47, 52
Abstract processing	General, superordinate and decontextualised mental representations that convey meaning, causes and implications of goals/events.	3	9, 51, 52
Age	Length of time a person has lived	2	21, 47

Internal contributing factors

Psychological inflexibility. The inflexibility of an individual to respond and adapt to unexpected events determines psychological distress (Karoly, 1999). Similarly, Watkins (2011) hypothesised that dysregulation of goal/action identification, that is, the inability to flexibly shift between abstract and concrete goals in accord with changing circumstances, is a transdiagnostic process underpinning psychopathology. Inflexibility limits awareness of higher-order goals and the source of conflict. It can also lead to arbitrary control (Watkins, 2011; Morris & Mansell, 2018). Corr (2010) suggests cognitive inflexibility is due to a dysfunctional BIS and associated deficits in switching attention and modulating responses consequently, learning from adverse experiences is prevented.

Dysfunctional motivational processes. Increased sensitivity of approach and avoidance motivational systems (i.e., BIS) the greater probability of goal conflict and neuroticism (McNaughton et al. 2016; Barker et al., 2019). Trower and Jones (2015) suggest that there are marked individual differences in dispositional tendencies towards pursing wants and oughts and, an imbalance is likely to cause negative affect and cognitive and behavioural consequences. Cornwell et al. (2015) proposed that there are four motivational systems, promotion, that generates goal progression; prevention, that is concerned with safety and security; locomotion, that initiates movement to evoke change; and assessment, that works to acquire true knowledge to evaluate options and make optimal decisions. A dominant motivational system produces motivational disintegration leading to psychological distress and a predisposition to personality disorders.

High levels of BIS activation are associated with greater approach-avoidance conflict and anxiety and depression (Deary & Johnson, 2009; Barker et al., 2019). However, Corr (2010) posits that psychosis and psychopathology are associated with low BIS activity and that insufficient cognitive control of executive and attentional resources prevent effective detection and resolution of goal conflict. Gonen et al. (2014) demonstrated that bipolar disorder was a result of motivational abnormalities, periods of depression involved a

hyperactive BIS and periods of mania involved a hypoactive BIS. Moreover, McNaughton (2014) reports evidence from rodent studies that have shown that the BIS depends on rhythmical slow activity (RSA) ("theta rhythm"). A human homologue of RSA is goal conflict-specific rhythmicity (GCSR). GCSR is positively correlated with neuroticism and trait anxiety, and it can be reduced by anxiolytic drugs. Anxiolytic drugs improve anxiety but, not panic or phobias suggesting that they target the BIS system (McNaughton, 2002). Hyper-reactivity of the GCSR in response to goal conflict may predispose and perpetuate anxiety by modulating the BIS. This provided support for the GCSR as a biomarker for individual differences in a neural system and that dysfunctional control of GCSR may produce a specific BIS syndrome within anxiety disorders (McNaughton, 2014).

Cognitive constraints. Deficits in information processing can hinder encoding and integration of information relevant to a decision. An individual may be unable to effectively apply value to goals or to combine information due to limited insight or inexperience. The H-EX-A-GO-N model (Watkins & Roberts, 2020) proposes that deficits in executive functioning (i.e., shifting, updating, and monitoring) hinders flexible processing of goal relevant information and disengaging from rumination. Moreover, chronic conflict and information overload increases psychological distress ensuing emotional and cognitive drain. Thereby, individuals opt for simpler, less effective ways to integrate information such as, compensatory strategies (Sincoff 1990; Karoly, 1999). Additionally, deficits in emotional sensitivity may hinder effective engagement of cognitive control in response to conflict (Inzlicht et al., 2015). It is postulated that reduced cognitive control of executive and attentional resources may be due to impairments in the BIS (Corr, 2010).

Abstract processing. Bias towards an abstract level of goal/action identification is associated with greater levels of depression, GAD, social anxiety and PTSD and bipolar disorder (Watkins, 2011). The H-EX-A-GO-N model (Watkins & Roberts, 2020) suggests that the interaction between goal discrepancies and an abstract processing style increases negative affect and persistent maladaptive rumination, hindering problem-solving and conflict

resolution. Conversely, Cooper (2019) suggests that abstract thinking facilitates a wider perspective enabling optimal strategies to meet higher-order goals.

Age. The relationship between goal conflict and psychological distress is stronger in adults (r = .30) in comparison to students (r = .18) (Gray et al., 2017). Additionally, Riediger (2007) found older adults reported less goal conflict than younger adults however, the effect size was small (r = -.14).

Table 11

Maintaining Factors to the Relationship Between Goal Conflict and Increases in Psychological Distress

Factors	Brief description	Number of citations	Articles
Behavioural inhibition	Reduced ability to pursue goal-directed behaviour	10	3, 4, 9, 11, 17, 20, 37, 40, 41, 46
Increased attention	Attention towards potential sources of threat	7	10, 13, 15, 23, 24, 35, 37
Rumination	Repetitive, prolonged and recurrent negative thinking	9	4, 9, 10, 13, 15, 17, 26, 43, 52

Maintaining factors

Behavioural inhibition. During goal conflict the BIS inhibits behaviour (McNaughton et al., 2016), perpetuating goal conflict due to reduced action and motivation towards goals (Michalak et al., 2004; 2011). Goal conflict can also lead to reduced motivation to challenge symptoms of distress and engage in psychological therapy (Michalak et al., 2011). Furthermore, neurological evidence reviewed by Silva and McNaughton (2019) suggests that when faced with conflict, the dorsal raphe promotes tonic inhibition of the dorsal periaqueductal gray, reducing behavioural responses. Furthermore, the ventrolateral periaqueductal gray and dorsal raphe produce long-term reductions in general motor and

autonomic activity observed in chronic conflict. Moreover, strong interconnections between the dorsomedial periaqueductal gray and the external part of the dorsolateral periaqueductal gray are in accord with increased aversion as the main response to goal conflict.

Increased attention. During goal conflict the BIS amplifies arousal and attention towards potential threats and generates exploration and displacement activities (Dreary & Johnson, 2009, Corr & McNaughton, 2012). BIS activity is generally adaptive as it attempts to find alternative means and prevents pursuit of unviable goals (McGregor et al., 2012). Furthermore, Inzlicht et al. (2015) proposes that negative affect experienced during conflict is functional as it recruits attention to motivate adaptive behaviour. This is underpinned by activity in the anterior cingulate cortex (ACC), which is involved in conflict monitoring, error processing and uncertainty. The ACC facilitates a tonic increase in baseline noradrenaline consequently, individuals become more distractable as they scan the environment for sources of reward and stability (Hirsh et al., 2012).

Rumination. Goal conflict leads to rumination which is associated with reduced action towards goals and increased awareness of unattained goals, resulting in negative affect (Emmons & Kaiser, 1996; Barone et al., 1997). The H-EX-A-GO-N model (Watkins & Roberts, 2020) postulates rumination becomes more frequent due to negative information processing bias that increases awareness of poor goal progress. Furthermore, it is posited that rumination increases when goals are instilled with excessive meaning (Karoly, 1999) and linked to overall happiness (Barone et al., 1997). Moreover, the impaired disengagement hypothesis suggests that rumination is pathologically problematic when it causes enduring conflict and when ruminative thought conflicts with the self-concept (Morris & Mansell, 2018).

BIS activity is characterised as anxiety involving rumination to cautiously assess the environment and determine action (Deary & Johnson, 2009). Corr and McNaughton (2012) report neurological findings that EEG theta rhythm is associated with goal conflict and rumination, and the EEG frequency band differentiates individuals with low and high BIS.

Discussion

Summary

The current systemic scoping review aimed to map out the key properties of goal conflict in relation to psychological distress that have been considered in the literature. Fifty-two articles were included in the review. Qualitative conventional content analysis revealed six main categories and twenty-one subcategories that were associated with the relationship between goal conflict and psychological distress: 1) properties of goal conflict associated with increases in psychological distress (limited awareness, higher-level goals, severity), 2) properties of goal conflict resolution (increased awareness, reorganisation, integration, meta-flexibility), 3) sources of goal conflict (arbitrary control, extrinsic goals, limited resources, incompatible strategies, avoidance goals, perceived loss), 4) external contributing factors (environmental influences, aversive experiences, uncertainty), 5) internal contributing factors (psychological inflexibility, dysfunctional motivational processes, cognitive constraint, abstract processing, age), 6) maintaining factors (behavioural inhibition, increased attention, rumination). Sixteen forms of psychological distress were identified as being related to goal conflict, ranging from common mental health difficulties (anxiety and depression) to more severe and enduring difficulties (dissociation disorders, bipolar disorder, psychosis and personality disorders). In accord with PCT, it is possible that goal conflict could be a transdiagnostic process underlying psychological distress. However, scoping reviews alone cannot inform theory and therefore, further research is required to investigate this hypothesis.

Reflexivity

Due to the interpretive nature of the review, some reflection on the position of the researcher is necessary to contextualise the findings. The researcher is a Trainee Clinical Psychologist whose practice is mainly derived from Cognitive Behaviour Therapy (CBT) and research interests are in PCT. This review was completed as part of the Clinical Psychology

Doctorate programme training requirements, alongside a pilot study to assess the feasibility of a protocol to determine whether Method of Levels (MOL) increases awareness of higher-level goals more than other psychological therapies.

Key properties

Awareness and hierarchical organisation

To date, the concept of awareness appears to be the property of goal conflict that has received the most research attention. Limited awareness of conflicting goals, also referred to as unconscious conflict and unidentified conflict was frequently cited in association with increased psychological distress. Furthermore, increased awareness of goal conflict was commonly reported as a property of goal conflict resolution. This is aligned with psychoanalytic, humanistic and PCT perspectives which have each proposed an association between psychological distress and goal conflict occurring outside of awareness. However, unlike the original psychoanalytic assertions, articles did not report repression of unacceptable goals, limited awareness referred more to misplaced attention arising from arbitrary control and psychological inflexibility. Similarly, arbitrary control was the most reported source of goal conflict due to its prevention in attaining multiple higher-level goals. Furthermore, conflict occurring between higher-level goals was also frequently discussed in relation to increased psychological distress. Moreover, the process of reorganisation, also framed as reformulation, reconfiguration, and evaluation of the goal hierarchy, was commonly described in relation to resolving goal conflicts and decreased psychological distress.

The concepts of awareness, higher-level goals and reorganisation identified in this review map onto the key principles of human functioning and behaviour described by PCT. Conversely, some of the articles indicated that accessible goal conflict that is, conflict within one's awareness to be related to increases in psychological distress. From a PCT perspective, this can be understood as reorganisation occurring at the wrong level. While

one may be aware of the goal conflict, awareness is yet to shift above the level of conflict, to its source. Additionally, as reorganisation occurs randomly, it is possible that individuals endure some distress before a solution to resolve the conflict is reached (Powers, 1973). However, it is important to reiterate that the findings from this scoping review cannot provide support for PCT as the credibility of the literature has not been evaluated and therefore, it is unknown how robust the evidence-base is.

Psychological flexibility

The notion of psychological (in)flexibility has also been of considerable interest. Similarly to the concept of awareness, it has been deemed a factor of goal conflict related to increases and decreases in psychological distress. It seems that for goal conflicts to be resolved a flexible goal system is required to enable appropriate goal selection that is conducive to the current context. Likewise, environmental influences were the most prevalent external contributing factor to the relationship between goal conflict and psychological distress within the literature. Psychological flexibility is aligned with Action Identification Theory (AIT; Vallacher & Wegner, 1987) which posits that action identifications are organised hierarchically from low-level, concrete identities detailing “how” an action is performed to, high-level, abstract identities that refer to “why” an action is performed. According to AIT, people naturally adopt higher-level identities and shift to lower levels when an action is difficult or unfamiliar (Vallacher & Wegner, 1987). When lower-level identities are sustainable, higher-levels are re-adopted. This process continues until an optimal level of action identification in accord with current circumstances is attained (Vallacher & Wegner, 1989).

The literature reviewed presented mixed opinions on abstract goal/action identification regarding whether it is related to increases or decreases in psychological distress. One review found abstract processing was prevalent in various psychopathologies (Watkins, 2011). Whereas in other articles it was considered functional in accentuating problems so that they can be addressed (Cooper, 2019; Watkins & Roberts, 2020). The

latter is similar to PCT which proposes that increased awareness of abstract goals facilitates reorganisation. Nonetheless, it begs the question under what conditions is abstract processing helpful and when does it become problematic. Watkins (2011) offered psychological flexibility as an explanation, as it was postulated that different levels of goal/action identifications (concrete vs. abstract) are functional under different circumstances.

Cognitive inflexibility is another term used to describe the inability to effectively adapt cognitive processing strategies to new and unexpected changes in the environment (Cañas et al., 2003; 2006). One article proposed that cognitive inflexibility can be caused by dysfunction in the BIS (Corr, 2010), which was also a prominent factor in relation to goal conflict and increased psychological distress indicated in the literature. This is aligned with RST which proposes that the BIS is activated during approach-avoidance conflict, and it is responsible for detecting and resolving goal conflicts. However, the functions of the BIS (behavioural inhibition, increasing attention and rumination) appear to maintain goal conflict, which has been evidenced in neuroimaging studies. RST was the most prevalent theoretical underpinning of the included articles in this review, suggesting that at present, it is the theory that has received the most attention in relation to goal conflict and psychological distress.

Integration

A source of goal conflict in relation to increases in psychological distress highlighted in this review was extrinsic goals, also referred to as interpersonal control. Goals pursued for controlled reasons evoke goal conflict (Watkins & Roberts, 2020) as they are less likely to be congruent with fundamental, higher-level goals (Cooper, 2013). Furthermore, exposure to adverse experiences was described as preventing attainment of higher-level goals due to high levels of interpersonal control and uncertainty (Hirsh et al., 2012; Mansell, 2005; Varese, 2014). Integrating goals across levels of abstraction was identified as a factor of goal conflict resolution associated with reduced psychological distress. This is allied with the self-concordance model (Sheldon & Elliot, 1999) that proposes that goals related to

fundamental needs and intrinsic values increases psychological wellbeing. Moreover, the literature showed that goals also need to be integrated with the environment and the resources available. A perceived loss of identity or connection with others can lead to incompatible higher-level goals (i.e., to be expressive vs. to be accepted) (Sincoff, 1990). This represents an ideal-self vs. ought-other discrepancy as depicted in SDT and is comparable to the humanistic view that internalised societal norms generate goal conflict. The literature highlighted the importance of goals being cohesive to one's identity and their social context.

Limitations

Systematic scoping reviews cannot inform theory or practice and they are not amenable to critical appraisal. Therefore, the findings must be interpreted with extreme caution. Another limitation is that although there was 94% agreement between raters, only moderate reliability was demonstrated. However, Cohen's Kappa corrects for chance agreement between raters and therefore, may underestimate reliability (Steinijans et al., 1997).

Database searches were limited to articles written in English language limiting generalisability to non-Westernised countries. This is concerning as it has been recognised that goal characteristics differ across cultures and have varying effects on wellbeing (Oishi & Diener, 2001; Elliot et al., 2012). Moreover, empirical studies were excluded to limit the volume of articles however, valuable literature that has not been incorporated into a review could have been missed. A challenge of qualitative conventional content analysis is that categorising data may fail to portray a comprehensive understanding of each article. Furthermore, the analysis was conducted independently by the researcher. Although an inductive approach taken, the results may reflect the author's preconceptions and theoretical influences. The review would have been more robust if multiple reviewers were involved in the data charting process.

Future directions

The properties of goal conflict in relation to psychological distress that have received the most research attention to date, and therefore, seem suitable candidates for further research are awareness and psychological flexibility. Future systematic reviews and/or meta-analyses into the relationship of such factors with goal conflict and psychological distress would be fruitful to inform theory and practice. Furthermore, empirical studies to explore the proposed relationships between awareness, psychological flexibility, goal conflict and psychological distress would be of interest. If a relationship was established, mediation analysis would be useful to explore the following hypotheses:

1. Awareness mediates the relationship between goal conflict and psychological distress
2. Psychological flexibility mediates the relationship between goal conflict and psychological distress

Conclusion

This scoping review revealed 24 properties of goal conflict in relation to psychological distress that have been considered within the literature. Factors associated with increased goal conflict and subsequent increases in psychological distress were, limited awareness of goal conflict, conflict occurring in higher-level goals, and conflicts of greater severity. Furthermore, susceptibility to goal conflict and associated distress appears to be due to a combination of interrelated external factors and internal factors. However, it seems that environmental influences, psychological inflexibility, and dysfunctional motivational processes have gained the most research interest. The review also indicated that the literature is concerned with how goal conflicts are resolved. Increased awareness of higher-level goals to enable reorganisation at the source of the conflict, agreement throughout the goal hierarchy, and psychological flexibility have been recognised as properties of goal conflict resolution. Due to the prevalence of research pertaining to awareness and

psychological flexibility in relation to goal conflict and psychological distress, such properties seem fruitful avenues for further research.

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Paper 2: Empirical Study

A pilot feasibility study of Method of Levels (MOL): Targeting goal awareness and wellbeing

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The following paper has been prepared for submission to *the Cognitive Behaviour Therapist*. Author guidelines are provided in Appendix D. Please note, there have been deviations from the guidelines to ensure adherence to thesis submission requirements.

Abstract

Background: It is proposed that Method of Levels (MOL) works by facilitating exploration of a problem and shifting and sustaining awareness on higher-level goals.

Aim: This study aimed to assess the feasibility of a protocol to evaluate whether MOL increases awareness of higher-level goals more than a control condition (Brief Behavioural Activation (BBA). A subsidiary aim was to examine the feasibility of a novel outcome measure, the Goal-level Awareness Questionnaire (GAQ).

Method: Participants were an opportunity sample of 40 adults who were experiencing low mood. Participants were randomly allocated to the MOL (*n* = 20) or BBA (*n* = 20) condition where they received one intervention session and a 7-day follow-up via video-therapy. Outcome measures were completed at three timepoints, pre-therapy; post-therapy; 7-day follow-up.

Results: Planned recruitment and retention rates were exceeded, and acceptability ratings were comparable between MOL and BBA. Fidelity to the BBA protocol was demonstrated however, adherence to MOL principles was inconclusive, questioning the feasibility of delivering MOL via video-therapy. Additionally, the GAQ indicated poor to moderate inter-rater reliability, suggesting that it may not be feasible to administer.

Conclusion: This study demonstrated that it is feasible and acceptable to recruit and retain an analogue sample to a single session randomised controlled trial of MOL and BBA, and that BBA is a suitable control condition. However, the feasibility of the GAQ remains to be established and revisions are proposed. Additionally, the GAQ requires validation prior to use in future trials.

Keywords: *Method of Levels (MOL), Perceptual Control Theory (PCT), awareness, goal conflict*

Introduction

Method of Levels (MOL; Carey, 2006) is a transdiagnostic approach that directly applies Perceptual Control Theory (PCT; Powers et al., 1960; Powers, 1973) principles of control, conflict, and reorganisation. The key tenets of PCT are detailed in chapter one and elsewhere (e.g., Mansell, et al. 2012; Powers, 1973). However, it is important to reiterate that according to PCT, psychological distress is the result of loss of control due to conflicting goals and reorganisation is the proposed neural mechanism of change (Powers, 1973; Mansell, 2021). Powers et al. (1960) proposed that reorganisation occurs where the current focus of conscious awareness is. This process occurs at all levels of the goal hierarchy however, it is reorganisation within higher-level systems, those responsible for generating goal conflict, that leads to enduring psychological change. Therefore, reducing psychological distress involves shifting awareness from lower levels (i.e., symptoms of distress), to goals in conflict, to higher levels (the source of conflict). Once sustained here, reorganisation can restore control (Mansell, 2021). It is postulated that the core mechanism of change for effective psychological therapies is the degree that it facilitates focus on present moment perceptions to increase awareness of higher-level goals and the methods employed to achieve them (Mansell et al., 2012). Moreover, it is proposed that MOL enables reorganisation by facilitating in-depth exploration of a problem and shifting awareness to higher-level goals (Carey, 2006; 2008).

There is evidence to show that individuals experiencing depression generally generate less specific goals (Dickson & Moberly, 2013; Watkins, 2011). Nonetheless, it is not the identification of abstract goals *per se* that is problematic, it is the ability to shift between levels of abstraction and render abstract goals into concrete actions (Dickson & Moberly, 2013). This is consistent with Action Identification Theory (AIT; Vallacher & Wegner, 1987). As outlined in chapter one, AIT proposes that action identifications shift between lower and higher levels until an optimal level, conducive to the current context is attained. Watkins (2008; 2011) stipulates that there is evidence to show that flexible

regulation of goal/action identifications in response to situational demands is impaired in depression and other psychological disorders (Watkins, 2011). Furthermore, Morris and Mansell (2018) hypothesised that rigid application of transdiagnostic maintenance processes (i.e., rumination and perfectionism) contributes to increases in psychopathology. As detailed in chapter one, rigid employment of maintenance processes is equivalent to arbitrary control, that is the disregard of goals due to attempts to make behaviour conform to other goals. This suggests that the generation of abstract goals alone is not sufficient to resolve goal conflict and subsequently reduce psychological distress. The strategies to achieve such goals need to be flexible and in accord with other important goals.

According to PCT, it is important to bring awareness to higher-level goals to determine whether continued employment of a particular strategy is conducive to all important goals (Morris & Mansell, 2018). Reorganisation does not change goals or behaviours, it alters the properties of the systems that set goals and employs behaviours to allow the smooth control of perception (Powers, 1973). From a PCT perspective, enduring depression can be understood as reorganisation occurring at a level that is not responsible for the goal conflict and therefore, shifting awareness to higher-level goals is required to enable reorganisation of blocked control systems (Powers, 1973). An MOL therapist therefore has two goals, firstly, to enable a client to talk about a problem in the present moment by asking short curious questions to sustain attention on the current focus of awareness, or at the edge of it (Mansell, 2018). Secondly, to notice and ask about disruptions. A disruption can be a pause, a smile, change in movement (i.e., looking away, a change in volume, pace, or intonation in speech, a change in topic) or an evaluation (i.e., “that sounds ridiculous”). PCT infers that disruptions indicate transient shifts in awareness, which are often to a higher level (Mansell et al., 2012). Through asking about disruptions awareness is shifted and sustained on higher-level control systems, enabling reorganisation to occur at the level where the conflict is generated (Carey, 2008).

Open trials of MOL have shown moderate to strong effective sizes for reducing psychological distress in diagnostically heterogenous samples including, depression, anxiety disorders, addiction, suicidality, and bereavement (Alsawy et al., 2014). MOL has been evaluated in primary care (Carey & Mullan, 2008; Carey et al., 2009; Bird et al., 2019), secondary care (Carey et al., 2013), and inpatient settings (Jenkins et al., 2020). Qualitative research also shows clients report positive experiences of MOL (Griffiths et al., 2019; Jenkins et al., 2020). Furthermore, Cocklin et al. (2017) employed a novel video-feedback methodology that enabled an in-depth, micro-level inquiry of client experience during an MOL therapy session. Therapist approach, control and talking freely were perceived as the most helpful elements. This is consistent with PCT as it provides support for the notion of control as an important factor of the therapeutic process.

MOL has also informed the development of Manage Your Life Online (MYLO), an online relational agent intervention that aims to emulate an MOL therapist (Gaffney et al., 2014; Bird et al., 2018). Gaffney et al. (2014) found that increased awareness of goal conflict and higher-level processes predicted greater distress reduction, problem resolution and higher ratings of the helpfulness of MYLO. A later study demonstrated that participants perceived questions that facilitated them to talk freely, increase awareness of their difficulties and gain new perspectives as helpful (Gaffney et al., 2020). This provides tentative support for reorganisation as the mechanism of change in MOL, and that reorganisation follows awareness (Carey, 2006; Powers, 1973). Despite such promising findings, there is a lack of large-scale controlled trials to determine the efficacy of MOL, and the proposed mechanism of change is yet to be proven.

Novel measures based on the key constructs of PCT have been developed to test the proposed mechanism of change of MOL. The Reorganisation of Conflict Scale (RoC; Higginson, 2007) is a self-report devised to measure engagement in processes that promote or block the process of reorganisation. More recently a state version was developed, the Awareness of Goal Conflict scale (AGC; Potempska, 2019), which aims to assess

awareness of a goal conflict immediately after talking about a problem in an MOL session. A limitation of such measures is that they do not directly assess awareness of higher-level goals as a potential effect of MOL. A measure that has been developed to assess shifts in awareness towards conflict and higher-level goals during a session of MOL, is the Depth and Duration of Awareness Coding Scheme (D-DACS; Higginson & Mansell, 2016). However, the D-DACS is based on observer codings which are susceptible to misinterpretation and challenges the theoretical assumption of MOL that only the individual knows where their awareness is at that moment in time (Carey, 2006; Grzegrzolka & Mansell, 2019).

The above account indicates that MOL may generally raise awareness of higher-level goals more than other psychological therapies. Parker (2018) began to investigate this hypothesis and developed a new methodology to assess whether individuals' most important goals changed following a session of MOL. Thematic analysis demonstrated that most participants reported changes to their most important goal and gained new perspectives. However, there were no statistically significant differences in the level of goal abstraction (low-level or high-level) between pre-exploration and post-exploration ratings. It was posited that this may be because only one goal was assessed which was rated as a high-level goal for 70% of participants pre-exploration, thus creating a ceiling effect. Furthermore, the authors note that the coding frame used to measure levels of abstraction was not sufficient in identifying subtle changes in goal abstraction as qualitative findings indicated participants reached a new "overarching goal" after goal exploration. This suggests that MOL may work as hypothesised however, assessment measures need refining to accurately determine whether individuals' level of goal awareness changes following MOL.

To build upon previous work, the current study aimed to conduct a randomised pilot study to assess the feasibility of a protocol to determine whether MOL increases awareness of higher-level goals more than other psychological therapies. Brief Behavioural Activation (BBA) was employed as a control condition as in contrast to MOL, BBA focuses awareness on lower-level goals specifying what, where, when and how goals should be implemented.

However, despite differences in therapeutic aim, like MOL, BBA can be delivered in a single session (Gawrysiak et al., 2009), it is considered an acceptable approach (e.g., Myhre et al., 2018; Lewis-Smith et al., 2021; Tompkins et al., 2017), and the therapeutic alliance is integral to its principles (Lejuez et al., 2005). A subsidiary aim was to examine the feasibility of a novel measure, the Goal-level Awareness Questionnaire (GAQ) (Appendix E).

Aims:

- To assess recruitment and retention rates against planned benchmarks
- To establish and compare the adherence, credibility, and acceptability of MOL and BBA
- To examine the feasibility of using the GAQ as a possible outcome measure in a future trial
- To report the effect size of GAQ to inform future power calculations for a larger trial
- To report the mental health and distress outcomes over time between MOL and BBA.

Method

Participants

Previous feasibility studies of MOL (Griffiths et al., 2019; Jenkins et al., 2020) and BBA (Gawrysiak et al., 2009) have recruited between 30-40 participants. Therefore, a minimum sample size of 30 participants was deemed suitable for this study. In accord with previous studies (e.g., Ekers et al., 2008), a retention rate of 80% was considered a successful outcome.

Forty participants were recruited via online advertisement on the University of Manchester's Student Experiment Participation Scheme (SEPS); research volunteering webpages; the Faculty of Biology, Medicine and Health daily announcement emails; and social media platform 'Twitter'. Inclusion criteria were: Aged over 18 years; able to speak and understand fluent English; experiencing symptoms depression as indicated by scores of

five or above on the Patient Health Questionnaire (PHQ-9) and be willing to talk to a researcher about a current problem. To recruit a homogeneous analogue sample and as the provision of one session of psychological therapy may not be sufficient to meet the needs of individuals with complex clinical difficulties exclusion criteria were: Significant brain injury or moderate to severe learning difficulties; a diagnosis of schizophrenia, schizoaffective disorder, delusional disorder, major depression, bipolar disorder, personality disorder; alcohol or substance misuse difficulties; accessing any other talking therapies; taking any prescribed medication for mental health difficulties; presenting with significant risk. Risk protocols are provided in Appendix F.

Design

The study utilised a parallel group randomised controlled trial with a 2x3 mixed design. The between-subjects variable was the experimental condition with two levels (MOL; BBA), and the within-subjects variable was time with three levels (pre-intervention; post-intervention; follow-up). The primary dependent variable was scores on the GAQ and subsidiary dependent variables were scores on the mental health and distress outcomes (see below).

Materials

Method of Levels (MOL) intervention

A description of MOL is provided in the introduction. As MOL aims to facilitate control, clients are able to determine the content and parameters of sessions i.e., timing, duration, frequency (Mansell, 2018). Participants were informed that the session duration was in their control, with a limit of up to 60 minutes to ensure equivalence with BBA. MOL sessions were conducted by the researcher, a Trainee Clinical Psychologist. The researcher was previously employed as a Psychological Wellbeing Practitioner (PWP) within NHS Improving Access to Psychological Therapies (IAPT) services where she delivered low-intensity interventions, including MOL. During the study period the researcher received MOL

training and supervision from the project supervisors who have vast experience in delivering MOL, and in training and supervising others using the approach. Supervision was provided via individual and group sessions and feedback on audio recorded sessions. Additionally, the researcher engaged in peer supervision with another Trainee Clinical Psychologist who was delivering MOL.

Brief Behavioural Activation (BBA) intervention

BA is an evidenced-based treatment for depression (e.g., Jacobson et al., 1996) commonly delivered by PWPs over three to eight 20–30-minute sessions in person or via telephone (Richards, 2010). Gawrysiak et al. (2009) demonstrated that BA could be modified into a single-session intervention. The BBA intervention employed in this study utilised an adapted version of the six-stage protocol developed for low-intensity IAPT workers (Richards, 2010) based on the modifications devised by Gawrysiak and colleagues. The six-stage protocol involves: 1) Explaining the rationale for BA; 2) identifying routine, pleasurable and necessary activities that individuals are avoiding or new activities; 3) developing a hierarchy of identified activities from easiest to most difficult, 4) scheduling activities 5) implementing activities, 6) reviewing progress, problem-solving and scheduling the next activities. Steps 1-4 were completed in the session supplemented with worksheets. Participants had 7-days to carry out step 5, and step 6 was completed during the follow-up session. BBA sessions were conducted by the researcher who had substantial experience delivering the approach. The researcher received BBA supervision from an external supervisor, the former managing director of a social enterprise delivering low-intensity IAPT interventions. Supervision consisted of individual telephone and videoconferencing session and verbal feedback on audio recorded BBA sessions.

Goal-level Awareness Questionnaire (GAQ)

The GAQ describes goals in accord with Emmons' (1986) personal strivings "an objective that you are typically trying to accomplish or attain" (*p*. 1060). The GAQ requires

individuals to record 5-15 personal goals and rank them in order of importance to them right now. A maximum of 15 goals was chosen in accord with Emmons (1986) personal strivings list. A minimum of five goals was chosen to prevent a ceiling effect, as found in Parker's (2018) study. Coding is based on Powers (1973; 1998) levels of perception that represent increasing levels of abstraction. While eleven levels have been identified, level nine is where rational thinking and reasoning pertaining goals begins (Powers, 1998). Goals ranked one to five are coded on a 3-point scale, 1 = program-level (i.e., 'to pass my psychology exam'); 2 = principle-level (i.e., 'to get a good education'; 3 = system-level (i.e., 'to be successful'). Scores range between 5-15, with higher scores indicating a higher level of goal awareness.

The GAQ was rated independently by two undergraduate psychology students who had volunteered to support the study. One volunteer (primary rater) had been involved with the study since September 2019 with another volunteer who ceased involvement with the study in January 2021 due to competing demands. Therefore, another volunteer (secondary rater) was recruited. GAQ scores rated by the primary rater were utilised in the main analysis. GAQ scores rated by the secondary rater were used to determine inter-reliability. The researcher delivered training in scoring the GAQ via individual and group video-conferencing sessions between November 2020 and January 2021. The researcher piloted the GAQ on friends and family who were asked to provide pseudo goals for training purposes. Initial pilots were discussed between the researcher and the volunteers to agree a level of awareness for each goal. Once the volunteers felt competent in scoring the GAQ, they were provided with further pilot versions to rate independently. Ratings were compared and discrepancies were discussed to reach consensus. The researcher consulted project supervisors when there was uncertainty to ensure scoring remained consistent with PCT principles.

Participant Demographics Questionnaire

Participant demographics (Appendix G) is a multiple-choice questionnaire that obtains details on age group, gender, ethnicity, and employment status.

Screening Questionnaire

The screening questionnaire (Appendix H) is a multiple-choice questionnaire that obtains details in relation to the inclusion/exclusion criteria to determine eligibility to participate in the study.

Adherence measures

In accord with previous studies of CBT (Borkovec et al., 1993; Stanley et al., 2003, 2009; Westra et al., 2009) and MOL (Griffiths et al., 2019; Carey et al., 2013), the primary project supervisor assessed adherence on a random sample (20%) of the audio recorded therapy sessions.

MOL Session Evaluation (MOLSE). The MOLSE (Carey & Tai, 2012) (Appendix I) is an 8-item observer-rated questionnaire that assesses adherence to MOL principles e.g., "To what extent was the content of the session generated by the patient?". It is rated on a 10-point likert scale (1 = not at all to 10 = completely). Scores range from 0 to 80, with higher scores indicating greater adherence. At present, its reliability and validity has not been demonstrated. Furthermore, a threshold as to what represents acceptable MOL adherence has not been established. Previous feasibility studies using the MOLSE have obtained observer-rated mean total scores of 68 (*n* = 10, 20% of sessions) (Griffiths et al., 2019) and 67.4 (*n* = 11, 22% of sessions) (Carey et al., 2013). Jenkins et al. (2020) used self-ratings and demonstrated mean scores ranging from 5.0 to 8.6 on each item.

Brief Behavioural Activation Fidelity Scale (BBAFS). The BBAFS (Hodgson, 2019) (Appendix J) is a 10-item observer-rated questionnaire adapted from the Cognitive Therapy Rating Scale Revised (CTS-R; Blackburn et al., 2001) to measure therapist

adherence and competence in delivering BBA. It has demonstrated good inter-rater reliability, internal consistency, and face validity. Each item is scored on a 7-point likert scale (0 = no adherence to 6 = full adherence and high level of skill) with scores ranging from zero to 60. As the researcher remained blind to the outcome measures and risk assessments and management plans were not always conducted within the therapy session, items, 'clinical use of outcome measures', and 'risk assessment and management' were removed. Hodgson (2019) stipulated that a total score of 30 (50%) and a score of two on each item represents acceptable fidelity. As two items were removed, the total score to determine fidelity was adjusted to 24.

Acceptability measures

Credibility/Expectancy Scale (CEQ). The CEQ (Devilly & Borkovec, 2000) is a 6-item self-report that measures the credibility and expected improvement of therapeutic interventions. It has demonstrated predictive validity, high internal consistency, and test-retest reliability. To determine equivalence between conditions the CEQ was completed prior to the intervention sessions, after participants had read a short description of each approach (Appendix K). The CEQ contains two sets of questions, set I contains four items that refer to what one thinks will happen, and set II contains two items about what one feels will happen. Items 1, 2, 3 and 5 are rated on a 9-point likert scale (1 = not at all to 9 = very), and items 4 and 6 are rated on a 11-point likert scale (0% to 100%). Factor analysis has shown that the first three items represent credibility, and the final three items represent expectancy (Devilly & Borkovec, 2000). In accord with previous studies (e.g., Borkovec et al., 2002; Thompson-Hollands et al., 2014; Westra et al., 2011), credibility was determined by calculating the mean of items 1-3. Expectancy was determined by responses on item 4 ("By the end of the therapy period, how much improvement in your symptoms do you think will occur?"), as it has demonstrated good face validity and it is widely used to indicate treatment outcome expectancy (e.g., Thompson-Hollands et al., 2014).

Session Rating Scale (SRS). The SRS (Duncan et al., 2003) is a four-item visual analogue scale assessing key dimensions of the therapeutic alliance including, relationship; goals and topics; approach or method; and overall session. It has demonstrated internal consistency and concurrent validity. It was not possible to implement the visual analogue scale in the online questionnaire therefore, an 11-point likert scale (0 - 10) was used. Scores range from 0 to 40 with higher scores representing a greater therapeutic relationship. The authors suggest that a total score lower than 36, or less than 9 on each item could indicate a concern and should be discussed with the client. As the researcher remained blind to responses on the outcome measures individual ratings could not be addressed. However, participants were invited to discuss their experience of the intervention, including concerns during the follow-up session.

Criterion measures

Awareness of Goal Conflict (AGC) scale. The AGC scale (Potempska, 2019) (Appendix L) is a 10-item self-report that measures awareness of goal conflict in relation to the problem(s) discussed immediately after a therapy session e.g., “When I talked about the problem a different way of seeing it just came to me”. Each question is scored on an 11-point likert scale (0% = don’t believe this at all to 100% = believe this completely). Scores range from 0 to 100 with higher scores indicating greater awareness of goal conflict. The AGC has demonstrated good internal reliability (Cronbach’s alpha = .82) (Potempska, 2019) however, its validity has not been evaluated.

Behaviour Identification Form (BIF). Derived from AIT, the BIF (Vallacher & Wegner, 1989) is a 25-item questionnaire that assesses individual differences in personal agency. Each item contains an action and has two possible responses, a low-level identification, how the action is performed, and a high-level identification, why the action is performed. For example, “Making a list: a) getting organised (high-level) or b) writing things down (low-level)”. Individuals are required to choose the response that best reflects their

personal preference to describe the item. Low-level identifications = 0; high-level identifications = 1. Higher scores indicate increased personal agency and a tendency to understand actions in terms of consequences and implications. Lower scores represent a lower level of personal agency and a tendency to understand actions in terms of details and mechanics (Vallacher & Wegner, 1989). The BIF has demonstrated internal reliability and convergent, divergent and predictive validity (Vallacher & Wegner, 1989).

The Depth and Duration of Awareness Coding Scheme (D-DACS). The D-DACS (Higginson & Mansell, 2016) was conducted on a subset of the MOL audio recordings (*n* = 3). However, due to the small sample size it was removed from the main analysis. Supplementary information and analysis are provided in Appendix M.

Mental health and distress outcome measures

Patient Health Questionnaire (PHQ-9). The PHQ-9 (Kroenke et al., 2001) is a 9-item self-report questionnaire that measures symptom severity based on the DSM-IV criteria for Major Depressive Disorder (e.g., “Little interest or pleasure in doing things”). Each item is rated according to its frequency of occurrence over the past two weeks on a 4-point scale (0 = not at all, 1 = several days, 2 = more than half the days, 3 = nearly every day). Scores range from 0 to 27 with thresholds of 5, 10, 15 and 20 indicating mild, moderate, moderately severe and severe, respectively. The PHQ-9 has demonstrated excellent internal reliability and inter-rater reliability, and criterion, construct and external validity (Kroenke et al., 2001).

General Anxiety Disorder (GAD-7). The GAD-7 (Spitzer et al., 2006) is a 7-item self-report questionnaire that measures symptom severity based on the DSM-IV criteria for Generalised Anxiety Disorder (GAD) (e.g., “Feeling nervous, anxious or on edge”). It is scored on the same four-point scale as the PHQ-9. Scores range from 0 to 21 with thresholds of 5, 10, and 15 indicating mild, moderate and severe, respectively. The GAD-7 has demonstrated good reliability and criterion, construct, factorial, and procedural validity (Spitzer et al., 2006).

Psychological Outcome Profiles (PSYCHLOPS). The PSYCHLOPS (Ashworth et al., 2004) consists of two self-report questionnaires, pre-therapy and post-therapy that assess problems, functioning and wellbeing. The PSYCHLOPS has demonstrated internal reliability, concurrent validity, and convergent validity (Ashworth et al., 2009). The pre-therapy questionnaire contains four questions with nine items e.g., a) “Choose the problem that troubles you most”, b) “How much has it affected you over the last week?”, c) “How long ago were you first concerned about this problem?” Four items (1b, 2b, 3b, 4) scored on a six-point likert scale are used in scoring. The post-therapy questionnaire contains six questions with nine items. The same items (1b, 2b, 3b, 4) are used in scoring. For both questionnaires, scores range from 0 to 20 with higher scores indicating higher severity.

The post-therapy PSYCHLOPS requires individuals to refer to responses on the pre-therapy questionnaire unfortunately, the online system used to implement the questions did not have the functionality to retrieve participants previous responses. Therefore, the pre-therapy questionnaire was sent to participants in a word document via email. Participants were required to complete and return the questionnaire to the researcher prior to intervention.

Procedure

Approval and piloting

The study was approved by the University of Manchester’s Research Ethics Committee (2020-7902-12953) (Appendix N). Prior to recruitment, the protocol was piloted using a Trainee Clinical Psychologist, an undergraduate psychology student and a member of the Community Liaison Group (CLG) as participants. Feedback was incorporated into the study protocol.

Recruitment and screening

Interested participants were emailed the participant information sheet along with the consent form and the contact details form (Appendices O-Q) that they were required to read, complete and return to the researcher. Upon receipt of informed consent, participants were emailed a link to a secure password protected university portal to complete the online screening questionnaires (participant demographics, screening questionnaire, PHQ-9 and GAD-7). Participants who did not meet the eligibility requirements did not continue with the study and were debriefed. Eligible participants used an online choose-and-book system to select a date and time for the intervention session. Participants were then sent a confirmation email, the PSYCHLOPS (pre-therapy) questionnaire, and a link to the online pre-therapy questionnaires (GAQ, BIF and CEQ). Using an online block randomisation generator participants were randomly allocated to the MOL or BBA condition.

Intervention session

The intervention sessions were delivered by the researcher between April and December 2020 via video-therapy and were audio recorded on an encrypted dictaphone. Participants were in a private place and the researcher was based in their home office. On the day of the intervention session, participants were informed which therapy they would receive. Those in the BBA condition were sent the corresponding worksheets for use in the session. At the end of the intervention, the follow-up session was arranged, and the researcher emailed participants with a link to the post-therapy questionnaires (PHQ-9, GAD-7, PSYCHLOPS (post-therapy) GAQ, BIF, AGC, SRS), which they were required to complete as soon as the videoconference ended.

Follow-up session

Seven days after the intervention session participants were emailed a link to the follow-up questionnaires (PHQ-9, GAD-7, PSYCHLOPS (post-therapy), GAQ, BIF, AGC). Upon completion of the questionnaires, participants attended a follow-up session.

Participants in the MOL group were asked about their experience of the session and whether there was anything that had come up following the session that they wanted to discuss using MOL. Participants in the BBA condition were asked about their experience of implementing the diary and were invited to complete another diary with the researcher. Participants were debriefed and given a choice of a £5 e-Gift voucher or course credits as reimbursement for their time.

Analysis

All statistical analysis were conducted using SPSS (version 25). Data was explored using boxplots to identify outliers and extreme scores. Outliers were determined by scores greater than the upper quartile, plus 1.5 times the inter-quartile range. Extreme scores were determined by scores greater than the upper quartile plus 3 times the inter-quartile range. The same criteria was applied to scores below the lower quartile (Field, 2018). In accord with the central limit theorem, as the sample size exceeded 30, normality was assumed. Nonetheless, to account for the possibility of non-normally distributed data and to reduce bias from outliers bootstrapping via bias corrected accelerated (BCa; Efron & Tibshirani, 1993) was computed.

Descriptive statistics are reported for participant demographics, GAQ scores, acceptability ratings, and mental health and distress outcomes. Independent samples t-tests (two-tailed) were conducted to obtain the mean difference and 95% BCa confidence intervals for the GAQ, CEQ, and SRS. Where confidence intervals ranged between a negative and a positive value, this implied that the true, unknown population estimate could be zero (Field, 2018). Significance levels are not reported due to insufficient power. Effect sizes were calculated for exploratory estimates, which were interpreted in accord with Cohen's *d* (Cohen, 1988), small (0.2), medium (0.5) and large (0.8).

The inter-rater reliability for the GAQ was examined by intra-class correlation coefficients (ICCS) and 95% confidence intervals which were calculated based on an

average-measures, two-way mixed-effects model with absolute agreement. Interrater reliability was interpreted in accord with criteria defined by Koo and Li (2016) (< .5 = poor; .5 - .75 = moderate; .75 - .9 = good; > .9 = excellent). To explore the construct validity of the GAQ, pearson product-moment correlation coefficients were conducted on the GAQ, BIF and AGC. The strength of relationships were interpreted in accord with Dancy and Reidy (2007) (< .3 = weak; .4 - .6 = moderate; .7 - .9 = strong).

Future definitive trial criteria

For a future RCT to be implemented based on the proposed protocol the following criteria are required:

- To recruit a minimum sample size of 30 participants and retain 80%
- MOLSE total scores to be similar to mean scores obtained in previous studies
- BBAFS total scores to be 24 or above
- CEQ and SRS ratings to be equivalent for MOL and BA ($d < 0.5$)

Results

Exploring data

GAQ raw data showed that data was missing from one case pre-intervention, three cases post-intervention and two cases at follow-up. In such instances, participants had recorded less than five goals and were therefore removed from analysis as total GAQ scores are obtained from the sum of five goals. Total scores derived from less than five goals would be an inaccurate representation of goal-level awareness. Boxplots identified two outliers (scores of 1 and 9 out of 40) for the SRS; one outlier (score of 20 out of 27) on the follow-up PHQ-9; and one outlier (score of 100 out of 100) on the follow-up AGC.

Participant demographics

Participant demographics are shown in Table 12.

Table 12

Participant Demographics for the Total Sample and MOL (*n* = 20) *and BA* (*n* = 20) *conditions*

Variable	MOL		BA		Total sample	
	n	%	*n*	%	*n*	%
Age group						
18-24	8	40	13	65	21	53
25-34	9	45	4	20	13	32
35-44	2	10	2	10	4	10
55-65	1	5	1	5	2	5
Gender						
Male	9	45	4	20	13	33
Female	11	55	16	80	27	67
Ethnicity						
White British	11	55	12	60	23	58
White Other	2	10	5	20	7	17
Asian	4	20	3	15	7	17
Other	3	15	0	0	3	8
Employment						
Student	13	65	15	75	28	70
Employed	6	30	5	20	11	28
Unemployed	1	5	0	0	1	2

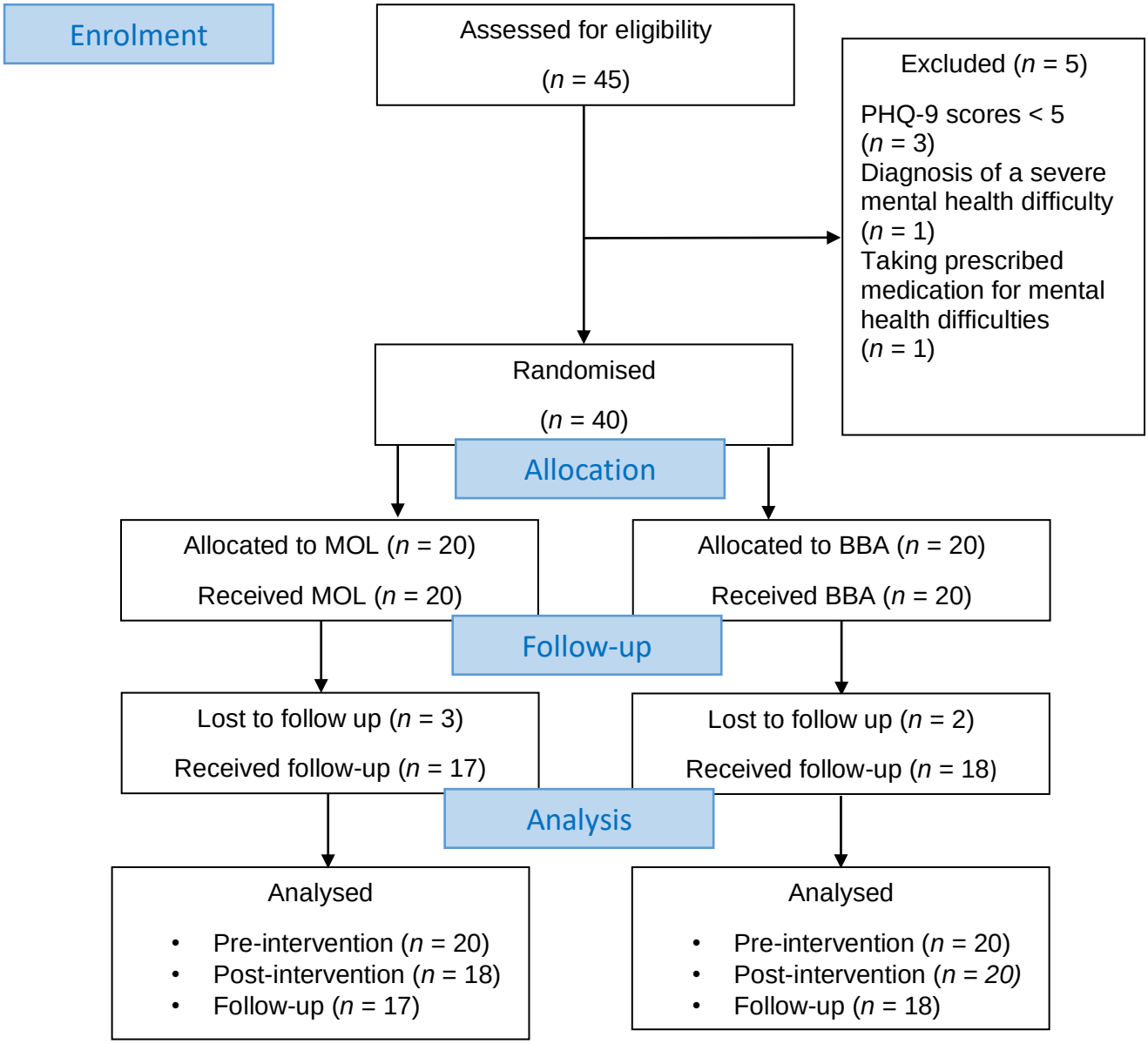
Feasibility

Recruitment and retention

The study recruited 45 participants between April and December 2020. The pilot study ended when 40 eligible participants had been recruited as this was deemed a suitable sample size in accord with previous feasibility studies. A CONSORT diagram is presented in Figure 2.

Figure 2

CONSORT diagram



Adherence

MOLSE ratings are presented in Table 13. Three of the total scores were lower than mean scores observed in previous studies (Carey et al., 2013; Griffiths et al., 2019). BBAFS ratings are shown in Table 14. Item scores were above the minimum standard of 2 and total scores were above the minimum standard of 24, indicating fidelity to the BBA protocol.

Table 13

MOL Session Evaluation (MOLSE) Observer-ratings (n = 4)

Item	Participant			
	1	2	3	4
Content of the session generated by the client	8	9	9	9
Questioned rather than advise, suggest, or teach	8	7	10	9
Asked about disruptions	3	4	7	4
Asked detailed and specific questions	5	4	8	7
Questioned rather than assumed	7	6	9	8
Asked about the participant's immediate experience	8	6	9	7
Followed rather than led the participant	7	7	9	8
Facilitated sustained focus in one or more areas	6	4	8	8
Total	52	47	69	60

Table 14

Brief BA Fidelity (BBAFS) Observer-ratings (*n* = 4)*.*

Item	Participant			
	1	2	3	4
Agenda setting	4	5	6	4
Feedback	5	6	4	5
Collaboration	5	5	6	6
Pacing and efficient use of time	5	6	6	6
Interpersonal effectiveness	5	5	6	5
Positive reinforcement	3	5	5	5
Appropriate use of BA techniques	5	5	5	5
Assigns homework	5	6	5	5
Total	32	43	43	41

Inter-rater reliability

Intraclass correlation coefficients (ICC) are reported in Table 15, indicating that the GAQ had poor to moderate inter-rater reliability.

Table 15

Intraclass Correlation Coefficients (ICCs) of the Goal-Awareness Questionnaire (GAQ)

Measure	*n*	ICC	95% CI	
			LL	*UL*
Pre-intervention GAQ	39	.64	.17	.83
Post-intervention GAQ	34	.44	-.19	.74
Follow-up GAQ	35	.56	-.20	.82

Note. LL = lower limit; *UL* = upper limit.

Construct validity

The GAQ met the assumption of linearity with the Behaviour Identification Form (BIF) and the Awareness of Goal Conflict scale (AGC). Pearson *r* bivariate correlations coefficients indicated that the GAQ had weak relationship with the BIF (*r* = .16) and the AGC (*r* = .11). The BIF and AGC also demonstrated a weak relationship (*r* = .02).

GAQ estimated effect

Descriptive statistics are reported in Table 16. Post-intervention scores were higher for the MOL condition than the BBA condition. An independent t-test demonstrated the mean difference, -2.12, 95% BCa CI [-3.57, -.67]. The confidence interval indicates that it is possible that the mean scores of the two conditions are different. To examine whether this difference was retained, an independent samples t-test was conducted on the follow-up GAQ which demonstrated the mean difference -0.22, 95% BCa CI [-1.98, 1.57]. From the confidence interval it is unclear whether there is a difference between conditions.

Table 16

Goal-level Awareness Questionnaire (GAQ) Descriptive Statistics for MOL and BBA Conditions, Pre-Intervention, Post-Intervention and Follow-Up

Time	MOL					BA					*d*
	n	*M*	*SD*	95% BCa CI		*n*	*M*	*SD*	95% BCa CI		
				LL	*UL*				*LL*	*UL*	
Pre-intervention	19	8.89	1.97	7.95	9.84	20	8.30	2.11	7.71	9.41	0.29
Post-intervention	17	10.65	2.62	9.50	11.85	17	8.53	1.70	7.66	9.40	0.96
Follow-up	18	9.28	3.18	7.79	10.67	17	9.06	2.08	8.06	10.00	0.08

Acceptability

Credibility ratings obtained on the CEQ were slightly higher for MOL (*M* = 5.63, *SD* = 1.32) than BBA (*M* = 5.15, *SD* = 1.84), representing a small effect size (*d* = 0.3). Similarly, expectancy ratings were greater for MOL (*M* = 37.25, *SD* = 20.51) than BBA (*M* = 34.5, *SD* = 23.09), representing a small effect size (*d* = 0.13). Independent samples t-tests demonstrated the mean difference between credibility scores -.48, BCa 95% CI [-1.14, 0.20], and expectancy scores, -2.75, BCa 95% CI [-12.14, 6.38]. From the confidence intervals it is unclear whether there is a difference in CEQ scores between conditions. Descriptive statistics of SRS ratings for MOL and BBA are reported in Table 17. Mean total SRS scores were greater for BBA in comparison to MOL however, the effect size was small. An independent samples t-test demonstrated the mean difference, 3.86, BCa 95% CI [-1.96, 10.59]. From the confidence interval it is unclear whether there is a difference in SRS scores between conditions.

Table 17

Session Rating Scale (SRS) Descriptive Statistics for MOL (n = 18) and BBA (n = 19) Conditions

Items	MOL				BBA				*d*
	M	*SD*	95% BCa CI		*M*	*SD*	95% BCa CI		
			LL	*UL*			*LL*	*UL*	
Relationship	8.22	2.51	7.00	9.28	9.21	0.98	8.79	9.58	0.52
Goals/topic	8.39	2.93	6.75	9.56	8.26	2.33	7.00	9.21	0.05
Approach	6.00	3.40	4.33	7.67	7.79	2.15	6.65	8.68	0.63
Overall	6.06	3.54	4.22	7.61	7.26	2.47	6.11	8.38	0.39
Total SRS	28.67	10.98	22.82	33.50	32.53	6.98	28.83	35.53	0.42

Note. LL = lower limit; *UL* = upper limit.

Mental health and distress outcomes

Descriptive statistics for the PHQ-9, GAD-7 and PSYCHLOPS are reported in Table 18.

Table 18

Descriptive Statistics for Mental Health and Distress Outcomes for MOL and BBA Conditions

Measure	MOL			BBA			*d*
	n	*M*	*SD*	*n*	*M*	*SD*	
PHQ-9							
Pre-intervention	20	12.95	5.04	20	12.50	4.22	0.10
Post-intervention	18	10.39	4.67	19	11.84	4.50	0.20
Follow-up	18	8.06	4.62	19	9.42	4.30	0.30
GAD-7							
Pre-intervention	20	10.35	4.52	20	9.55	4.38	0.18
Post-intervention	18	9.33	5.53	19	9.89	4.08	0.11
Follow-up	18	8.22	5.35	19	8.37	5.00	0.03
PSYCHLOPS							
Pre-intervention	20	13.50	3.40	20	14.60	2.76	0.35
Post-intervention	18	11.72	2.97	19	13.47	3.79	0.51
Follow-up	18	8.06	4.41	19	10.53	4.14	0.58

Criteria for future definitive trial

Whether the criteria for a future trial has been achieved is reported in Table 19.

Table 19

Achievement Status of Criteria for a Future Definitive Trial

Criterion	Achieved
To recruit a minimum sample size of 30 participants and retain 80%	Yes
MOLSE total scores to be similar to mean scores obtained in previous studies	No
BBAFS total scores to be 24 or above	Yes
CEQ and SRS ratings to be equivalent for MOL and BBA ($d < 0.5$)	Yes

Discussion

This study aimed to explore the feasibility of a design for a future trial to determine whether MOL increases awareness of higher-level goals more than BBA. The findings demonstrated that the proposed trial design fulfilled most of the requirements to determine this a feasible study. A subsidiary aim was to examine the feasibility of a novel measure, the Goal-Level Awareness Questionnaire (GAQ). The feasibility and acceptability of the study protocol will be discussed and proposed revisions will be described.

Feasibility

The findings demonstrated that it is feasible to recruit and retain an analogue sample to an online single-session RCT of MOL and BBA. As planned, 40 participants were recruited and 35 (87.5%) remained in the study until follow-up, exceeding retention rates obtained in previous studies of interventions for depression (Ekers et al., 2008). This may partly be due to the online nature of the study, as individuals have reported that video-therapy increases accessibility and convenience (Shklarski et al., 2021).

Adherence

The therapist demonstrated competence and fidelity in adhering to BBA principles. This suggests that it is feasible to deliver a modified version of the six-stage protocol

(Richards, 2010; Gawrysiak et al., 2009) in a single-session via video-therapy. At present, there are no defined minimum standards for the MOL Session Evaluation (MOLSE) to deem an MOL session as acceptable. The majority (75%) of the total scores were lower than average scores obtained in previous studies (Carey et al., 2013; Griffiths et al., 2019). The item with the lowest ratings referred to the extent that the therapist asked about disruptions. Similarly, this was the lowest rated item in Jenkins et al. (2020) study where MOL was also delivered by a Trainee Clinical Psychologist. Asking about disruptions is one of the two goals of MOL and it is pivotal to helping clients broaden their awareness of goal conflicts and higher-level goals (Mansell, 2018). As asking about disruptions is unique to MOL, therapists may require further training to refine this technique to ensure the effects of MOL are maximised in a definitive trial.

The lower ratings on the MOLSE could reflect a limitation of delivering MOL via video-therapy. Research has shown that video-therapy is effective in reducing depressive symptomology (Berryhill et al., 2019) and the therapeutic alliance appears comparable to in-person therapy (e.g., Simpson & Reid, 2014; Reese et al., 2016). Additionally, clients have described remote therapy as less threatening (Reynolds et al., 2013) and to have a more neutral power balance, facilitating openness (Fletcher-Tomenious & Vossler, 2009). From a PCT perspective, this suggests that video-therapy may promote control. Nonetheless, MOL has not been formally assessed in this format. The premise of MOL is to ask curious questions about the client's immediate experience. Often while utilising videoconferencing there is a time-lag which may hinder the therapist's ability to capture and ask about disruptions as they occur in the present moment, which may have contributed to the lower ratings on this item. This suggests that evaluating the feasibility of delivering MOL by video-therapy is required prior to use in a future trial. This would also be beneficial to clinical practice. Since the COVID-19 pandemic remote treatment has become a necessity, and considering the positive experiences expressed by both practitioners and clients (e.g.,

McBeath et al., 2020; Shklarski et al., 2021), it is highly likely that video-therapy will continue to be utilised.

The GAQ as a novel outcome measure

The GAQ was developed because to date, there is no existing self-report measure of goal-level awareness, which was deemed necessary for future studies assessing MOL processes. The GAQ is an unvalidated measure and the study was underpowered to indicate a true effect. However, effect sizes were reported to inform future power calculations for a larger trial, and to see if they were consistent with what would be hypothesised in a definitive trial. Post-intervention GAQ scores were higher for the MOL group than the BBA group and there was a large estimated effect size. This is consistent with what would be expected in a future trial, as it indicates that MOL increases individuals' awareness of higher-level goals more than BBA.

To assess the feasibility of administering the GAQ, its inter-rater reliability was examined. The GAQ indicated poor to moderate inter-rater reliability, suggesting a degree of subjectivity in interpreting goals in accord with the scoring criteria (program-level, principle-level, system-level). Inter-rater reliability was weakest on the post-intervention GAQ. This is noteworthy as scores rated by the primary rater were highest at this time-point. On inspection of the raw data, the primary rater tended to code goals at a higher level than the secondary rater. As the primary rater had received more training and was more familiar with PCT principles it seems they were more attuned to the subtle differences in levels of abstraction than the secondary rater. This raises questions regarding the feasibility of administering the GAQ as it may require extensive training. Possible revisions are described below in section 'future directions'.

This study also examined whether the criterion measures, the Behaviour Identification Form (BIF) and the Awareness of Goal Conflict (AGC) scale would be useful questionnaires to evaluate the construct validity of the GAQ in a future study. The GAQ

demonstrated weak relationships with both criterion measures. However, the GAQ was developed as currently, there is no measure of goal-level awareness and therefore, it is possible that the criterion measures are measuring different constructs. To evidence this, the relationship between the BIF and AGC was also weak. It was thought that that how one describes actions in relation to the level of abstraction on the BIF would concur with the level of abstraction of goals. However, a change in awareness of personally important goals may not transpire to the way one describes unrelated actions. Furthermore, the lack of convergence between the GAQ and AGC mirrors the lack of relationship between the Depth and Duration of Awareness Coding Scheme (D-DACS) and the Reorganisation of Conflict Scale (RoC). This suggests that although goal conflict and higher-level goals are conceptually related, they are essentially distinct constructs.

Acceptability

The results showed that ratings on the Credibility/Expectancy Scale (CEQ) and Session Rating Scale (SRS) were equivalent for MOL and BBA conditions. Both approaches were comparable regarding how logical the treatment seemed, the degree of improvement expected and overall satisfaction with the intervention. This demonstrates that BBA is an adequate control condition for a future trial. Nonetheless, although the effect size for total SRS scores was small, the effect sizes for individual items ranged from small to medium, with higher scores for BBA. While this study is not sufficiently powered to determine a true effect, this suggests that BBA was perceived as more acceptable than MOL. This may be because the therapist had more experience delivering BBA than MOL. It may also reflect that fidelity to the BBA protocol was achieved whereas, adherence to MOL principles could be improved. The lowest rated items for MOL regarded the approach. This could imply that MOL is not suited to all clients, particularly university students who constituted 70% of the sample. The acceptability of MOL has typically been assessed in adult samples seeking, or in receipt of mental health services (Carey & Mullan, 2008; Carey et al., 2009; 2013; Bird et al., 2019; Cocklin et al., 2017; Griffiths et al., 2019; Jenkins et al., 2020). While a recent

study demonstrated that young people aged 11-15 found MOL delivered in a school setting acceptable (Churchman et al., 2019), to our knowledge, this is the first study that has evaluated the acceptability of MOL within a university student sample.

As anticipated, SRS ratings did not meet the standards determined by Duncan et al. (2003), except for the relationship item for the BBA condition. Average scores were more in line with scores obtained in previous studies of MOL and BBA (Carey et al., 2013; Pass et al., 2018). Furthermore, in a study utilising CBT, mean scores of 30.8 and 31.8 were associated with treatment efficacy and effectiveness for individuals with mood disorders (Janse et al., 2017). This suggests that the interventions were deemed acceptable by participants and such ratings are associated with improvements in mood. Moreover, this implies that it is possible that the threshold established by Duncan and colleagues may be unrepresentative of the satisfaction levels obtained in psychotherapy research, and unnecessary to deem a therapeutic approach acceptable.

Mental health and distress outcomes

Average scores on the Patient Health Questionnaire (PHQ-9), Generalised Anxiety Disorder (GAD-7) and Psychological Outcome Profiles (PSYCHLOPS) reduced over time for both MOL and BBA conditions. Although this study is not sufficiently powered to support conclusions regarding effect, it seems that changes in scores on PHQ-9 and GAQ-7 were equivalent for both approaches. However, scores reduced more on the PSYCHLOPS for the MOL group in comparison to the BBA group. This suggests that MOL may be more effective in reducing general distress than BBA however, this remains to be tested in a suitably powered trial.

Limitations

The present study was limited as the researcher was also the therapist, raising questions regarding the objectivity of the findings. To minimise potential bias, all questionnaires, except for the pre-therapy PSYCHLOPS, were completed online, and the

GAQ was scored by volunteers who were blind to the intervention group. This enabled the researcher to remain blind to assessment outcomes. However, researcher allegiance often operates on an implicit level (Nuzzo, 2015) therefore, the findings could have been influenced by the researcher's motivations and prejudices. Furthermore, due to the sample size, adherence ratings were only based on four participants in each condition, rated by a single rater, casting doubt on the accuracy of the ratings. In a future trial the sample size will be larger and therefore, assessing adherence on 20% may be sufficient. However, ensuring multiple raters is paramount to determine the reliability of ratings. Furthermore, the design of research studies tends to lead to aggregating data and focusing on central tendencies between groups, which are the generalised to the population. Such an emphasis on group statistics masks individual variation which is crucial to developing our understanding of human functioning (Carey et al., 2020).

It is important to note that there are baseline differences between groups on the GAQ and mental health and distress outcomes. While the effect sizes are small, this could influence the estimated post-intervention effect sizes. This is of particular concern for the GAQ as scores were higher in the MOL condition pre-therapy suggesting that the large post-intervention estimated effect size may not be due to the intervention group. Furthermore, pre-therapy scores on the PSYCHLOPS were higher for the BBA group. This suggests that the observation that MOL may be more effective than BBA in reducing distress may be inaccurate. A future study should consider controlling for baseline differences.

Future directions

- To establish the feasibility of delivering MOL via video-therapy, or to return to the initial protocol (prior to the COVID-19 pandemic) where interventions were to be delivered in person, provided national guidance permits face-to-face therapeutic contact.

- To establish the reliability of the GAQ. This may be achieved by ensuring training and experience is sufficient and equivalent between raters. Another option is to revise the GAQ with a view to reduce subjectively between raters. This could involve participants providing descriptions of their most important goals as a oppose to a list. Alternatively, questions could be added i.e., “Why is this goal important to you?”, “What change/s in your life do you expect to occur from achieving this goal?”, “What are the benefits of achieving this goal?”. This would provide a richer account of the meaning of goals pertinent to the individual which may assist raters in categorising goals in accord with the level of abstraction. However, this may inadvertently increase subjectivity and administration demands. It would be fruitful to conduct focus groups with clients and therapists to gather views on the how the GAQ could be improved.
- To establish the validity of the GAQ. Examining convergence with the D-DACS appears to be the closest measure of a similar construct. However, associations may be weak due to differences between self-reports and observer-rated measures (Grzegrzolka & Mansell, 2019). Future studies into the face validity and the predictive validity in relation to distress outcomes would be valuable in determining the psychometric properties of the GAQ. Another option is to compare GAQ scores with responses on the post-task questionnaire developed by Parker (2018), which was designed to capture participants experience of change in goals and how they felt towards their goals following MOL.
- Following validation of the GAQ, a sufficiently powered study would prosper from conducting mediation analyses to determine whether awareness of goal level determined by scores on the GAQ statistically accounts for the relationship between MOL and distress outcomes. This would be beneficial in examining the hypothesis that reorganisation is the mechanism of change in MOL. Nonetheless, Mansell and Huddy (2020) propose that “the ultimate test of a theory” (*p*. 2) is a computational

modelling approach where a theory is specified in precise mathematical terms and tested against real-world data. This approach is currently subject to a long-term research program to test a PCT model of psychological change (see Mansell & Huddy (2020) for a review).

Conclusion

This study has demonstrated that it is feasible to recruit and retain an analogue sample to a single session RCT to explore whether MOL increases awareness of higher-level goals more than BBA. Both MOL and BBA were considered acceptable interventions as satisfaction ratings were consistent with ratings obtained in previous studies. Furthermore, acceptability ratings were comparable between conditions indicating that BBA is an appropriate control condition for a future trial. Fidelity to the BBA protocol was demonstrated however, adherence to MOL was lacking in comparison to previous studies, which could be due to delivering the intervention via video-therapy. Furthermore, the lack of inter-rater reliability for the GAQ suggests that in its current form it may not be feasible to administer, and it may require extensive training and/or revising. Moreover, although the GAQ has not been validated, and the study is not sufficiently powered to obtain an accurate effect size, the large estimated effect size indicated for the post-intervention GAQ was in the direction of what would be hypothesised in a future trial. However, the reliability and validity of the GAQ needs to be established prior to use in a future definitive trial.

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Paper 3: Critical Appraisal

Word count: 4813

Introduction

This paper provides a critical appraisal of the research conducted whilst completing the systematic scoping review and the empirical study. Stages of the research will be discussed to provide further insights into the planning, decision-making and implementation processes, while considering the strengths and limitations of the research. Clinical implications and the researcher's personal reflections will be offered.

Paper 1: Properties of goal conflict related to psychological distress: A systematic scoping review

Rationale for topic

The research topic was chosen due to the researcher's and the project supervisors' (henceforth will be referred to as the research team) interest and motivation to explore a transdiagnostic approach to understanding psychological distress. Research has shown that there are numerous cognitive and behavioural processes that span a range of psychological disorders (Harvey et al., 2004). Through identifying transdiagnostic processes, psychological interventions can be streamlined, increasing the efficacy of training and dissemination (Mansell et al., 2012). Moreover, a transdiagnostic approach does not rely on diagnosis, and questions the utility of the diagnostic classification system (Dudley et al., 2011; Mansell et al., 2012). This is consistent with The Power Threat Meaning Framework (Johnstone et al., 2018) that aims to move away from diagnostic classification and focus on individual distress. This is something of personal interest to the researcher. Through working in NHS settings, particularly forensic services there appears to be pressure on the responsible clinician to provide a timely diagnosis, which can often feel like a 'checklist' exercise. The researcher acknowledges that diagnosis can be useful to provide an understanding that can be shared efficiently, and it can be validating to individuals. However, diagnosis is accompanied with huge implications regarding sentencing and treatment. Therefore, the researcher was driven to contribute to the evidence-base on transdiagnostic processes.

The research team also have a profound interest in Perceptual Control Theory (PCT; Powers, et al., 1960; Powers, 1973), which has been proposed to account for the common features of transdiagnostic processes (Alsawy et al., 2014). Defining the research question was a lengthy process due to the requirement of balancing the breadth and focus of the review. To remain consistent with the empirical study, initial thoughts were to conduct a review into the concept of awareness and psychological distress. However, due to plethora of literature on insight, mainly derived from a psychoanalytical background the scope was too broad. Goal conflict was chosen as according to PCT, it is the cause of psychological distress. Therefore, it was deemed a fundamental concept to explore in accord with the aims of the review, to understand psychological distress. Previous reviews had demonstrated that goal conflict was associated with increased psychological distress (Kelly et al., 2015; Gray et al., 2017). Such work was pertinent to field and led to us wanting to know more about the properties of goal conflict, and under what conditions does goal conflict become more problematic for individuals. The research team acknowledged that there was already a plethora of literature on the concept goal conflict and its association with psychological distress. However, due to variation in terminology and conceptualisations from different schools of thought there was a lack of consensus, making it difficult to draw conclusions and advance clinical practice. A narrative synthesis was therefore deemed necessary to integrate the literature and bring clarity to a heterogenous topic.

Rationale for methodology

Early scoping searches were conducted to explore the literature on goal conflict and psychological distress. Searches revealed a wealth of information from multiple data sources. The most relevant sources containing the more intricate details of goal conflict appeared to be book chapters and integrative reviews and models therefore, a systematic scoping review was deemed the most appropriate methodology to answer the research question.

Search strategy

Careful consideration was taken in defining the search terms to ensure the review was as comprehensive as possible whilst remaining relevant to the research question. Search terms were developed and agreed with the research team. Considerations were given to the inclusion of 'ambivalence' as it retrieved a large number of articles, many of which were unrelated to the research question. However, as ambivalence formed part of the conceptualisation of goal conflict it was included. Additionally, discussions were centred around whether to include the search string related to 'review' as articles that were not strictly reviews (i.e., book chapters) could have been missed. However, it was felt that the associated search terms for 'review' were comprehensive enough to minimise exclusion of relevant articles. Furthermore, without this limit, searches would have returned numerous empirical studies and therefore, it was deemed appropriate to narrow the scope.

To determine whether the search terms were appropriate, preliminary searches were conducted in varying databases to see whether articles known to the research team were retrieved. A problem that occurred was that after numerous consultations and revisions to the search terms, over half of the identified articles were not found. Upon exploring the titles, abstracts, headings, and key words of identified articles it appeared that terms related to goal conflict were not present. Therefore, where possible (in CINAHL plus and ASSIA) the 'goal conflict' search string was expanded to search within the full text. Furthermore, the decision was made to include Google Scholar as in addition to searching grey literature, it too searches within the full text. Additionally, the meta-analysis into goal conflict and psychological well-being by Gray et al. (2017) utilised Google Scholar.

Credibility

While scoping reviews have their strengths, they are not amenable to quality assessment. This was somewhat uncomfortable for the researcher who had wanted to produce a high-quality, credible review. However, this was balanced against choosing the

most appropriate method to answer the research question. To conduct a rigorous, transparent, and trustworthy scoping review, the Joanna Briggs Institute (JBI) framework (Peters et al., 2020) was used, a PRISMA checklist is provided in Appendix R.

An independent reviewer screened a sample of the search results. However, only moderate reliability was established. While this may be an underestimation due to Cohen's Kappa analysis (Steinijans et al., 1997) it appears this was because the primary rater (the researcher) included more articles than the secondary rater (n = 16). It is possible that the primary rater included articles where the title or abstract did not explicitly fulfil the inclusion criteria but, were written by an expert in the field or referenced a relevant theory. Furthermore, the primary rater had an invested interested in the review and when doubt of inclusion arose the articles were included so that the full text could be retrieved and screened. However, it should be noted that three of the articles excluded by the secondary rater were included in the analysis. Moreover, although the concept goal conflict was defined, some of the disagreement between raters was based on what constitutes goal conflict. This suggests that the present conceptualisation may require revision, and/or examples incorporated to reduce ambiguity.

The integrity of the review could have been improved if the data charting process was conducted by more than one researcher. Seeking voluntary support was considered however, due to the qualitative nature of the data this was a laborious task, and it was not feasible for an undergraduate student to undertake in conjunction with their own studies. Advertising externally for an honorary research assistant was contemplated however, this would have placed additional demands on the researcher in terms of recruitment and training which was not feasible within the timeframe of the Clinical Psychology Doctorate programme. In attempts to reduce subjectivity the researcher reflected on the process and the data charting table was continually revised to ensure it captured the essence of the articles. This was challenging for the researcher as it drastically increased the workload

during what was already pressured timeframe. Upon reflection this may have been prevented if the data charting tool had been calibrated prior to use by multiple reviewers.

Although it was not possible to conduct a quality assessment, the credibility could have been enhanced by including a critical appraisal of the individual sources. This could have been achieved by incorporating limitations into the data charting progress. However, as most of the articles were subjective in nature i.e., book chapters, integrative frameworks/models and literature reviews incorporating limitations was unlikely to contribute additional value to the review. Furthermore, critical appraisal is generally not recommended in scoping reviews as the aim is to map the data rather than provide a clinically meaningful answer to inform practice or policy (Peters et al., 2020).

Qualitative analysis

A thematic analysis was initially considered however, recent guidelines stipulate that a thematic approach is beyond the remit of a scoping review and qualitative content analysis is recommended (Peters et al., 2020). However, of concern to the researcher was the limited guidance on how to conduct a content analysis for a scoping review. Therefore, in accord with previous scoping reviews (e.g., Olding et al., 2016; Guo et al., 2021) the researcher followed steps outlined by Hsieh and Shannon (2005). Thought was also given to the use of a deductive or inductive approach. A deductive approach using PCT as an overarching framework would have been insightful and consistent with the rationale of the topic. However, the researcher wanted to keep an open mind and to derive findings directly from the data rather than imposing a priori expectations which may have limited the findings of the review. An inductive approach was also in keeping with the aims of capturing the essence of the evidence-base.

Clinical implications

Due to the remit of scoping reviews, clinical implications are limited. Nevertheless, given the vast amount of literature pertaining to the relationship between goal conflict and

psychological distress, and as it has been noted elsewhere (e.g., Michalak et al., 2011), identification of goal conflict and interventions aimed at resolving conflict should be fundamental to psychological therapy. Despite the concept of goal conflict being integral to a range of psychotherapeutic approaches, it is rarely explicitly acknowledged. However, what is considered fundamental is formulating shared treatment goals (Michalak & Holtforth, 2006). From personal experience working in IAPT services and delivering CBT, clients are often expected to identity therapeutic goals within the initial therapy sessions. A lack of therapeutic goals can even be considered a reason for discharge. It is acknowledged that shared goals are important in assisting treatment planning and evaluation (Michalak & Holtforth, 2006) and in fostering the therapeutic alliance (Bordin, 1979). Nonetheless, goal setting too early may inadvertently increase arbitrary control due to limited awareness of other competing goals.

It is widely recognised that goals can exist outside of awareness which raises the question as to why clients are expected to enter therapy with fully formed self-concordant goals. From a PCT perspective, if an individual had awareness of all their important goals, they are unlikely to be seeking support as reorganisation would be able to occur at the source of conflict and reduce psychological distress. Moreover, people often seek psychotherapy due to distressing symptoms and therefore, goals often relate to distress reduction. Consequently, therapeutic techniques specifically cognitive and behavioural interventions, are implemented at the symptom level. This may be helpful in some cases however, it may result in further application of compensatory strategies rather than addressing the source of goal conflict. This may explain why some individuals are considered “treatment resistant” when they do not respond to an adequate trial of evidenced-based psychotherapy. It may not be that the individual is unable to recover from treatment, it may be that treatment has been targeting the wrong area. Through exploring the properties of goal conflict, it is hoped that this work will increase awareness of the role of goal conflict in

psychological distress and inspire future research towards the reorganisation of clinical practice. Suggested future directions are outlined in paper one.

Personal reflections

With no prior experience of conducting a systematic review the researcher initially found prospect of conducting a review rather overwhelming, which only seemed to grow, as did each stage of the review. The qualitative nature of the review of reviews meant that the full-text screening and data charting were extremely intensive processes due to the wealth of information per source. However, on reflection it has been a valuable learning experience and the researcher has developed skills in resilience and diligence. The researcher particularly enjoyed synthesising and interpreting the data as from what appeared to be a multitude of diverse articles came a coherent understanding of the factors that influence the relationship between goal conflict and psychological distress.

Paper 2: A pilot feasibility study of Method of Levels (MOL): Targeting goal awareness and wellbeing

Selecting the topic

As discussed, the research team have an interest in transdiagnostic processes and approaches, and PCT. Method of Levels (MOL) is a transdiagnostic approach that directly applies PCT principles. Furthermore, the researcher was familiar with MOL through delivering it in a former role prior to commencing the Clinical Psychology Doctorate programme. While the research team advocate the provision of MOL, and evidence is accumulating to support its acceptability and efficacy (e.g., Carey & Mullan, 2008; Carey et al., 2009, 2013; Bird et al., 2019; Griffiths et al., 2019; Jenkins et al., 2020) it is not routinely used in practice. Moreover, although MOL is based on PCT which specifies an integrative account of the mechanism of psychological change, whether MOL works the way it is intended to work is yet to be confirmed. Therefore, the research team were keen to explore this area.

Sample and recruitment

Eligible participants were required to be experiencing symptoms of depression. This was because while MOL is a transdiagnostic therapy, Brief Behavioural Activation (BBA) is an intervention that targets depression. Therefore, it would have been unethical to recruit participants that were experiencing other mental health difficulties. To prevent flooring effects participants were required to be experiencing at least mild depression, indicated by scoring above five on the initial (screening) Patient Health Questionnaire (PHQ-9). An analogue sample was recruited as the phenomenological continuity hypothesis (Flett et al., 1997) proposes that depressive experiences differ in intensity, but not in kind between analogue and clinical samples. Obtaining ethical approval and permissions to conduct research in clinical settings can be timely, hindering recruitment. Therefore, an analogue sample was chosen as it fulfilled the aims of the study without unnecessary delay. Moreover, analogue samples have been used to explore mechanisms of change in psychological interventions (e.g., Dugas, et al., 2001; Roemer et al., 2005; Healey et al., 2017).

Design and analysis

Initially, the plan was to conduct an RCT however, a power analysis indicated that a sample size of 128 participants was required to yield a medium effect size (d = 0.5). This was deemed unfeasible given the time constraints of the Clinical Psychology Doctorate programme. Moreover, as the study involved using a novel unvalidated measure (Goal-level Awareness Questionnaire (GAQ)), a pilot study was considered a more appropriate option. In order to produce a robust pilot study, the researcher adhered to the CONSORT extension for randomised pilot trials (Eldridge et al., 2016). A CONSORT checklist is included in Appendix S. The study was not sufficiently powered to determine statistical significance or a true effect therefore, numerous discussions were held with project supervisors regarding the inclusion of effect sizes and inferential statistics. As advised by a university statistician, t-tests were conducted solely for obtaining the difference in means and confidence intervals, not hypothesis testing and effect sizes were calculated for exploratory estimates only.

Developing the GAQ

A key aspect of this study was the development of the GAQ. Searches of goal assessment measures indicated that there was no existing measure of goal-level awareness. The researcher aimed to develop a self-report measure that could be used in studies assessing MOL processes. Preliminary pilot studies indicated no concerns with completing the GAQ, individuals were able to generate at least five goals and did not describe the experience to be taxing. However, difficulties arose during coding which appeared to be due to limited information regarding the context of individuals' goals. Proposed revisions to the GAQ are outlined in paper two.

Providing training in the GAQ was a valuable experience and enabled the researcher to develop skills in tailoring communication and pitching information at an appropriate level for the volunteers. This was at times challenging due to the complex theoretical background of the GAQ. The researcher aimed to foster a learning environment that was informative and interactive i.e., through practising coding and group discussions. This also enabled the researcher to share appreciation of the volunteers' perspectives which helped develop positive working relationships. Furthermore, the researcher found that remaining transparent and sharing personal difficulties in coding the GAQ was beneficial in enabling a supportive space for the volunteers to also share their concerns. The training process has equipped the researcher with skills that will be fundamental in future practice.

Measures

The adherence measures MOL Session Evaluation (MOLSE; Carey & Tai, 2012) and Brief Behavioural Activation Fidelity Scale (BBAFS; Hodgson, 2019) were planned to be rated by two project supervisors. Unfortunately, due to unforeseen circumstances this was not possible. Another challenge was that the BBAFS has a specified criteria as to what constitutes sufficient adherence, whereas the MOLSE does not. Conversations were had with the authors of the MOLSE and the project supervisors, who confirmed that at present

there is no defined standard of acceptable adherence. Such discussions were enlightening as opinions were mixed as to whether establishing a threshold would be of value. One perspective was that the concept of a "minimum standard" may not make sense from an MOL perspective as the focus is on the agreement between the therapist and an observer. Whereas others felt it would assist in determining adherence to MOL principles for use in psychotherapy research and clinical practice. Nonetheless, the development of a 'cut-off' would entail a large body of work involving the evaluation of numerous therapists with different clients. Furthermore, both adherence measures were limited regarding validity. However, as such instruments are specifically designed to measure the interventions employed in the present study it was agreed they were the most suitable.

The Credibility/Expectancy Scale (CEQ; Devilly & Borkovec, 2000) was chosen as assessing credibility and expectancy of improvement is considered of paramount importance in psychotherapy research (Kazdin, 1979) and it is widely used measure (e.g., Silva et al., 2021; Thompson-Hollands et al., 2014). Previous studies suggest that the CEQ can be administrated before (e.g., Curley et al., 2019; Tompkins et al., 2017), or after initial therapy sessions (e.g., Borkovec et al., 2002; Myhre et al. 2018; Thompson-Hollands et al., 2014). In the present study the CEQ was administered prior to therapeutic contact and before participants were informed which intervention they would receive. This was to reduce demand characteristics and to provide a more accurate representation of how the approaches were perceived. Additionally, it was to ensure equivalence between treatment rationales as the BBA includes a structured rationale as part of the intervention whereas MOL does not. The CEQ was completed after reading descriptions of each approach, that had been discussed and agreed with the project supervisors. We aimed to keep the description simple to ensure participants remained blind to the study aims. The MOL description was developed first and the BBA description was based on this to ensure equivalence in scope, perspective and credibility.

A difficulty with the CEQ is scoring the expectancy factor as it derived from two different scales. The authors advise standardising individual items however, no guidance as to how to do this could be identified. The researcher contacted the authors to obtain further information. While one responded, they did not know how the standardisation was conducted. The researcher also contacted an author of a study who had used the CEQ where it appeared the items had been standardised. However, they too did not know how to standardise the items and derived estimated percentages instead, which they were not certain in recommending. Not only did this pose difficulties in scoring the CEQ, but it proved issues in comparing ratings to those obtained in previous studies to gauge an indication as to the acceptability of the therapeutic approaches.

It is unfortunate that the Depth and Duration of Awareness Coding Scheme (D-DACS; Higginson & Mansell, 2016) was not included in analysis as this may have provided preliminary data regarding the construct validity of the GAQ. However, as the D-DACS requires transcription of audio recorded sessions and intensive coding it was not possible to complete on a larger subset within the timeframe for the study. Moreover, it would have been fruitful to include a measure of goal conflict such as a conflict matrix (e.g., Emmons & King, 1988), the Computerized Intrapersonal Conflict Assessment (CICA; Lauterbach, 1996) or the Repertory Grid Technique (RGT; Slade & Sheehan, 1979). Measuring goal conflict in conjunction with the GAQ may provide further evidence as to whether MOL works as hypothesised and should be considered in a future trial.

COVID-19

The COVID-19 pandemic incurred changes to the study as the intervention sessions were initially planned to take place in-person. However, due to national guidance restricting face-to-face contact the study protocol was adapted to incorporate remote therapy. Being able to deliver therapeutic interventions as part of the empirical study was one of the highlights for the researcher. Particularly, due to reduced interactions within a professional and personal capacity due to the impact of the COVID-19 pandemic. As described by other

psychotherapists (McBeath et al., 2020), the researcher felt an increased sense of intimacy and connectedness due to the shared experience of being at home. Moreover, the pandemic has been detrimental to university students' mental health (Savage et al., 2020) and the researcher valued the opportunity to be able to offer support to this group. However, video-therapy it is not equivalent to the personal contact and interpersonal cues that are provided via face-to-face contact (Humer et al., 2020; McBeath et al., 2020), which as noted in paper two, may account for lower adherence ratings to MOL principles.

On the other hand, the experience of conducting therapy from home was at times quite isolating. Although the researcher had the support of the project supervisors and the university, her sense of responsibility for participants' wellbeing was heightened without the physical structures of delivering therapy in an organisational setting. Moreover, there was reduced ad-hoc supervision and peer support that typically comes with physically being on site and around colleagues. Upon reflection the researcher believes she could have been more proactive in seeking supervision however, this was thwarted by not wanting to be an additional burden during a time when everyone was facing additional demands in response to COVID-19.

An unexpected issue that arose from conducting remote therapy was that university students recruited via the student experiment participation scheme (SEPS) were not currently residing in the UK. Discussions were held with the project supervisors regarding the feasibility of effective risk management and safeguarding of such participants if risk was disclosed. To prevent exclusion and disadvantage to international students', that could potentially exacerbate distress, revisions were made to the contact details form. Changes included requiring participants to provide details of their GP/healthcare provider in the country they were currently residing in and their home address. The latter was a detail that in hindsight should have been included as soon as the study protocol changed to include remote therapy. This was because most participants were located at their home address for

the intervention session therefore, it was useful to have this information in the event that they required urgent medical attention.

Role Conflict

While clinical psychologists have multiple roles (BPS, 2017), role theory (Secord & Backman, 1974) suggests that dual-role relationships become problematic when the expectations or behaviours associated with one role (i.e., researcher) are incompatible with another role (i.e., therapist) that one is simultaneously participating in. The researcher experienced multiple role conflicts. They were simultaneously receiving clinical training where formulation is a core competency and is used to plan interventions (BPS, 2017). Due to the nature of the two approaches, and the provision of one therapy session, developing a formulation was not possible. Moreover, as a former PWP the researcher was primed to working within a fast-paced role where low-intensity interventions are delivered based on a cross-sectional formulation, the 'hot-cross bun model' (Greenberger & Padesky, 1995). Therefore, a key area of clinical development for the researcher was to work at a slower pace and spend time gathering information to inform systemic, longitudinal formulations. Revisiting a low-intensity intervention therefore, presented a conflict to the researcher. Furthermore, at times the researcher found it difficult to adhere to BBA principles due to having received advanced clinical training that was difficult to separate and disregard. Especially, as the researcher has a natural inclination to want to help people and use their available skills to do so. The researcher used BBA supervision to reflect on this experience.

The researcher had a dual role in delivering two therapies that had opposing therapeutic aims. The 'choose-and-book' system and randomisation of participants often] led to the researcher swapping between approaches within the same day. This posed a challenge because it required rapid shifts in focus and increased mental resources to process information and divide attention between the two therapeutic roles (Pashler & Johntson 1998). The researcher found it particularly difficult to shift back to MOL which was likely due to be being less experienced in this approach and its uniqueness (i.e., asking

about disruptions and non-verbal behaviour). Additionally, findings have shown that in comparison to other therapies MOL involves more client and therapist utterances (Mansell et al., 2018), suggesting that it may be a more cognitively demanding approach. Consequently, this resulted in additional pressure of wanting to perform well, not only for the participant but, for the project, which was reliant of adherence to MOL principles. The researcher aimed to overcome their conflicts towards delivering MOL by reviewing feedback from project supervisors and practicing curious questioning prior to sessions with friends and family. It was also discussed in MOL group supervision and it was suggested that reflecting on personal goals and conflicts may be useful in recognising potential barriers to sessions. Despite the challenges in delivering MOL, the researcher embellished in the opportunity to have received bespoke training and supervision as part of the empirical project.

Clinical implications

The empirical project informs the development of a future trial to test whether MOL increases awareness of higher-level goals. The researcher hopes this work will increase awareness of MOL and how it works to support its dissemination into services. The researcher believes that MOL could resolve some the limitations in the current provision of psychological therapy. Firstly, it is a transdiagnostic approach that can be used with a variety of individuals with diverse and complex needs. Secondly, mental health services currently have long waiting lists with clients waiting an average of 10 weeks from referral to a second treatment session (Baker, 2020). Even though a widespread problem is the number of non-attended sessions (Davis et al., 2020; Sweetman et al., 2021). Thirdly, treatment protocols often specify a recommended number of sessions. However, the “optimal dose” of therapy is dependent on the severity of problems, intensity of treatment and therapeutic responsiveness (Robinson et al., 2019). A premise of MOL is to facilitate client control by not having fixed session parameters (Mansell, 2018). A client-led appointment scheduling system utilising MOL has demonstrated effectiveness and increased efficiency compared to standard practice (Carey et al., 2013). Additionally, qualitative findings show that clients

value being able to determine their own appointments (Mansell, 2018). Therefore, MOL may be a way to manage the rising demand on services especially, considering the mental health and psycho-social consequences following the COVID-19 pandemic (World Health Organisation, 2020).

Upon completion of the Clinical Psychology Doctorate programme the researcher hopes to work in a forensic mental health setting. Although engagement with psychological interventions is voluntary, research shows that patients in secure services report a lack of control and a sense of perceived coercion to meet with psychologists, resulting in superficial engagement to progress through the system (Mason & Adler, 2012; Simms-Sawyers et al., 2020). MOL could therefore be an appropriate option that enables flexibility and client choice within forensic services.

Final reflections

Embarking on this research has been a journey filled with challenges and strife yet, it has been extremely rewarding. The researcher has thrived in the opportunities the research has presented in developing skills not only in research, but in clinical practice and delivering training, all of which are core competencies of a Clinical Psychologist. The researcher has also developed skills in creativity, resilience, diligence, self-reflection and critical appraisal which have contributed to her personal and professional development.

Dissemination

Paper one has been prepared for submission to the ‘Psychological Bulletin’. Paper two has been prepared for submission to ‘the Cognitive Behaviour Therapist’. The researcher also plans to disseminate the findings at relevance conferences. A summary of the findings will also be made available to the individuals who participated in the research.

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Appendix A. Author Guidelines for Psychological Bulletin Journal

Prior to submission, please carefully read and follow the submission guidelines detailed below. Manuscripts that do not conform to the submission guidelines may be returned without review.

Submission

To submit to the Editorial Office of Blair T. Johnson, please submit manuscripts electronically through the Manuscript Submission Portal in Microsoft Word (.docx) or LaTex (.tex) as a zip file with an accompanied Portable Document Format (.pdf) of the manuscript file.

Starting June 15, 2020, all new manuscripts submitted should be prepared according to the 7th edition of the *Publication Manual of the American Psychological Association*. APA Style and Grammar Guidelines for the 7th edition are available.

SUBMIT MANUSCRIPT

Blair T. Johnson, Editor
University of Connecticut

General correspondence may be directed to the Editor's Office.

In addition to addresses and phone numbers, please supply electronic mail addresses and fax numbers, if available, for potential use by the Editorial Office and later by the Production Office.

Keep a copy of the manuscript to guard against loss.

Psychological Bulletin is now using a software system to screen submitted content for similarity with other published content. The system compares the initial version of each submitted manuscript against a database of 40+ million scholarly documents, as well as content appearing on the open web. This allows APA to check submissions for potential overlap with material previously published in scholarly journals (e.g., lifted or republished material).

Masked Review Policy

The identities of authors will be withheld from reviewers and will be revealed after determining the final disposition of the manuscript only upon request and with the permission of the authors.

Authors are responsible for the preparation of manuscripts to permit masked review. Manuscripts submitted electronically should include all author names and affiliations, as well as the corresponding author's and co-authors' contact information, in the box labeled "cover letter," not in the manuscript file.

Every effort should be made to ensure that the manuscript itself contains no clues to the authors' identities, including deletion of easily identified self-references from the reference list.

If an author feels that revealing his or her identity is critical to receiving a fair review, such a request along with its justification should be made in the cover letter accompanying the manuscript.

Please ensure that the final version for production includes a byline and full author note for typesetting.

Availability of Data

For use during the review process, we strongly recommend that authors who submit quantitative analyses supply their databases, codebook, and relevant scripts (e.g., so that reviewers can check analyses).

Authors may provide anonymized links to databases, codebook, and relevant scripts (here's how to do so on OSF, the Open Science Framework; Dataverse and ICPSR also offer services for posting replication data files). Should the manuscript be published, these links (now made non-anonymized) should be included in the author note.

Regardless of whether databases, codebook, and relevant scripts are shared, authors must make sure to remove authorship information (e.g., names, affiliations) from these files, in order to help maintain the integrity of the double-blind review process. Similarly, linked webpage and materials available there should not reveal the authors' identities. The database must include all variables reported in the manuscript. Links to the database, codebook, and scripts must also be included in the manuscript's author note (more on this in the Data Availability Statements section, below).

Data Availability Statements

Regardless of whether they choose to make the article data available, authors must include a Data Availability Statement in the author note. Authors must indicate whether the data and code reported in the manuscript will be made available or provide a reason for not sharing the data. The link to the permanent repository for the dataset, codebook, and scripts (or the brief statement explaining why data are not being shared) must be included in the author note.

Policy on Commentaries

Psychological Bulletin traditionally publishes commentaries that are requested by the action editor in light of issues that arise during the review. These commentaries are brief, with the length set by the action editor but never exceeding half of the length of the original article.

The authors of the target article are then invited to write a response. The length of the response is also determined by the action editor and cannot exceed half of the length of the individual commentary/ies.

Both commentaries and responses have a strict timeline set by the action editor, which is typically one month. The response from the author/s of the target article ends the discussion in the context of *Psychological Bulletin*. After that point, authors are encouraged to submit related manuscripts to other scientific outlets.

Commentaries are not accepted for articles that are already in print.

Unsolicited commentaries may be submitted by authors only while accepted target articles are disseminated online. If submitted later, authors must present a strong rationale for considering a comment beyond the standard time frame. Such requests, however, are rarely granted, and authors should consider other outlets for unsolicited commentaries. Unsolicited commentaries are subject to the regular process of preliminary editorial review after which a commentary, if deemed appropriate, may be sent out for external peer review.

No commentaries are published without external review.

Manuscript Preparation

Prepare manuscripts according to the *Publication Manual of the American Psychological Association* using the 7th edition. Manuscripts may be copyedited for bias-free language (see Chapter 5 of the *Publication Manual*). APA Style and Grammar Guidelines for the 7th edition are available.

Review APA's Journal Manuscript Preparation Guidelines before submitting your article.

Double-space all copy. Other formatting instructions, as well as instructions on preparing tables, figures, references, metrics, and abstracts, appear in the *Manual*. Additional guidance on APA Style is available on the APA Style website.

Below are additional instructions regarding the preparation of display equations, computer code, and tables.

Display Equations

We strongly encourage you to use MathType (third-party software) or Equation Editor 3.0 (built into pre-2007 versions of Word) to construct your equations, rather than the equation support that is built into Word 2007 and Word 2010. Equations composed with the built-in Word 2007/Word 2010 equation support are converted to low-resolution graphics when they enter the production process and must be rekeyed by the typesetter, which may introduce errors.

To construct your equations with MathType or Equation Editor 3.0:

Go to the Text section of the Insert tab and select Object.

Select MathType or Equation Editor 3.0 in the drop-down menu.

If you have an equation that has already been produced using Microsoft Word 2007 or 2010 and you have access to the full version of MathType 6.5 or later, you can convert this equation to MathType by clicking on MathType Insert Equation. Copy the equation from Microsoft Word and paste it into the MathType box. Verify that your equation is correct, click File, and then click Update. Your equation has now been inserted into your Word file as a MathType Equation.

Use Equation Editor 3.0 or MathType only for equations or for formulas that cannot be produced as Word text using the Times or Symbol font.

Computer Code

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References

List references in alphabetical order. Each listed reference should be cited in text, and each text citation should be listed in the References section.

Examples of basic reference formats:

Journal Article

McCauley, S. M., & Christiansen, M. H. (2019). Language learning as language use: A cross-linguistic model of child language development. *Psychological Review*, *126*(1), 1–51. https://doi.org/10.1037/rev0000126

Authored Book

Brown, L. S. (2018). *Feminist therapy* (2nd ed.). American Psychological Association. https://doi.org/10.1037/0000092-000

Chapter in an Edited Book

Balsam, K. F., Martell, C. R., Jones. K. P., & Safren, S. A. (2019). Affirmative cognitive behavior therapy with sexual and gender minority people. In G. Y. Iwamasa & P. A. Hays (Eds.), *Culturally responsive cognitive*

behavior therapy: Practice and supervision (2nd ed., pp. 287–314). American Psychological Association. https://doi.org/10.1037/0000119-012

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Appendix B. Electronic search strategy conducted in the Ovid platform

EBM Reviews - Cochrane Database of Systematic Reviews <2005 to June 23, 2021>

EBM Reviews - ACP Journal Club <1991 to June 2021>

EBM Reviews - Database of Abstracts of Reviews of Effects <1st Quarter 2016>

EBM Reviews - Cochrane Clinical Answers <May 2021>

EBM Reviews - Cochrane Central Register of Controlled Trials <May 2021>

EBM Reviews - Cochrane Methodology Register <3rd Quarter 2012>

EBM Reviews - Health Technology Assessment <4th Quarter 2016>

EBM Reviews - NHS Economic Evaluation Database <1st Quarter 2016>

Embase <1980 to 2021 Week 24>

APA PsycInfo <1806 to June Week 2 2021>

Ovid MEDLINE(R) and Epub Ahead of Print, In-Process, In-Data-Review & Other Non-Indexed Citations, Daily and Versions(R) <1946 to June 23, 2021>

1 "goal conflict*".mp. [mp=ti, ab, tx, kw, ct, ot, sh, hw, tn, dm, mf, dv, fx, dq, tc, id, tm, mh, nm, kf, ox, px, rx, ui, sy] 637

2 "striving conflict*".mp. [mp=ti, ab, tx, kw, ct, ot, sh, hw, tn, dm, mf, dv, fx, dq, tc, id, tm, mh, nm, kf, ox, px, rx, ui, sy] 6

3 "personal conflict*".mp. [mp=ti, ab, tx, kw, ct, ot, sh, hw, tn, dm, mf, dv, fx, dq, tc, id, tm, mh, nm, kf, ox, px, rx, ui, sy] 565

4 "motivation* conflict*".mp. [mp=ti, ab, tx, kw, ct, ot, sh, hw, tn, dm, mf, dv, fx, dq, tc, id, tm, mh, nm, kf, ox, px, rx, ui, sy] 446

5 "internal conflict*".mp. [mp=ti, ab, tx, kw, ct, ot, sh, hw, tn, dm, mf, dv, fx, dq, tc, id, tm, mh, nm, kf, ox, px, rx, ui, sy] 1772

6 "intrapersonal conflict*".mp. [mp=ti, ab, tx, kw, ct, ot, sh, hw, tn, dm, mf, dv, fx, dq, tc, id, tm, mh, nm, kf, ox, px, rx, ui, sy] 222

7 "intraindividual conflict*".mp. [mp=ti, ab, tx, kw, ct, ot, sh, hw, tn, dm, mf, dv, fx, dq, tc, id, tm, mh, nm, kf, ox, px, rx, ui, sy] 10

8 approach avoid* conflict*.mp. [mp=ti, ab, tx, kw, ct, ot, sh, hw, tn, dm, mf, dv, fx, dq, tc, id, tm, mh, nm, kf, ox, px, rx, ui, sy] 754

9 "goal incongruen*".mp. [mp=ti, ab, tx, kw, ct, ot, sh, hw, tn, dm, mf, dv, fx, dq, tc, id, tm, mh, nm, kf, ox, px, rx, ui, sy] 55

10 "goal discrepan*".mp. [mp=ti, ab, tx, kw, ct, ot, sh, hw, tn, dm, mf, dv, fx, dq, tc, id, tm, mh, nm, kf, ox, px, rx, ui, sy] 133

11 "self-discrepan*".mp. [mp=ti, ab, tx, kw, ct, ot, sh, hw, tn, dm, mf, dv, fx, dq, tc, id, tm, mh, nm, kf, ox, px, rx, ui, sy] 1277

12 "conflicting goal*".mp. [mp=ti, ab, tx, kw, ct, ot, sh, hw, tn, dm, mf, dv, fx, dq, tc, id, tm, mh, nm, kf, ox, px, rx, ui, sy] 759

13 dissonance.mp. [mp=ti, ab, tx, kw, ct, ot, sh, hw, tn, dm, mf, dv, fx, dq, tc, id, tm, mh, nm, kf, ox, px, rx, ui, sy] 10449

14 ambivalen*.mp. [mp=ti, ab, tx, kw, ct, ot, sh, hw, tn, dm, mf, dv, fx, dq, tc, id, tm, mh, nm, kf, ox, px, rx, ui, sy] 30022

15 1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9 or 10 or 11 or 12 or 13 or 14 46601

16 "psychological distress".mp. [mp=ti, ab, tx, kw, ct, ot, sh, hw, tn, dm, mf, dv, fx, dq, tc, id, tm, mh, nm, kf, ox, px, rx, ui, sy] 76843

17 "psycholog* stress*".mp. [mp=ti, ab, tx, kw, ct, ot, sh, hw, tn, dm, mf, dv, fx, dq, tc, id, tm, mh, nm, kf, ox, px, rx, ui, sy] 38283

18 "mental health".mp. [mp=ti, ab, tx, kw, ct, ot, sh, hw, tn, dm, mf, dv, fx, dq, tc, id, tm, mh, nm, kf, ox, px, rx, ui, sy] 785472

19 "psych* disorder".mp. [mp=ti, ab, tx, kw, ct, ot, sh, hw, tn, dm, mf, dv, fx, dq, tc, id, tm, mh, nm, kf, ox, px, rx, ui, sy] 81139

20 "mental disorder".mp. [mp=ti, ab, tx, kw, ct, ot, sh, hw, tn, dm, mf, dv, fx, dq, tc, id, tm, mh, nm, kf, ox, px, rx, ui, sy] 36976

21 anxiety.mp. [mp=ti, ab, tx, kw, ct, ot, sh, hw, tn, dm, mf, dv, fx, dq, tc, id, tm, mh, nm, kf, ox, px, rx, ui, sy] 959081

22 depression.mp. [mp=ti, ab, tx, kw, ct, ot, sh, hw, tn, dm, mf, dv, fx, dq, tc, id, tm, mh, nm, kf, ox, px, rx, ui, sy] 1570283

23 psychosis.mp. [mp=ti, ab, tx, kw, ct, ot, sh, hw, tn, dm, mf, dv, fx, dq, tc, id, tm, mh, nm, kf, ox, px, rx, ui, sy] 232046

24 psychopathology.mp. [mp=ti, ab, tx, kw, ct, ot, sh, hw, tn, dm, mf, dv, fx, dq, tc, id, tm, mh, nm, kf, ox, px, rx, ui, sy] 158322

25 transdiagnos*.mp. [mp=ti, ab, tx, kw, ct, ot, sh, hw, tn, dm, mf, dv, fx, dq, tc, id, tm, mh, nm, kf, ox, px, rx, ui, sy] 9899

26 distress.mp. [mp=ti, ab, tx, kw, ct, ot, sh, hw, tn, dm, mf, dv, fx, dq, tc, id, tm, mh, nm, kf, ox, px, rx, ui, sy] 484367

27 16 or 17 or 18 or 19 or 20 or 21 or 22 or 23 or 24 or 25 or 26 3308244

28 review.mp. [mp=ti, ab, tx, kw, ct, ot, sh, hw, tn, dm, mf, dv, fx, dq, tc, id, tm, mh, nm, kf, ox, px, rx, ui, sy] 8050445

29 synthes*.mp. [mp=ti, ab, tx, kw, ct, ot, sh, hw, tn, dm, mf, dv, fx, dq, tc, id, tm, mh, nm, kf, ox, px, rx, ui, sy] 2937243

30 conceptual.mp. [mp=ti, ab, tx, kw, ct, ot, sh, hw, tn, dm, mf, dv, fx, dq, tc, id, tm, mh, nm, kf, ox, px, rx, ui, sy] 255127

31 meta-analys*.mp. [mp=ti, ab, tx, kw, ct, ot, sh, hw, tn, dm, mf, dv, fx, dq, tc, id, tm, mh, nm, kf, ox, px, rx, ui, sy] 672487

32 theor*.mp. [mp=ti, ab, tx, kw, ct, ot, sh, hw, tn, dm, mf, dv, fx, dq, tc, id, tm, mh, nm, kf, ox, px, rx, ui, sy] 2568520

33 scop*.mp. [mp=ti, ab, tx, kw, ct, ot, sh, hw, tn, dm, mf, dv, fx, dq, tc, id, tm, mh, nm, kf, ox, px, rx, ui, sy] 374862

34 integrat*.mp. [mp=ti, ab, tx, kw, ct, ot, sh, hw, tn, dm, mf, dv, fx, dq, tc, id, tm, mh, nm, kf, ox, px, rx, ui, sy] 1570546

35 28 or 29 or 30 or 31 or 32 or 33 or 34 14385452

36 15 and 27 and 35 3199

37 remove duplicates from 36 2311

38 limit 37 to english language 2034

39 remove duplicates from 38 2034

Appendix C. List of excluded articles at the full-text level

Articles excluded because they did not fulfil the definition of goal conflict:

- Adams, M. (2015). Motherhood: A discrepancy theory. *Research and Theory for Nursing Practice*, *29*(2), 143-157.
- Boldero, J. M., Moretti, M. M., Bell, R. C., & Francis, J. J. (2005). Self-discrepancies and negative affect: A primer on when to look for specificity, and how to find it. *Australian Journal of Psychology, 57*(3), 139-147.
- Champion, L. A., & Power, M. J. (1995). Social and cognitive approaches to depression: Towards a new synthesis. *British Journal of Clinical Psychology*, *34*(4), 485-503.
- Cohen, A. S., Minor, K. S., & Najolia, G. M. (2010). A framework for understanding experiential deficits in schizophrenia. Psychiatry Research, 178(1), 10-16.
- Cole, G. (2016). Existential dissonance: A dimension of inauthenticity. *The Humanistic Psychologist*, *44*(3), 296.
- Cornette, M. M., Abramson, L. Y., & Bardone, A. M. (2000). Toward an integrated theory of suicidal behaviors: Merging the hopelessness, self-discrepancy, and escape theories. In T. E. Joiner & M. D. Rudd (Eds.), *Suicide science: Expanding the boundaries* (pp. 43–66). Kluwer Academic/Plenum Publishers.
- Corradi, R. B. (2013). Ambivalence: Its development, mastery, and role in psychopathology. *Bulletin of the Menninger Clinic*, *77*(1), 41-69.
- Russell Cropanzano, K. J., & Citera, M. (1993). A goal hierarchy model of personality, motivation, and leadership. *Research in organizational behavior*, *15*, 267-322.
- Damiani, S., Fusar-Poli, L., Brondino, N., Provenzani, U., Baldwin, H., Fusar-Poli, P., & Politi, P. (2020). World/self ambivalence: A shared mechanism in different subsets of psychotic experiences? Linking symptoms with resting-state fmri. *Psychiatry Research: Neuroimaging*, *299*, 111068.
- García-Mieres, H., Niño-Robles, N., Ochoa, S., & Feixas, G. (2019). Exploring identity and personal meanings in psychosis using the repertory grid technique: A systematic review. *Clinical Psychology & Psychotherapy*, *26*(6), 717-733.
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- Goldenberg, J. L., Kosloff, S., & Greenberg, J. (2006). Existential underpinnings of approach and avoidance of the physical body. *Motivation and Emotion*, *30*(2), 127-134.
- Mansell, W. (2011). Working with Comorbidity in CBT. In W. Dryden & R. Branch (Eds.), *The CBT handbook*, (pp. 141-161). Sage.
- Hardin, E. E., & Larsen, J. T. (2014). Distinct sources of self-discrepancies: Effects of being who you want to be and wanting to be who you are on well-being. *Emotion*, *14*(1), 214.
- Hayes, J., Prentice, M., & McGregor, I. (2016). Giving in and giving up: Accommodation and fatalistic withdrawal as alternatives to primary control restoration. In M. Bukowski, I. Fritsche, A. Guinote & M. Kofta (Eds.), *Coping with lack of control in a social world* (pp. 126-142). Routledge.
- Higgans, E. T. (1990). Self-state representations: Patterns of interconnected beliefs with specific holistic meanings and importance. *Bulletin of the Psychonomic Society*, *28*(3), 248-253.

- Higgans, E. T. (1999). When do self-discrepancies have specific relations to emotions? The second-generation question of Tangney, Niedenthal, Covert, and Barlow (1998). *Journal of Personality and Social Psychology, 77*(6), 1313–1317.
- Jonas, E., McGregor, I., Klackl, J., Agroskin, D., Fritsche, I., Holbrook, C., ... & Quirin, M. (2014). Threat and defense: From anxiety to approach. In J. M. Olsen & M. P. Zanna (Eds.), *Advances in experimental social psychology,* (Vol. 49, pp. 219-286). Academic Press.
- Jost, J., & Hunyady, O. (2003). The psychology of system justification and the palliative function of ideology. *European review of social psychology*, *13*(1), 111-153.
- Klenk, M. M., Strauman, T. J., & Higgins, E. T. (2011). Regulatory focus and anxiety: A self-regulatory model of GAD-depression comorbidity. *Personality and Individual Differences*, *50*(7), 935-943.
- Mack, J. E. (1994). Power, powerlessness, and empowerment in psychotherapy. *Psychiatry*, *57*(2), 178-198.
- Mansell, W., Morrison, A. P., Reid, G., Lowens, I., & Tai, S. (2007). The interpretation of, and responses to, changes in internal states: an integrative cognitive model of mood swings and bipolar disorders. *Behavioural and Cognitive Psychotherapy*, *35*(5), 515-539.
- Marchetti, I., Koster, E. H., Klinger, E., & Alloy, L. B. (2016). Spontaneous thought and vulnerability to mood disorders: The dark side of the wandering mind. *Clinical Psychological Science*, *4*(5), 835-857.
- Mason, T. B., Smith, K. E., Engwall, A., Lass, A., Mead, M., Sorby, M., ... & Wonderlich, S. (2019). Self-discrepancy theory as a transdiagnostic framework: A meta-analysis of self-discrepancy and psychopathology. *Psychological Bulletin*, *145*(4), 1-18.
- Mitzman, S. F. (2013). Clinically depressed adults' idiographic goals and causal explanations [Unpublished Doctoral dissertation] University of Birmingham.
- Petrides, K. V. (2011). A general mechanism for linking personality traits to affect, motivation, and action. *New Ideas in Psychology*, *29*(2), 64-71.
- Priolo, D., Pelt, A., Bauzel, R. S., Rubens, L., Voisin, D., & Fointiat, V. (2019). Three decades of research on induced hypocrisy: A meta-analysis. *Personality and Social Psychology Bulletin*, *45*(12), 1681-1701.
- Rothman, N. B., Pratt, M. G., Rees, L., & Vogus, T. J. (2017). Understanding the dual nature of ambivalence: Why and when ambivalence leads to good and bad outcomes. *Academy of Management Annals*, *11*(1), 33-72.
- Sato, T. (2005). The internal conflict model: A theoretical framework for integration. *The Humanistic Psychologist*, *33*(1), 33-44.
- Schauman, O., & Mansell, W. (2012). Processes underlying ambivalence in help-seeking: The loss of valued control model. *Clinical Psychology: Science and Practice*, *19*(2), 107.
- Arantes-Gonçalves, F., Gama Marques, J., & Telles-Correia, D. (2018). Bleuler's Psychopathological Perspective on Schizophrenia Delusions: Towards New Tools in Psychotherapy Treatment. *Frontiers in Psychiatry*, *9*, 1-4.
- Strauman, T. J., & Kolden, G. G. (1997). The self in depression: Research trends and clinical implications. *In Session: Psychotherapy in Practice: Psychotherapy in Practice*, *3*(3), 5-21.
- Strauman, T. J. (1995). Psychopathology from a self-regulation perspective. *Journal of Psychotherapy Integration, 5*(4), 313–321.
- Taylor, M. F. (2007). Professional dissonance: A promising concept for clinical social work. *Smith College Studies in Social Work, 77*(1), 89-99.

- Tryon, W. W., & Misurell, J. R. (2008). Dissonance induction and reduction: A possible principle and connectionist mechanism for why therapies are effective. *Clinical Psychology Review*, *28*(8), 1297-1309.
- Watkins, E. R., & Nolen-Hoeksema, S. (2014). A habit-goal framework of depressive rumination. *Journal of Abnormal Psychology*, *123*(1), 24-34.
- Yonekura, S., Kuniyoshi, Y., & Kawaguchi, Y. (2007). Neural and behavioral substrates of emotions as actions to reduce embodied dissonance. *IEEE 6th International Conference on Development and Learning* (pp. 312-317). [Conference paper]. IEEE 2007, London, UK.

Articles excluded because they did not propose and/or evaluate an explicit link between goal conflict and psychological distress:

- Holopainen, A., & Hakulinen, T. (2019). New parents' experiences of postpartum depression: a systematic review of qualitative evidence*. JBI Database of Systematic Reviews and Implementation Reports, 17*(9), 1731-1769.
- Kelly, K., & Cooper, A. M. (1989). Intrapsychic models. In J. J. Mann (Ed.), *Models of depressive disorders* (pp. 79-91). Springer.
- Korn, C. W., & Bach, D. R. (2019). Minimizing threat via heuristic and optimal policies recruits hippocampus and medial prefrontal cortex. *Nature human behaviour*, *3*(7), 733-745.
- McEvoy, P., Baker, D., Plant, R., Hylton, K., & Mansell, W. (2013). Empathic curiosity: resolving goal conflicts that generate emotional distress. *Journal of Psychiatric and Mental Health Nursing*, *20*(3), 273-278.
- McNaughton, N. (2006). The role of the subiculum within the behavioural inhibition system. *Behavioural Brain Research*, *174*(2), 232-250.
- McNaughton, N., & Corr, P. J. (2019). Behavioural inhibition and valuation of gain/loss are neurally distinct from approach/withdrawal. *Behavioral and Brain Sciences*, *42*, e132.
- Murphy, W. F. (1961). A note on trauma and loss. *Journal of the American Psychoanalytic Association*, *9*(3), 519-532.
- Paige, L., & Mansell, W. (2013). To attend or not attend? A critical review of the factors impacting on initial appointment attendance from an approach–avoidance perspective. *Journal of Mental Health*, *22*(1), 72-82.
- Shahar, G. (2011). Projectuality versus eventuality: Sullivan, the (ambivalent) intentionalist. Journal of Psychotherapy Integration, 21(2), 211–220.
- Smith, H. F. (2003). Conceptions of conflict in psychoanalytic theory and practice. *The Psychoanalytic Quarterly*, *72*(1), 49-96.
- Fernández-Teruel, A., & Tobeña, A. (2020). Revisiting the role of anxiety in the initial acquisition of two-way active avoidance: Pharmacological, behavioural and neuroanatomical convergence. *Neuroscience & Biobehavioral Reviews, 118,* 739-758.

Articles excluded because they were single empirical studies containing either quantitative or qualitative data:

- Franzese, A. T. (2011). Do individual differences in authenticity influence the magnitude and affective consequences of self-discrepancies? [Unpublished doctoral dissertation]. Duke University.

- Heppen, J. B., & Ogilvie, D. M. (2003). Predicting affect from global self-discrepancies: The dual role of the undesired self. *Journal of Social and Clinical Psychology*, *22*(4), 347-368.
- Yang Hsu, B. (2019). Having it all: Filial piety, moral weighting, and anxiety among young adults. In B. Yang Hsu & R. Marsden (Eds.), *The Chinese pursuit of happiness: Anxieties, hopes, and moral tensions in everyday life*, (pp. 42-65). University of California Press.
- Job, V. (2007). Antecedents and consequences of motive-goal congruence [Unpublished Doctoral dissertation]. University of Zurich.
- Marcussen, K., & Large, M. D. (2003). Using identity discrepancy theory to predict psychological distress. In P. J. Burke, T. J. Owens, R. Serpe, P. A. Thoits (Eds.), *Advances in identity theory and research* (pp. 151-164). Springer.
- Marcussen, K. (2006). Identities, self-esteem, and psychological distress: An application of identity-discrepancy theory. *Sociological Perspectives*, *49*(1), 1-24.
- Riediger, M. (2001) Theoretical Considerations. [Unpublished dissertation] University Berlin.
- Sandler, A. M. (1989). Comments on phobic mechanisms in childhood. *The Psychoanalytic Study of the Child*, *44*(1), 101-114.
- Engle, D., & Holiman, M. (2002). A gestalt-experiential perspective on resistance. *Journal of clinical psychology*, *58*(2), 175-183.

Appendix D. Author Guidance for the Cognitive Behaviour Therapist

Aims and Scope

The Cognitive Behaviour Therapist is published for the British Association for Behavioural and Cognitive Psychotherapies and is the sister Journal to Behavioural and Cognitive Psychotherapy
The Cognitive Behaviour Therapist is an interdisciplinary peer reviewed journal aimed at CBT practitioners. Published online, the journal will publish a range of types of papers (see below for a full description of each) that support CBT therapists in improving their delivery of CBT, supervision and training and/or develop our knowledge and understanding of CBT across all areas.
A particular feature of the journal is that its electronic nature is designed to ensure timeliness of publication and professional debate whilst also ensuring rigorous standards in the dissemination of high-quality materials with relevance to the practice of the cognitive and behaviour therapies.

Editorial Governance

The Cognitive Behaviour Therapist encompasses most areas of human behaviour and experience, and represents many different research methods, from quantitative to qualitative research, how to flexibly implement specific clinical interventions right through to detailed case studies. Under the guidance of its editorial board the Cognitive Behaviour Therapist aims to reflect and influence the continuing changes in the concepts, methodology, and techniques within the cognitive and behaviour therapies.

Editorial Statement – scope of journal content

The Editors welcome authoritative contributions from people involved, in the practice, research, education, training and supervision in the cognitive and behaviour therapies. Articles must be original and focused upon cognitive and/or behaviour therapy. There is no formal word limit but concision is recommended.
In terms of subject areas, our scope includes
the delivery of CBT
supervision of CBT
training in CBT
service model and forms of delivery of CBT.
Papers on these subject areas may fit within any of the types of papers detailed below.
Papers should be submitted online at https://mc.manuscriptcentral.com/cbt
Manuscripts should be submitted with any identifiers removed for blind review. If authors fail to omit identifiers, anonymised review cannot be guaranteed.
The Editor-in-Chief and Editorial Team will make an initial decision on of whether submitted papers fall within the remit of the journal and/or are of sufficient interest and importance to warrant full review.
All articles must include the following sections:
Key Learning Aims (3 – 5 bullet points)
- Position – After the Abstract and Keywords
- Intention – What will the reader learn through reading the paper?

Key Practice Points (3 – 5 bullet points)
- Position – before the references
- Intention – a summary of the papers with clear and practical implications for the day-to-day practice of CBT therapists

Further Reading
- Position – before the references and after the Key Practice Points
- Intention – to direct the reader to other relevant follow up literature

This stipulation is in keeping with the practitioner and professional development aims of the journal.
The main types of articles published are detailed below as a guide. Many of these will be therapy related but tCBT also welcomes papers related to subject areas such as CBT supervision and training. Most papers will have a subject area (e.g. therapy, assessment, supervision, training, service development) and a paper type (e.g. Original Research, Case Study, Review) e.g. a single case study

looking at the impact of supervision, an empirically grounded clinical guidance paper focussing on a training method.

Research Transparency

The Cognitive Behaviour Therapist believes in the importance of transparent and reproducible research. We therefore strongly encourage authors to make their evidence, data and other materials that underpin their findings openly available to readers which is outlined in our Research Transparency Policy. Authors will be asked on submission to include in their cover letter to the Editor whether they have made their data publicly available and confirm the inclusion of the Data Availability Statement. If the authors are not making their data publicly available, we ask them to state the reason why in their cover letter.

Types of Paper

Original Research

Research evidence is at the heart of the practice of cognitive and behavioural psychotherapists. Original research will be published that directly relevant to the practice of CBT, such as the therapeutic relationship, therapeutic process and the evaluation of therapeutic strategies and techniques. It is expected that such reports meet both the necessary standards of scientific rigour and the journal's requirement of clear implications for the practice of CBT. Consequently, the description of the research and the presentation of results should be sufficiently brief to enable sufficient discussion of the practice implications. Consideration will be given to quantitative, qualitative and mixed approaches given appropriate fit between the question, methodology and research methods chosen.

For examples see:

Hutton, J., Ellett, L., & Berry, K. (2017). Adult attachment and paranoia: An experimental investigation. The Cognitive Behaviour Therapist, 10, E4. doi:10.1017/S1754470X17000058

Kobori, O., Salkovskis, P., Pagdin, R., Read, J., & Halldorsson, B. (2017). Carer's perception of and reaction to reassurance seeking in obsessive compulsive disorder. The Cognitive Behaviour Therapist, 10, E7. doi:10.1017/S1754470X17000095

McManus, F., Leung, C., Muse, K., & Williams, J. (2014). Understanding 'cyberchondria': An interpretive phenomenological analysis of the purpose, methods and impact of seeking health information online for those with health anxiety. The Cognitive Behaviour Therapist, 7, E21. doi:10.1017/S1754470X14000270

This category of paper type could also include single-case experimental design research or a case series.

For example see:

Thomson, C., Wilson, R., Collerton, D., Freeston, M., & Dudley, R. (2017). Cognitive behavioural therapy for visual hallucinations: An investigation using a single-case experimental design. The Cognitive Behaviour Therapist, 10, E10. doi:10.1017/S1754470X17000174

Empirically Grounded Clinical Guidance Papers

Some of the most widely-read and discussed papers in tCBT have been those that are the synthesis of clinical experience, informed reasoning and either limited direct evidence in the field with evidence from related fields.

tCBT is very keen to consider submission of such papers in relevant fields that are of interest to CBT therapists, supervisors and trainers. These tend to be written by experts in the field and are designed to solve specific practical problems or clarify gaps in our knowledge. Ideally they lead to practical implications and recommendations whilst generating hypotheses for future research.

For examples see:

Barton, S., Armstrong, P., Wicks, L., Freeman, E., & Meyer, T. (2017). Treating complex depression with cognitive behavioural therapy. the Cognitive Behaviour Therapist, 10, E17.

Duffy, M., & Wild, J. (2017). A cognitive approach to persistent complex bereavement disorder (PCBD). the Cognitive Behaviour Therapist, 10, E16.

Freeston, M., Thwaites, R., & Bennett-Levy, J. (2019). 'Courses for Horses': Designing, adapting and implementing self-practice/self-reflection programmes. The Cognitive Behaviour Therapist, 12, E28.
Murray, H., Merritt, C., & Grey, N. (2015). Returning to the scene of the trauma in PTSD treatment - why, how and when? the Cognitive Behaviour Therapist, 8, 1–12.
Veale, D. (2009). Cognitive behaviour therapy for a specific phobia of vomiting. the Cognitive Behaviour Therapist, 2(4), 272-288.

Case Studies

Dissemination of effective practice will be promoted through the publication of case studies that involve CBT with individuals, couples, groups and families. A suggested template is provided which is designed to ensure sufficient information is provided to allow other therapists to replicate successful therapy. All articles must include 3-5 learning objectives that will be achieved through reading the article. At the end of each paper a summary of the main practice points should be included with suggestions for follow-up reading. This stipulation is in keeping with the practitioner and professional development aims of the journal.

The case study should contribute to the development of theory or clinical practice, and feed into CBT practice as a whole rather than just relating to the specific case. Case studies should generally follow this structure:

Abstract

Key Learning Points

Introduction: including an outline of theoretical research and clinical literature relevant to the case

Presenting problem: including information on the presenting problem and associated goals of treatment, diagnosis, relevant history and development of problems, scores on standard and idiographic measures, relevant history

Formulation: including a relevant theory-based CBT model used as a framework.

Course of therapy: including methods used linked to theory and assessment of progress; difficulties encountered and any innovations in therapy

Outcome: including clinical change, progress towards goals, change to measures, plans for follow-up

Discussion: including relating to theory and evidence-base as well as reflections on own practice; implications for therapy and recommendations for other clinicians

Key Practice Points

Further Reading

For examples see:

Bernstein, R., Angell, K., & Dehle, C. (2013). A brief course of cognitive behavioural therapy for the treatment of misophonia: A case example. The Cognitive Behaviour Therapist, 6, E10. doi:10.1017/S1754470X13000172

Jenkins, P. (2017). Can temporary cessation of CBT really be therapeutic? A case study. The Cognitive Behaviour Therapist, 10, E8. doi:10.1017/S1754470X17000101

In addition to clinical case studies, there may be case studies related to training or supervision which would require a slightly amended structure to the one outline above.

Invited Papers

At times tCBT will invite papers on specific issues where there is a gap in the clinical literature. This may involve commissioning papers directly from experts in a particular area or this may be a call to the wider CBT community.

Reviews

Reviews of historical, contemporary, or innovative approaches to practice are also sought providing that they demonstrate relevance to the practice of the current cognitive and behavioural psychotherapies. Prospective authors for review papers should initially discuss their proposals with the Editor-in-Chief.

Reviews of Assessment Tools and Methods

Reviews of clinical scales and other assessment methods will also be considered.

These reviews should provide the practitioner with a review of a scale's or other tool's purpose and properties, sufficient information to know how and when to use it, and how to interpret the results and make use of them. All articles must include a set of 3-5 learning objectives that will be achieved through reading the paper. At the end of each paper a summary of the main points from the paper must be included with suggestions for follow-up reading. This stipulation is in keeping with the practitioner and professional development aims of the journal.

For examples see:

Hyland, P., Shevlin, M., Adamson, G., & Boduszek, D. (2013). The factor structure and composite reliability of the Profile of Emotional Distress. The Cognitive Behaviour Therapist, 6, E15. doi:10.1017/S1754470X13000214

Reiser, R., Cliffe, T., & Milne, D. (2018). An improved competence rating scale for CBT Supervision: Short-SAGE. The Cognitive Behaviour Therapist, 11, E7. doi:10.1017/S1754470X18000065

Service Models, Forms of Delivery and Cultural Adaptations of CBT

The service model is the clinical and operational framework that exists to support the therapist with the delivery of cognitive behavioural therapies. Description and evaluation of innovative clinical service models (both in the UK and internationally) and delivery formats that can be generalised to other services will be considered for publication. Audits will only be considered if they are of wider interest and value in informing the work of other services.

tCBT is keen to publish research that either expands the evidence base for previously under-represented groups or work that describes and evaluates cultural adaptations that are required for different populations.

For examples see:

Jankowska, M. (2019). Cultural modifications of cognitive behavioural treatment of social anxiety among culturally diverse clients: A systematic literature review. The Cognitive Behaviour Therapist, 12, E7. doi:10.1017/S1754470X18000211

King, D., & Said, G. (2019). Working with unaccompanied asylum-seeking young people: Cultural considerations and acceptability of a cognitive behavioural group approach. The Cognitive Behaviour Therapist, 12, E11. doi:10.1017/S1754470X18000260

Thew, G. (2020). IAPT and the internet: The current and future role of therapist-guided internet interventions within routine care settings. The Cognitive Behaviour Therapist, 13, E4. doi:10.1017/S1754470X20000033

Thew, G., MacCallam, J., Salkovskis, P., & Suntharalingam, J. (2017). Developing and evaluating psychological provision in the acute hospital setting for patients with chronic respiratory disease. The Cognitive Behaviour Therapist, 10, E5. doi:10.1017/S1754470X17000071

Style Guide

Title page

This should uploaded as a separate file the main text to ensure blind review.

The title should phrase concisely the major issues. Author(s) to be given with departmental affiliations and addresses, grouped appropriately. A running head of no more than 40 characters should be indicated.

The following statements should be included on the title page:

Acknowledgements

You may acknowledge individuals or organizations that provided advice, support (non-financial).

Conflicts of Interest

Authors should include a Conflicts of Interest declaration in their title page. Conflicts of Interest are situations that could be perceived to exert an undue influence on an author's presentation of their work. They may include, but are not limited to, financial, professional, contractual or personal relationships or situations.Conflicts of Interest do not necessarily mean that an author's work has been compromised. Authors should declare any real or perceived Conflicts of Interest in order to be transparent about the context of their work. If the manuscript has multiple authors, the author

submitting the title page must include Conflicts of Interest declarations relevant to all contributing authors.
Example wording for your Conflicts of Interest declaration is as follows: “Conflicts of Interest: Author A is employed at company B. Author C owns shares in company D, is on the Board of company E and is a member of organisation F. Author G has received grants from company H.” If no Conflicts of Interest exist, your declaration should state “Conflicts of Interest: None”.
Data Availability Statement
This is a brief statement about whether the authors of an article have made the evidence supporting their findings available, and if so, where readers may access it. More information on Data Availability Statements and example statements can be found here. Please note that if you are not making your data publicly available, we ask you to state the reason why in your cover letter to the Editor. Also see information on Data Availability below in these instructions.
Financial support
Please provide details of the sources of financial support for all authors, Including grant numbers. For example, "This work was supported by the Medical research Council (grant number XXXXXXX)". Multiple grant numbers should be separated by a comma and space, and where research was funded by more than one agency the different agencies should be separated by a semi-colon, with "and" before the final funder. Grants held by different authors should be identified as belonging to individual authors by the authors’ initials. For example, "This work was supported by the Wellcome Trust (A.B., grant numbers XXXX, YYYY), (C.D., grant number ZZZZ); the Natural Environment Research Council (E.F., grant number FFFF); and the National Institutes of Health (A.B., grant number GGGG), (E.F., grant number HHHH)". Where no specific funding has been provided for research, please provide the following statement: "This research received no specific grant from any funding agency, commercial or not-for-profit sectors."
Main Text (anonymised with no author information)
This should be uploaded as a .doc file with the following running order (unless a Case study). The following format is based on APA style, which should be followed throughout:
http://www.apastyle.org/
Abstract
This should summarize the article in no more than 250 words, references should not be included in the abstract.
Keywords
Please include up to six key words that could be used to effectively search for the article.
Key Learning Aims
Body of paper
This should begin with an introduction, succinctly introducing the point of the paper to those interested in the general area of the journal. Attention should be paid to the Editorial Statement. The appropriate positions of tables and figures should be indicated in the text. Footnotes should be avoided where possible.
Ethical Statements
All papers should include a statement indicating that authors have abided by the Ethical Principles of Psychologists and Code of Conduct as set out by the BABCP and BPS. Authors should also confirm if ethical approval was needed, by which organisation, and provide the relevant reference number. If no ethical approval was obtained, the authors should state what governance arrangements were in place (e.g. audit committee approval).
Key Practice Points
Further Reading
References
Please use APA style for the in-text citations and references. In the reference list there is an additional requirement that author names be listed in bold face. For example:

Grady, J. S., Her, M., Moreno, G., Perez, C., & Yelinek, J. (2019). Emotions in storybooks: A comparison of storybooks that represent ethnic and racial groups in the United States. Psychology of Popular Media Culture, 8(3), 207–217. https://doi.org/10.1037/ppm000...
Authors are encouraged to make use of referencing software packages (e.g. Endnote, Mendeley, Reference Manager etc.) to assist with formatting - extensions for APA formatting are easily accessible. Authors are also reminded to use bold face for author names in the reference list.
Tables and Figures
These should not be included in the body of the manuscript text, but uploaded as individual files.
Use text anchors to show their intended position within the manuscript.
Numbered figure captions should be provided.
Tables
Use APA style. Tables should be provided in editable Word format. They should be numbered and given explanatory titles.
Name your uploaded file to correspond with the caption in the manuscript.
Figures
Use APA style. All artwork should be submitted as separate TIFF format files.
The minimum resolution for submission of electronic artwork is:

Halftone Images (Black and White Photographs only): 300 dpi (dots per inch).
LineTone (Black and White Photographs plus Line Drawings in the same figure): 600 dpi (dots per inch).
Bitmap (Line Drawings only): 1200 dpi (dots per inch).
Please see this link for full guidance on artwork
Supplementary Files
Where unpublished material e.g. behaviour rating scales or therapy manuals are referred to in an article, copies should be submitted as an additional document (where copyright allows) to facilitate review. Supplementary files can be used to convey supporting or extra information to your study, however, the main manuscript should be able to 'stand-alone'. Supporting documents are reviewed but not copyedited on acceptance of the article. They can therefore be submitted in PDF format, and include figures and tables within the text. There is no word limit for supporting online information.
Reporting Standards
The Cognitive Behaviour Therapist supports standardised reporting practices, consult the following table to ensure your submission meets the reporting standards for your manuscript type. Please include the relevant supporting information (such as diagrams and checklists) with your submission files. See http://www.equator-network.org/reporting-guidelines/ for more information on manuscript types not described below.
The journal also encourages clarity in describing interventions sufficient to allow their replication through the use of the Template for Intervention Description and Replication Checklist (TIDieR).
Randomised Controlled Trial CONSORT http://www.consort-statement.org/
Systematic reviews and Meta-Analysis PRISMA http://www.prisma-statement.org/
Study Protocols SPIRIT http://www.spirit-statement.org/
Suggested Reviewers
During the submission process, you will be asked to indicate your preferred and non-preferred reviewers, and the reasons for your choices.
Preferred reviewers:
Should not have a conflict of interest (such as a recent or current close working relationship, or from the same institution)
At least half of the list should be international to yourself
Please consider early career researchers as well as field leaders
Please suggest both niche experts and those with wider knowledge of the subject
Non-preferred reviewers:

May have personal or subjective bias to your work which disregards the scientific merit
May have seen or commented on the submitted manuscript, or prior versions.
For more information on the peer review process and to find resources for reviewers, please visit this page.

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Discoverability: ORCID increases the discoverability of your publications, by enabling smarter publisher systems and by helping readers to reliably find work that you've authored.
Convenience: As more organisations use ORCID, providing your iD or using it to register for services will automatically link activities to your ORCID record, and will enable you to share this information with other systems and platforms you use, saving you re-keying information multiple times.
Keeping track: Your ORCID record is a neat place to store and (if you choose) share validated information about your research activities and affiliations.
You can register for an ORCiD account and iD here: https://ORCID.org/register. If you already have an iD, please use this when submitting, either by linking it to your Scholar One account or supplying it during submission by using the "Associate your existing ORCID ID" button.

Publication Ethics

The Cognitive Behaviour Therapist is committed to actively investigating any cases of suspected misconduct, even in the event of the manuscript being withdrawn. All editors and reviewers are asked to disclose any conflicts of interest when they are assigned a manuscript. If deemed necessary, alternative or additional opinions will be sought in order to maintain the balance of fair and thorough peer review. All authors are also required to provide statements pertaining to conflicts of interest and ethical principles.
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Please note: APC collection is managed by Rightslink, who will contact authors who have elected to publish via Open Access.
Green Open Access is also supported by Cambridge Open and full details can be found on the journal author publishing agreements.
Note: Open Access publication under a CC-BY licence may be required when funding has been received from some funding bodies. If this applies to your paper make sure to let us know during the submission process, and complete the appropriate Open Access author publishing agreement. You

can also indicate through the Scholar One system that your paper should deposited in PubMed Central if accepted, which may also be required by funders.

Data Availability

The Cognitive Behaviour Therapist believes in the importance of transparent and reproducible research. We therefore strongly encourage all submissions to include a Data Availability Statement to describe whether the materials that underpin the findings of the manuscript have been made available to readers, and if so, where. This policy will be encouraged from August 2020 and made mandatory by January 2022. For more information on including a data availability statement and making data available please see the information on the Research Transparency page.

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Author Language Services

Cambridge University Press recommends that authors have their manuscripts checked by an English language native speaker before submission; this will ensure that submissions are judged at peer review exclusively on academic merit. Cambridge partners with a third-party service specialising in language editing and / or translation, and suggest that authors contact as appropriate. Use of such services is voluntary, at the author's own expense, and no guarantee of having an article accepted in the journal.

Appendix E: Goal-level Awareness Questionnaire (GAQ)

Goal-level Awareness Questionnaire (GAQ)

A goal is an objective that you are typically trying to accomplish or attain. For example, ‘to exercise at least twice a week’ or ‘to get a degree’ or ‘to be happy’.

Write down between ***5 - 15 personal goals*** and rank them in ***order of importance*** to you right now.

1 = most important and 15 = least important

Goals	Ranking (1 – 15)

Total: ……

Scoring

Goals ranked 1-5 are to be coded on the 3-point scale:

1 = Program-level goals: “A program is a structure of tests and choice-points connecting sequences” (Powers, 1998 p. 148). The essence of a programme is the *if-then* statement - a point where perceptual experience is compared to a reference point and determines a course of action (Powers, 1973). I.e., *if* this perception occurs, *then* do that step; otherwise do another step (Powers, 1998). They are the processes that one engages with either physically or mentally.
For example, *to eat less chocolate, to pass my psychology exam, to call my friends more, to worry less*

2 = Principle-level goals: General rules that we attempt to adhere to by selecting a range of programmes (Powers, 1973). They do not produce direct action but form the basis for determining what action/s to take.
For example, *to have a healthy diet, to get a good education, to be sociable, to be calm*

3 = System-level goals: The efforts to maintain unity among sets of moral, factual and abstract principles (Powers, 1973). Primarily related to the “self” - the type of person one wants to be.
For example, *to be healthy, to be successful, to be loyal, to be loved, to be happy, to be normal*

Further information:

If a goal contains aspects of a higher-level goal (i.e. principle or system) but, it is in relation to a programme level goal, it is rated as a programme level goal.
For example, ‘*to be more confident in public speaking’*.
Confidence is a property of the self and therefore the goal ‘to be more confident’ would be a system-level goal. However, as in this example, confidence is specifically related to public speaking, inferring a specific course of action thereby, it is rated as a programme-level goal.

If a goal contains two separate goal-levels it is rated at the highest-level of goal-level awareness indicated.
For example, *‘to do well at work and tick off everything on my to do list”.*
‘To do well at work’ (principle-level goal) can be separated from to ‘tick everything off my to do list’ (programme-level goal). As an independent principle-level goal is indicated the goal is rated at this level.

Appendix F: Risk Protocols

Risk Protocol

Risk disclosed:
Participant discloses risk to themselves and/or others, or information relating to illegal activity.

Step 1:

- Inform project supervisors.
- Postpone therapy session to conduct a full risk assessment including questions relating to;
  - Nature, severity and imminence of risk
  - Thoughts, plans and intent to act
  - Moderating factors that may enhance/reduce level of risk
  - Any previous attempts to harm themselves or others
- Conduct a safety plan including;
  - Factors that may increase risk
  - Reduce access to means
  - Ways to manage increased distress
  - Information on crisis pathways
  - Encourage seeking support
  - Offer to inform friend or family member
  - Establish hope for the future i.e. protective factors.

Step 2:

- If the risk disclosed is deemed low risk i.e. no immediate risk and no specific plans or intent to act on thoughts of harming themselves or others. Ask the participant if they feel able to continue with the session and remind them of available support services.
- If the risk disclosed does not pose immediate risk, but the participant feels unable to continue, terminate the session and continue to step 3a.
- If the risk disclosed issue does pose immediate risk to the participant or others, terminate the interview and continue step 3b.

Step 3a- No immediate risk:

- Encourage the participant to speak to the researcher and/or the project supervisors for support.
- Ask the participant if there is anyone (e.g. friend or family member) who we can contact for them to offer support.
- If the participant feels they require more professional support the researcher will discuss the available referral channels and signpost them appropriately.
- If the participant poses a risk to themselves or others the researcher will phone the police/an ambulance/mental health services for assistance but remain with the participant until they arrive.
- In all instances the researcher will seek support from the project supervisors who will be available during interview times.

Step 3b- Immediate risk:

- Discontinue the MOL session and remain with the participant.
- Inform project supervisors who will, if necessary, attend the session immediately. If the project supervisor is not on campus, they will contact another qualified clinical psychologist who will attend the session immediately.
- Explain to the participant that relevant professionals, who may include; campus security, their GP, mental health services or emergency services (e.g. police/ambulance) will be informed and request they remain with the researcher in the meantime.
- Ask the participant if there is anyone (e.g. friend or family member) we can who we can contact for them to offer support.
- If the participant discloses an intent to harm others, a

Follow up:

- The researcher will offer to contact the participant via phone or email the following day.
- The researcher will offer the participant the opportunity to withdraw from the study and for their data to be destroyed
- Encourage participant to call the research team if they experience increased distress in the hours/days after the therapy session.
- The researcher will reiterate details of further support and signpost accordingly.
- The researcher will encourage the participants to attend A&E or contact crisis services if they feel at risk of harming themselves and/or others.

Risk Protocol for Telephone Consultations

Risk disclosed:
Participant discloses risk to themselves and/or others, or information relating to illegal activity.

Step 1:

- Inform project supervisors.
- Conduct a full risk assessment including questions relating to;
  - Nature, severity and imminence of risk
  - Thoughts, plans and intent to act
  - Moderating factors that may enhance/reduce level of risk
  - Any previous attempts to harm themselves or others
- Conduct a safety plan including;
  - Factors that may increase risk
  - Reduce access to means
  - Ways to manage increased distress
  - Information on crisis pathways
  - Encourage seeking support
  - Offer to inform friend or family member
  - Establish hope for the future i.e. protective factors.

Step 2:

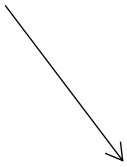
- If the risk disclosed is deemed low risk i.e. no immediate risk and no specific plans or intent to act on thoughts of harming themselves or others continue to step 3a.
- If the risk disclosed issue does pose immediate risk to the participant or others continue to step 3b.

Step 3a- No immediate risk:

- Ensure the participate feels able to keep themselves safe and feels able to seek support if this changes.
- Ask the participant if there is anyone (e.g. friend or family member) who we can contact for them to offer support.
- If the participant feels they require more professional support the researcher will discuss the available referral channels and signpost them appropriately.
- In all instances the researcher will seek support from the project supervisors who will be available during interview times.

Step 3b – Immediate risk:

- Inform emergency services (police/ambulance) and remain on the phone with the participant until they arrive.
- Ask the participant if there is anyone (e.g. friend or family member) we can who we can contact for them to offer support.
- Inform the participant's GP.
- If the participant discloses an intent to harm others, a disclosure of information form will be filled in immediately following the session and sent to David Barker (Director of Risk and Compliance at the University of Manchester).
- In all instances the researcher will seek support from the project supervisors who will be available during telephone session times.



Follow up:

- The researcher will offer to contact the participant via phone or email the following day.
- The researcher will offer the participant the opportunity to withdraw from the study and for their data to be destroyed
- Encourage participant to call the research team if they experience increased distress in the hours/days after the telephone session.
- The researcher will reiterate details of further support and signpost accordingly.
- The researcher will encourage the participants to attend A&E or contact crisis services if they feel at risk of harming themselves and/or others.

Appendix G: Participant Demographics Questionnaire

Participant Demographics

All information provided in this document will be treated as strictly confidential.

Age:

☐ 18 - 24
☐ 25 - 34
☐ 35 - 44
☐ 44- 54
☐ 55 - 64
☐ 65+
☐ Prefer not to answer

Gender:

☐ Male
☐ Female
☐ Other
☐ Prefer not to answer

Ethnicity:

White

☐ English / Welsh / Scottish / Northern Irish / British
☐ Irish
☐ Gypsy or Irish Traveller
☐ Any other White background

Mixed / Multiple ethnic groups

☐ White and Black Caribbean
☐ White and Black African
☐ White and Asian
☐ Any other Mixed/Multiple ethnic background

Asian / Asian British

☐ Indian
☐ Pakistani
☐ Bangladeshi
☐ Chinese
☐ Any other Asian background
☐ Prefer not to answer

Black / African / Caribbean / Black British

☐ African

☐ Caribbean

☐ Any other Black/African/Caribbean background

Other ethnic group

☐ Arab

☐ Any other ethnic group

☐ Prefer not to answer

Employment status:

☐ Student

☐ Employed by The University of Manchester

☐ Employed Other

☐ Self-employed

☐ Unemployed

☐ Homemaker

☐ Retired

☐ Other

☐ Prefer not to answer

Appendix H: Screening Questionnaire

How do Talking Therapies Work?

Screening questionnaire

1. **Do you consider yourself to have a significant brain injury?**
   ☐ Yes
   ☐ No

2. **Have you received a diagnosis of a learning difficulty?**
   ☐ Yes
   ☐ No

(*If no go to question 3)*

2a. Please select all that apply

☐ Dyslexia
☐ Dyspraxia
☐ Dyscalculia
☐ Attention Deficit-Hyperactivity Disorder (ADHD)
☐ Autistic Spectrum Condition (ASC)
☐ Down's syndrome
☐ Williams syndrome
☐ Fragile X syndrome
☐ Cerebral palsy
☐ Other

If other please state:

……

2b. Do you consider your learning difficulty to be

☐ Mild
☐ Moderate
☐ Severe

This study requires you to be able to complete a series of questionnaires both online and using pen and paper, and to participate in a session of talking therapy that could last up to 90 minutes.

2c. Do you think your learning difficulty will stop you from being able to participate in this research study?

☐ Yes
☐ No

3. **Have you received a diagnosis of a severe and enduring mental illness (e.g. schizophrenia, schizoaffective disorder or delusional disorder, major depression, bipolar disorder)?**
   ☐ Yes
   ☐ No

4. **Have you received a diagnosis of a personality disorder?**
   ☐ Yes
   ☐ No

5. **Have you received a diagnosis of alcohol or drug dependency?**
   ☐ Yes
   ☐ No

6. **Are you currently accessing talking therapies e.g. psychological therapy, counselling, self-help services etc?**
   ☐ Yes
   ☐ No

7. **Are you currently taking any prescribed medication for difficulties related to your mental health?**
   ☐ Yes
   ☐ No

8. **Can you speak and understand fluent English?**
   ☐ Yes
   ☐ No

Appendix I: MOL Session Evaluation

MOL Session Evaluation – Other

1. To what extent was the content of the session generated by the patient?

1	2	3	4	5	6	7	8	9	10
not at all									completely

Examples:

2. To what extent did the therapist question rather than advise, suggest, or teach?

1	2	3	4	5	6	7	8	9	10
not at all									totally

Examples:

3. To what extent did the therapist ask about disruptions?

1	2	3	4	5	6	7	8	9	10
not at all									constantly

Examples:

4. To what extent did the therapist ask detailed and specific questions about the current topic of conversation?

1	2	3	4	5	6	7	8	9	10
not at all									constantly

Examples:

5. To what extent did the therapist question rather than assume?

1	2	3	4	5	6	7	8	9	10
not at all									extremely

Examples:

6. To what extent did the therapist ask about the patient's immediate experience?

1	2	3	4	5	6	7	8	9	10
not at all									constantly

Examples:

7. To what extent did the therapist follow rather than lead the client?

1	2	3	4	5	6	7	8	9	10
not at all									extremely

Examples:

8. To what extent did the therapist facilitate the client sustaining a focus in one or more areas?

1	2	3	4	5	6	7	8	9	10
not at all									constantly

Examples:

9. Comments about the session:

10. Suggestions for improvement and development:

Appendix J: Brief Behavioural Activation Fidelity Scale

1. Agenda setting

Fidelity Level	Description	Rating
0	No agenda set, highly inappropriate agenda or agenda not adhered to	
1	Inappropriate agenda set or significant items missing/not added	
2	An attempt at an agenda made, but major difficulties evident. Poor adherence	
3	Appropriate agenda set well, but some difficulties evident. Some adherence	
4	Appropriate agenda, minor difficulties. Moderate adherence	
5	Highly appropriate agenda, minimal difficulties. Agenda adhered to	
6	Excellent agenda, or highly effective agenda in the face of difficulties	

Comments

2. Feedback

Fidelity Level	Description	Rating
0	Absence of feedback or highly inappropriate (insensitive or not constructive)	
1	Minimal appropriate feedback	
2	Appropriate feedback, but not given and elicited frequently enough or too vague	
3	Appropriate feedback given and elicited frequently, but some difficulties in content or method	
4	Appropriate feedback given and elicited frequently, minor problems evident	
5	Highly appropriate feedback given and elicited frequently, minimal problems	
6	Excellent use of feedback	

Comments

3. Collaboration

Fidelity Level	Description	Rating
0	Client is actively prevented or discouraged from being collaborative	
1	Therapist is too controlling, dominating, or passive	
2	Some attempt at collaboration but style causes problems	
3	Teamwork evident but some problems	
4	Effective teamwork is evident but not consistent, minor problems	
5	Effective teamwork throughout most of the session, minimal problems	
6	Excellent teamwork, or highly effective teamwork in the face of difficulties	

Comments

4. Pacing and Efficient use of Time

Fidelity Level	Description	Rating
0	Poor time management leads either to an aimless or overly rigid session	
1	The session is too slow or fast for the client's needs, session overruns significantly without due cause	
2	Reasonable pacing but digression or repetitions leads to an inefficient use of time	
3	Good pacing some of the time, some problems	
4	Balanced allocation with start middle and end, minor problems	
5	Good time management and flow to the session, minimal problems	
6	Excellent time management, or highly effective management in face of difficulties	

Comments

5. Interpersonal Effectiveness

Fidelity Level	Description	Rating
0	Therapist may be dismissive, and the client disengages, is distrustful and/or hostile	
1	Therapist has difficulty in showing empathy, genuineness, and warmth	
2	Therapist style at times impedes empathetic understanding	
3	Therapist understands explicit meaning of client communication resulting in some trust, some inconsistencies	
4	Therapist understands implicit and explicit meaning, minor problems	
5	Very good interpersonal effectiveness, client is understood, minimal problems	
6	High interpersonal effectiveness, even in the face of difficulties	

Comments

6. Positive Reinforcement

Fidelity Level	Description	Rating
0	Therapist criticises or tells off the client	
1	Therapist does not give positive reinforcement	
2	Therapist misses many opportunities to praise and encourage the client	
3	Therapist provides some praise and encouragement, some inconsistencies	
4	Therapist gives praise and encouragement, minor problems or inconsistencies	
5	Therapist gives a lot of praise and encouragement throughout, minimal problems	
6	Excellent positive reinforcement, or very good even in the face of difficulties	

Comments

7. Appropriate use of Brief BA Techniques

Fidelity Level	Description	Rating
0	Therapist uses inappropriate techniques e.g. cognitive restructuring	
1	Therapist does not use any of the Brief BA techniques outlined above	
2	Some attempt to use Brief BA techniques but very rigid or unclear	
3	Therapist uses Brief BA techniques, but some problems evident	
4	Therapist uses appropriate Brief BA techniques, minor problems	
5	Therapist uses appropriate Brief BA techniques flexibly, minimal problems	
6	Therapist uses appropriate techniques skilfully, even in the face of difficulties	

Comments

8. Assigns Homework

Fidelity Level	Description	Rating
0	Therapist fails to set homework or sets inappropriate homework	
1	Therapist does not negotiate homework, insufficient time allocated to discuss	
2	Therapist negotiates homework in a routine way without explaining rationale	
3	Therapist sets an appropriate homework task, but some problems evident	
4	Appropriate homework jointly negotiated, clear rationale, minor problems	
5	Appropriate homework jointly negotiated with clear rationale, obstacles explored, minimal problems	
6	Excellent homework negotiated, or appropriate one set in the face of difficulties	

Comments

Appendix K: Therapy Descriptions

Method of Levels (MOL)

MOL is a talking therapy that is designed to help people resolve their problems. The therapist asks questions to help the client talk freely and explore whatever is bothering them, and to notice new perspectives.

Behavioural Activation (BA)

Behavioural Activation (BA) aims to help people to recognise areas of their life that they have neglected due to a change in circumstances and/or feeling low in mood. BA helps people to re-engage with routine, necessary and pleasurable activities to ensure a balanced lifestyle.

Appendix L: Awareness of Goal Conflict (AGC) scale

AGC

Thinking about the problem you have talked about during the session, please read each of the statements below and make a rating to indicate how much you believe each one. Make your rating by circling the appropriate square between 0% (don't believe this at all) and 100% (believe this completely). For example, 50% means that the statement is equally likely to be true or false for you. Here is an example:

'I feel comfortable around my friends'

0	10	20	30	40	50	60	70	80	90	100

This would mean that you rate your belief that you feel comfortable around your friends at 70%. It is not completely true (which would be 100%), but it is more than false for you (i.e., it is over 50%)

With regards to the problem you have talked about, please make a rating for the following items. Please note that there are no right or wrong answers to these statements and only your opinion is important.

1. When I talked about the problem, a different way of seeing it just came to me

0	10	20	30	40	50	60	70	80	90	100

Don't believe this at all — Believe this completely

2. When I was talking about the problem, it seemed that I was deciding between two ways of thinking

0	10	20	30	40	50	60	70	80	90	100

Don't believe this at all — Believe this completely

3. When I explained the problem to the researcher, I noticed a shift in what I made of the problem

0	10	20	30	40	50	60	70	80	90	100

Don't believe this at all — Believe this completely

4. I felt that talking about my problem has helped to look at the problem from a different perspective

0	10	20	30	40	50	60	70	80	90	100

Don't believe this at all

Believe this completely

regards to my problem I just talked about, it seemed that deciding to do one thing would stop me from doing something else

0	10	20	30	40	50	60	70	80	90	100

Don't believe this at all

Believe this completely

6. When I talked through my problem, I felt that there were two sides of me wanting different things

0	10	20	30	40	50	60	70	80	90	100

Don't believe this at all

Believe this completely

7. When I consider the problem I just talked about, I am aware that I hadn't thought about it in that way before

0	10	20	30	40	50	60	70	80	90	100

Don't believe this at all

Believe this completely

8. During the session, I was aware of one issue being at the forefront of my mind, while the other was at the back

0	10	20	30	40	50	60	70	80	90	100

Don't believe this at all

Believe this completely

9. When I was talking about my problem, I noticed that thoughts switched from one side to the other

0	10	20	30	40	50	60	70	80	90	100

Don't believe this at all

Believe this completely

10. I had conflicting feelings when talking about my problem

0	10	20	30	40	50	60	70	80	90	100

Don't believe this at all

Believe this completely

Appendix M: Supplementary information for the Depth and Duration of Awareness Coding Scheme (D-DACS).

The D-DACS (Higginson & Mansell, 2016) is an observer-rated coding system that measures shifts in depth and duration of awareness within a therapy session. Verbal utterances are coded on levels of awareness of conflict (1 = present moment perceptual experience, 2 = arbitrary control, 3 = internal conflict, 4 = higher order goals, values or ideals) and the degree of awareness of (a = catching disruptions or fleeting awareness, b = sustained awareness, c = potential reorganisation). The level (1 - 4) and degree (a - c) of awareness of goal conflict are combined resulting in 12 categories that verbal utterances can be coded under (see coding scheme below). The categories are scored by the frequency of occurrence and time in seconds. Higginson and Mansell (2018) found that the D-DACS has substantial agreement between raters in judging the depth (*K* = .71) and duration of awareness (*K* = .64). However, it lacked convergent validity with self-report measures of similar processes, including the RoC, and predictive validity in changes on the PHQ-9 and Generalised Anxiety Disorder (GAD-7) scale.

A subset (*n* = 3) of the MOL audio recordings were transcribed by a third research volunteer, also a psychology undergraduate student. Transcripts and audio recordings were used by two independent raters to code the D-DACS. Both raters have experience using the D-DACS and have conducted research into its development and feasibility (e.g., Grzegrzolka & Mansell, 2019). Individual codings were compared and discrepancies discussed to obtain consensus.

Descriptive statistics for the duration on D-DACS item 4 and scores on the post-intervention GAQ for a subset of participants (*n* = 3) are provided in Table 20

Table 20

Descriptive Statistics for Duration on D-DACS Item 4 and Post-intervention GAQ Score (n = 3)

Case	Item duration (seconds)			Total duration (seconds)	Duration of Session (%)	Post-GAQ
	4a	4b	4c			
1	0	16	0	16	1	11
2	37	23	24	84	2	7
3	7	160	36	203	6	14

Depth and Duration of Awareness Coding Scheme (D-DACS) coding system

	Duration of Awareness		
	a. Catching disruptions or fleeting awareness The client expresses an awareness of a disruption in their flow of dialogue and briefly comments on this. Alternatively, in the development of their dialogue the client verbally expresses something they become aware of in that moment, however awareness is fleeting and not sustained and the client demonstrates limited awareness of any significance.	**b. Sustained awareness** The client sustains their awareness on and provides further description of the content of their awareness. The client expresses awareness of the significance of this as indicated by the quality or manner in which the client expresses this or by the amount of time the client sustains awareness on it.	**c. Potential reorganisation** The client appraises, considers changing or experiences a transformation in his/her experience of the content of awareness. This may be indicated by choosing new ways of expressing a perceptual experience, process, conflict or goal. The novel facet of reorganisation is indicated by what the client says, by the expression of a felt sense that things are better understood or by an accompanying shift in emotional tone.
1. Present moment perceptual experience An awareness of a present moment perceptual experience. This may occur in sensory modalities (thoughts, images, memories, feelings emotions and physiological experiences).	**1a:** **Catching a disruption or fleeting recognition of a present moment perceptual experience**	**1b:** **Sustained awareness on a present moment perceptual experience.**	**1c:** **Evaluates and reorganises a perceptual experience.**
2. Arbitrary control An awareness of 'doing something' i.e. a mental process, action, pursuing a goal etc., which they recognise is arbitrary, inflexible or causes difficulties in relation to the problem. Including processes engaged in too much or those that would be helpful but not carried out sufficiently.	**2a:** **Catching a disruption or fleeting recognition of control/ lack of control and processes related to this.**	**2b:** **Sustained awareness on control/ lack of control and processes related to this.**	**2c:** **Evaluates and reorganises arbitrary/ inflexible process.**
3. Internal conflict Simultaneously aware of two incompatible, opposing or contradictory goals, thoughts, moods or emotions.	**3a:** **Catching a disruption or fleeting recognition of conflict.**	**3b:** **Sustained awareness on explicit conflict.**	**3c:** **Evaluates and reorganises conflict.**
4. Higher order goals, values or ideals Awareness of an important goal, value or ideal which relates to their sense of self or the kind of person they want to be, which the client experiences no internal conflict about.	**4a:** **Catching a disruption or fleeting recognition of a higher order goal, value or ideal the client is not in conflict over.**	**4b:** **Sustained awareness on a higher order goal, value or ideal the client is not in conflict over.**	**4c:** **Evaluates and reorganises a higher order goal, value or ideal.**

References

Higginson, S., & Mansell, W. (2016). The Depth and Duration of Awareness Coding Scheme (D-DACS) Manual [Unpublished manuscript]. https://doi.org/10.13140/RG.2.1.2494.4725

Higginson, S., & Mansell, W. (2018). The development and evaluation of the Depth and Duration of Awareness Coding Scheme (D-DACS). *Cognitive Behaviour Therapist*, *11*, 1-21. https://doi.org/10.1017/S1754470X1800020X

Grzegrzolka, J., & Mansell, W. (2019). A test of the feasibility of a visualization method to show the depth and duration of awareness during Method of Levels therapy. *The Cognitive Behaviour Therapist, 12,* Article e34. https://doi.org/10.1017/S1754470X19000199

Appendix N: University Research Ethics Committee (UREC) letter of approval

Research Governance, Ethics and Integrity
2nd Floor Christie Building
The University of Manchester
Oxford Road
Manchester
M13 9PL
Tel: 0161 275 2206/2674
Email: research.ethics@manchester.ac.uk

Ref: 2020-7902-12953
20/01/2020
Dear Miss Abigail Kay, Dr Warren Mansell, Dr Sara Tai
Study Title: How Do Talking Therapies Work?
University Research Ethics Committee 4
I write to thank you for submitting the final version of your documents for your project to the Committee on 17/01/2020 16:37 . I am pleased to confirm a favourable
ethical opinion for the above research on the basis described in the application form and supporting documentation as submitted and approved by the Committee.
Please see below for a table of the title, version numbers and dates of all the final approved documents for your project:

Document Type	File Name	Date	Version
Distress Protocol/Debrief Sheet	Distress Protocol	28/10/2019	1
Additional docs	Risk Protocol	28/10/2019	1
Default	PHQ9	28/10/2019	1
Default	GAD7	28/10/2019	1
Default	PSYCHLOPS, pre-therapy	28/10/2019	1
Default	PSYCHLOPS, post-therapy (1)	28/10/2019	1
Default	GAQ	28/10/2019	1
Default	Behaviour Identification Form	28/10/2019	1
Default	AGC	28/10/2019	1
Default	CEQ	28/10/2019	1
Default	Session Rating Scale	28/10/2019	1
Default	MOL session evaluation	28/10/2019	1
Default	Depth and Duration of Awareness Coding Scheme	28/10/2019	1
Default	Participant Contact Details	13/12/2019	1
Default	Screening questionnaire	13/12/2019	2
Advertisement	Poster	13/12/2019	2
Advertisement	Emails	13/12/2019	2
Participant Information Sheet	PIS	13/12/2019	2
Consent Form	Consent form 1 (screening)	13/12/2019	2
Consent Form	V2 Consent Form 2 (therapy)	13/12/2019	2
Additional docs	Debrief 1 (screening)	13/12/2019	2
Additional docs	V2 Debrief 2 (therapy)	13/12/2019	2
Default	Demographic information	13/12/2019	2
Data Management Plan	DMP 03.01.20 (1)	03/01/2020	1
Additional docs	UREC committee response letter2	17/01/2020	1

This approval is effective for a period of five years however please note that it is only valid for the specifications of the research project as outlined in the approved
documentation set. If the project continues beyond the 5 year period or if you wish to propose any changes to the methodology or any other specifics within the project,
an application to seek an amendment must be submitted for review. Failure to do so could invalidate the insurance and constitute research misconduct.

You are reminded that, in accordance with University policy, any data carrying personal identifiers must be encrypted when not held on a secure university computer or kept securely as a hard copy in a location which is accessible only to those involved with the research.

Reporting Requirements:

You are required to report to us the following:

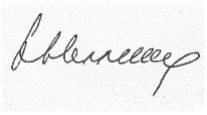
1. Amendments: Guidance on what constitutes an amendment
2. Amendments: How to submit an amendment in the ERM system
3. Ethics Breaches and adverse events
4. Data breaches
5. Notification of progress/end of the study

Feedback

It is our aim to provide a timely and efficient service that ensures transparent, professional and proportionate ethical review of research with consistent outcomes, which
is supported by clear, accessible guidance and training for applicants and committees. In order to assist us with our aim, we would be grateful if you would give your
view of the service that you have received from us by completing a **UREC Feedback Form**. Instructions for completing this can be found in your approval email.

We wish you every success with the research.

Yours sincerely,



Ms Kate Hennessy
Secretary to University Research Ethics Committee 4

Appendix O: Participant Information Sheet

How Do Talking Therapies Work?

Participant Information Sheet

You have been invited to take part in a research study conducted for a doctorate project in Clinical Psychology. Before you decide whether to take part, it is important for you to understand why the research is being carried out and what it will involve. Please take time to read the following information carefully before deciding whether to take part; and discuss it with others if you wish. Please ask if there is anything that is not clear or if you would like more information. Thank you for taking the time to read this.

About the research

Who will conduct the research?

Abigail Kay a Clinical Psychology Doctoral student under supervision of Dr Warren Mansell and Dr Sara Tai, School of Health Sciences at The University of Manchester.

What is the purpose of the research?

This is a pilot study to explore how two different talking therapies work, using a newly developed questionnaire. This study will determine the suitability and practicalities of our method in order to conduct a larger experiment.

Why have I been asked to take part?

We are aiming to recruit 50 people who are experiencing low mood and are willing to talk to a researcher about a current problem causing them distress and/or impacting on day-to-day life.

To be eligible to take part you must:

- Be experiencing symptoms of low mood suggestive of mild to severe depression
- Be aged over 18 years
- Be able to speak and understand fluent English

You must not:

- Have a significant brain injury
- Have moderate to severe learning difficulties that impacts on your verbal and non-verbal communication
- Have a severe and enduring mental illness (e.g. schizophrenia, schizoaffective disorder or delusional disorder, major depression, bipolar disorder) or personality disorder
- Have alcohol or drug dependency
- Be accessing any other talking therapies for a mental health difficulty e.g. psychological therapy, counselling, self-help services etc.

- Be taking any prescribed medication for difficulties related to mental health

Will the outcomes of the research be published?

We aim to publish the findings of the study in student thesis and an academic journal.

Following submission of the student thesis in April 2021, the results of the study will be written up into a report for participants. If you participate in the study and would like a copy of this report, please contact the researcher.

Who has reviewed the research project?

The University of Manchester Research Ethics Committee 4 and the Clinical Psychology Doctorate Research Sub-Committee have provided all the necessary approvals to conduct this research.

What would my involvement be?

What will I be asked to do if I take part?

You will be asked to complete and return a signed consent form, a contact details form and a series of online screening questionnaires.

If you do not meet the study requirements to participate your involvement will stop following the screening questionnaires. The researcher will contact you via email explaining the reason for this and you will be sent a debrief information sheet.

If you do meet study requirements to participate you will be prompted to use an online choose-and-book system to select a suitable date and time to attend a session of talking therapy via telephone, Skype or at The University of Manchester.

When you attend your appointment the researcher will go through the study information and answer any questions you may have prior to taking part. You will then be asked to complete a further set of questionnaires and read a brief description of two talking therapies. You will then be randomly assigned to one of these talking therapy groups; either Method of Levels (MOL) or Behavioural Activation (BA). Both therapies are evidenced-based and widely used in clinical practice to help with low mood. The therapy session will be audio recorded. You can stop the session at any time and you do not have to share information that you are not comfortable in sharing. Following the therapy session, you will be asked to complete a series of questionnaires.

One week after the therapy session you will be required to complete a series of online questionnaires and participate in a follow-up telephone session with the researcher to review your experience of the talking therapy. You will then be sent a debrief information sheet.

What is the duration of the research?

- Part 1: Online screening questionnaires: 15 minutes
- Part 2: Talking therapy session: 60 minutes
- Part 3: Online follow-up questionnaires (30 minutes) and telephone follow-up session (30 minutes)

Will I be compensated for taking part?

Students collecting credits with the Student Experiment Participation Scheme (SEPS) will be offered a choice of 1 credit per 15 minutes of study participation or a £5 high street voucher.

If a student collecting credits with the SEPS does not meet study requirements they will be offered 1 course credit. 7 course credits will be offered for completion of parts 1 and 2 of the study, 9 course credits will be allocated for completion of parts 1, 2, and 3 of the study and 11 course credits will be allocated for completion of parts 1, 2, 3 and 4 of the study.

Participants who are not collecting course credits will be offered a £5 high street voucher upon completion of part 2 of the study.

What happens if I do not want to take part or if I change my mind?

It is up to you to decide whether or not to take part. If you do decide to take part, you will be asked to complete a consent form. If you decide to take part you are still free to withdraw at any time without giving a reason and without detriment to yourself. However, it will not be possible to remove your data from the project once it has been anonymised as we will not be able to identify your specific data. This does not affect your data protection rights. If you decide not to take part you do not need to do anything further.

Data Protection and Confidentiality

What information will you collect about me?

In order to participate in this research project we will need to collect information that could identify you, called "personal identifiable information". Specifically, we will need to collect:

- Name
- Contact details; email address and contact number
- GP details
- Age group
- Gender
- Ethnicity
- Employment status

Under what legal basis are you collecting this information?

We are collecting and storing personal identifiable information in accordance with data protection law, which protect your rights. These state that we must have a legal basis (specific reason) for collecting your data. For this study, the specific reason is that it is "a public interest task" and "a process necessary for research purposes".

What are my rights in relation to the information you will collect about me?

You have a number of rights under data protection law regarding your personal information. For example, you can request a copy of the information we hold about you, including audio recordings. If you would like to know more about your different rights or the way we use your personal information to ensure we follow the law, please consult our Privacy Notice for Research.

Will my participation in the study be confidential and my personal identifiable information be protected?

In accordance with data protection law, The University of Manchester is the Data Controller for this project. This means that we are responsible for making sure your personal information is kept secure, confidential and used only in the way you have been told it will be used. All researchers are trained with this in mind, and your data will be looked after in the following way:

- Only the study team at The University of Manchester will have access to your personal information. This will be destroyed when it is no longer needed at the end of the study.
- Your name and any other identifying information will be removed and replaced with a random ID number. Only the research team will have access to the key that links this ID number to your personal information.
- Electronic data will be stored on a shared drive on the university secure server that only the research team have access to.
- Non-digital data e.g. paper-based questionnaires will be stored in locked filing cabinets in a locked office at The University of Manchester.
- The therapy sessions will be audio recorded on a university approved device and transferred, as soon as possible, to a shared drive on the university secure server that only the research team has access to. The recordings will be listened to by two members of the research team to ensure the researcher adheres to the therapy protocol. The recordings will also be transcribed by the research team and all personal identifiable information will be removed from the transcript.

The University of Manchester Records Retention Schedule suggests the minimum default retention period is 5 years after publication. However as this is a new study, anonymised data will be retained for 10 years after study completion. This is to enable further data analyses in the future. Following write up of the study, anonymised study data will be stored on The University of Manchester Institutional Repository, this will enable the data to be shared for future research purposes. At the end of the retention period, paper data will be destroyed using paper shredders which are certified to an appropriate security level. Electronic data will be deleted. All personally identifiable data (i.e. contact details) will be destroyed in the same way when it is no longer needed at the end of the study.

When you agree to take part in a research study, the information about you may be provided to researchers running other research studies in this organisation. The future research will be of a similar nature to this research project and will concern MOL. Your information will only be used by this organisation and researchers to conduct research in accordance with UREC studies: The University of Manchester's Research Privacy Notice.

This information will not identify you and will not be combined with other information in a way that could identify you. The information will only be used for the purpose of research studies into MOL and cannot be used to contact you regarding any other matter. It will not be used to make decisions about future services available to you.

Please also note that individuals from The University of Manchester or regulatory authorities may need to look at the data collected for this study to make sure the project is being carried out as planned. This may involve looking at identifiable data. All individuals involved in auditing and monitoring the study will have a strict duty of confidentiality to you as a research participant.

What happens if I disclose something that may place me or someone else at harm?

If you indicate frequent thoughts of ending your life, or of hurting yourself, on the screening questionnaires the researcher will attempt to contact you via telephone within 24 hours to conduct a risk assessment. However, please note the researcher's working hours are **Monday-Friday 9:00am to 4:00pm**. If you complete the screening questionnaire outside of these hours the researcher will contact you on the next available working day. Furthermore, upon completion of the questionnaires you will be informed if the researcher is on leave. During periods of leave the researcher will not have access to the information you have provided until their return. They will contact you via telephone at their earliest opportunity. If you need immediate support, please contact one of the support organisations listed below.

During the telephone consultation the researcher will have a discussion with you about whether this study is suitable for you, or whether there is a more appropriate service to meet your current support needs. If the researcher is unable to speak with you within 48 hours your GP will be informed in case you require support to ensure your safety.

If, during the study, or if you disclose information that means your safety or the safety of others might be at risk, or information about any current or future illegal activities, we have a legal obligation to share this information. In such cases, we might need to inform relevant professionals which may include; your GP, campus security, mental health services or emergency services (e.g. police/ambulance). Should this occur, the researcher would stop the session immediately and conduct a risk assessment with you. They will also inform the project supervisors.

What if something goes wrong?

Should you feel distressed by any of the content addressed in this study, please talk to us so we can offer help and support. If necessary, you might also consider contacting one of the below organisations who offer advice and support:

- **Your GP**
- **The University of Manchester Student Support Service**
  Tel: 0161 275 5000 email: studentsupport@manchester.ac.uk
  Web: http://www.studentsupport.manchester.ac.uk/taking-care/
- **The University of Manchester Counselling Service:** Offers individual and group counselling, and advice for self-help tools.
  Tel: 0161 275 2864 Web: https://www.counsellingservice.manchester.ac.uk/
- **Samaritans**: 116 123 (24 hour helpline) https://www.samaritans.org

- **Self Help Services**: Works actively with people in the Greater Manchester area on a number of difficulties including anger, anxiety and depression.

  Tel: 0161 226 3871 (Manchester, Trafford, Salford) 0161 480 2020 (Stockport)
  Web: https://www.selfhelpservices.org.uk/

What if I have a complaint?

If you have a complaint that you wish to direct to members of the research team, please contact:

DR WARREN MANSELL

Email: warren.mansell@manchester.ac.uk

Tel: +44 (0) 161 275 8589

DR SARA TAI

Email: sara.tai@manchester.ac.uk

Tel: +44 (0) 161 275 2595

If you wish to make a formal complaint to someone independent of the research team or if you are not satisfied with the response you have gained from the researchers in the first instance then please contact:

The Research Governance and Integrity Officer, Research Office, Christie Building, The University of Manchester, Oxford Road, Manchester, M13 9PL, by emailing: research.complaints@manchester.ac.uk or by telephoning 0161 275 2674.

If you wish to contact us about your data protection rights, please email dataprotection@manchester.ac.uk or write to The Information Governance Office, Christie Building, The University of Manchester, Oxford Road, M13 9PL at the University and we will guide you through the process of exercising your rights.

You also have a right to complain to the Information Commissioner's Office about complaints relating to your personal identifiable information Tel: 0303 123 1113.

What do I do now?

The researcher will send you a link and log in details to a secure password protected university portal where you will be required to complete a consent form and online screening questionnaires.

If you have any queries about the study, please contact the researcher:

Abigail Kay - abigail.kay@postgrad.manchester.ac.uk

This project has been approved by the University of Manchester's Research Ethics Committee [REF: 2020-7902-12953]

Appendix P: Consent Form

MANCHESTER 1824
The University of Manchester

How Do Talking Therapies Work?
Consent form

If you are happy to participate please complete and sign the consent form below

	Activities	Initials
1	I confirm that I have read the participant information sheet (Version 6; 20/10/2020) for the study and have had the opportunity to consider the information and ask questions and had these answered satisfactorily.	
2	I understand that my participation in the study is voluntary and that I am free to withdraw at any time without giving a reason and without detriment to myself. I understand that it will not be possible to remove my data from the project once it has been anonymised and forms part of the data set. I agree to take part on this basis.	
3	I agree that the researchers can contact me via telephone and email.	
4	I agree that should I disclose risk of harm on the screening questionnaires and the researcher is unable to speak with me to conduct a risk assessment within 48 hours, the researchers will notify my GP.	
5	I agree to the therapy session being conducted in person or via telephone or video conferencing.	
6	I agree to the therapy session being audio recorded.	
7	I agree that there may be instances where, during the course of the therapy session, information is revealed, which means that the researchers will be obliged to break confidentiality. This has been explained in more detail in the information sheet.	
8	I agree that any data collected may be published in anonymous form in academic books, reports or journals.	
9	I understand that individuals from The University of Manchester or regulatory authorities might look at data collected during the study, where it is relevant to my taking part in this research. I give permission for these individuals to have access to my data.	
10	I agree that anonymised data collected will be retained for 10 years after study completion and it may be shared with researchers at other institutions for future research studies.	
11	I agree to take part in this study.	

Data Protection
The personal information we collect and use to conduct this research will be processed in accordance with data protection law as explained in the Participant Information Sheet and the Privacy Notice for Research Participants.

_____	_____	_____
Name of Participant	Signature	Dat
_____	_____	_____
Name of the person taking consent	Signature	Date

[1 copy for the participant, 1 copy for the research team]

Appendix Q: Participant Contact Details Form

Participant Contact Details

By providing us with your contact details you are consenting for us to contact you in this way for the duration of the study.

You do not have to complete every item below however, you must provide at least **one contact telephone number, one email address, one home address** and the details of your **GP/healthcare provider** in the country you are currently residing in.

Name:

……

Primary email address:

……

Secondary email address:

……

Primary contact telephone number:

……

Can we leave a voicemail message on this number?

☐ Yes
☐ No

Secondary contact telephone number:

……

Can we leave a voicemail message on this number?

☐ Yes
☐ No

Please indicate the most convenient days/times for us to contact you by telephone.

	Monday	Tuesday	Wednesday	Thursday	Friday
Morning	☐	☐	☐	☐	☐
Afternoon	☐	☐	☐	☐	☐
Evening	☐	☐	☐	☐	☐

We will do our best to contact you during these times, however this may not always be possible.

Are you currently residing in the UK?

☐ Yes
☐ No

Primary address

……

……

……

……

Secondary address

……

……

……

……

GP/Healthcare Provider Details

GP surgery/healthcare provider:

……

Address:

……

……

……

……

Telephone number:

……

Email address:

……

Appendix R: PRISMA Checklist

Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR) Checklist

SECTION	ITEM	PRISMA-ScR CHECKLIST ITEM	REPORTED ON PAGE #
TITLE			
Title	1	Identify the report as a scoping review.	8
ABSTRACT			
Structured summary	2	Provide a structured summary that includes (as applicable): background, objectives, eligibility criteria, sources of evidence, charting methods, results, and conclusions that relate to the review questions and objectives.	9
INTRODUCTION			
Rationale	3	Describe the rationale for the review in the context of what is already known. Explain why the review questions/objectives lend themselves to a scoping review approach.	16
Objectives	4	Provide an explicit statement of the questions and objectives being addressed with reference to their key elements (e.g., population or participants, concepts, and context) or other relevant key elements used to conceptualize the review questions and/or objectives.	16
METHODS			
Protocol and registration	5	Indicate whether a review protocol exists; state if and where it can be accessed (e.g., a Web address); and if available, provide registration information, including the registration number.	N/A
Eligibility criteria	6	Specify characteristics of the sources of evidence used as eligibility criteria (e.g., years considered, language, and publication status), and provide a rationale.	17
Information sources*	7	Describe all information sources in the search (e.g., databases with dates of coverage and contact with authors to identify additional sources), as well as the date the most recent search was executed.	18-19
Search	8	Present the full electronic search strategy for at least 1 database, including any limits used, such that it could be repeated.	140

SECTION	ITEM	PRISMA-ScR CHECKLIST ITEM	REPORTED ON PAGE #
Selection of sources of evidence†	9	State the process for selecting sources of evidence (i.e., screening and eligibility) included in the scoping review.	18-19
Data charting process‡	10	Describe the methods of charting data from the included sources of evidence (e.g., calibrated forms or forms that have been tested by the team before their use, and whether data charting was done independently or in duplicate) and any processes for obtaining and confirming data from investigators.	20
Data items	11	List and define all variables for which data were sought and any assumptions and simplifications made.	20
Critical appraisal of individual sources of evidence§	12	If done, provide a rationale for conducting a critical appraisal of included sources of evidence; describe the methods used and how this information was used in any data synthesis (if appropriate).	N/A
Synthesis of results	13	Describe the methods of handling and summarizing the data that were charted.	20
RESULTS			
Selection of sources of evidence	14	Give numbers of sources of evidence screened, assessed for eligibility, and included in the review, with reasons for exclusions at each stage, ideally using a flow diagram.	21
Characteristics of sources of evidence	15	For each source of evidence, present characteristics for which data were charted and provide the citations.	23-30
Critical appraisal within sources of evidence	16	If done, present data on critical appraisal of included sources of evidence (see item 12).	N/A
Results of individual sources of evidence	17	For each included source of evidence, present the relevant data that were charted that relate to the review questions and objectives.	N/A
Synthesis of results	18	Summarize and/or present the charting results as they relate to the review questions and objectives.	32-46
DISCUSSION			
Summary of evidence	19	Summarize the main results (including an overview of concepts, themes, and types of evidence available), link to the review questions and	47-51

SECTION	ITEM	PRISMA-ScR CHECKLIST ITEM	REPORTED ON PAGE #
		objectives, and consider the relevance to key groups.	
Limitations	20	Discuss the limitations of the scoping review process.	51-52
Conclusions	21	Provide a general interpretation of the results with respect to the review questions and objectives, as well as potential implications and/or next steps.	52
FUNDING			
Funding	22	Describe sources of funding for the included sources of evidence, as well as sources of funding for the scoping review. Describe the role of the funders of the scoping review.	N/A

JBI = Joanna Briggs Institute; PRISMA-ScR = Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews.
* Where *sources of evidence* (see second footnote) are compiled from, such as bibliographic databases, social media platforms, and Web sites.
† A more inclusive/heterogeneous term used to account for the different types of evidence or data sources (e.g., quantitative and/or qualitative research, expert opinion, and policy documents) that may be eligible in a scoping review as opposed to only studies. This is not to be confused with *information sources* (see first footnote).
‡ The frameworks by Arksey and O'Malley (6) and Levac and colleagues (7) and the JBI guidance (4, 5) refer to the process of data extraction in a scoping review as data charting.
§ The process of systematically examining research evidence to assess its validity, results, and relevance before using it to inform a decision. This term is used for items 12 and 19 instead of "risk of bias" (which is more applicable to systematic reviews of interventions) to include and acknowledge the various sources of evidence that may be used in a scoping review (e.g., quantitative and/or qualitative research, expert opinion, and policy document).

From: Tricco AC, Lillie E, Zarin W, O'Brien KK, Colquhoun H, Levac D, et al. PRISMA Extension for Scoping Reviews (PRISMAScR): Checklist and Explanation. Ann Intern Med. 2018;169:467–473. doi: 10.7326/M18-0850.

Appendix S: CONSORT checklist

CONSORT 2010 checklist of information to include when reporting a pilot or feasibility trial*

Section/Topic	Item No	Checklist item	Reported on page No
Title and abstract			
	1a	Identification as a pilot or feasibility randomised trial in the title	66
	1b	Structured summary of pilot trial design, methods, results, and conclusions (for specific guidance see CONSORT abstract extension for pilot trials)	67
Introduction			
Background and objectives	2a	Scientific background and explanation of rationale for future definitive trial, and reasons for randomised pilot trial	68-72
	2b	Specific objectives or research questions for pilot trial	72
Methods			
Trial design	3a	Description of pilot trial design (such as parallel, factorial) including allocation ratio	73
	3b	Important changes to methods after pilot trial commencement (such as eligibility criteria), with reasons	N/A
Participants	4a	Eligibility criteria for participants	72-73
	4b	Settings and locations where the data were collected	80-81
	4c	How participants were identified and consented	72/80
Interventions	5	The interventions for each group with sufficient details to allow replication, including how and when they were actually administered	73-74
Outcomes	6a	Completely defined prespecified assessments or measurements to address each pilot trial objective specified in 2b, including how and when they were assessed	74-80
	6b	Any changes to pilot trial assessments or measurements after the pilot trial commenced, with reasons	79
	6c	If applicable, prespecified criteria used to judge whether, or how, to proceed with future definitive trial	83
Sample size	7a	Rationale for numbers in the pilot trial	72

	7b	When applicable, explanation of any interim analyses and stopping guidelines	N/A
Randomisation:			
Sequence generation	8a	Method used to generate the random allocation sequence	81
	8b	Type of randomisation(s); details of any restriction (such as blocking and block size)	81
Allocation concealment mechanism	9	Mechanism used to implement the random allocation sequence (such as sequentially numbered containers), describing any steps taken to conceal the sequence until interventions were assigned	N/A
Implementation	10	Who generated the random allocation sequence, who enrolled participants, and who assigned participants to interventions	N/A
Blinding	11a	If done, who was blinded after assignment to interventions (for example, participants, care providers, those assessing outcomes) and how	76/97
	11b	If relevant, description of the similarity of interventions	71-72
Statistical methods	12	Methods used to address each pilot trial objective whether qualitative or quantitative	82
Results			
Participant flow (a diagram is strongly recommended)	13a	For each group, the numbers of participants who were approached and/or assessed for eligibility, randomly assigned, received intended treatment, and were assessed for each objective	84
	13b	For each group, losses and exclusions after randomisation, together with reasons	84
Recruitment	14a	Dates defining the periods of recruitment and follow-up	85
	14b	Why the pilot trial ended or was stopped	85
Baseline data	15	A table showing baseline demographic and clinical characteristics for each group	84
Numbers analysed	16	For each objective, number of participants (denominator) included in each analysis. If relevant, these numbers should be by randomised group	86-90
Outcomes and estimation	17	For each objective, results including expressions of uncertainty (such as 95% confidence interval) for any estimates. If relevant, these results should be by randomised group	92-94
Ancillary analyses	18	Results of any other analyses performed that could be used to inform the future definitive trial	N/A
Harms	19	All important harms or unintended effects in each group (for specific guidance see CONSORT for harms)	N/A

	19a	If relevant, other important unintended consequences	N/A
Discussion			
Limitations	20	Pilot trial limitations, addressing sources of potential bias and remaining uncertainty about feasibility	96-97
Generalisability	21	Generalisability (applicability) of pilot trial methods and findings to future definitive trial and other studies	92-99
Interpretation	22	Interpretation consistent with pilot trial objectives and findings, balancing potential benefits and harms, and considering other relevant evidence	92-99
	22a	Implications for progression from pilot to future definitive trial, including any proposed amendments	97-99
Other information			
Registration	23	Registration number for pilot trial and name of trial registry	N/A
Protocol	24	Where the pilot trial protocol can be accessed, if available	N/A
Funding	25	Sources of funding and other support (such as supply of drugs), role of funders	N/A
	26	Ethical approval or approval by research review committee, confirmed with reference number	80

Citation: Eldridge SM, Chan CL, Campbell MJ, Bond CM, Hopewell S, Thabane L, et al. CONSORT 2010 statement: extension to randomised pilot and feasibility trials. BMJ. 2016;355.

*We strongly recommend reading this statement in conjunction with the CONSORT 2010, extension to randomised pilot and feasibility trials, Explanation and Elaboration for important clarifications on all the items. If relevant, we also recommend reading CONSORT extensions for cluster randomised trials, non-inferiority and equivalence trials, non-pharmacological treatments, herbal interventions, and pragmatic trials. Additional extensions are forthcoming: for those and for up to date references relevant to this checklist, see www.consort-statement.org