DAVID J. A. KIRKPATRICK BSc Hons, MSc

THERAPISTS' SELF-PRACTICE OF CBT

Section A

Self-Experiential Work by CBT Practitioners:

A Literature Review

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Section B

Voluntary Self-Practice of CBT Techniques by CBT Practitioners:

The Application of the Theory of Planned Behaviour

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A thesis submitted in partial fulfilment of the requirements of

Canterbury Christ Church University for the degree

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JULY 2015

School of Psychology, Politics and Sociology

CANTERBURY CHRIST CHURCH UNIVERSITY

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Doctorate in Clinical Psychology (D.Clin.Psychol.)

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Summary of the MRP

Section A

Section A discusses the therapeutic relationship in CBT together with how self-explorative activities, such as self-experiential work, have been used to cultivate CBT practitioners' self-awareness and empathy. A systematic review of the current literature is conducted, with the topic of self-experiential work in CBT found to be dominated by studies focusing on a 'self-practice/self-reflection' CBT training course. The findings are critiqued and synthesised. Avenues of future research are suggested.

Section B

Section B explores the frequency of voluntary self-practice of CBT by CBT practitioners, and investigates whether the TPB is a model which can predict intention to self-practice CBT. A mixed methods study design was employed which involved two stages. In stage one a content analysis informs the construction of a theory of planned behaviour (TPB) questionnaire. In stage two a cross-sectional online survey was conducted using the TPB questionnaire and demographic items. Analyses were performed using multiple regressions and structural equation modelling. The limitations of the study are discussed, together with implications of the findings and potential areas of future research.

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Section A

Self-Experiential Work by CBT Practitioners: A Literature Review

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Abstract

A systematic search of the literature was conducted on self-experiential work performed by practitioners of Cognitive Behaviour Therapy (CBT). The expansion of clinical contexts in which CBT is employed has raised questions of how practitioners may gain the necessary skills to work with more complex client groups (Thwaites & Bennett-Levy, 2007), with self-experiential work likened to therapist's own personal therapy in terms of development opportunities to meet these demands (Chaddock, Thwaites, Bennett-Levy & Freeston, 2014). Self-experiential work in CBT is defined with relevant models of learning introduced, after which three review questions are posed: 1) How do trainees and qualified CBT practitioners experience self-experiential work in CBT? 2) What is the efficacy and effectiveness of self-experiential work in CBT? 3) What factors predict engagement in self-experiential work in CBT? A systematic search of the literature is performed, with each question addressed in turn. The review concludes with a discussion of the current state of the evidence base in this area, together with suggestions for avenues of future research.

Keywords: self-experiential, self-practice, self-care, cognitive behaviour therapy, training.

Cognitive Behaviour Therapists' Self-Experiential Work: A Literature Review

Introduction

Cognitive Behaviour Therapy and the Therapeutic Relationship

The therapeutic relationship has been valued since the origins of cognitive behaviour therapy (CBT) (Beck, 1976). Whilst psychodynamic approaches viewed the therapeutic relationship as the core mechanism of change through interpretation of transference towards the therapist (Persons, Gross, Etkin & Madan, 1996), within CBT this relationship has traditionally served a secondary function; providing a fertile environment for client learning through CBT techniques such as cognitive restructuring and behavioural experiments (Ahn & Wampold, 2001).

The past twenty years has seen the context in which CBT is employed broaden substantially, partly through the national program of Improving Access to Psychological Therapies (IAPT). Political support in response to a cost-benefit analysis (Layard et al., 2006) has contributed to CBT being offered as a first line of psychological treatment for a variety of conditions, including depression (NICE, 2009), obsessive compulsive disorder (NICE, 2005), bipolar disorder (NICE, 2006), anxiety disorders (NICE, 2014a), psychosis and schizophrenia (NICE, 2014b).

A challenge CBT practitioners may encounter with more complex client groups is the activation of their own schema (Haarhoff, 2006), which may obstruct the therapeutic alliance. Furthermore, CBT practitioners need to be aware of their own reactions and motivations when working with complex client groups in order to prevent the possibility of enmeshment in the therapy (Bennett-Levy et al., 2001). These issues have led to calls for a greater level of self-awareness by the CBT practitioner offering therapy, and it has been recommended that "to manage the limits of the therapeutic relationship effectively, and to use their personal

reactions in the process of treatment, cognitive therapists must first be sensitive observers to their own thoughts, feelings and beliefs" (p. 252, Beck, Freeman & Davis, 2006). Developing this greater self-awareness would enable therapists to "both identify with and differentiate themselves from their clients" (p.238, Aponte et al., 2009).

Haarhoff (2006) posited that CBT was revisiting psychodynamic concepts of transference and counter transference, and recommended that cultivating self-awareness should play a greater role within CBT training and supervision to develop the required competence for working with complex clients. The challenge of how to acquire the necessary competence to work with transference and counter transference was initially posed by Freud, who advocated self-analysis as the solution, stating "but where and how is the poor wretch to acquire the ideal qualifications which he will need in his profession? The answer is in an analysis of himself." (p.246, Freud, 1964).

In psychoanalytic orientations therapists' own personal therapy has been a mandatory aspect of training, with some suggesting that personal therapy should be the core process in therapy training (Wiseman & Shefler, 2001). Personal therapy has been perceived to provide a range of benefits to therapists, namely empathy with the client experience, socialisation to a therapy model, alleviating stress and providing emotional support, and personal and professional development (Grimmer & Tribe, 2001). Although a review of therapist's own therapy is beyond the scope of this paper, it is of interest that CBT practitioners have been found to be the least likely orientation to access their own personal therapy (Lazarus, 1971; Norcross & Guy, 2005; Orlinsky, Schofield, Schröder & Kazantzis, 2011). Furthermore, when CBT practitioners do access their own therapy, their preference has been found to be for humanistic and psychodynamic orientations rather than CBT (Laireiter, 2000). The comparatively lower priority placed upon self-explorative work within CBT is also reflected in the guidance for the main regulatory body for CBT in the UK, with there being no current

requirement of any personal explorative work to be accredited by the British Association for Behavioural and Cognitive Psychotherapists (BABCP, 2000).

Atkinson (2006) has argued that studies investigating therapists own therapy have overstated the positive effects with perceived benefits on therapist competency failing to translate into tangible differences for clients, whilst understating potential difficulties for trainees regarding confidentially and dual relationships (i.e. a therapist who also functions as an assessor). In addition, Pope and Tabachnick (1994) have found that personal therapy may have deleterious effects on therapists, with 22% of their sample reporting that their own therapy could be harmful. An alternative to personal therapy which is supported by leading figures in CBT is self-experiential work, with Beck (1995) stating that "your growth as a cognitive therapist will be enhanced if you start applying the tools described in this book to yourself" (p.5), sentiments echoed by Padesky (1996) who recommended that "to fully understand the process of therapy, there is no substitute for using cognitive therapy methods on oneself" (p.288).

Tangentially, the recommendations to engage in self-practice has been viewed as a necessity in some third wave approaches, for example in Mindfulness Based Cognitive Therapy (MBCT) where "a central message in MBCT is that in order to do this work, therapists should practice mindfulness themselves" (p.419, Segal, Williams & Teasdale, 2004). Self-practice of mindfulness techniques within CBT has also been advocated to support self-care amongst therapists in training, where a study has reported reduced stress and increased positive affect (Shapiro, Brown & Biegel, 2007). The use of mindfulness for therapist self-care may be viewed as consistent with Schwebel and Coster's (1997) study, where self-awareness was perceived as the single greatest factor contributing to the wellbeing of psychologists.

Defining Self-Experiential Work

Self-experiential work within CBT is a concept that can cover a broad range of topics; these include self-directed experience (Laireiter, 2000), personal sensitivity work (BABCP, 2000) and personally focused work (Bennett-Levy et al., 2001) among others. This lack of clarity is argued to be related to the perceived lack of attention paid to personal reflection within CBT historically; "what has been absent from the CBT literature is the language of reflection. This has led to a common misconception that CBT therapists don't reflect" (p.115, Bennett-Levy, Thwaites, Chaddock & Davis, 2009).

Within German speaking countries self-experiential work, termed 'selbsterfahrung', has been a mandatory aspect of CBT training for several decades. Despite a significant accompanying literature base there has been limited diffusion into the English language journals. In their widely cited paper, Laireiter and Willutzki (2003) sought to bridge the language divide and unpick some of the terminology surrounding self-experiential work, highlighting that "as a consequence of sensitivity work having no tradition in CBT, no generally accepted terms exist to define training elements centering on the therapist as a person" (p.21). They proposed that a demarcation needed to be applied, distinguishing between "self-practice of therapeutic methods" (which involves experiential learning and technical competence), and "self-reflection of the therapist" (which involves meta-cognitive awareness and interpersonal sensitivity). The authors recognised that these processes were not mutually exclusive, instead functioning as an iterative process. For the purposes of this review, self-experiential work will be defined as encompassing both these concepts.

Based on the work of Laireiter and Fiedler (1996), Laireiter and Willutzki (2003) posited that the aims of "self-practice" and "self-reflection" were "management of personal involvement; improvement of self-insight; reduction of negative, noxious effects; develop interpersonal skills; acquisition of specific therapeutic skills; model learning; awareness of

interactional processes; improving training effects; identify with how CBT work in real life" (p.22). These aims are comparable to the perceived benefits of personal therapy reported by Grimmer and Tribe (2001) which were referred to earlier, supporting the notion that self-experiential work can seek to address similar areas to therapists' own therapy.

Models of Learning for Self-Experiential Work

As previously stated, therapists' self-experiential work within CBT is thought to involve an iterative process of self-practice and self-reflection which develops competence across a range of skills and personal awareness. This model of developing professional competency draws on Kolb's (1984) experiential learning theory, which understands learning as "the process whereby knowledge is created through the transformation of experience" (p.38). The model posits that learning results from a cyclical process where reflecting on experiences informs new understanding; in turn this prompts fresh experimentation causing new experiences that can be reflected upon (see Figure 1). Drawing on this model, self-practice may tentatively be viewed as encompassing 'active experimentation' and 'concrete experience', whilst self-reflection may involve 'reflective observation' and 'abstract conceptualisation'.

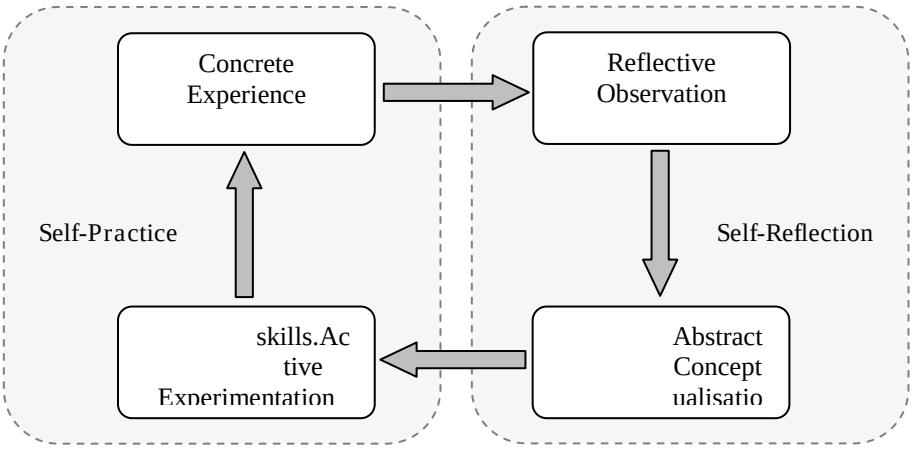

Figure 1. Experiential Learning Theory (Kolb, 1984), applied to self-reflection and self-practice.

Binder (1999) delineated the domains of what was learnt, which has proved influential on the training of therapists. Binder argued that technical knowledge and procedural skills were distinct, with technical knowledge lending itself to didactic teaching, whilst procedural skills of how and when to employ the acquired knowledge was tacit and gained from direct experience. In this way, procedural skills had the goal of developing 'professional artistry' (Schön, 1987), once sufficient technical knowledge had been acquired. Interestingly, given Kolb's (1984) earlier work, what is conspicuously absent from Binder's model is a recognition of the role of reflection on experience and how this relates to didactic and procedural competency; this will be revisited later in the review.

Drawing on these models, self-experiential work has been introduced into the CBT world as a method of learning. It has been proposed that self-experiential work may provide benefits analogous to therapist's own personal therapy (Chaddock et al., 2014) and promote the skills for facilitating a working alliance with more complex client groups. Given the proposed rationale for self-experiential work, a systematic search and critique of the available literature is called for in the interests of evidence based practice.

Aims

A systematic review was performed to address the following research questions:

1. How do trainee and qualified CBT practitioners experience self-experiential work in CBT?
2. What is the efficacy and effectiveness of self-experiential work in CBT?
3. What factors predict engagement in self-experiential work in CBT?

Methods

Search Terms

For the systematic search of the literature the search terms 'self-practice', 'self-reflection', 'self-experiential', 'experiential learning', 'personal experiential', 'personal sensitivity', 'personally focused', 'self-case study', 'self-directed experience' and 'sensitivity work' were selected with the 'OR' command, which was combined through the 'AND' command with 'cognitive therapy', 'cognitive behaviour therapy' which had also been combined with the 'OR' command. A systematic search was then conducted on the following search engines: Psycinfo, Google Scholar, Medline, and Web of Science (from January 1900 – January 2015).

Inclusion Criteria

The inclusion criteria for the systematic search were:

- Studies were reported in the English Language.
- The use of self-experiential work reported as a major focus of the study.
- Studies conducted within Cognitive Behaviour Therapy or Cognitive Therapy. Studies solely examining behaviour therapy and third wave CBT approaches were not included.
- Studies reporting either empirical research findings as a result of an identified methodology, or reporting a case study.
- Due to the predicted limited literature in this area, the search was expanded to include unpublished theses cited by papers and conference presentations.

Search Results

A search of the literature generated a list of 160 articles and book chapters, together with four theses which were obtained through citation searching of the previously identified papers. The papers were systematically screened using the inclusion criteria, with papers rejected from the review in the sequence described in Figure 2.

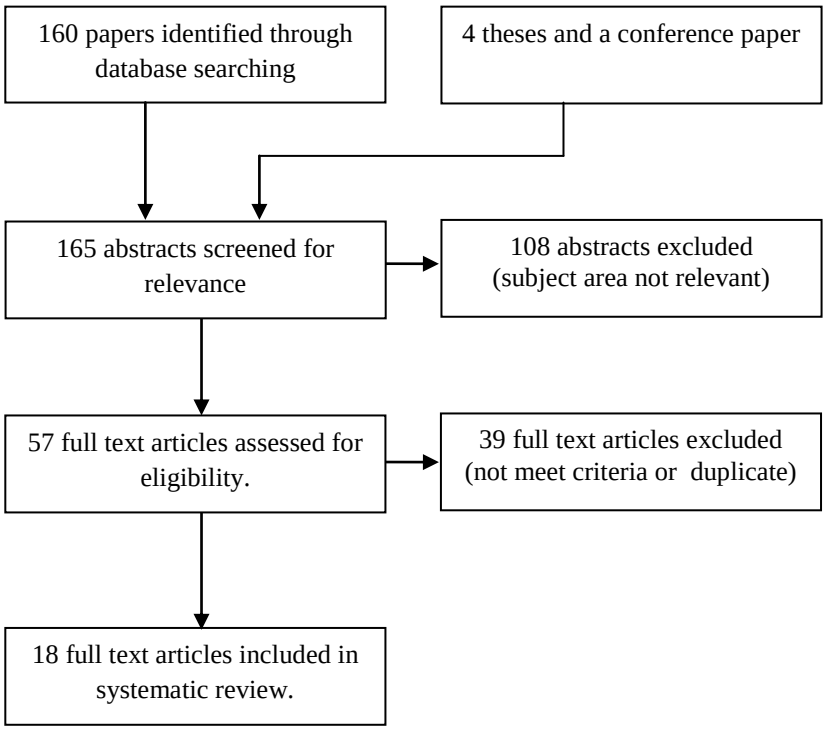

Figure 2. Flowchart of studies yielded from systematic search.

This led to 18 full text articles which are listed below in Table 1, ordered by the research questions they address (where a study appears twice this is made explicit, e.g. 1.a. in the first instance, 1.b. in the second). In judging the relative merits of the various research studies, the Standard Quality Assessment Criteria (SQAC, Kmet, Lee & Cook, 2004) was applied (see Appendix A). The SQAC has the capacity to provide a systematic quantitative assessment of both quantitative (scores from 1-28) and qualitative (scores from 1-20) studies employing a diverse range of methodologies. In the review section that follows, the studies are summarised and critiqued in order of the identified aims of this review.

Authors/Year	Sample details	Form of self-experiential work	Methodology details	SQAC	Study design	Key findings
Research question 1: How do trainee and qualified CBT practitioners experience self-experiential work in CBT?						
1.a. Bennett-Levy and Lee (2014) Part of meta-synthesis (Gale & Schröder, 2014)	Australian study: 46 participants across 4 SP/SR training courses; 2 trainee groups, 1 experienced therapist group, 1 mental health worker group.	Self-experiential training course in CBT involving structured program (SP/SR).	Aim to develop a model to maximise the value of SP/SR training through identifying the factors which promote engagement.	16/20	Qualitative: Grounded theory	Positive feedback from three of the four groups regarding SP/SR, yet little benefit reported by mental health worker group. See 1.b. for further details of grounded theory model.
2. Bennett-Levy, Wilson and Nelson (2013)	Australian study: 5 community counsellors of Aboriginal origin.	Regular and voluntary self-practice of CBT (no SP/SR instruction)	Action research project.	7/20	Qualitative: Thematic analysis of interviews	Themes included 'feeling more skilled', 'increased confidence', 'decreases burnout', 'personally and professionally valuable".
3.a. Schneider and Rees (2012) Part of meta-synthesis (Gale & Schröder, 2014)	Australian study: 9 practitioners between 1-2 years' experience.	Training module using SP/SR.	Study simultaneously examined impact of an interpersonal process group and an SP/SR module.	13/20	Mixed methods: Thematic analysis of interviews	Qualitative findings focused on interpersonal process group, with SP/SR only referred to indirectly.

4. Haarhoff, Gibson and Flett. (2011) Part of meta-synthesis (Gale & Schröder, 2014)	New Zealand study: 16 recent CBT graduates.	SP/SR workbook.	Study is an abridged report of thesis which also included quantitative aspect (referred to later in table as Haarhoff, 2008).	12/20	Qualitative: Thematic analysis of interviews	Identified themes included an 'increased theoretical understanding of the CBT model', 'empathy', 'conceptualization of the therapeutic relationship' and 'self-awareness'.
5. Price (2011)	UK study: Self-case-study of trainee therapist.	Reflection on personal experiences of completing SP/SR workshop	Narrative account.	5/20	Qualitative: Self-case study	Trainee reported better understanding of being in client shoes, increase in competence and confidence as a therapist. Greater empathy for clients, and found the CBT model easier to communicate.
6. Sanders and Bennett-Levy (2010)	UK study Self-case study of experienced therapist	Voluntary self-practice of CBT.	Narrative account.	3/20	Qualitative: Self-case study	Therapist reported recognition of schema, but contrasted with beliefs that should be able to cope better; difficulty identifying and accepting when not coping; highlighting necessity of personal therapy on occasion.

7. Fraser and Wilson (2010) Part of meta-synthesis (Gale & Schröder, 2014)	New Zealand study: 7 trainees completing a module.	Self-case study with written reflections	Self-case study of experiences of whole process of learning CBT.	17/20	Qualitative: Narrative inquiry	Reported benefits included 'valuing self-development through self-practice of CBT', leading many to view self-practice as a life-changing experience.
8. Farrand, Perry and Linsley. (2010) Part of meta-synthesis (Gale & Schröder, 2014)	UK study: 19 allied health professionals	Reflective blogs to support SP/SR.	Focus group at end of the module.	15/20	Qualitative: Thematic Analysis of focus group	Blogs viewed as enhancing SP/SR through building a learning community and improving supervision.
9. Sutton, Townend and Wright. (2007)	UK study: 19 CBT trainees.	Reflective learning journals	3 focus groups used to discuss experiences.	17/20	Qualitative Interpretive Phenomeno-logical Analysis	Uncovered ethical and practice issues. Main themes were: Benefits of the learning journal; process and content; unclear expectations and mixed messages; perceptions of help and support with the learning journal; writing for assessments; recommendations.

10. Bennett-Levy et al., (2003) Part of meta-synthesis (Gale & Schröder, 2014)	Australian study: 14 participants, group 1 = 6 and group 2 =8.	Group 1 – self case study in pairs, Group 2 – self-practice of techniques alone.	E-mailed reflections to course co-ordinator at the end of the course, who e-mailed back weekly digest to all members.	17/20	Qualitative: Technologies of participation workshop method.	Themes involved a greater understanding of CBT conceptual framework, greater flexibility, reflection and empathy, contributing to the 'professional artistry' of the therapist.
11. Bennett-Levy et al. (2001) Part of meta-synthesis (Gale & Schröder, 2014)	Australian study: 19 trainees undertaking module in CBT. Group 1 = 7, group 2 = 12.	Group 1 – essay summarising reflections on several self-practice exercises. Group 2 – SP/SR workbook.	Reflective Assessments (Group 1) and weekly SP/ SR homework (Group 2), together with group reflections and semi-structured interviews.	18/20	Qualitative Grounded theory	Model: Experiencing and reflecting from the Client's Perspective produced a 'Deeper Sense of Knowing', leading to enhanced Therapeutic Understandings and Therapist Skills, which in turn may impact positively on Therapist Self-Concept.
Research question 2: Quantitative studies regarding outcomes and evaluations of self-experiential work in CBT						
12. Davis, Thwaites, Freeston and Bennett-Levy. (2014)	UK study: 7 experienced CBT practitioners	SP/SR manual on 12 week program	Cognitive Therapist Self-Monitoring Scale (CTSMS) and Cognitive Therapist Empathy Scale (CTES). Internal consistency for subscales of	14/28	Quantitative: Non-controlled repeated measures.	Measurable enhancement of self-perceived therapeutic skills. Technical CT skills and interpersonal empathic skill rated higher after SP/SR than

			measures reported in study, alphas ranging from .74-.96.			before, no change at pre-baseline. Self-selected sample.
13. Bennett-Levy and Padesky (2014)	UK study: Mental Health professionals at CBT workshop. 50 in control, 48 in intervention group.	Instructions and reminders to complete self-practice and reflection worksheets.	16 item outcome questionnaire to self-rate outcomes and learning strategies, measuring change in awareness and behaviour change.	17/28	Quantitative: Non randomised Single-blind controlled design.	Providing reminders increased usage of reflection worksheets and self-practice post training.
14. Rakovshik and McManus (2013)	UK study: 73 trainees of CBT training course.	Trainees expected to self-practice as part of the course.	Supervisor rated competence on audio recordings using Cognitive Therapy Scale. Course Impact Likert questionnaire	17/28	Quantitative: Cross sectional survey using Likert scale items.	Supervision rated as greatest learning experience. "Surprising" finding is that experiencing CBT from clients' perspective rated in lower third for perceived impact on learning.
3.b. Schneider and Rees (2012) (qualitative aspect reported in meta-synthesis	Australian study: 11 clinical psychology trainees.	Interpersonal process group and CBT training module using	Counselling Self Estimate Inventory (COSI).	11/28	Mixed methods: Repeated measures t-test.	As predicted, improvements on all scales of COSI apart from cultural competence.

(Gale & Schröder, 2014)		SP/SR.				
15. Haarhoff (2008) (Thesis – qualitative aspect included in metasynthesis as Haarhoff et al. 2011)	New Zealand study: 26 CBT graduates. 10 in control group, 16 in intervention.	SP/SR manualised training intervention, impact on case conceptualisation.	Case Formulation Content Coding Method; Fothergill and Kuyken quality of Cognitive Therapy Case Formulation rating scale; and the CBT Case Conceptualisation rating scale (created for this study).	22/28	Mixed methods: Randomised controlled single blind study design.	No significant differences between the groups on two of the measures, significant improvement on Fothergill and Kuyken (2002) Quality of Cognitive Therapy rating scale.
16. Niemi and Tiuraniemi (2010)	Finish study: 39 CBT trainees time 1 and 53 trainees time 2	4 year cognitive psychotherapy training, including SP/SR.	Finnish Inventory of Cognitive Psychotherapist Skills – designed for study; global self-appraisal of psychotherapist competence and multiple measures in various technical areas (all alpha scores .6 or above).	16/28	Mixed methods: Repeated measures (2 years and 4 years during training) and Content analysis of open ended questions.	Perceived competence increased significantly, mainly in technical and conceptual with least gain in interpersonal skills. No signs of increased self-reflection, needs for further learning for inter-personal not recognised. Trainees tended to describe their therapist schema rather than self schema. The main themes focused on

						technical and conceptual knowledge. Non-specificity of impact of SP/SR, confounding variables.
17. Bennett-Levy, McManus, Westling and Fennnell. (2009a)	Swedish study: 120 CBT trainees.	2 day CBT workshop focusing on SP/SR DPR model.	Methods of learning therapy skills questionnaire.	15/28	Quantitative: Survey design – descriptive analysis only.	Reflective practice and self-experiential work perceived to be most effective learning methods for procedural and reflective systems, but not declarative.
Research question 3: Engagement with self-experiential work in CBT						
1.b. Bennett-Levy and Lee (2014)	Australian study: 46 participants across 4 SP/SR training courses. 2 trainee groups, 1 experienced therapist group, 1 mental health worker group.	Introductory course to CBT / self-experiential training course in CBT involving SP/SR.	Aim to develop a model maximising the value of SP/SR training.	16/20	Qualitative: Grounded theory	Grounded theory model which viewed 'experience of benefit' and 'engagement with process' as part of iterative process, with engagement affected by 'course structure', 'expectation of benefit', 'perceived safety' and 'group process'.
18. Chaddock et al. (2014)	UK study 4 CBT trainees on 1yr	SP/SR manual on 12 week	Cognitive Therapist Self-Monitoring Scale (CTSMS) and	11/28	Quantitative: Quasi-	Confirmation of Declarative Procedural Reflective model.

	course	program	Cognitive Therapist Empathy Scale (CTES); weekly reflections and individual interview. Inter-rater agreement categorising responses as either "therapist self" or "personal self"	experimental single case hybrid design.	Integration of therapist and personal schema had best outcomes.

Table 1. Articles from systematic search

Review of Studies

Following the systematic search of the literature, it was found that self-experiential work in CBT was dominated by 'Self-Practice/Self-Reflection' (SP/SR), a CBT training module developed in a seminal paper by Bennett-Levy et al. (2001). In the interests of clarity SP/SR will be described prior to addressing the three research questions.

Self-Practice / Self-Reflection (SP/SR)

Bennett-Levy et al. (2001) witnessed the need to incorporate self-reflection into CBT training to meet the demands for working with more complex client groups beyond those of didactic learning and procedural fluency. Building on Laireiter and Willutksi's (2003) framework the SP/SR module was devised, where self-practice was defined as "the actual practising of the techniques on oneself (e.g., completing thought records, behavioural experiments, goal setting, positive data logs, schema-focused approaches), [and self-reflection] refers to the experience of reflecting on and evaluating self-practice" (p.204, Bennett-Levy et al., 2001). SP/SR was viewed as offering a comparable experience to personal therapy within CBT (Bennett-Levy, Lee, Travers, Pohlman & Hamernik, 2003), as it was "a structured program designed to give cognitive –behaviour therapists some personal therapy like experience through practising CBT techniques on themselves" (p.2, Chaddock, Thwaites et al., 2014).

Bennett-Levy (2006) constructed a model which develops Binder's (1999) model by acknowledging the role of reflection, leading to the integration of three information processing systems: The Declarative-Procedural-Reflective model (DPR) (see Figure 3). Within the DPR, the 'Declarative' system includes 'conceptual knowledge', 'interpersonal knowledge' and 'technical knowledge'. The 'Procedural' involves 'when/then' rules together with how information from client and therapist communications is processed, either through 'self-schema' or 'self as therapist schema' (also termed 'therapist schema'). Finally, the 'Reflective' system utilises 'focused attention', 'autonoetic consciousness' and 'cognitive operations', prerequisites to enable the mental representation of subjective experiences and capacity for awareness and self-questioning.

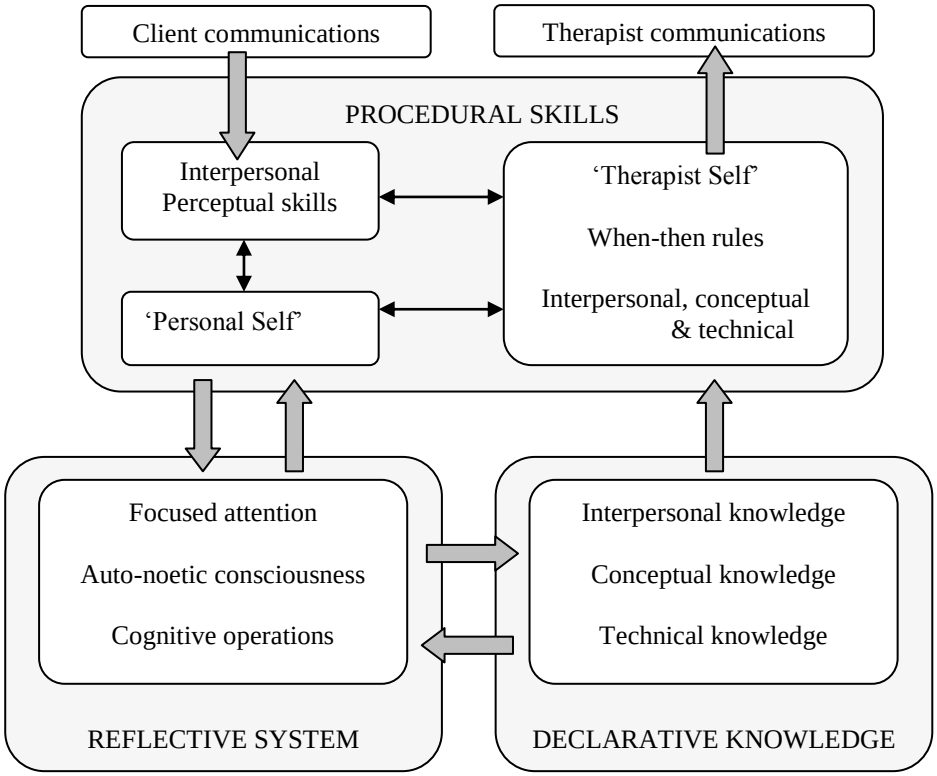

Figure 3. The Declarative Procedural Reflective model (Bennett-Levy et al., 2006).

Within the DPR model, reflection is held as the core process of developing competency, "the engine of ongoing therapist skill development, especially once the basic building blocks of declarative and procedural knowledge/skills are in place" (Bennett-Levy et al., 2009a, p. 573). Furthermore, the role of the different information processing systems was said to alter over the course of the development of competency, with the reflective component predicted to play an increasingly important role once procedural skills are sufficiently familiar to become automated. It should be noted that within the DPR model it is specified that the reflective component comes to the fore once there is a foundation of knowledge, which given that SP/SR was designed for CBT trainees raises questions as to how beneficial this approach is for novice and inexperienced CBT practitioners.

Question 1. How do trainees and qualified cognitive behavioural therapists experience self-experiential work in CBT?

A recent meta-synthesis on experiences of SP/SR was found during the literature search (Gale & Schröder, 2014). The seminal study of SP/SR will be presented (Bennett-Levy et al., 2001) to provide a more in-depth example of a qualitative study investigating SP/SR, prior to critiquing the meta-synthesis. The

qualitative studies not included in the meta-synthesis will be compared and critiqued with their main findings.

Seminal study of SP/SR. Bennett-Levy et al. (2001) was the earliest identified study employing a systematic qualitative methodology, and has been heralded as the seminal paper in the area of self-experiential work in CBT (Farrand et al., 2010). The authors introduced SP/SR as an operationalised program of self-experiential work in CBT, prior to a grounded theory analysis of how CBT trainees experienced SP/SR. A sample of 19 CBT trainees participants with a diverse range of prior CBT experience engaged in SP/SR, either guided by an SP/SR workbook or with the degree of self-practice broadly left to the trainee's discretion. Data obtained from a mandatory essay and a semi-structured interview indicated that trainees largely benefited from SP/SR and gained greater self-awareness and insight of the CBT model, although there were instances of discomfort related to awareness being drawn to personal blindspots. This led to the development of a tentative model which focused on trainees' development of competency: 'Experiencing from the client's perspective' and 'reflecting on experience' were felt to contribute to a 'deeper sense of knowing', thereby influencing therapist's skill, understanding and self-concept. Interestingly, although the study cited the importance of reflexivity within qualitative analyses, there were no further references on the influence of the researchers' perspective on their analysis, nor was there reference to the potential for bias towards good outcomes due to social desirability and demand characteristics. These critiques will be returned to later with regard to the meta-synthesis.

Meta-synthesis. Qualitative studies of SP/SR have typically employed a form of thematic analysis (Bennett-Levy et al., 2003; Farrand et al., 2010; Fraser & Wilson, 2010; Haarhoff et al., 2011; Schneider & Rees, 2012) or grounded theory methodology (Bennett-Levy et al., 2001; Bennett-Levy & Lee, 2014). Gale and Schröder (2014) aimed to provide an accumulated perspective of the value of SP/SR by conducting a meta-synthesis. Their framework was Noblit and Hare's (1988) guidance for meta-ethnography, which distinguishes between refutational and reciprocal constructs across studies. Using an exhaustive range of search terms, they identified 367 papers, which led to 10 papers (including those cited above) being included which reported 6 separate studies. The study mentioned the heterogeneity of the studies, both in terms of

how SP/SR was employed and the characteristics of the participants. The meta-synthesis led to three main categories, 'Experiences of SP/SR', 'Outcomes of SP/SR' and 'Implications for training'. The paper culminated in the line of argument depicted in Figure 4.

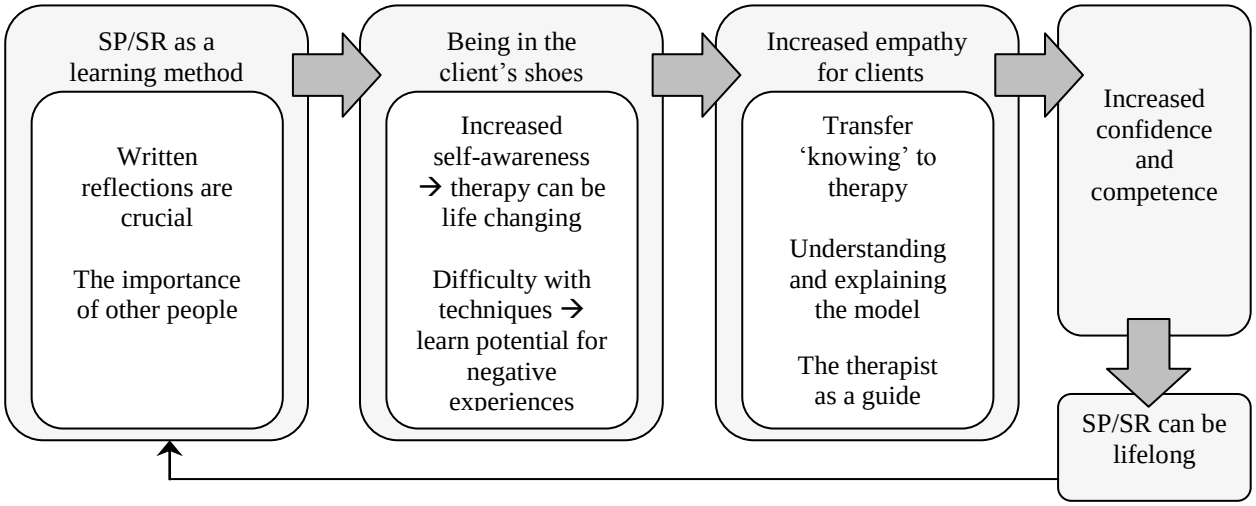

Figure 4: Line of argument following meta-synthesis (Gale and Schröder, 2014).

Their model was clearly a descendant of Bennett-Levy et al.'s (2001) original grounded theory study, where experiences of self-practicing CBT leads to greater empathy of how clients may experience therapy. This greater understanding of client experience in turn contributes to the development of competence through a process of self-reflection. The model in Figure 4 develops upon Bennett-Levy et al.'s (2001) study through highlighting the benefits of written reflection and the involvement of peers in SP/SR. Gale and Schröder (2014) expanded the horizon of SP/SR through reporting that self-practice was also beneficial for experienced CBT practitioners, with the potential to become a life-long technique to promote personal wellbeing and clinical competency. The central role of empathy may suggest the influence of third wave approaches (e.g. Compassion-Focused Therapy, Gilbert, 2005) on mainstream CBT, with the "growing recognition that empathy, validation and compassion can, in themselves, be therapeutic agents of change" (p.606, Thwaites & Bennett-Levy, 2007).

Based on the Sandelowski and Barroso's (2007) criteria for appraising meta-synthesis (see Appendix B), the analysis by Gale and Schröder (2014) was of an acceptable standard having met the criteria specified by Noblitt and Hare (1988). This was due to their exhaustive and systematic search of the literature, the

employment of a quality appraisal tool, the iterative process of analysis, and the generation of a model which provided a novel interpretation of the findings. However, the authors neglected to either position themselves with reference to their own personal bias, nor highlight the paucity of sufficient reflection in the papers. The implications of this neglect of researcher bias increases the potential for a biased interpretation within their analysis, warranting a closer examination of the papers contributing to their meta-synthesis.

The studies cited in the meta-synthesis were examined to assess whether the authors had been overly reductionist in their analysis, since it was claimed that "only reciprocal relationships were found between the papers" (p.390, Gale & Schröder, 2014). Bennett-Levy & Lee's (2014) grounded theory study included a group of 19 mental health workers who attended a voluntary SP/SR short course in CBT who reported little or no benefits. In contrast to other groups involved in their grounded theory, the mental health worker group were not involved in any feedback or member checking, with no given quotes attributed to this group when describing themes. Therefore this is an example of a refutational finding not being included in the meta-synthesis, indicating that their findings may be over generalised.

An additional area of concern is the homogeneity of the papers involved in the meta-synthesis, both in terms of the characteristics of the sample and the method of delivery of SP/SR. Gale and Schröder (2014) argued that the lack of refutational findings infer that the "different methodologies were complementary" (p. 390). Schneider & Rees' (2012) study investigated CBT training which incorporated both SP/SR and an interpersonal process group, with interview questions focusing exclusively on the latter. The themes related overwhelmingly on experiences of the group with only oblique reference to SP/SR. Despite this, Gale and Schröder's (2014) comparison of third order constructs gives the impression that the themes of self-awareness and empathy for client experience were referring specifically to SP/SR in this study.

What is noteworthy from the meta-synthesis is the seeming ubiquity of one researcher who has led the field since Bennett-Levy et al. (2001). Given that SP/SR is marketed towards CBT courses and published a workbook (Bennett-Levy, Thwaites, Haarhoff & Perry, 2015), this raises concerns of a potential conflict of interest. In this context, there is a lack of reported reflexivity throughout the papers within the meta-synthesis, will all studies scoring poorly for reflexivity on the SQAC.

Studies not included in meta-synthesis. Beyond the studies involved in the meta-synthesis, the qualitative literature on self-experiential work in CBT was sparse. Sutton et al. (2007) conducted a thematic analysis of the experiences of 19 CBT trainees who attended a focus group to discuss their use of a reflective journal on a course which implemented SP/SR. This study both identified potential biases through bracketing, and reported a coherent process to promote the reflexivity of their analysis. The identified themes were broadly parallel to the 3rd order constructs identified by Gale and Schröder (2014), highlighting "that client empathy was emphasised through students undertaking various personal cognitive-behavioural techniques" (p.392, Sutton et al., 2007).

Price (2011) reported a self-case study of their experience of applying CBT techniques on themselves during CBT training (the author deciding to self-practice on their own initiative, prompted by their awareness of SP/SR). These techniques were mainly performed in concert with a peer through a role play exercise, with homework completed alone. They described a greater understanding of the obstacles that clients may encounter in CBT, greater empathy and self-awareness. However the study is limited due to the case-study design, limiting external validity.

In Sanders and Bennett-Levy (2010), the former author presented a self-case study of their experiences of voluntary self-practice of CBT (independent of SP/SR) at a time of personal crisis. This study provided a different emphasis to those previously mentioned, with a focus on self-care and self-practice of CBT techniques, rather than using SP/SR to develop therapeutic competence. The author's account described the limited benefits of having tangible coping strategies at their ready disposal. The benefits were countered by the hindrance of failing to accept the need to seek help, due to difficulties of both recognising their level of wellbeing and admitting it to themselves. Furthermore, due to being an experienced practitioner the author felt they held unrealistic expectations of their capacity to cope on their own, compounded by their concerns of disclosing to colleagues. The same limitations as for the previous study apply here also, with external validity limited due to the n = 1 study design.

Bennett-Levy et al. (2013) conducted a thematic analysis of five aboriginal counsellors who spontaneously applied CBT techniques to themselves in everyday life. The participants indicated that they

felt more skilled and had increased confidence, while also claiming that self-practice of CBT protected them against burnout. However the study was unsophisticated with a small sample size, no validity checking and lacking generalisable findings. Interestingly, the authors reported that it was the "first cohort to spontaneously apply CBT to self; routinely using in everyday life; (with) no SP/SR instruction" (slide 6, p. 1). This raises the question of how comparable SP/SR and voluntary self-practice is, where further research may investigate qualitative differences between these practices.

Summary. This research question asked how trainees and qualified CBT practitioners experienced self-experiential work in CBT. The use of SP/SR was found to dominate this area, with a number of thematic analyses and grounded theory studies citing a core process of empathy with the client experience and increased self-awareness as contributing to a greater sense of competency. Many of the studies were found to lack a sufficient level of reflexivity, leading to a danger of social desirability effects on participants and a conflict of interest due to the vested interests of the main researchers. However, additional papers (Price, 2011; Sutton et al., 2007) provide convergent findings that support the model proposed by the meta-synthesis. A reoccurring theme is that the use of SP/SR appears beneficial, especially when practiced in concert with a reflective process involving peers, either through role play (Price, 2011), a reflective journal or blog (Farrand et al., 2010; Sutton et al., 2007), or through a form of reflective group (Bennett-Levy et al., 2001; Schneider & Rees, 2012). A recent development has been the identification of spontaneous self-practice of CBT, which warrants further research to identify if the findings are replicable with different populations. Finally, although the use of self-experiential work had led to reports that "therapists experienced lasting benefits from using this approach" (p.383, Gale & Schröder, 2014), the case study presented by Sanders & Levy (2010) described a scenario where self-practice of CBT had led to less help-seeking behaviour. These contrasting experiences of self-practice and self-care suggest that further research is needed in this area.

Question 2. What is the efficacy and effectiveness of such self-experiential work?

All the studies that addressed this question related to SP/SR. Several of the studies involved the quantitative components of a mixed methods design, the qualitative results of which were covered in the

previous section. The focus of the seven studies (described in Table 1) clustered around two main areas: the value of SP/SR relative to other training methods, and changes in confidence and competency resulting from SP/SR.

The value of SP/SR relative to other training methods. Bennett-Levy et al., (2009a) investigated how CBT practitioners perceived the relative merits of a range of training approaches. The Declarative-Procedural-Reflective model (DPR) (Bennett-Levy et al., 2009b) was applied as a conceptual framework to apportion the different areas of learning on which the various training approaches may contribute. The participants were 120 therapists who attended a CBT workshop completing a self-report measure, 'Methods of Learning Therapist Skills Questionnaire' (MLTSQ – devised for this study with no validity or reliability analyses reported). The study was conducted in Sweden; of note is that therapist's own personal therapy is mandatory in Sweden, with the participants of this study having spent an average of 28.1 hours in personal CBT therapy. The findings showed that differing learning methods were differentially effective for different areas, with self-experiential work and reflective practice the most highly rated training approach for both reflective and procedural systems of the DPR model. However, the MLTSQ was not subject to any statistical analysis beyond reporting percentile rates, the authors asserting that "an eyeball analysis gives a clear indication of the results" (p. 576). The generalisability of the findings is limited, however it is reasonable to conclude that self-experiential work was a valued practice.

Rakovshik and McManus (2013) conducted a study along similar lines, investigating which parts of CBT training were considered by participants (73 CBT trainees based in the UK who had prior therapeutic experience) to have had the greatest impact on their competence. The DPR model was not used as a framework, the authors aiming for a more explorative study. A self-report Likert scale was used to measure the perceived impact of 26 different course elements, which were clustered into categories of 'trainer learning' (e.g. supervisor feedback), 'peer learning' (e.g. direct feedback) & 'self-learning' (e.g. using CBT methods on yourself). Inferential statistics revealed that trainer learning was rated significantly more highly than both self and peer learning, with self-learning rated significantly more highly than peer learning. The

authors expressed surprise that 'using CBT on oneself' was rated as only the 19th most impactful source of learning out of the 26 course elements, a contrasting finding to Bennett-Levy et al. (2009a).

Niemi and Tiuraniemi (2010) investigated the relative important of different skills and procedures of a CBT training course based in Finland which included SP/SR. Participants were given four short answer questions which were completed at two time points, two years into training (n = 39) and at the end of the four year training (n = 53). The responses were subjected to a content analysis, with no marked differences found between the time points. The frequency of items revealed that gaining technical knowledge and strategic skills were most often rated highly, whereas interpersonal perceptual and relational skills were far less likely to be rated highly. Interpreting these findings was problematic, as it was not clear which items referred to SP/SR in their content analysis. In addition, the findings cannot be linked specifically to SP/SR as the study was investigating the training as a whole, hindering the specificity of their research design.

The three studies provided a mixed picture of the value CBT trainees' gave to self-experiential work when compared to other training methods. Rakovshik and McManus (2013) appeared to have the methodology which most specifically compared self-practice of CBT to other learning approaches, although the research in this area is at an early stage with numerous confounding variables likely to influence the findings. Further research would benefit from replicating these studies whilst controlling for confounding variables to provide a cleaner comparison (i.e. whether participants had had their own therapy; level of experience of participants).

Changes in confidence and competency resulting from SP/SR. Schneider and Rees (2012) conducted a repeated measures design on 11 participants of a 12 week CBT training program based in Australia, to assess whether an SP/SR course would enhance therapist competency. They used the Counselling Self Estimate Inventory (COSI, validated in Larson et al., 1992) a self-rated measure of perceived competence, which was administered at the beginning and end of the CBT course. They reported significant improvements in all areas of the COSI measure (i.e. 'microskills', 'process', 'difficult client behaviour') other than 'cultural competence'. However, there were major limitations of this study, most prominently the small sample size and the lack of a control group to account for confounding variables.

A study employing a comparable methodology was conducted by Niemi and Tiuraniemi (2010), who applied a repeated measures study design with 53 participants of a CBT course based in Sweden which employed SP/SR, testing their self-assessed competency as psychotherapists at the beginning and end of the course. The study included the construction of a self-rated measure, the Finnish Inventory of Cognitive Psychotherapist Skills, which reported acceptable levels of internal consistency. The trainees' self-reported competency improved significantly, with the greatest progress in the technical and conceptual domains whilst 'advanced interpersonal skills' saw the least improvement. This could be interpreted within the DPR model as supporting Bennett-Levy et al.'s (2009) conjecture that the declarative and procedural information processing systems will play a greater role during training, with the reflective information processing system coming to the fore when the declarative and procedural domains become more automated with experience.

Both Schneider and Rees (2012) & Niemi and Tiuraniemi (2010) reported significant improvements in trainee's self-rated competence during a CBT training course which implemented SP/SR, suggesting that qualitative reports of benefit may be supported by quantitative studies. However, neither study reported effect sizes, presumably due to the small sample sizes, with participant demographics also under reported. The main criticism is that the simplicity of their study designs renders their findings moot due to the large number of plausible confounding variables (e.g. impact of other aspects of training, demand characteristics, experience of own personal therapy), which could be rectified with a randomised controlled study design comparing the self-rated competence of a group who receive SP/SR with a control group.

Bennett-Levy & Padesky (2013) examined the impact of self-experiential work and reflection on the learning and skills development of participants of a CBT workshop. Promisingly, this study included a control group and achieved reasonable sample sizes (48 in experimental group, 50 in control group) with good matching of demographic characteristics between the groups. The experimental group received worksheets and a handout on self-experiential work at the end of the workshop whilst the control condition did not. A Likert scale was used which discriminated between 'changes in awareness' and 'changes in behaviour' with the rationale that awareness may not necessarily lead to change, the assumption being that awareness precipitates changes in behaviour. The experimental group were significantly more likely to

report 'changes in behaviour' than the control group, however there was no significant difference for 'changes in awareness'. This finding implied that the intervention specifically targeted behavioural changes rather than changes in awareness, nevertheless the authors concluded the worksheets encouraged both awareness raising and utilization of skills relating to the workshop.

The studies described thus far have demonstrated a reliance on self-report measures, reporting improvements in perceived competency. In an unpublished thesis, Haarhoff (2008) sought to obtain an objective measure of the effectiveness of SP/SR, comparing a manualised SP/SR group (16 participants) with a control group (10 participants). The assessed outcome was the quality of participants' CBT case conceptualisations on standardised clinical vignettes. The quality of the conceptualisation was assessed through three scales (see Table 1), with the results identifying that for two of the three scales, the control group outperformed the intervention group. In addition to a small sample size, this study exemplified the difficulty of capturing a measure of the objective benefits of SP/SR which had been alluded to in qualitative studies (see previous section regarding experiences of SP/SR).

A recent paper (Davis et al., 2014) aimed to address many of the limitations hindering the earlier research with reference to confounding variables and outcome measures of SP/SR. Experienced CBT practitioners were selected as participants so that other factors involved with CBT training did not function as confounding variables, thereby providing a better controlled study. A comparison group was not included, although multiple baselines and a follow-up time point were employed. The study provided a comprehensive description of the validity and reliability of two scales, the Cognitive Therapist Self-Monitoring Scale (CTSMS) and the Cognitive Therapist Empathy Scale (CTES), with self-awareness and empathy both hypothesised by qualitative studies to be mechanisms associated with SP/SR that mediate CBT practitioners' perceived competence and confidence (Gale & Schröder, 2014). Whilst the initial sample size was small (n= 14) with 50% subsequent attrition, the authors attempted to manage these issues by reporting effect sizes and performing an intention to treat analysis. The study reported significant improvements of both CTES and CTSMS solely during the active phase of the intervention (i.e. no change during baseline nor follow up), with large effect sizes reported for both . Interestingly, their analysis

revealed that the changes reported could be mostly attributed to how participants had rated themselves with reference to their most difficult client, rather than their work with all clients. The authors concluded that the study presented a fair assessment of the specific impact of SP/SR, leading to improvements in self-reported empathy and self-monitoring, albeit with the requirement of good engagement in SP/SR. However, the study is not controlled, with no arrangements for double blinding or randomisation , and therefore did not score highly on the SQAC.

Summary. The above studies illustrate some of the methodological constraints that have been met by researchers in this field. Whilst some findings support the notion that SP/SR promotes self-rated confidence and competence, there is a dearth of objective measures leading to a reliance on self-report questionnaires being retained. Interestingly, the strongest evidence of beneficial changes has involved experienced practitioners of SP/SR whose participation was voluntary, with Davis et al. (2014) stating that the "level of engagement is a key issue in terms of what benefit can be gained from the programme" (p.7). This leads to the question of what factors predict the level of engagement in self-experiential work.

Question 3. What factors predict engagement and benefit from such self-experiential work?.

Bennett-Levy and Lee's (2014) grounded theory of SP/SR was included in the Gale & Shroder (2014) meta-synthesis, and involved the development of a model which aimed to predict engagement with SP/SR. Their study involved reanalysing data from previous studies of the experiences of SP/SR (Bennett-Levy et al., 2001; Bennett-Levy et al., 2003), which was combined with the previously unreported data from 19 health care professionals who had reported little engagement with SP/SR or benefit. Their grounded theory analysis included the validation procedure of member checking, yet had little recognition of any impact of interpretive bias by the researchers nor any evident process of reflexivity. Their grounded theory model of engagement with SP/SR conferred the outcome of 'Experience of Benefit' as being solely associated with 'Engagement of SP/SR' in a reciprocal relationship; 'Engagement of SP/SR' was influenced by 'Course Structure and Requirements', 'Expectation of Benefit', 'Feeling of Safety with the Process', 'Available Personal Resources' and 'Group Process'. What is notable about their model is the focus on the manualised programme of SP/SR, rather than CBT self-experiential work per se (e.g. Bennett-Levy et al.,

2013). This limits the model's explanatory power since 'Group Process' and 'Course Structure and Requirements' are not strictly associated with SP/SR, and may be an aspect of any training method that involves a group process. Nevertheless, the remaining factors of 'Expectation of Benefit', 'Feeling of Safety with the Process' and 'Available Personal Resources' may be generalisable to SP/SR beyond CBT training programs, together with voluntary self-practice of CBT.

In their investigation to explore what may predict engagement and benefit of SP/SR, Chaddock et al. (2014) applied a quasi-experimental single case methodology. This involved an analysis of the idiosyncratic experiences of eight trainees who participated in a manualised SP/SR program, which through attrition resulted in four participants. The participants self-rated the CTES and CTSMS throughout the SP/SR program, with weekly written reflections and a semi-structured interview providing qualitative data. The DPR model was used as a framework for linking the qualitative data to the outcomes of the CTES and CTSMS; the rationale being that the DPR has been "widely adopted as a model of therapist skill development"(p.3). The DPR model provided a-priori categories, distinguishing between the three different information processing systems previously described, whilst also discriminating between the trainee's selection of either 'personal self-schema' or 'therapist self-schema' as their chosen focus. It was reported that higher rated self-awareness and empathy scores on the CTES and CTSMS occurred when trainees' personal and therapist self-schema were more integrated. A notable finding was that the performance of the trainee whose scores showed the least improvement was attributed to SP/SR raising the level of their conscious incompetence. Tellingly, the authors interpreted this as suggesting that this trainee may be a 'mismatch' for SP/SR. This raises significant conceptual questions for this area of research, as it has been tacitly assumed that an increase in self-awareness prompted by self-experiential work will lead to higher scores on self-rated measures (e.g. CTES and the CTSMS, Davis et al., 2014).

Summary. Bennett-Levy and Lee (2014) and Chaddock et al. (2014) sought to identify the factors which influence engagement with SP/SR. The proposed predictive factors included intra-psychic processes such as the degree of integration of therapist and self-schema, and internal and external factors of 'Expectation of Benefit', 'Feeling of Safety with the Process' and 'Available Personal Resources'. These

papers adopted contrasting approaches towards answering this question, either a bottom-up approach using grounded theory (Bennett-Levy & Lee, 2014), or a top-down approach using a model to interpret results (Chaddock et al., 2014). In their introductions, both papers have a narrow focus with limited consideration of complementary literature beyond SP/SR which may provide relevant models that predict behaviour (e.g. the theory of planned behaviour). Further research may benefit from bringing together converging models which may be applied to predict engagement in SP/SR.

Discussion

The first research question investigated how trainees and qualified CBT practitioners experienced self-experiential work in CBT. CBT trainees and experienced therapists generally reported benefiting from SP/SR, both personally and professionally. Grounded theories posited a causal relationship, with SP/SR leading to greater self-awareness and empathy of a client's experience of CBT, contributing to improvements in confidence and self-perceived competence. Several papers supported the use of a reflective space in conjunction with SP/SR, either through a reflective group, peer relationship or reflective blog, suggesting that SP/SR benefits from having a relational component. However, the qualitative studies on SP/SR scored very poorly on the SQAC for reflexivity, prompting caution when interpreting the results due to the potential for bias impacting the findings.

While the emphasis of the SP/SR qualitative studies was towards developing therapeutic competence, there were benefits for personal wellbeing cited for both SP/SR and voluntary self-practice of CBT. Although the use of CBT self-practice to promote therapist self-care has been recommended (Ludgate, 2013), others have warned against relying on a single approach to coping individually instead of using interpersonal relationships or seeking professional help (Figley, 2002), echoing the experience reported by Sanders and Bennett-Levy (2012). Therefore further research into the use of CBT self-practice to promote therapist wellbeing is warranted.

The second research question investigated quantitative findings regarding the effectiveness and efficacy of self-experiential work. The research in this field is in the early stages and is therefore

understandably limited, most notably due to small sample sizes, high rates of attrition and poorly controlled study designs. The initial forays into experimental research have uncovered several methodological and conceptual obstacles to be overcome prior to larger and more controlled studies take place. A core issue is the reliance on self-report measures to provide data concerning self-awareness, an area which does not provide linear relationships due to the interchanges between unconscious incompetence towards conscious incompetence. This raises significant conceptual questions for this area of research, as it has been tacitly assumed that an increase in self-awareness prompted by self-experiential work will lead to higher scores on self-rated measures (e.g. CTES and the CTSMS, Davis et al., 2014). An alternative hypothesis may be that an increase in self-awareness may highlight areas of conscious incompetence, resulting in lower scores on the CTSMS and CTES. This issue provokes the hypothetical question which could be asked of all the quantitative studies on SP/SR, how can you quantitatively measure the maximum benefit of an approach which aims to increase self-awareness? One potential solution would be to measure behavioural outcomes rather than self-report, as was conducted by Haarhoff (2008) who investigated the impact of SP/SR on quality of case formulation.

The third research question examined what factors predict engagement in such self-experiential work. These studies have either developed a model from grounded theory, or chosen to employ the DPR model as a method of explaining the differing receipt of benefit. Future investigations regarding engagement would profit from drawing upon existing models that may be used to predict levels of engagement, for example the theory of planned behaviour, which describes behaviour as being directly related to intention, intention being affected by attitudes towards the behaviour, social norms regarding the behaviour, and perceived behavioural control to perform the behaviour.

The systematic search of the literature revealed that the topic of self-experiential work in CBT was dominated by the SP/SR training module. A question emerging from the systematic review was how comparable voluntary self-practice of CBT was to SP/SR. A tentative proposition is that voluntary self-practice and SP/SR are the CBT equivalents to the psychoanalytic practices of what Horney (1942) referred to as 'occasional self-analysis', described as isolated solutions to conscious symptoms (compared to

voluntary self-practice), and 'systematic self-analysis', described as the continued reflection of underlying personal processes (compared to SP/SR).

Clinical Implications

Based on the qualitative research of self-experiential work in CBT, it has been purported that self-practice of CBT is a valuable source of learning to promote clinical competence. Therefore a clinical implication is that CBT self-practice may provide a rich experience to foster therapist competency both on CBT training programs and for experienced practitioners as a form of continuous professional development. The use of a relational component in concert with CBT self-practice is recommended (e.g. a reflective group, working with a partner, or use of a blog), together with consideration of how participation in self-experiential work is achieved in order to promote engagement. CBT self-practice may also confer benefits for therapist well-being, and may be encouraged as a method of promoting self-awareness; however, care should be taken that there is not an over reliance of CBT self-practice to the detriment of other help seeking behaviour.

Future Research

Due to self-experiential work in CBT being a relatively new area there are ample opportunities for further research, most notably randomised controlled trials where therapists have received an SP/SR intervention. However, there are two major gaps within the existing literature: Firstly, the use of self-experiential work for the purposes of self-care, which could involve a qualitative study to identify the themes associated with CBT self-practice by CBT practitioners for the purposes of self-care. Secondly, there is a conspicuous lack of research into the prevalence of voluntary self-practice of CBT by CBT practitioners, warranting further research in this area.

Conclusion

A systematic review of the literature on CBT self-experiential work was conducted; it was found that the research in the field was dominated by SP/SR, with isolated studies examining voluntary self-practice of CBT. The qualitative research indicated substantial benefits for trainees and experienced therapists, however

quantitative studies were in the earlier stages with limited use of controlled research designs. CBT self-experiential work was theorised as incorporating a greater reflective component into learning beyond the acquisition of knowledge and development of procedural skills. As such, it has been viewed as providing a therapy life experience for CBT practitioners, and is an area which may be greatly expanded upon with many avenues of future research to be explored.

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Section B

Voluntary Self-practice of CBT Techniques by CBT Practitioners:

The Application of the Theory of Planned Behaviour

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Abstract

This study investigated the prevalence of voluntary self-practice of cognitive behaviour therapy (CBT) by accredited CBT practitioners, and explored the ability of the theory of planned behaviour (TPB) to predict intentions to engage in CBT self-practice. A TPB questionnaire was constructed by implementing the protocol devised by Francis et al. (2004), with content specific items generated from an elicitation exercise to obtain salient beliefs regarding CBT self-practice. A sample of 177 accredited CBT practitioners completed an online survey which included demographic items and the TPB questionnaire. It was found that 45.8% of participants intended to self-practice CBT more than once a week over the following month. While the TPB predicted intentions to self-practice CBT, structural equation modeling revealed that the theory of reasoned action was the best model fit of the observed data. It was concluded that a substantial proportion of CBT practitioners intended to regularly engage in CBT self-practice, with intentions predicted by subjective normative beliefs and attitudes towards the behaviour. Implications are discussed, with calls for the study to be replicated. Potential future research is considered, with suggestions to explore the role of CBT self-practice to promote therapist wellbeing.

Key Words: self-experiential, self-practice, cognitive behaviour therapy, theory of planned behaviour, theory of reasoned action.

Voluntary Self-practice of CBT Techniques by CBT Practitioners:

The Application of the Theory of Planned Behaviour

Introduction

Self-experiential work has been recommended by leading figures within the field of Cognitive Behaviour Therapy (CBT) (Beck, 1995; Padesky, 1996). It is defined as an iterative process of 'self-practice of therapeutic methods' which involves therapists employing CBT techniques on themselves, and 'self-reflection of the therapist' which involves a meta-perspective of therapist and personal schema (Laireiter & Willutski, 2003).

Self-experiential work is an established aspect of CBT training in Germany (Laireiter, 1998), and has received greater attention in English speaking countries over the past 15 years. In the United Kingdom the research into self-experiential work in CBT has been dominated by Self-Practice/Self-Reflection (SP/SR), a manualised training module devised by Bennett-Levy et al. (2001) which operationalised self-experiential work for CBT trainees. Qualitative studies have suggested that there are multiple benefits from SP/SR to be gained by both trainees and experienced CBT practitioners (Gale & Schröder, 2014), including empathy with how clients experience therapy (Bennett-Levy, Lee, Travers, Pohlman & Hammernik, 2003), improved self-care (Fraser & Wilson, 2010), and greater self-awareness (Bennett-Levy et al., 2001; Haarhoff, Gibson & Flett, 2011). The experiences acquired through SP/SR have led to self-experiential work in CBT being likened to a "personal therapy like experience" for CBT trainees (Chaddock, Thwaites, Bennett-Levy & Freeston, 2014, p.2). However, there have been reports of difficulties with engagement (Bennett-Levy & Lee, 2014), while the emphasis on trainee samples who were required to participate in SP/SR raises the possibility of social-desirability bias and demand characteristics affecting the findings.

Bennett-Levy, Wilson and Nelson (2013) investigated Aboriginal Counsellors' experience of applying CBT approaches in community settings, and reported that the participants were the "first cohort to spontaneously apply CBT to self; Routinely using in everyday life; (with) no SP/SR instruction" (slide 6, p. 1). Their study identified themes associated with voluntary self–practice of CBT which were comparable to those reported in other thematic studies conducted on SP/SR, which included 'increased confidence and

skills', and 'protection against professional burnout'. However, these findings should be approached with caution as the generalisability is limited due to the small sample size of five participants, together with the cultural specificity of the sample.

Bennett-Levy et al.'s (2013) study presented an isolated example of the spontaneous regular self-practice of CBT by practitioners, while the prevalence of voluntary self-practice of CBT among other populations of CBT practitioners was unknown. Based on the reported benefits that may be derived from SP/SR, voluntary self-practice of CBT may prove a valuable source of self-explorative work as there is now a greater recognition that CBT practitioners' personal schema and beliefs influence the therapeutic relationship (Haarhoff, 2006; Leahy, 2001). Self-practice of CBT as a self-explorative exercise may be viewed as important as CBT practitioners have consistently been found to be the least likely clinicians to engage in personal therapy (Norcross & Guy, 2005; Pope & Tabachnick, 1994; Orlinsky, Schofield, Schröder & Kazantzis, 2011), in addition to the fact that CBT training in the United Kingdom has not required trainees to engage in self-explorative work (BABCP, 2000). As a result it has been suggested that SP/SR should be made mandatory for CBT accreditation with the BABCP (Davis, Thwaites, Freeston & Bennett-Levy, 2014).

Bennett-Levy and Lee (2014) and Chaddock et al. (2014) have expressed concerns that SP/SR is vulnerable to poor engagement which has a detrimental impact on the experienced benefit. It is important to understand what may influence CBT therapists' decisions to engage in self-practice of CBT by drawing from available theory. From their grounded theory analysis on three different groups of clinicians that participated in SP/SR (CBT trainees, experienced CBT practitioners and other health care professionals), Bennett-Levy and Lee (2014) generated five potential factors that may predict engagement (see Figure 1).

Their grounded theory model hypothesised that behaviour (i.e. level of engagement with SP/SR) was influenced by a combination of external factors (e.g. course structure), and beliefs regarding the behaviour (e.g. expectation of benefit). This model may therefore be viewed as fitting conceptually into the framework of a social cognitive theory (Conner & Norman, 1996), where cognitions are considered to influence intention to perform the behaviour in question and this, in turn, is thought to precede the volitional

behaviour itself. Based on Bennett-Levy and Lee's (2014) grounded theory model it could be hypothesised that a social cognitive model would predict a significant proportion of the variance of the level of engagement in CBT self-experiential work, warranting further research in this area drawing on social cognitive models.

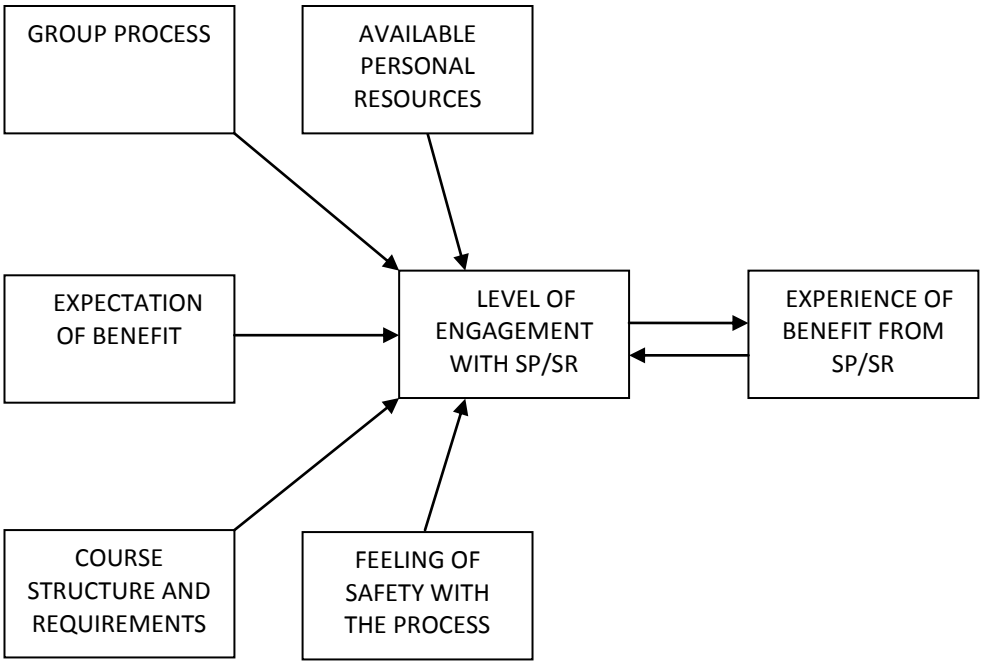

Figure 1. Grounded theory model from Bennett-Levy and Lee (2014).

Theory of Planned Behaviour

In a systematic review of social cognitive models applied to health care professionals (Godin, Belanger-Gravel, Eccles & Grimshaw, 2008), the theory of planned behaviour (TPB) (Ajzen, 1991; Ajzen & Fishbein, 1988) was reported to be the most widely used model with the greatest predictive power. The TPB was found to account for 59% of the variance in intention and 31% of the variance in behaviour, suggesting that an individual's intention to perform a behaviour is the greatest predictor of the likelihood of whether that behaviour will actually take place. More specifically, a study investigating CBT practitioners' use of self-help materials in sessions found that the TPB predicted 70% of the variance of intentions, with attitudes the strongest predictors (Levy, 2011).

The TPB predicts that the higher the level of intention, the more determined the individual will be to engage in a given behaviour, and therefore the more likely it will be for the individual to succeed in

performing the behaviour. The TPB developed from the theory of reasoned action (TRA; Fishbein & Ajzen, 1975), which had viewed intention as being predicted by subjective norms and attitudes towards the behaviour. The TPB added a factor to the TRA to account for the influence of external factors, leading to three predictors of intentions: Attitudes towards the behaviour (behavioural beliefs), subjective norms regarding the behaviour (normative beliefs), and perceived behavioural control (PBC) to perform the behaviour (control beliefs). In addition, the TPB views PBC as functioning as a proxy measure of volitional control (i.e. capacity to engage in wilful action) which has a direct relationship with behaviour (dotted line in Figure 2).

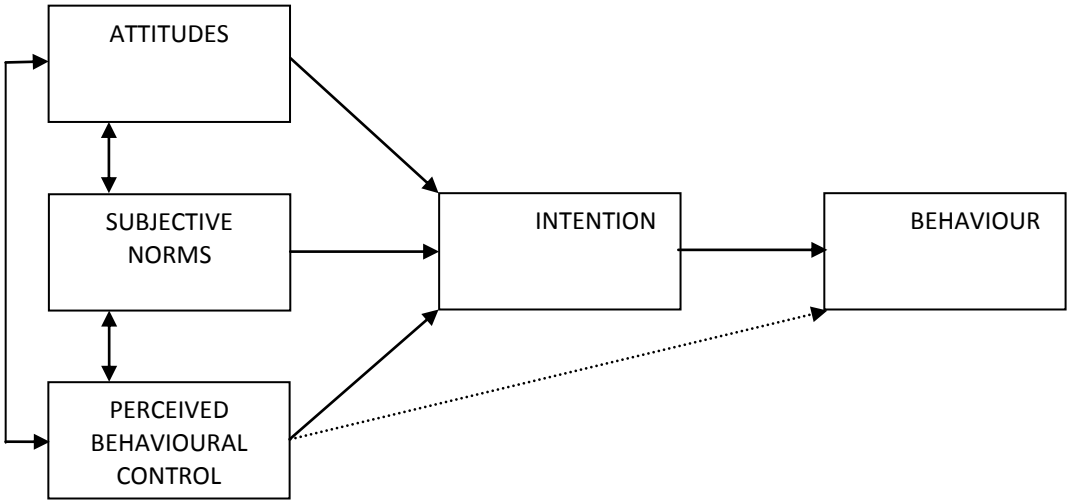

Figure 2. The theory of planned behaviour (Ajzen, 1991).

Summary

Self-practice of CBT had become increasingly recognised as a valued activity which has been found to contribute to the development of therapists' perceived competence, with potential benefits for therapist self-care. Based upon the available literature there were two gaps in the research which may be addressed. Firstly, the extent to which CBT practitioners in the UK regularly engaged in voluntary self-practice of CBT. The extent of CBT self-practice had not been previously investigated, whilst the Bennett-Levy et al. (2013) study invited questions regarding the generalisability of their findings, warranting further research of the prevalence of self-practice within different cultural settings. Secondly, the extent to which the theory of planned behaviour may provide a useful framework to predict CBT practitioners' decisions to engage in

self-practice of CBT. The rationale for this hypothesis was drawn from the grounded theory model of engagement with SP/SR (Bennett-Levy & Lee, 2014) . This led to three research questions being addressed in this study.

Study Aims

1. To investigate the extent that accredited CBT practitioners intended to engage in CBT self-practice.
2. To investigate whether the TPB can be used as a model to predict intentions to engage in voluntary self-practice of CBT**.**
3. To identify which factors of the TPB were the strongest predictors of the intention to self-practice CBT based on the structural equation model which best fits the observed data.

This study may highlight practices that have been reported as beneficial for CBT practitioners, both in terms of self-care and perceived clinical competence. The findings may also be informative when designing future interventions to encourage CBT practitioners and trainees to engage in manualised self-explorative work, such as SP/SR.

Method

Design

A mixed methods study design was conducted across two stages. In stage one qualitative data were elicited to generate a TPB questionnaire for CBT self-practice. In stage two the TPB questionnaire together with demographic items was used in a cross-sectional web-based national survey of CBT practitioners. Multiple regressions were performed using the software 'Statistical Package for the Social Sciences (SPSS, version 22) to answer the second research question. Structural Equation Modelling (SEM) was conducted using AMOS software (version 22) for the third research question.

Stage one followed a research protocol that has operationalised the development of TPB questionnaires (Francis et al., 2004) based on guidance from Ajzen (1991). Francis et al.'s research protocol has been successfully implemented with a range of topics including self-care behaviours (Gatt & Sammut,

2008) and intentions to engage in research (Eke, Holtum & Hayward, 2012). The research protocol recommended measuring the TPB predictors directly, through enquiring about overall beliefs towards CBT self-practice, and indirectly through enquiring about specific beliefs and outcome evaluations regarding the behaviour. To inform indirect measures, qualitative data regarding salient beliefs of CBT self-practice were gathered through an elicitation questionnaire. In stage two, a cross-sectional survey was conducted in which the main sample was administered the TPB questionnaire together with items on participant demographics.

Ethics. Approval for both stages of this study was granted by the Salomons Ethics Panel, Canterbury Christ Church University (see Appendix C). A prize draw of a £75 internet voucher for books was offered to potential participants as an incentive to take part in the study.

Participants

All participants were fully accredited members of the British Association for Behaviour and Cognitive Psychotherapies (BABCP). This was to ensure a sufficient level of familiarity and competence with CBT, whilst also being conversant in English.

First Stage. A convenience sample was obtained through a snowballing recruitment strategy, resulting in 16 participants. It has been recommended by Godin and Kok (1996) that a sample size of 25 was required for the elicitation stage, however Francis et al. (2004) suggested that fewer participants are sufficient where there is data saturation, which was viewed as met due to the richness of the responses received. The participants were 75% female, representative of the gender proportions reported for applied psychologists (BPS, 2007). Applied psychologists made up 62.5% of participants in this sample, compared to 23.7% of all accredited BABCP members in the UK (BABCP, 2015); the over-representation likely due to the convenience sampling method's reliance on personal contacts.

Second stage. Participants were recruited through the BABCP mailing list of accredited CBT practitioners based in the UK, with an e-mail inviting participants to access the survey through a link to Bristol Online Survey. Participants were presented with an information sheet prior to giving informed consent (see Appendix D). Based upon Green's (1991) formulae for calculating required sample size to

assess the fit of a regression model (i.e. n = 50 + (8 x number of predictors)), a minimum of 98 participants was required; whilst Francis et al. (2004) advised a minimum of 80 participants to identify a moderate effect size (R^2 = .3; Cohen, 1988). The BABCP forwarded an e-mail (see Appendix E) to 2,487 accredited CBT practitioners in the UK, with 177 participants completing the online survey (a response rate of 7.1%). Participants were asked to provide details about their age, gender, ethnicity, profession, experience, service setting, work place setting and prior experience of therapy (see Table 1).

Ethnicity and gender was representative of the proportions that have been reported for applied psychologists (BPS, 2007) (this data not available from BABCP). The proportion of applied psychologists and psychotherapists in the main sample (24.2%) was comparable to the proportion present within the total population of BACBP accredited members in the UK (23.7%; BABCP, 2015). In contrast, other health professions (e.g. psychiatric nurses, social workers, occupational therapists) were underrepresented in the main sample (27.1%) compared to the proportion present in the total population of BABCP accredited members in the UK (40.1%; BABCP, 2015). Interestingly, the percentage of participants reporting having accessed personal therapy (56.5%) is lower than has been reported for CBT practitioners in several previous studies (Norcross & Guy, 2008; Pope & Tabachnick, 1994; Orlinsky, Schofield, Schröder & Kazantzis, 2011).

Sample characteristics	Frequency (n=177)	%
Age		
25-34	32	18.1%
35-44	48	27.1%
45-54	59	33.3%
55-64	33	18.6%
64-74	5	2.8%
Gender		
Male	44	24.9%
Female	133	75.1%
Ethnicity		
Asian / Black / Multiple Ethnic	4	2.3%
White / White Other	173	97.7%
Profession *		
CBT Practitioners	141	59.5%
Psychotherapists and Psychologists	43	24.2%
Other Health Professionals	48	27.1%

Experience since CBT accreditation		
Less than 1 year	10	5.6%
1-5 years	86	48.6%
5-10 years	46	26.0%
10-15 years	16	9.0%
Over 15 years	19	10.7%
Work place setting		
High Intensity IAPT	81	45.8%
Adult Secondary Care	30	16.9%
Primary Care Service	15	8.5%
Private Settings	23	13.0%
CAMHS	9	5.1%
Specialist & Tertiary	10	5.6%
Other	9	5.1%
Personal experience of therapy *		
No prior experience of own therapy	77	43.5%
CBT	25	19.2%
Psychodynamic	33	25.4%
Humanistic	35	26.9%
Other	37	28.5%

* Percentages not equal to 100% as multiple responses selectable for item.

Table 1. Demographic information of participants from main survey.

Materials

First stage. An elicitation questionnaire (see Appendix F) was constructed which followed guidelines by Francis et al. (2004) to elicit the salient behavioural, normative and control beliefs associated with self-practice of CBT. Example questions are: "what do you believe are the [disadvantages / advantages] of routinely using CBT techniques on yourself in everyday life"; "are there any individuals or groups who would [approve / disapprove] of you routinely using CBT techniques on yourself in everyday life?"; "what factors or circumstances would [enable you / make it difficult or impossible] to routinely use CBT techniques on yourself in everyday life?".

A content analysis (Krippendorff, 2004) was performed (see Table 2 below for coding frame with example quotes) which provided frequency counts of the emergent themes. An iterative process of re-reading the data and amending the themes was conducted to ensure that all themes were mutually exclusive and intuitive. The coding frame was revised with the research supervisor to provide face validity. An inter-

rater reliability check was performed on fifty percent of the data using Cohen's kappa, which was found to be k = .88 (p < .001), viewed as 'substantial' (Landis & Kock, 1977).

TPB Factor	Theme	Freq	Description of theme	Example quote
Behavioural beliefs	Supports wellbeing	11	Self-practice of CBT supports the personal wellbeing of the therapist.	"I think it's really useful and I do it regularly to manage my own negative thoughts / behaviours"
	Not always suitable	10	Self-practice of CBT not always the most relevant or useful way of coping.	"Not always effective / relevant to the situation – sometimes other coping strategies are more useful"
	Promotes empathy	7	Self-practice of CBT provides a greater awareness of how clients experience their therapy.	"A deeper understanding of the experiences of our clients using CBT"
	Develops competency	7	Self-practice of CBT functions as experiential learning and so helps develop competency.	"Secondly, using techniques on myself means they remain fresh in my mind and maintain my skills in their delivery."
	Practice what you preach	6	Therapists should self-practice as they are asking clients to use CBT techniques, and they are found to be effective.	"I think it is very important to practice what one preaches."
	Gives perspective	4	Helps you to feel more grounded and put things in perspective.	"More specifically, it can help to put things in proportion"
	No disadvantages	4	There are no disadvantages of self-practice of CBT.	"Can't see any particular disadvantages – if it works, it works, if it doesn't, then try something else!"
	Leads to less flexibility	3	Self-practice of CBT can mean you are less flexible in the techniques used.	"Routine use of something could lead to a lack of flexibility and rote use"

	Influenced by mindfulness	3	Prior experiences of mindfulness has encouraged self-practice of CBT.	"I've completed a MBCT course and it is important to attempt to routinely use techniques."
	Takes time.	3	Self-practice of CBT requires time and commitment.	"It is time-consuming"
	Potentially annoying	1	Self-practice of CBT could be annoying for others.	"Potentially annoying to others though no-one has ever indicated this is the case"
Normative beliefs	Work colleagues would approve	10	Work colleagues would approve of self-practice of CBT.	"My friends who are also in psychology roles would approve and show an interest in what exactly I do."
	No negative views	7	Not aware of any negative views towards self-practice of CBT.	"I can't imagine anyone would disapprove"
	CBT establishment would approve	5	The CBT establishment (BABCP and CBT training) would approve of self-practice of CBT.	"Presumably the BABCP institution"
	Clients would approve	5	Clients would approve of therapists self-practice of CBT.	"Amongst clients the idea that clinicians regularly self-practice CBT would be seen as an endorsement of this approach."
	Non CBT professions would not approve	5	Non CBT professions may not approve of self-practice of CBT.	"Perhaps some other therapists / people who don't understand CBT"
	Not discussed	3	It is not discussed, what others think is not relevant.	"I generally wouldn't expect to discuss it."
	Others may not understand	2	Not understanding self-practice of CBT or thinking it is psychobabble.	"People who might feel it's all psychobabble."

	People in personal life would approve	2	Friends, families and partners would approve of self-practice of CBT.	"Other friends and family would just be happy that I have ways of making myself worry less."
	Stigma of mental health	1	Others may assume you have mental health difficulties.	"However there could be a misconception that this is indicative of having mental health problems"
Control beliefs	Time limits	9	Not having enough time can limit self-practice of CBT.	"Just the general circumstances that would stop me doing things such as being pushed for time."
	Stress levels	8	Choice to self-practice CBT influenced by current level of stress.	"I guess it depends upon the level of stress in my day to day life . . . . "
	Part of routine	6	More likely to self-practice CBT when this is incorporated into a routine.	"It would be good if they could be routinely integrated into supervision"
	Alternative coping available	5	Less likely to self-practice CBT when there are other ways of coping.	"Other sources of support/outlets might mean I needed CBT techniques less."
	Poor physical health	4	Not being able to focus (due to pain, tiredness etc) can limit self-practice of CBT.	"Very high levels of pain / illness???"
	Recent CPD for CBT	4	More likely to self-practice CBT if recently read CBT papers or attended CBT training.	"Training – If I have recently been on training I am more mindful of applying CBT to my life not just patients."
	Maintain boundaries for work / life balance	2	Less likely to self-practice CBT as want to get away from work.	"If you do it for your work, sometimes it's nice to forget about it!"
	Impractical (not time)	1	Less likely to self-practice CBT if impractical (not due to time).	"Lack of quiet space to engage in self-practice."

Prior therapy experience	1	More likely to self-practice if attended individual CBT therapy.	"Attending individual CBT focused on my goals"
Perceived as important	1	More likely to self-practice if believe it is important.	"making a point of thinking through how that might benefit me to encourage commitment"

Table 2. Content analysis coding frame

The most common themes from the content analysis (65% of total themes) were selected as the salient beliefs to inform the indirect measures of behavioural, normative and control beliefs for voluntary self-practice of CBT. Two questionnaire items were generated for each theme; an item which measured the strength of the salient belief with Likert scales from 1 to 7, and an item which measured the positive or negative evaluations of the belief with Likert scales from -3 to +3. The item pairs were multiplied together to provide a single 'weighted item'. As an example, the item "in general, other CBT practitioners [-3 to +3 Likert scale: do not / do] engage in self-practice of CBT", was paired with "doing what other CBT practitioners do is important to me [1-7 Likert scale: Not at all/'Very much]" (see Table 3 for further examples). All end points of the items were comparable, with more positive scores indicative of positive beliefs regarding CBT self-practice. The weighted items for each indirect factor were summed to provide a single measure for each of indirect attitudes, indirect subjective norms and indirect PBC.

In line with the research protocol, items for the direct measures of behavioural, normative and control beliefs and items corresponding to the intention to voluntary self-practice CBT were added to the questionnaire (see Table 3 for examples). As an example, for direct attitudes an item was "Overall I think that self-practice of CBT is [1-7 Likert scale: bad practice/good practice]". All end points of the items were comparable, with more positive scores indicative of positive beliefs regarding CBT self-practice. The items for each direct variable were summed to provide a single measure for each of direct attitudes, direct

subjective norms, direct PBC and generalised intentions. An intention statement was added to the TPB questionnaire for participants to state how frequently they intended to self-practice CBT over the next month.

Construct	Number of items	Example of Item
Indirect Measures		
Attitudes (Behavioural beliefs)	5	"Self-practice of CBT gives me a better understanding of how my clients may experience therapy [1-7 Likert scale: strongly disagree/strongly agree]"
Attitudes (Outcome evaluation)	5	"Having a better understanding of how clients experience therapy is [-3 to +3 Likert scale: extremely undesirable/'extremely desirable]"
Subjective Norms (Normative beliefs)	5	"In general, other CBT practitioners [-3 to +3 Likert scale: do not / do] engage in self-practice of CBT"
Subjective Norms (Motivation to comply)	5	"Doing what other CBT practitioners do is important to me [1-7 Likert scale: Not at all/'Very much]"
Perceived Behavioural Control (Control belief strength)	6	"At times when I could self-practice CBT, I feel under stress [1-7 Likert scale: Unlikely/Likely]"
Perceived Behavioural Control (Control belief power)	6	"I am [-3 to +3 Likert scale: less likely / more likely] to engage in self-practice if I am influenced by stress."
Direct Measures		
Attitudes	4	"Overall I think that self-practice of CBT is [1-7 Likert scale: bad practice/good practice]"
Subjective Norms	3	"People who are important to me think I should self-practice CBT [1-7 Likert scale: strongly disagree/strongly agree]"
Perceived Behavioural Control	3	"I am confident I can use CBT self-practice if I want to [1-7 Likert scale: strongly disagree/strongly agree]"
Intentions		
Generalised Intentions	3	"I hope to use CBT on myself regularly over the next month. [1-7 Likert scale: strongly disagree / strongly agree]"

Intention Statement	1	"Over the next month, how frequently do you expect to engage in self-practice of CBT? [1-5 Likert scale: not at all / less than once every two weeks / more than once every two weeks / more than once a week / more than once a day]"

Table 3. Example items from the TPB questionnaire.

Second stage. The TPB questionnaire had 46 items (see Appendix G) , comprised of indirect and direct factors together with items for generalised intention and an item where participants specified the frequency of their intended self-practice. The survey for the second stage also included the aforementioned demographic items reported in Table 1. The psychometric properties of the TPB questionnaire are reported in the results section.

Procedure

First stage. Participants were sent an e-mail in spring of 2014 with the elicitation questionnaire attached. Responses were inputted into a password protected Excel worksheet with all personally identifiable information removed to anonymise the data.

Second stage. Potential participants were contacted through the BABCP mailing list in winter of 2014, which directed them to Bristol Online Survey. Participants provided informed consent and completed the survey online. Participants who consented to being contacted again were e-mailed two weeks later to repeat the survey to establish test-retest reliability, with 40 participants repeating the survey (35.4% response rate). The data were downloaded, anonymised and transferred to SPSS. Using the data from the main sample (n = 177) the indirect and direct TPB predictors, together with items for intention, were constructed from the questionnaire items using the scoring key (see Appendix H).

Preliminary data analyses included examination of the assumptions of parametric data through inspecting Q-Q plots and histograms which were satisfactory (see Appendix I). The Kolmogorov-Smirnoff tests (K-S) were significant, however it was decided to proceed with the parametric analysis on the basis of the visual inspection of the plots as large sample sizes increase the likelihood of a significant K-S test (Field,

2005). Furthermore, an inspection of the residuals of the dependent variables can provide an additional method of checking assumptions of normality (p. 119, Tabachnick & Fidell, 2001), which is further discussed in the results section.

Results

The results section will first examine the validity and reliability of the TPB questionnaire, after which the research questions will be addressed in turn.

Psychometric Properties of TPB Questionnaire

As previously described, the TPB questionnaire was constructed following the protocol by Francis et al. (2004), with the generated questionnaire containing items for different factors of the predictor variables of the TPB, some direct and some indirect. Indirect factors were formed from elicited beliefs, hence they are content specific to CBT self-practice. Direct factors followed the phraseology as specified by the protocol, identifying general beliefs towards CBT self-practice. Generalised intention to self-practice CBT was measured by a three items construct, whilst the intention statement was a single item which provided information about the frequency of intended CBT self-practice.

Validity of indirect factors and intention statement. A bi-variate analysis was conducted with each indirect factor's corresponding direct factor to test the validity of the indirect factors. There were large positive relationships between direct and indirect attitudes ($r = .58$, $n = 177$, $p < .001$), and between direct and indirect subjective norms ($r = .56$, $n = 177$, $p < .001$), with a small positive relationship between direct and indirect perceived behavioural control ($r = .264$, $n = 177$, $p < .001$). These findings supported the validity of the indirect factors as they correlated positively with the direct factors, suggesting they may be contributing to the same construct (Francis et al., 2004). In addition, there was a large positive relationship between the intention statement and the generalised intention construct ($r = .699$, $p < .001$), supporting the validity of the intention statement by indicating it is loading on the same construct as generalised intention.

Internal consistency. To assess internal consistency of the TPB questionnaire, Cronbach's alpha (see Table 4) were calculated using the data of the main study ($n = 177$) (see Appendix J). Cronbach's alpha

for the three items contributing to direct PBC was .323 suggesting that these items were not internally consistent. This was improved to .564 by deleting the item with the lowest correlation with the overall score of direct PBC. Francis et al. (2004) stated that factors must achieve a Cronbach's alpha of > .600 to merit their inclusion in further analyses. As a result direct PBC was removed from further analyses, replaced by the single item with the highest 'corrected item-total correlation' score which had been most representative of the construct of direct perceived behavioural control (following guidance from Field (2005, p. 672)); the remaining item for direct PBC was "I am confident that I can use CBT self-practice on myself if I want to". The single item for PBC had face validity, with the issue of using a single item measure for direct PBC further addressed in the discussion.

Cronbach's alpha for indirect PBC was .584. To enhance the internal consistency the two weighted items with the lowest correlations with the overall score of indirect PBC (r = .211 & r = .157) were removed. This resulted in a Cronbach's alpha score of .643 which suggested adequate internal consistency.

TPB factor	Cronbach's alpha (n=177)	Pearson's product moment correlation (n = 40)
Direct Attitudes	.786	.807**
Direct Subjective Norms	.652	.667**
Direct PBC $^{+}$	(single item)	.781**
Indirect Attitudes	.893	.641**
Indirect Subjective Norms	.769	.832**
Indirect PBC $^{++}$	.643	.438*
Generalised Intentions	.927	.792**
Intention Statement	(single item)	.672**

Note: $^{+}$ two items removed, $^{++}$ two weighted items removed. ** p < .001, *p=.05

Table 4. Internal consistency and test-retest reliability of TPB questionnaire factors

Test-retest reliability. From the main sample (n = 177), 40 participants repeated the TPB online survey within a space of 2 to 3 weeks. Test-retest reliability was performed on the indirect and direct factors using Pearson's product moment correlation. All factors were found to be significantly correlated between the two time points (see Table 4). Following the amendments to direct and indirect PBC, the descriptive statistics for the TPB variables are provided in Table 5.

Predictor Variable	Theoretical Range	Min	Max	Median	Inter-Quartile Range
Indirect attitudes	-105 to +105	9	105	75	31.5
Indirect subjective norms	-105 to +105	-33	96	40	26
Indirect PBC	-84 to +84	-69	63	0	23
Direct attitudes	4 to 28	11	28	25	3.5
Direct subjective norms	3 to 21	3	19	9	4.5
Direct PBC single item	1 to 7	2	7	6	1
Generalised intention	3 to 21	3	21	15	5
Intention statement	1 to 5	1	5	3	1

Table 5. Descriptive statistics of factors

Frequency of Intended Self-Practice

The first research question sought to investigate the extent to which qualified CBT practitioners intended to engage in voluntary self-practice of CBT. The intention statement item (see Table 3) was used for this purpose. The findings are provided in the Table 6.

Likert Scale	Intention to self-practice over next month	Freq. Male	Freq. Female	Total %
1	Do not intend to self-practice CBT	6	0	3.4%
2	Intend to self-practice CBT less than once every two weeks	9	21	16.9%
3	Intend to self-practice CBT more than once every two weeks	10	50	33.9%
4	Intend to self-practice CBT more than once a week	15	51	37.3%
5	Intend to self-practice CBT more than once a day	4	11	8.5%

Note: Mean = 3.31 (of 1-5 Likert scale), SD = .964, SE = .072

Table 6. Frequencies of intention to engage in self-practice of CBT over the next month.

Based on the intention statement, 45.8% of the sample intended to engage in CBT self-practice more than once a week over the next month, with 3.4% not intending to engage in any self-practice over the next month. Using Pearson's chi-square test none of the demographic variables led to a significant difference in the intention statement, with the exception of gender where there was a significant difference with women more likely to intend to self-practice than men (X^2 (4) = 20.903, $p < .001$) (see Appendix K). However, as

30% of the expected frequencies were less than 5 this finding should be interpreted with caution as the assumption of chi-square tests was broken (Field, 2005).

Multiple Regressions

The second research question was to investigate whether the TPB was a model that could predict CBT practitioners' intention to engage in voluntary self-practice of CBT. To answer this question multiple regressions were conducted in SPSS. The assumptions for multiple regressions were checked, including multi-collinearity and independent errors, with the data found to fit all the assumptions required showing normally distributed residuals of all the dependent variables (see Appendices L – N). The multiple regressions were conducted in three steps to map all the relationships between the factors.

In step 1 each direct factor was used as the dependent variable in three regressions (see Appendix L). The corresponding indirect factor to the dependent variable was entered stepwise, with the two remaining indirect factors put 'forced entry' into the regression. For example, where direct attitudes was the dependent variable, indirect attitudes was put stepwise into the regression, with indirect subjective norms and indirect PBC put forced entry into the regression.

In step 2 generalised intention was the dependent variable, with the direct factors put into the regression as forced entry (see Appendix M). This was based on guidance from the protocol (Francis et al., 2004) that the direct factors alone are sufficient to assess if the TPB can predict intentions. In step 3 generalised intention was the dependent variable with all indirect and direct factors put into the regression as forced entry (see Appendix N) to identify the significant predictors of intention. Table 6 shows the associated values for each step of the multiple regressions.

Model	Dependent Variable	Independent variables	Beta	Model R^2	F
Step 1					
Model 1	Direct attitudes	Indirect attitudes	.580**	.336**	88.529
Model 2	Direct attitudes	Indirect attitudes	.425**	.458**	48.777
		Indirect subjective norms	.371**		
		Indirect PBC	0.058		
Model 1	Direct subjective norms	Indirect subjective norms	.560**	.314**	79.995
Model 2	Direct subjective norms	Indirect subjective norms	.564**	.319**	26.991
		Indirect attitudes	0.072		
		Indirect PBC	-0.034		
Model 1	Direct PBC	Indirect PBC	.151*	.023*	4.064
Model 2	Direct PBC	Indirect PBC	0.07	.118**	7.686
		Indirect attitudes	.297**		
		Indirect subjective norms	0.048		
Step 2	Generalised intention	Direct attitudes	.502**	.455**	48.122
		Direct subjective norms	.255**		
		Direct PBC	.129*		
Step 3	Generalised intention	Direct attitudes	.404**	.491**	27.383
		Direct subjective norms	.249**		
		Direct PBC single item	.093		
		Indirect attitudes	.181*		
		Indirect subjective norms	-.028		
		Indirect PBC	.108		

** p < .001, *p< .05

Table 7. Multiple regressions for the theory of planned behaviour.

In step 2 of the multiple regressions generalised intention was regressed onto three direct factors of the TPB. All direct factors of the TPB were significant predictors of the generalised intention to self-practice CBT, with R^2 indicating that 45.5% of the variance of intentions was accounted for [F (3,173) = 48.122, p < .001], viewed as a large effect ($f^2 = 0.834$).

In step 3 all the direct and indirect factors was added to the regression, which led to an additional 3.6% of variance being predicted, ($R^2 = .491$, p < .001). Given that PBC was no longer a significant

predictor in the third step of the multiple regressions, further analysis was required to explore the relationships between the predictors of generalised intention. As multiple regressions are additive this limits the ability to explore all relationships within the model at the same time, hence SEM was deemed to be the most suitable method to continue the analyses.

Structural Equation Modelling

The third research question was to identify which factors of the TPB were the strongest predictors of the intention to self-practice CBT. A path analysis using SEM was conducted as it enabled a quantitative test of the whole model of the TPB. The sample was of a sufficient size to warrant SEM and statistical assumptions regarding multivariate outliers and kurtosis were checked; no outliers were identified and no individual item found to be substantially kurtotic (see Appendix O). Based on the TPB, the hypothesised model (see Figure 3) specified that all indirect and direct factors of attitudes, subjective norms and PBC were predictors of intention to self-practice CBT.

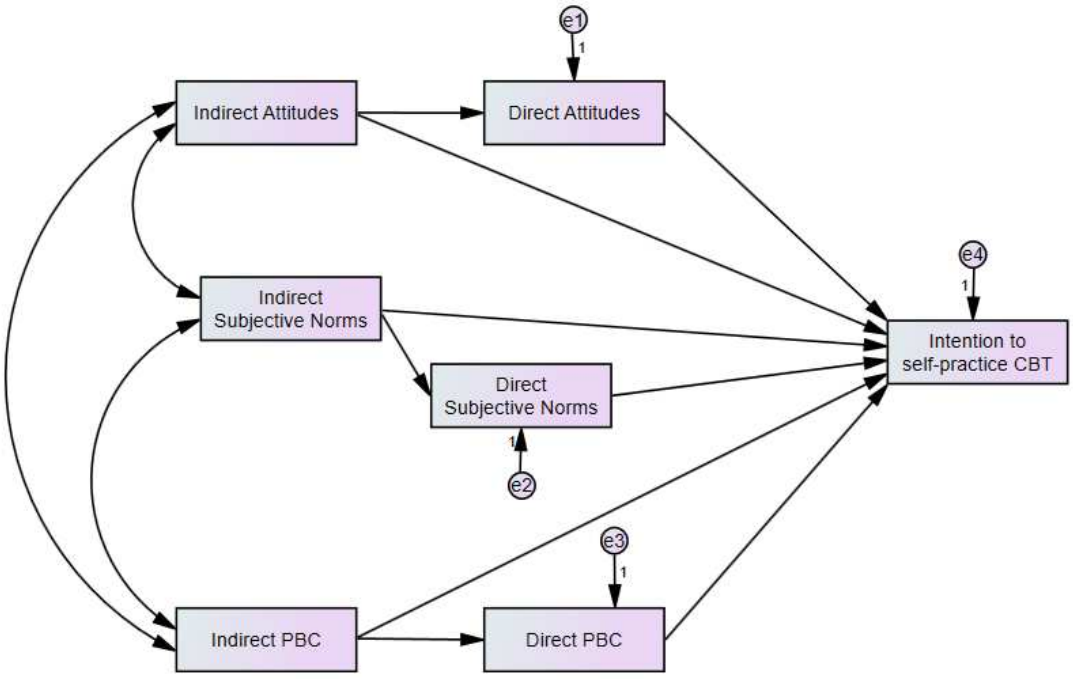

Figure 3. SEM hypothesised model

Tests of goodness of fit were performed to assess the model's ability to describe the relationships found in the data. Chi squared was highly significant (x^2 (9) = 67.256, p<.001), indicating considerable

discrepancies between the observed relationships in the sample data and the implied relationships from the model. On the root mean square of approximation (RMSEA) the model scored .192, beyond the acceptable bounds of .05 (Browne & Cudeck, 1993). Other measures of fit suggested modifications to the model were required, with the Comparative-Fit Index (CFI) scoring .832 and the Adjusted Goodness-of-Fit Index (AGFI) scoring .718, both below the threshold of .9 for an acceptable model fit of the data (Bryne, 2010).

Table 8 shows the standardised residual co-variances. Based on the guidelines from Joreskog and Sorbom (1993), standardised residuals over 2.58 depict a relationship that is not sufficiently described (shown in bold). The largest standardised residuals were between direct attitudes and direct PBC (4.553), with the relationships between indirect subjective norms and direct attitudes, together with indirect attitudes and direct PBC also not captured well.

	Indirect attitudes	Indirect subjective norms	Indirect PBC	Direct subjective norms	Direct attitudes	Direct PBC	Intention
Indirect attitudes	0						
Indirect subjective norms	0	0					
Indirect PBC	0	0	0				
Direct subjective norms	-0.188	0	0.848	0			
Direct Attitudes	0	**4.144**	0.832	2.247	0		
Direct PBC	**3.913**	1.99	0	-0.279	**4.553**	0	
Intention	0.292	1.888	0.554	0.928	0.864	2.49	0.693

Table 8. Standardised residual co-variances from the initial SEM model

The three additional paths were added to the model (for amended model see Appendix P). The amended model was an adequate fit of the data with a CFI score of 1.0, AGFI of .954, RMSEA of .012 and a non-significant chi squared test for goodness of fit (x^2 (6) = 6.160, p>.05, ns). To make the model as informative as possible non-significant pathways (shown in bold, see Table 9) were deleted.

SEM Pathway	Unstandardised (Standard Error)	Standardised β
Indirect attitudes --> Direct attitudes	0.068 (0.009)	0.439**
Indirect subjective norms --> Direct attitudes	0.066 (0.011)	0.373**
Indirect subjective norms --> Direct subjective norms	0.161 (0.018)	0.56**
Indirect PBC --> Direct PBC	0.01 (0.013)	**0.054**
Indirect attitudes --> Direct PBC	0.034 (0.017)	0.172*
Direct attitudes --> Direct PBC	0.321 (0.107)	0.254*
Direct attitudes --> Intention	0.756 (0.139)	0.404**
Indirect attitudes --> Intention	0.052 (0.02)	0.181*
Direct PBC --> Intention	0.138 (0.087)	**0.093**
Indirect PBC --> Intention	0.029 (0.015)	**0.108**
Indirect subjective norms --> Intention	-0.009 (0.025)	**-0.028**
Direct subjective norms --> Intention	0.29 (0.075)	0.249**

Note: ** p<.001, * p<.05

Table 9. Unstandardised, standardised, and significance levels for the SEM amended model.

Factors which subsequently had no direct or mediated pathways to intention were also removed (i.e. indirect and direct PBC) in the interests of providing the most parsimonious model which remained a good fit of the data (for final model see Figure 4).

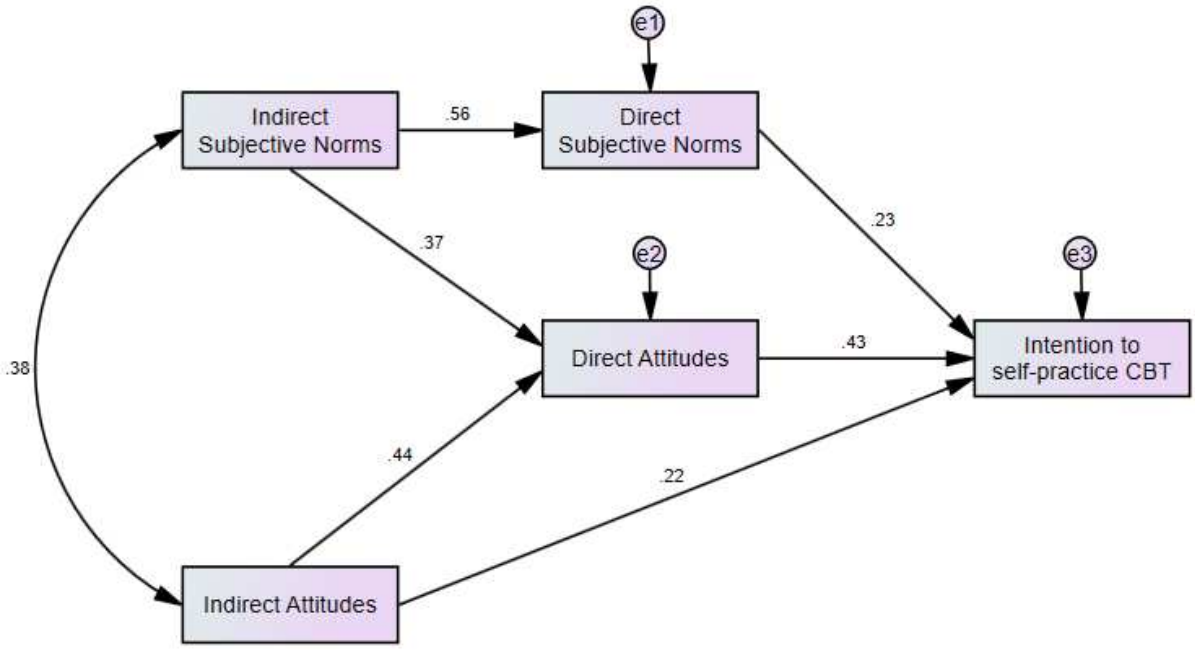

Figure 4. SEM final model, significant β coefficients displayed. (R^2 = .473, p < .001).

The model summaries gave a non-significant chi square (x^2 (3) = 0.248, p> .05, ns), an AGFI of .997, CFI score of 1.00, and a RMSEA of .000 indicating that the final model was a good fit of the data. The final model predicted 47.3% of the variance to self-practice CBT (β co-efficients are provided in Table 10).

SEM Pathway	Unstandardised (Standard Error)	Standardised β
Indirect subjective norms --> Direct subjective norms	0.161 (0.018)	0.56**
Indirect attitudes --> Direct attitudes	0.068 (0.009)	0.439**
Indirect subjective norms --> Direct attitudes	0.066 (0.011)	0.373**
Direct attitudes --> Intention	0.804 (0.129)	0.429**
Indirect attitudes --> Intention	0.063 (0.019)	0.217*
Direct subjective norms --> Intention	0.27 (0.067)	0.232**

Note: ** p<.001, * p<.05

Table 10. Unstandardised, standardised, and significance levels for the final model.

Discussion

In response to the first research question, this study investigated the extent of voluntary self-practice of CBT by CBT practitioners in the UK. Based upon Bennett-Levy et al.'s (2013) finding of spontaneous self-practice of CBT amongst aboriginal counsellors, it was hypothesised that CBT practitioners in the UK would also engage in voluntary self-practice of CBT. It was found that 45.8% of participants intended to self-practice CBT more than once every week, suggesting that self-practice of CBT was widespread in the sample.

From the findings it may tentatively be concluded that the extent of voluntary self-practice of CBT by CBT practitioners has been under identified in the literature. There were no precise predictions of the extent of the behaviour due to the lack research into the prevalence of voluntary self-practice of CBT by CBT practitioners. However, the prevalence rate of CBT self-practice found in the sample was unexpected given that previous research has shown that practitioners of CBT were the least likely therapy orientation to engage in their own therapy (e.g. Norcross et al., 2008; Pope & Tabachnik, 1994), which has been identified as providing a comparable experience to self-practice in CBT (Chaddock et al., 2014).

With the exception of gender, neither previous experience of therapy nor other demographic characteristics led to significant differences on intention to self-practice. From the sample, 46.6% of female practitioners intended to engage more than once a week, with zero female practitioners reporting no intention to self-practice. In comparison, 43.2% of male practitioners intended to engage in self-practice more than once a week, with 13.6% of male practitioners reporting that they had no intention to self-practice CBT. As previously stated, this result should be treated with caution as the data failed to meet statistical assumptions and therefore requires replication. Nevertheless, this finding may be compared to the therapist's personal therapy literature, where it has been previously reported that female therapists were more likely to engage in their own personal therapy than male therapists (e.g. Pope & Tabachnick, 1994), although more recent studies have not found a significant difference (Bike, Norcross & Schatz, 2009; Gilroy, Carroll & Murra, 2002). Interestingly, the prevalence of personal therapy in the sample was 56.6 %, lower than has previously been found for CBT practitioners with 73% reported by Orlinsky, Schofield,

Schröder & Kazantzis (2011). While previous experience of therapy was not a significant predictor of intentions, further studies may explore the salient beliefs regarding therapists own therapy and voluntary self-practice of CBT.

The second research question hypothesised that the theory of planned behaviour would predict a significant proportion of the variance of the generalised intention to self-practice CBT. In step 2 of the multiple regressions it was found that the direct predictors of the TPB explained 45.5% ($R^2 = .455$, $p < .001$) of the variance of generalised intention to engage in CBT self-practice; therefore the null hypothesis that the TPB does not predict CBT self-practice may be rejected. This meant that close to half of the variance of intentions to self-practice CBT was accounted for by the TPB, while 54.5% of the variance remained unexplained which indicates the presence of unaccounted variables. The degree of variance of intention explained by the TPB was within the range reported by reviews of the TPB (33.7%, Connor & Sparks, 2005; 40%, Godin & Kok, 1996) although this was less than the 59% of variance which has been found when the TPB has been applied to Health Care professionals (Godin et al., 2008), and less still than the 70% of intention predicted by the TPB for the use of homework materials by CBT practitioners in sessions (Levy, 2011).

Although significant relationships can be described from these analyses, causal relationships cannot be inferred as this was a cross sectional study design. When intentions were regressed onto the direct factors of the TPB there was a large positive relationship between direct attitudes and intentions (β=.502, $p < .001$), a medium positive relationship between direct subjective norms and intentions (β=.255, $p < .001$), and a small positive relationship between direct PBC and intentions (β=.129, $p < .05$). Therefore, participants were more likely to engage in CBT self-practice if they held positive attitudes towards CBT self-practice, believed that others held positive attitudes towards CBT self-practice, and had sufficient control over their environment to engage in CBT self-practice. Subjective norms has not previously been the focus of studies into engagement of SP/SR, where the emphasis has been towards attitudes (Bennett-Levy & Lee, 2014). The strength of subjective norms in predicting the intention to engage in a self-explorative behaviour has

also been reported for therapist's own therapy, where it was found that perceived social stigma predicted UK trainees' attitudes towards seeking therapy (Digiuni, Jones & Camic, 2013).

The third research question explored which indirect and direct factors of the constructs of the TPB were the strongest predictors of intention by conducting a path analysis using SEM. The hypothesised model derived from the TPB was found to be a poor fit of the data, prompting systematic adjustments with reference to the standardised residual covariances. Subsequent to these adjustments the final model (see Figure 4) was a good fit of the data, accounting for 47.3% ($R^2 = .473$, $p < .001$) of the variance of generalised intention to self-practice CBT.

The final model specified that intention to self-practice CBT was predicted most strongly by direct attitudes (β=.429, $p < .001$), followed by direct subjective normative beliefs (β=.232, $p < .001$) and indirect attitudes (β=.217, $p < .05$). Interestingly, indirect subjective normative beliefs was partly mediated by direct attitudes (β=.373, $p < .001$), in addition to being mediated by direct subjective norms (β=.560, $p < .001$). This finding suggests that attitudes towards self-practice of CBT was significantly influenced by the beliefs of what other people may think about self-practice, for example perceived social stigma and social pressure from authoritative figures.

Both indirect and direct factors of PBC was removed from the final model as they did not improve the models ability to predict intentions as they had no mediating or direct pathways to intention. This resulted in a final model which departed from the theory of planned behaviour through the omission of PBC. With reference to social-cognitive theories the final model may be viewed as fitting conceptually within the theory of reasoned action (TRA; Fishbein & Ajzen, 1975), where intentions are predicted by subjective norms and attitudes towards the behaviour. The better fit of the TRA to the data than the TPB may be attributed to PBC proving to be a poor predictor of intention to self-practice CBT. One interpretation of this finding is that self-practice of CBT is not impacted by environmental constraints and may be viewed as an inherently internal process. This is supported by a qualitative study of SP/SR (Farrand Perry & Linsley, 2010), which found that setting aside time to engage in SP/SR did not necessarily lead to greater engagement, signifying that environmental constraints may not be a strong predictor of CBT self-practice.

An alternative explanation for PBC being a poor predictor of intentions is that this can be attributed to measurement error; the low internal consistency of the indirect and direct factors of PBC signifying that the TPB questionnaire failed to adequately capture the construct of PBC for this specific behaviour. Further studies are required before it may be concluded that the TRA is a better predictor of intentions to self-practice CBT than the TPB.

It was found that the indirect attitudes factor was only partially mediated by direct attitudes in the final model (β=.439, $p < .001$). While the direct attitudes factor measured general attitudes towards CBT self-practice, the indirect attitudes factor was composed of content specific items derived from the elicitation stage. This suggests that salient beliefs were not captured by the construct of direct attitudes, yet were predictors of intention. In the content analysis (see Table 2) the most frequent theme overall concerned behavioural beliefs, with the theme that self-practice of CBT supports the personal wellbeing of CBT practitioners. This echoes a qualitative study which described voluntary self-practice of CBT by aboriginal counsellors (Bennett-Levy, Wilson, Nelson, Stirling, Ryan et al., 2014), where it was stated that:

> CBT was seen to be of particular value for the counsellors themselves, not only for its impact on their skills, but also in reducing their stress levels and protecting them from burnout . . . . . If future studies confirm that CBT is 'burnout protective', this is an important finding. (p.5).

Employing third wave CBT approaches to support the wellbeing of trainee therapists has been reported as highly beneficial (Shapiro, Brown & Biegel, 2007), whilst there have been recommendations to self-practice CBT to directly support the wellbeing of more experienced therapists (Ludgate, 2013). As a result, the potential for voluntary self-practice of CBT to support therapist wellbeing warrants further research.

Limitations

The study methodology relied on participants' self-report rather than observable behaviour, and is therefore more vulnerable to the influence of biases on the findings. While the main sample was large and

appeared broadly representative, it is plausible the sample was self-selected, populated by those who held favourable views of self-practice of CBT.

Although the study involved a cross-sectional survey, completing the questionnaire itself may have functioned as an intervention, influencing participant's intentions to self-practice CBT. This is feasible as the intention items were placed towards the end of the questionnaire, whilst all end points of Likert scales were designed so that a more positive number indicated positive views towards self-practice. As a result, demand characteristics and social desirability may have biased the findings towards reporting favourable views of CBT self-practice.

A systematic protocol was followed (Francis et al., 2004), with validity and reliability checks performed on the generated TPB questionnaire. However, the low internal consistency of the indirect and direct PBC factors suggest that the construct of PBC was not adequately captured. Despite attempts to improve the internal consistency of direct PBC, this construct was subsequently measured using a single item. The use of single items measures has been argued to be valid when the construct being measured is tangible and concrete (Rossiter, 2002), however this is generally discouraged with multiple item constructs viewed as preferable (Diamantopoulos, Sarstedt, Fuchs, Wilczynski, & Kaiser, 2012). As previously stated, it was found that the TRA was a better predictor of intention than the TPB; this conclusion based on the distinction that PBC was not a significant predictor in the SEM final model. It is tenable that this finding can be explained by the low internal consistency of PBC. Another possibility is that the difficulties of measuring PBC for CBT self-practice was because this construct was not meaningful for this behaviour.

This study relied on intentions as an outcome variable due to the difficulties involved with recording observable behaviour. Due to the intention-behaviour gap present in the TPB, the actual behaviour of CBT self-practice is predicted to be lower than intentions to engage in self-practice (Godin et al., 2008); inclusion of additional casual mechanisms within the intention-behaviour gap may increase the models power (e.g. anticipated regret (Abraham, & Sheeran, 2003)).

Practice implications

Given the extent of CBT self-practice intentions reported by CBT practitioners, it has been tentatively posited that a substantial proportion of CBT practitioners do practice what they preach in their everyday life. For clients this may be very normalising, while also functioning as an endorsement of CBT approaches by suggesting that practitioners hold positive beliefs about the effectiveness of CBT. In terms of the therapeutic relationship this may be described as fostering a collaborative partnership, departing from an expert model. Meanwhile, high rates of CBT self-practice may challenge preconceptions that CBT is less reflective and more aligned with an expert model than other orientations.

Based on the findings, it may be speculated that a substantial proportion of CBT practitioners are engaging in CBT self-practice to promote their wellbeing. This may be viewed as highlighting the requirement for self-care skills to promote resiliency with more complex client groups, together with the dangers of compassion fatigue and professional burnout. Voluntary self-practice of CBT may be encouraged on CBT training, with an emphasis towards self-care rather than purely competence attainment as has been the case for SP/SR interventions which involve CBT self-practice.

The finding that the TRA was the best model of predicting intentions suggests that both attitudes and subjective normative beliefs influence decisions to self-practice. Future interventions involving self-practice of CBT (i.e. SP/SR) should address not just attitudes towards self-practice, but also beliefs regarding stigma of using therapy methods on oneself.

Future Research

As previously stated, future research would look to replicate this study to provide cross validation to assess whether the findings may be attributed to sampling bias and measurement error. Replicating this study would also provide an opportunity to investigate if the gender differences in self-practice reoccurred.

Qualitative methodologies, such as interpretive phenomenological analysis, would help to explore in greater depth how CBT practitioners experienced voluntary CBT self-practice, shedding light on how this may differ from experiences of more structured programs such as SP/SR.

Given that subjective norms was a predictive factor of CBT self-practice, further studies may investigate what relationships there may be between perceived self-stigma and self-practice, in a comparable study to Digiuni et al. (2013) who investigated the impact of perceived stigma on the therapy seeking behaviour of trainee therapists.

Conclusion

This research has shown that a substantial proportion of the sample intended to engage in voluntary self-practice of CBT on a regular basis, with 45.8% intending to self-practice more than once a week. This indicates that the use of CBT self-practice may be widespread among CBT practitioners. While the theory of planned behaviour was found to be a valid model to predict intentions to self-practice, the model which best predicted intentions was the theory of reasoned action, which accounted for 47.3% of the variance. From this it was inferred that while attitudes and subjective norms were important factors to consider regarding CBT self-practice, perceived behavioural control was not necessary to predict intention.

During the elicitation exercise it was found that the most frequently reported belief regarding CBT self-practice was that it supported the personal wellbeing of the practitioner. Therefore future studies into CBT self-practice, such as research on SP/SR, may place a greater emphasis on self-care of practitioners as opposed to purely focusing on the attaining therapeutic competence.

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Section C

Appendices of Supporting Material

A thesis submitted in partial fulfilment of the requirements of

Canterbury Christ Church University for the degree

of Doctor of Clinical Psychology

JULY 2015

School of Psychology, Politics and Sociology

CANTERBURY CHRIST CHURCH UNIVERSITY

Appendix A

Standard Quality Assessment Criteria for Evaluating Primary Research Papers: Quantitative studies.

	Criteria	YES (2)	PARTIAL (1)	NO (0)	N/A
1	Question / objective sufficiently described?				
2	Study design evident and appropriate?				
3	Method of subject/comparison group selection or source of information/input variables described and appropriate?				
4	Subject (and comparison group, if applicable) characteristics sufficiently described?				
5	If interventional and random allocation was possible, was it described?				
6	If interventional and blinding of investigators was possible, was it reported?				
7	If interventional and blinding of subjects was possible, was it reported?				
8	Outcome and (if applicable) exposure measure(s) well defined and robust to measurement / misclassification bias? means of assessment reported?				
9	Sample size appropriate?				
10	Analytic methods described/justified and appropriate?				
11	Some estimate of variance is reported for the main results?				
12	Controlled for confounding?				
13	Results reported in sufficient detail?				
14	Conclusions supported by the results?				

Standard Quality Assessment Criteria for Evaluating Primary Research Papers: Qualitative studies

	Criteria	YES (2)	PARTIAL (1)	NO (0)
1	Question / objective sufficiently described?			
2	Study design evident and appropriate?			
3	Context for the study clear?			
4	Connection to a theoretical framework / wider body of knowledge?			
5	Sampling strategy described, relevant and justified?			
6	Data collection methods clearly described and systematic?			
7	Data analysis clearly described and systematic?			
8	Use of verification procedure(s) to establish credibility?			
9	Conclusions supported by the results?			
10	Reflexivity of the account?			

Appendix B

Methodology Steps for Synthesizing Qualitative Research (Sandelowski & Barroso, 2007)

1. Philosophical positioning	Objective idealism → Results exist and are subject to synthesis through an empirical/analytical view; Reviewers construct researchers' construction.
2. Literature search Exhaustive	Systematic, iterative searches and hand- searching; Backward and forward citation searching; "Berry picking" .
3. Quality appraisal Focus on individual and comparative appreciation and evaluation	Focus on individual and comparative appreciation and evaluation.
4. Analysis techniques and concepts	Classifying findings; Meta-summarizing; Extract, edit, and group findings; Abstract findings; Calculate effect sizes.
5. Synthesis output	Meta-summary → Quantitatively oriented aggregation of topics and themes to prepare surveys, bridge to meta-synthesis, or optimization of validity; Meta-synthesis → Offers novel interpretation and experimenting innovations of findings.

Appendix C

Letter from Ethics Panel

THIS APPENDIX HAS BEEN REMOVED FROM THE FINAL VERSION

Appendix D

Information supplied prior to informed consent

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Appendix E

E-mail from BABCP

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Appendix F

Elicitation questionnaire

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Appendix G

TPB questionnaire with 46 items

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Appendix H

TPB scoring key

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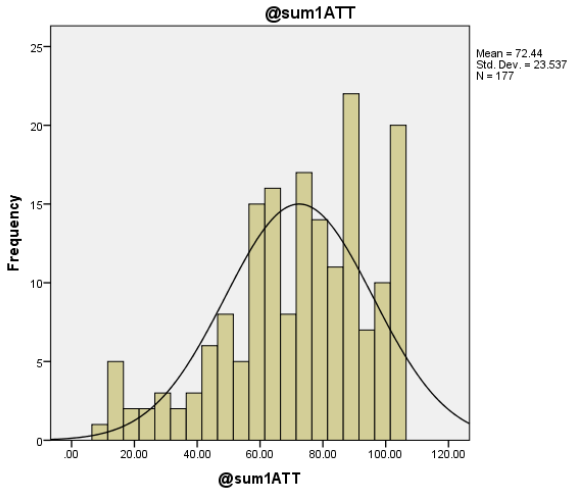
Appendix I

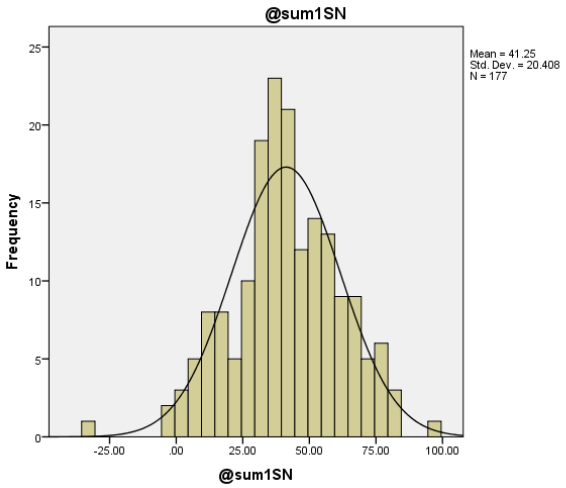
Parametric assumptions for main sample

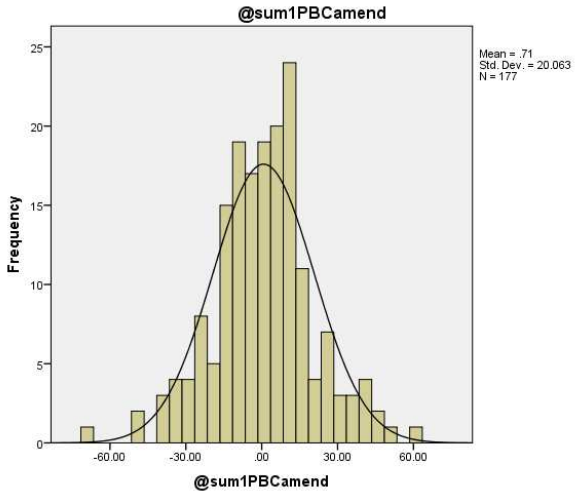
Tests of Normality

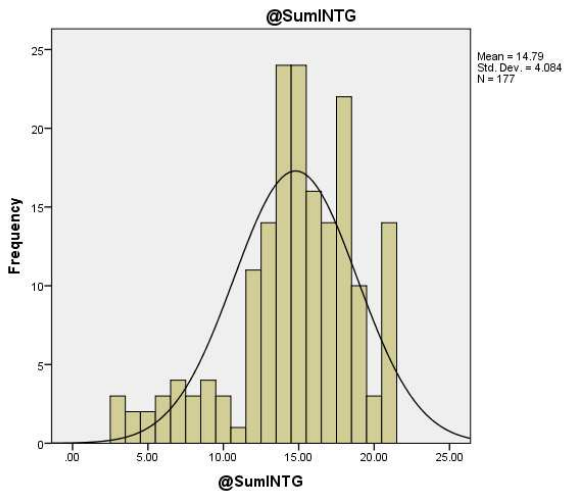
	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	Df	Sig.
@sum1ATT	.083	177	.005	.949	177	.000
@sum1SN	.060	177	.200*	.991	177	.328
@sum1PBC	.059	177	.200*	.987	177	.089
@sum1PBCamend	.074	177	.018	.987	177	.090
@SumINTG	.141	177	.000	.932	177	.000
@SumAttDir	.149	177	.000	.905	177	.000
@SumSNDir	.091	177	.001	.975	177	.003
@SumPBCDirR	.158	177	.000	.940	177	.000

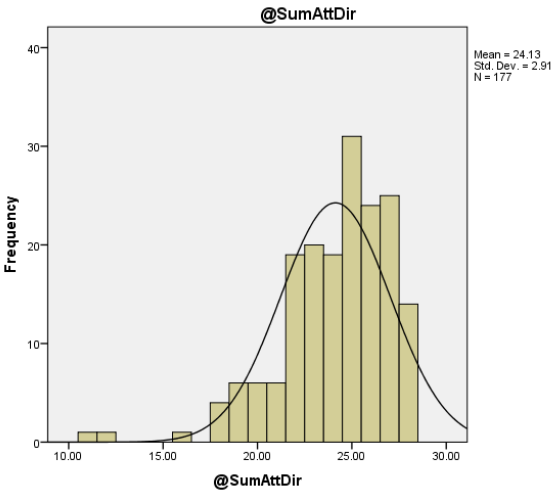
*. This is a lower bound of the true significance.

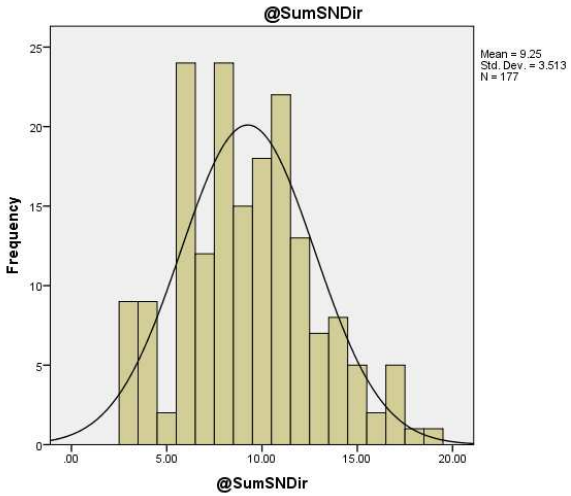


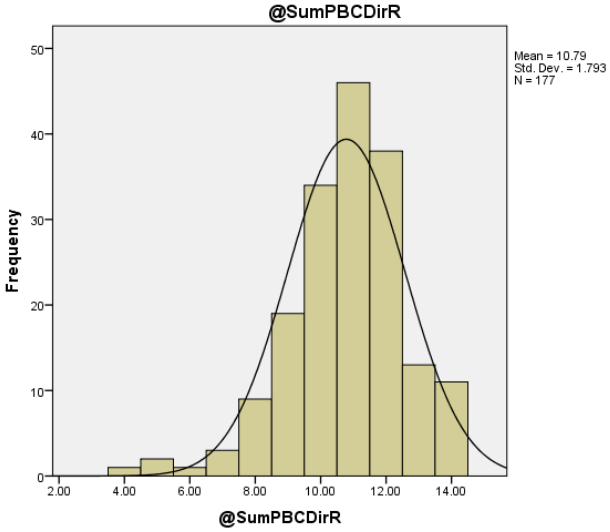







@SumAttDir
Mean = 24.13
Std. Dev. = 2.91
N = 177
Frequency
@SumAttDir


@SumSNDir
Mean = 9.25
Std. Dev. = 3.513
N = 177
Frequency
@SumSNDir


@SumPBCDirR
Mean = 10.79
Std. Dev. = 1.793
N = 177
Frequency
@SumPBCDirR

Appendix J

Test-retest and internal consistency for main study

Test-retest for factors

Correlations

		@sum1ATT	@sum2ATT	@sum1SN	@sum2SN	@sum1PBC	@sum2PBC
@sum1ATT	Pearson Correlation	1	.641**	.377**	.266	.374**	.255
	Sig. (2-tailed)		.000	.000	.097	.000	.112
	N	177	40	177	40	177	40
@sum2ATT	Pearson Correlation	.641**	1	.370*	.388*	.248	.172
	Sig. (2-tailed)	.000		.019	.013	.123	.289
	N	40	40	40	40	40	40
@sum1SN	Pearson Correlation	.377**	.370*	1	.832**	.297**	-.103
	Sig. (2-tailed)	.000	.019		.000	.000	.526
	N	177	40	177	40	177	40
@sum2SN	Pearson Correlation	.266	.388*	.832**	1	.027	.038
	Sig. (2-tailed)	.097	.013	.000		.867	.817
	N	40	40	40	40	40	40
@sum1PBC	Pearson Correlation	.374**	.248	.297**	.027	1	.507**
	Sig. (2-tailed)	.000	.123	.000	.867		.001
	N	177	40	177	40	177	40
@sum2PBC	Pearson Correlation	.255	.172	-.103	.038	.507**	1
	Sig. (2-tailed)	.112	.289	.526	.817	.001	
	N	40	40	40	40	40	40

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Internal Consistency: Indirect Attitudes

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.893	.902	5

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
@1Att1	56.8475	387.710	.761	.661	.868
@1Att2	57.2825	386.761	.744	.639	.870
@1Att3	58.4407	342.191	.814	.698	.852
@1Att4	57.9774	369.079	.768	.638	.864
@1Att5	59.1921	334.463	.671	.457	.896

Internal Consistency: Indirect Subjective Norms

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.769	.767	5

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
@1SN1	37.2599	300.739	.479	.245	.747
@1SN2	29.6610	280.112	.591	.380	.710
@1SN3	37.1695	330.994	.407	.183	.767
@1SN4	29.0452	252.759	.651	.465	.685
@1SN5	31.8814	245.082	.591	.365	.711

Internal Consistency: Indirect Perceived Behavioural Control (with two item pairs removed)

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.643	.641	4

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
@1PBC1	2.8136	199.209	.524	.283	.497
@1PBC2	-2.9266	260.114	.415	.212	.580
@1PBC4	1.7740	294.949	.298	.110	.652
@1PBC5	.4746	259.148	.478	.229	.541

Internal Consistency: Direct Attitudes

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.786	.817	4

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
1Qu22	17.68	5.424	.705	.552	.697
1Qu23	18.97	5.147	.380	.168	.876
1Qu24	18.03	4.880	.655	.617	.702
1Qu25	17.72	4.954	.756	.705	.660

Internal Consistency: Direct Subjective Norms

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.652	.654	3

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
1Qu37	5.24	6.932	.421	.182	.609
1Qu39	7.16	7.316	.455	.221	.573
1Qu44	6.11	5.067	.534	.288	.456

Internal Consistency: Direct Perceived Behavioural Control (before substituting for single item 1Qu40)

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.323	.419	3

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
1Qu40	10.52	4.751	.345	.184	.050
1Qu41	10.79	3.215	.093	.022	.564
1Qu42	11.66	4.489	.200	.167	.212

Internal Consistency: Generalised Intentions

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.927	.927	3

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
1Qu38	9.73	8.196	.816	.667	.922
1Qu43	9.80	7.569	.871	.767	.878
1Qu45	10.05	7.282	.869	.766	.880

Appendix K

Chi square of gender with intentions statement

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
1Qu46 * Gender, 0 = female, 1 = male	177	100.0%	0	0.0%	177	100.0%

1Qu46 * Gender, 0 = female, 1 = male Crosstabulation

			Gender, 0 = female, 1 = male		
			0	1	Total
1Qu46	1	Count	0	6	6
		Expected Count	4.5	1.5	6.0
	2	Count	21	9	30
		Expected Count	22.5	7.5	30.0
	3	Count	50	10	60
		Expected Count	45.1	14.9	60.0
	4	Count	51	15	66
		Expected Count	49.6	16.4	66.0
	5	Count	11	4	15
		Expected Count	11.3	3.7	15.0
Total		Count	133	44	177
		Expected Count	133.0	44.0	177.0

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	20.903[a]	4	.000	.000
Likelihood Ratio	19.652	4	.001	.001
Fisher's Exact Test	.[b]			.[b]
N of Valid Cases	177			

a. 3 cells (30.0%) have expected count less than 5. The minimum expected count is 1.49.

b. Cannot be computed because unable to open temporary file.

Directional Measures

			Value	Asymp. Std. Error[a]	Approx. T[b]	Approx. Sig.	Exact Sig.
Nominal by Nominal	Lambda	Symmetric	.039	.015	2.492	.013	
		1Qu46 Dependent	.000	.000	.[c]	.[c]	
		Gender, 0 = female, 1 = male Dependent	.136	.052	2.492	.013	
	Goodman and Kruskal tau	1Qu46 Dependent	.012	.008		.081[d]	.[e]
		Gender, 0 = female, 1 = male Dependent	.118	.022		.000[d]	.[e]

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

c. Cannot be computed because the asymptotic standard error equals zero.

d. Based on chi-square approximation

e. Cannot be computed because unable to open temporary file.

Appendix L

Step 1 of multiple regression

Predicted variable: Direct Attitudes regressed to indirect factors

Model Summary[c]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.580[a]	.336	.332	2.37783	.336	88.529	1	175	.000	
2	.677[b]	.458	.449	2.16011	.122	19.528	2	173	.000	1.903

a. Predictors: (Constant), @sum1ATT

b. Predictors: (Constant), @sum1ATT, @sum1PBCamend, @sum1SN

c. Dependent Variable: @SumAttDir

ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	500.547	1	500.547	88.529	.000[b]
	Residual	989.464	175	5.654		
	Total	1490.011	176			
2	Regression	682.783	3	227.594	48.777	.000[c]
	Residual	807.229	173	4.666		
	Total	1490.011	176			

a. Dependent Variable: @SumAttDir

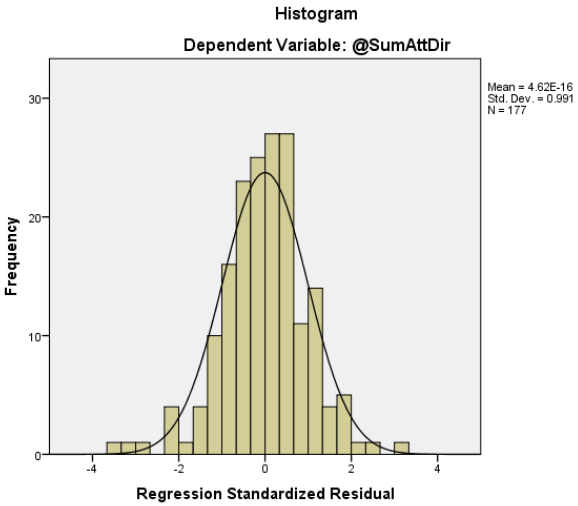
b. Predictors: (Constant), @sum1ATT

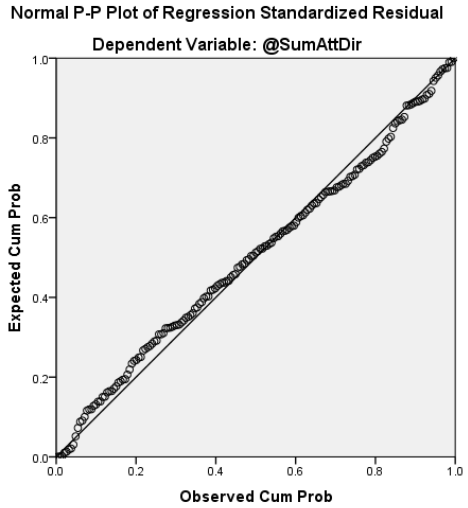
c. Predictors: (Constant), @sum1ATT, @sum1PBCamend, @sum1SN

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	18.940	.580		32.665	.000					
	@sum1ATT	.072	.008	.580	9.409	.000	.580	.580	.580	1.000	1.000
2	(Constant)	18.134	.563		32.216	.000					
	@sum1ATT	.053	.008	.425	6.858	.000	.580	.462	.384	.815	1.227
	@sum1SN	.053	.009	.371	6.139	.000	.538	.423	.344	.857	1.167
	@sum1PBCamend	.008	.008	.058	1.000	.319	.209	.076	.056	.936	1.068

a. Dependent Variable: @SumAttDir





Predicted variable: Direct Subjective Norms regressed to indirect factors

Model Summary[c]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.560[a]	.314	.310	2.91823	.314	79.995	1	175	.000	
2	.565[b]	.319	.307	2.92409	.005	.650	2	173	.523	1.954

a. Predictors: (Constant), @sum1SN

b. Predictors: (Constant), @sum1SN, @sum1PBCamend, @sum1ATT

c. Dependent Variable: @SumSNDir

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	681.244	1	681.244	79.995	.000[b]
	Residual	1490.315	175	8.516		
	Total	2171.559	176			
2	Regression	692.356	3	230.785	26.991	.000[c]
	Residual	1479.204	173	8.550		
	Total	2171.559	176			

a. Dependent Variable: @SumSNDir

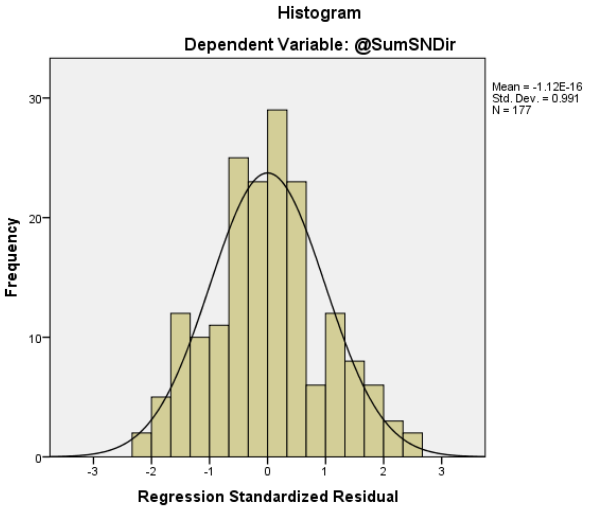
b. Predictors: (Constant), @sum1SN

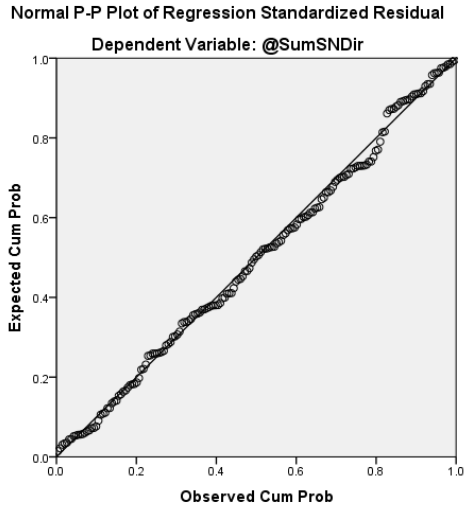
c. Predictors: (Constant), @sum1SN, @sum1PBCamend, @sum1ATT

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	5.277	.496		10.643	.000					
	@sum1SN	.096	.011	.560	8.944	.000	.560	.560	.560	1.000	1.000
2	(Constant)	5.608	.762		7.360	.000					
	@sum1SN	.097	.012	.564	8.328	.000	.560	.535	.523	.857	1.167
	@sum1PBCamend	.013	.011	.072	1.112	.268	.131	.084	.070	.936	1.068
	@sum1ATT	-.005	.010	-.034	-.493	.623	.197	-.037	-.031	.815	1.227

a. Dependent Variable: @SumSNDir





Predicted variable: Direct PBC (single item) regressed to indirect factors

Model Summary[c]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.151[a]	.023	.017	.911	.023	4.064	1	175	.045	
2	.343[b]	.118	.102	.871	.095	9.304	2	173	.000	2.063

a. Predictors: (Constant), @sum1PBCamend

b. Predictors: (Constant), @sum1PBCamend, @sum1SN, @sum1ATT

c. Dependent Variable: 1Qu40

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.375	1	3.375	4.064	.045[b]
	Residual	145.348	175	.831		
	Total	148.723	176			
2	Regression	17.491	3	5.830	7.686	.000[c]
	Residual	131.233	173	.759		
	Total	148.723	176			

a. Dependent Variable: 1Qu40

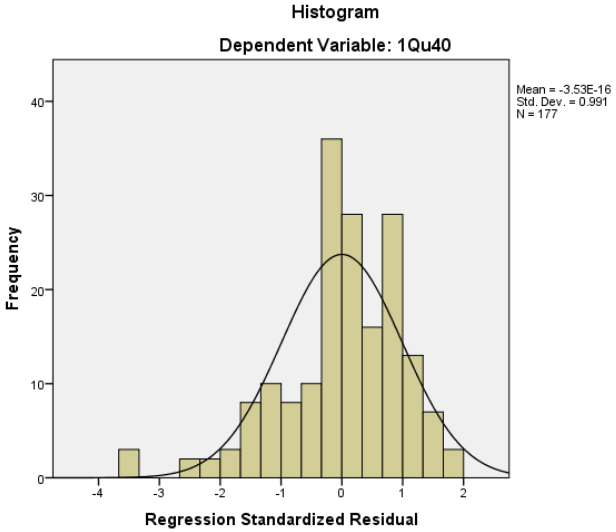
b. Predictors: (Constant), @sum1PBCamend

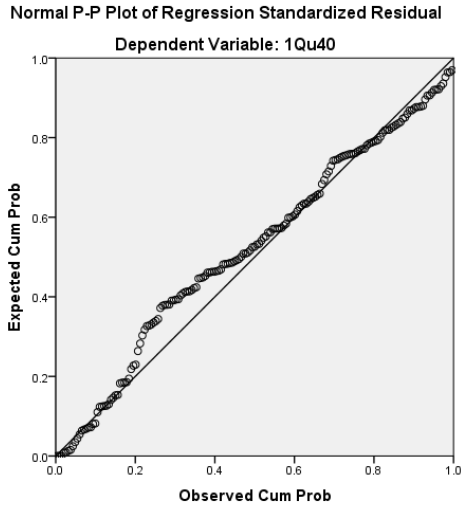
c. Predictors: (Constant), @sum1PBCamend, @sum1SN, @sum1ATT

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	5.956	.069		86.885	.000					
	@sum1PBCamend	.007	.003	.151	2.016	.045	.151	.151	.151	1.000	1.000
2	(Constant)	5.028	.227		22.155	.000					
	@sum1PBCamend	.003	.003	.070	.951	.343	.151	.072	.068	.936	1.068
	@sum1ATT	.012	.003	.297	3.759	.000	.333	.275	.268	.815	1.227
	@sum1SN	.002	.003	.048	.616	.539	.168	.047	.044	.857	1.167

a. Dependent Variable: 1Qu40





Appendix M

Step 2 of multiple regression

Predicted variable: Generalised Intention regressed onto direct factors

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.674[a]	.455	.445	3.04134	.455	48.112	3	173	.000	2.006

a. Predictors: (Constant), 1Qu40, @SumSNDir, @SumAttDir

b. Dependent Variable: @SumINTG

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1335.063	3	445.021	48.112	.000[b]
	Residual	1600.203	173	9.250		
	Total	2935.266	176			

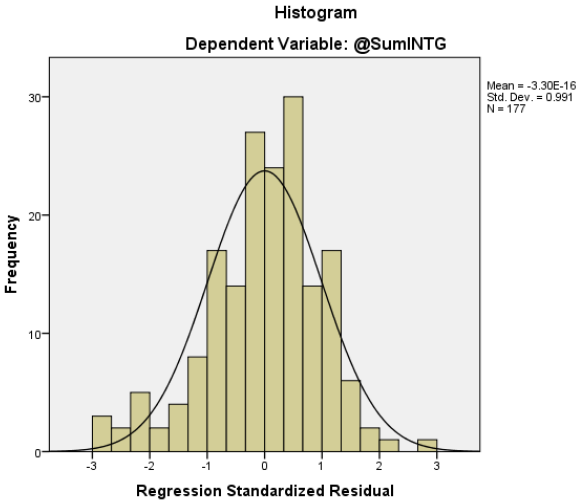
a. Dependent Variable: @SumINTG

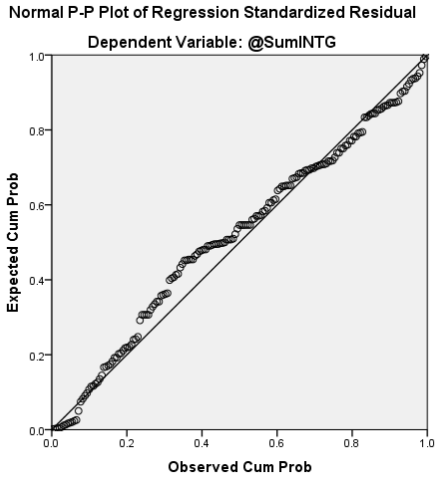
b. Predictors: (Constant), 1Qu40, @SumSNDir, @SumAttDir

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	-8.360	2.102		-3.977	.000					
	@SumAttDir	.704	.089	.502	7.882	.000	.623	.514	.442	.778	1.285
	@SumSNDir	.297	.069	.255	4.306	.000	.401	.311	.242	.898	1.114
	1Qu40	.574	.270	.129	2.124	.035	.310	.159	.119	.851	1.175

a. Dependent Variable: @SumINTG





Appendix N

Step 3 of multiple regression

Predicted variable: Generalised Intention regressed onto direct factors and indirect factors

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.701[a]	.491	.474	2.96318	.491	27.383	6	170	.000	2.014

a. Predictors: (Constant), @sum1PBCamend, @sum1SN, 1Qu40, @sum1ATT, @SumSNDir, @SumAttDir

b. Dependent Variable: @SumINTG

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1442.589	6	240.431	27.383	.000[b]
	Residual	1492.677	170	8.780		
	Total	2935.266	176			

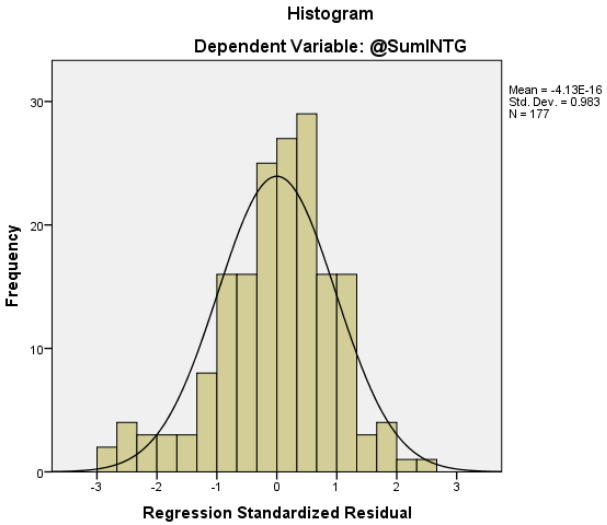
a. Dependent Variable: @SumINTG

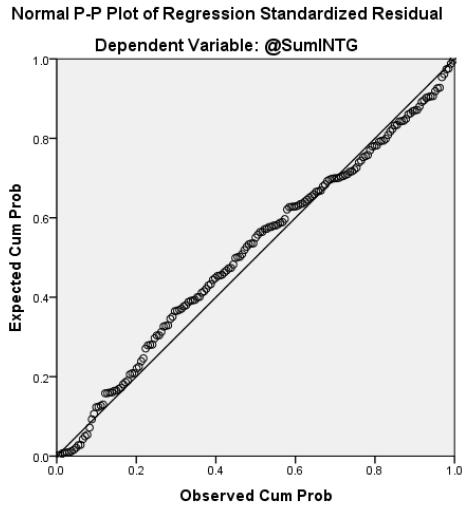
b. Predictors: (Constant), @sum1PBCamend, @sum1SN, 1Qu40, @sum1ATT, @SumSNDir, @SumAttDir

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	-6.094	2.309		-2.639	.009					
	@SumAttDir	.567	.107	.404	5.303	.000	.623	.377	.290	.515	1.941
	@SumSNDir	.290	.078	.249	3.722	.000	.401	.275	.204	.668	1.496
	1Qu40	.413	.268	.093	1.542	.125	.310	.117	.084	.824	1.214
	@sum1ATT	.031	.012	.181	2.615	.010	.512	.197	.143	.625	1.599
	@sum1SN	-.006	.015	-.028	-.367	.714	.426	-.028	-.020	.527	1.896
	@sum1PBCamend	.022	.012	.108	1.890	.060	.281	.143	.103	.920	1.087

a. Dependent Variable: @SumINTG


Histogram
Dependent Variable: @SumINTG
Mean = -4.13E-16
Std. Dev. = 0.983
N = 177
Frequency
Regression Standardized Residual


Normal P-P Plot of Regression Standardized Residual
Dependent Variable: @SumINTG
Expected Cum Prob
Observed Cum Prob

Appendix O

SEM parameters and assumptions

Variable Summary (Group number 1)

Your model contains the following variables (Group number 1)

Observed, endogenous variables

Dir_PBC
Dir_Att
Dir_SN
Generalised_Intention

Observed, exogenous variables

Ind_PBC
Ind_SN
Ind_Att

Unobserved, exogenous variables

e1
e2
e3
e4

Variable counts (Group number 1)

Number of variables in your model:	11
Number of observed variables:	7
Number of unobserved variables:	4
Number of exogenous variables:	7
Number of endogenous variables:	4

SEM Assumptions, modification indices & regression weights:

Assessment of normality (Group number 1)

Variable	min	max	skew	c.r.	kurtosis	c.r.
Ind_Att	1.800	21.000	-.655	-3.557	-.106	-.288
Ind_SN	-6.600	19.200	-.226	-1.228	.372	1.010
Ind_PBC	-17.250	15.750	-.035	-.188	.909	2.468
Dir_SN	1.000	6.333	.319	1.731	-.253	-.687
Dir_Att	2.750	7.000	-1.285	-6.981	2.855	7.752
Dir_PBC	2.000	7.000	-1.066	-5.791	1.838	4.992
Generalised_Intention	1.000	7.000	-.857	-4.654	.667	1.810
Multivariate					9.707	5.753

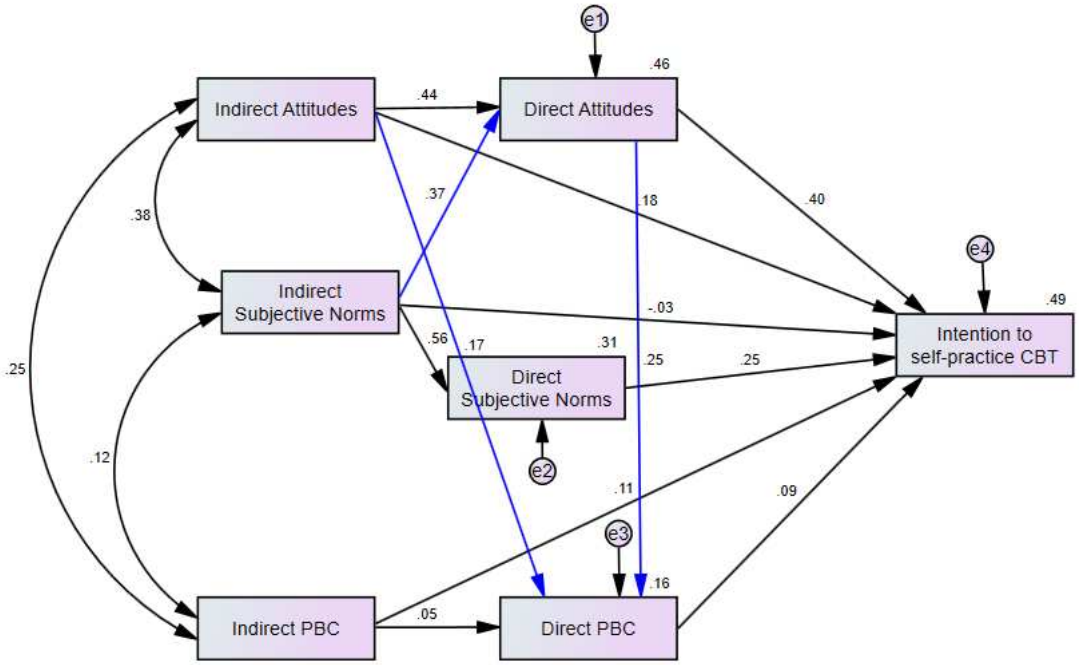
Regression Weights: (Group number 1 - Default model)

			M.I.	Par Change
Dir_Att	<---	Ind_SN	27.096	.057
Dir_Att	<---	Dir_SN	8.500	.111
Dir_Att	<---	Dir_PBC	7.857	.136
Dir_PBC	<---	Ind_Att	15.686	.058
Dir_PBC	<---	Ind_SN	4.054	.034
Dir_PBC	<---	Dir_Att	20.053	.422

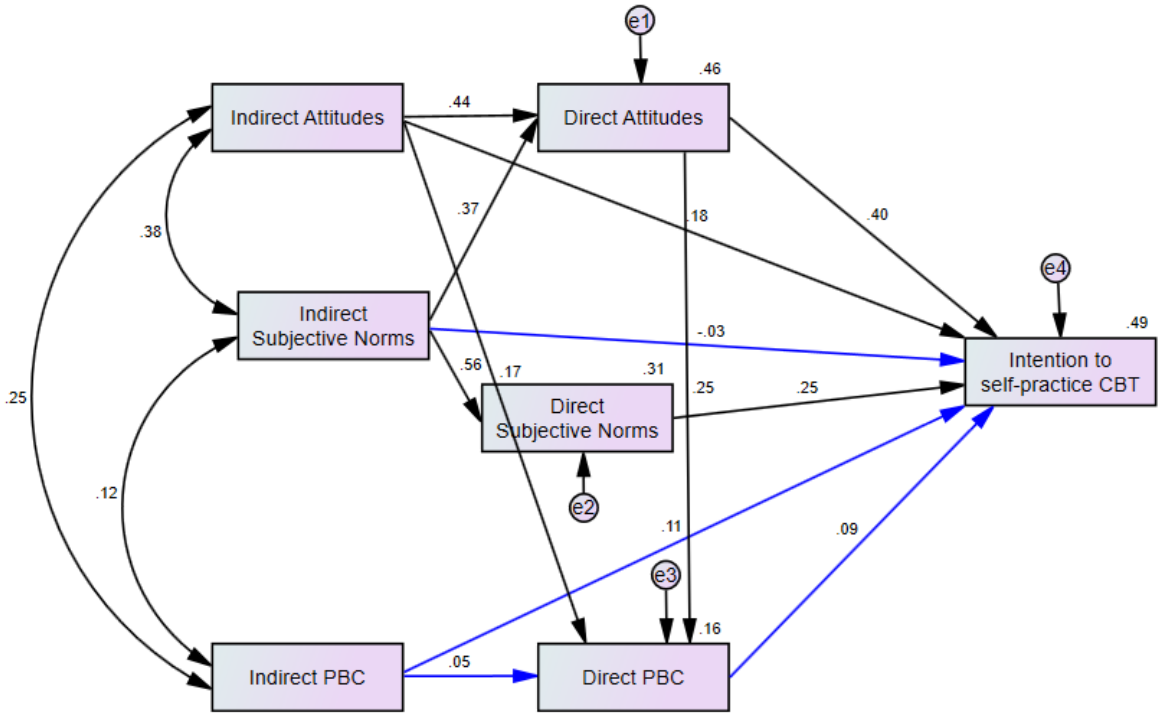
Appendix P

Amended SEM model

See below for lines in blue which indicate regression pathways added to the hypothesised model with reference to the standardised residual covariances (see Table 8).



See below for lines in blue which indicate regression pathways deleted from the amended model with reference to the significance levels of the standardised β for the regression pathways (see Table 9).



Appendix Q

Notes for Submission: Behavioural and Cognitive Psychotherapy Journal

Behavioural and Cognitive Psychotherapy

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Manuscript preparation

A Word document of the manuscript must be submitted electronically at:

http://mc.manuscriptcentral.com/babcp

Original figures and tables should be supplied in a separate document (do not embed figures and table within the text). Articles must be under 5,000 words including references (except Brief Clinical Reviews) and be typed double-spaced throughout allowing wide margins all round. Where unpublished material e.g. behaviour rating scales, therapy manuals etc., is referred to in an article, copies should be submitted as an additional document where copyright allows to facilitate review. Articles must be written in English and not submitted for publication elsewhere.

Submissions will be sent out for review exactly as submitted. Authors who want a blind review should indicate this at the point of submission of their article, omitting details of authorship and other identifying information from the main manuscript but including a separate title page. Submission for blind review is encouraged.

Abbreviations where used must be standard. The Systeme International (SI) should be used for all units: where metric units are used the SI equivalent must also be given. Probability values and power statistics should be given with statistical values and degrees of freedom (e.g. $F(1,34) – 123.07$. $p<.001$), but such information may be included in tables rather than in the main text. Spelling must be consistent within an article, either using British usage (The Shorter Oxford English Dictionary), or American usage (Webster's new collegiate dictionary).

However, spelling in the list of references must be literal to each publication. Details of style not specified here may be determined by reference to the Publication Manual of the American Psychological Association or the style manual of the British Psychological Society.

(cont)

EDITORIAL STATEMENT

Behavioural and Cognitive Psychotherapy is an international multidisciplinary journal for the publication of original research, of an experimental or clinical nature, that contributes to the theory, practice and evaluation of behaviour therapy. As such, the scope of the journal is very broad and articles relevant to most areas of human behaviour and human experience, which would be of interest to members of the helping and teaching professions, will be considered for publication. As an applied science, the concepts, methodology and techniques of behavioural psychotherapy continue to change. The journal seeks both to reflect and to influence those changes. While the emphasis is placed on empirical research, articles concerned with important theoretical and methodological issues as well as evaluative reviews of the behavioural literature are also published. In addition, given the emphasis of behaviour therapy on the experimental investigation of the single case, the journal from time to time publishes case studies using single case experimental designs. For the majority of designs this should include a baseline period with repeated measures; in all instances the nature of the quantitative data and the intervention must be clearly specified. Other types of case report can be submitted for the Brief Clinical Reports section.

The following types of articles are suitable for Behavioural and Cognitive Psychotherapy:

• Reports of original research employing experimental or correlational methods and using within or between subject designs.

• Review or discussion articles that are based on empirical data and that have important new theoretical, conceptual or applied implications.

• Brief reports and systematic investigations in single case employing innovative techniques and/or approaches.

Articles should concern original material that is neither published nor under consideration for publication elsewhere. This applies to articles in languages other than English.

(Revised 17th March 2013)

Appendix R

Feedback to ethics panel

THIS APPENDIX HAS BEEN REMOVED FROM THE FINAL VERSION