

The effectiveness of Supportive Counselling, based on Rogerian principles:

**A systematic review of
recent international and
Australian research.**

Dr Nicky Jacobs and Dr Andrea Reupert



Psychotherapy & Counselling
Federation of Australia

© PACFA, May 2014

This publication is copyright. No part may be reproduced by any process except in accordance with the provisions of the Copyright Act 1968.

Suggested citation:

Jacobs, N. & Reupert, A. (2014), *The effectiveness of Supportive Counselling, based on Rogerian principles: A systematic review of recent international and Australian research*. Melbourne: PACFA.

Acknowledgments:

The review was generously funded by an anonymous philanthropic body.

Correspondence concerning this article should be addressed to:

Dr Nicky Jacobs, Monash University, email: nicky.jacobs@monash.edu

Dr Andrea Reupert, Monash University, email: andrea.reupert@monash.edu.au

Contents

- Foreword 1
- Abstract 2
 - Introduction 3
 - Humanistic, non-directive or supportive counselling 3
- Method..... 5
 - Search strategy..... 5
 - Eligibility Criteria 5
- Results 6
 - Table 1: *Country of Origin for Eligible Studies*..... 7
 - Table 2: *Presenting Problem or Diagnosis of Clients in Eligible Studies* 7
 - Meta-analyses 8
 - Systematic reviews..... 9
 - Studies where SC/ST, PCT or a NDST was the primary therapy candidate 9
 - Studies where SC/ST, PCT, NDST was compared as an equal therapy to other therapies 10
 - Studies where SC/ST, PCT or NDST was the control group 10
 - Australian research 11
- Discussion..... 11
- Conclusion 13
- References..... 14
- Appendix 1..... 18
- Appendix 2..... 19
- Appendix 3..... 20
- Appendix 4..... 21
- Appendix 5..... 24
- Appendix 6..... 25

Foreword

This document is a literature review of research into the effectiveness of supportive counselling, intended as a resource for counsellors and psychotherapists. It demonstrates the effectiveness of supportive counselling for a range of psychological conditions.

The PACFA Research Committee recognises that it is important to counsellors and psychotherapists that they have access to recent research evidence that demonstrates the effectiveness of different therapeutic approaches, to assist them in their practice. This review is one of a series of reviews that has been commissioned by the PACFA Research Committee to support its Member Associations in their work. It was written on behalf of the PACFA Research Committee. However, this does not imply that PACFA or its Member Associations endorses any of the particular treatment approaches described.

The Committee endorses the American Psychological Association's definition of evidence-based practice as 'the integration of the best available research evidence with clinical expertise in the context of patient characteristics, culture and preferences' (although we refer to a client or consumer rather than 'patient'). The Committee recognises that there is significant research evidence to indicate the effectiveness of counselling and psychotherapy and that different methods and approaches show broadly equivalent effectiveness. The Common Factors research, in particular, has shown the centrality of the therapeutic relationship, and the relatively minimal relevance of specific techniques, to positive therapeutic outcomes.

The Committee acknowledges that an absence of evidence for a particular counselling or psychotherapy intervention does not mean that it is ineffective or inappropriate. Rather, the evidence showing equivalence of effect for different counselling and psychotherapy interventions justifies a starting point assumption of effectiveness.

It should be noted that this review is necessarily limited in its scope and examines the types of mental health issues that supportive counselling is effective in treating.

The Committee is committed to supporting PACFA Member Associations and Registrants to develop research protocols that will help the profession to build the research base to support the known effectiveness of counselling and psychotherapy. We hope that you find this review, and others in this series, useful for your own research and advocacy purposes. We welcome your feedback.

Dr Elizabeth Day
Chair of the PACFA Research Committee
May 2014

Abstract

The purpose of this paper is to present a systematic literature review of the effectiveness of Supportive Counselling (SC) based on Rogerian principles. This review of recent international (last five years) and Australian (last ten years) papers was employed using the PsycINFO, Ovid Medline, APAIS (Informat), Web of Science and Social Services Abstracts data bases. Various terms were employed encompassing Supportive Counselling (SC) including; Person Centred Therapy (PCT), Non-Directive Supportive Therapy (NDST) and Supportive Therapy (ST). A total of 26 international papers and two Australian papers met the inclusion criteria. Papers were grouped into (i) meta-analyses and systematic reviews (n=4) as well as papers (ii) where SC was the primary therapeutic candidate (n=10), (iii) where SC was equally compared to other therapies (n=3) and (iv) where SC was the alternative, control therapy (n=11). Various methodological issues were identified, primarily in the way SC was defined, implemented and compared to other therapies. Overall, while a number of methodological issues preclude definitive claims, there is evidence to suggest that the group of therapies often referred to as supportive are effective, and equally as effective as selected other therapies, in the treatment of adult depression.

Introduction

Many therapists identify with a humanistic or a supportive orientation to therapy, in Australia and elsewhere. A 2004 survey of professional and clinical members of the Psychotherapy and Counselling Federation of Australia found 12% of respondents nominated humanistic approaches as being their primary theoretical orientation (Schofield, 2008). A somewhat larger percentage was found in the USA: from over 2,200 North American psychotherapists, Cook and colleagues (2010) found that a fifth (31%) identified with a Rogerian/client-centered/humanistic orientation. At the same time, the most commonly endorsed therapeutic techniques in this same survey were; conveying warmth and respect, communicating understanding of a client's experience, empathizing with the client, promoting clear, direct expression of client's feelings, making reflective or clarifying comments and cultivating the therapeutic relationship. These techniques are at the core of Rogers' (1957) person-centred approach, which focuses on building and sustaining a good therapeutic alliance. Thus, even though some counsellors might not identify as humanistic, many employ the techniques commonly associated with a Rogerian approach. The prevalent use of these humanistic and supportive approaches makes it critical to ascertain how effective these are in therapeutic environments.

Humanistic, non-directive or supportive counselling

Carl Rogers was among the founders of the humanistic approach to psychology. There are a variety of terms that are often used interchangeably in his therapeutic approach including Client-Centred Therapy (CCT), Person-Centred Therapy (PCT) or Non-Directive Supportive Therapy (NDST) (Gibbard & Hanley, 2008).

Rogers argued that human beings are on the whole positively motivated, with a natural internal drive towards growth and adjustment (Thorne, 2003). This natural tendency is to become a fully functioning individual, or in other words, to become who we truly are. The counsellor who provides the right conditions in the counselling relationship will enable clients to choose to become their true selves (Thorne, 2003). In 1957, Rogers argued that there were six, fundamental conditions necessary and sufficient for client growth:

1. Two persons are in psychological contact.
2. The first, whom we shall term the client, is in a state of incongruence, being vulnerable or anxious.
3. The second person, whom we shall term the therapist, is congruent or integrated in the relationship.
4. The therapist experiences unconditional positive regard for the client.
5. The therapist experiences an empathic understanding of the client's internal frame of reference and endeavours to communicate this experience to the client.
6. The communication to the client of the therapist's empathic understanding and unconditional positive regard is to a minimal degree achieved (Rogers, 1957, p. 96).

The six conditions are interrelated and of equal importance: this means that one cannot exist without the other. Rogers also asserted that the above six conditions were not about specific techniques but were instead an integrated part of the counsellor's personality and belief system about human nature and a client's capacity to grow and self-actualize.

Nonetheless, some have attempted to operationalize these core conditions into specific counsellor behaviours. For example, Tursi and Cochran (2006) include attending, reflecting, clarifying, paraphrasing and summarising as the behaviours often associated with PCT along with the avoidance of questioning clients. Another therapeutic stance that has attracted some attention in recent times is related to counsellor non-directivity. Non-directive counselling involves the counsellor attending to the client's internal processes without interfering (Meador & Rogers, 1984). According to Bohart (2013) Rogers defined the non-directive stance as the client having a right to select his or her own goals in therapy. Bohart (2013, p. 142) further elaborates when he writes that therapist non-directive-ness:

... explicitly attempts to model the idea that the therapist is not the expert (the client is), that listening to the client is the ultimate value and that trusting the client to find his or her own path and to make wise choices for him or herself is the ultimate way of proceeding.

Thus, the basis of non-directivity is a belief that the client is the expert in his or her own life, rather than a specific or pre-determined set of techniques that a person-centred counsellor should or should not employ. In recent times, there are some counsellors who have incorporated an active problem solving component in the non-directive approach to PCT (Knight, 2007) or cognitive behaviour therapy techniques (including homework) (Tursi & Cochran, 2006). Such inclusions are however only appropriate if aligned with client goals and consistent with the six core conditions highlighted earlier.

Another, related modality, Supportive Counselling (SC) (sometimes also referred to as Supportive Therapy, ST) is in many ways similar to PCT though much of the theoretical discussion on this is dated. For example, Winston, Pinsker and McCullough (1986) list the various techniques associated with SC; a style of communication where the therapist is "real" for the client, demonstrating respect, allowing the client to vent (involving an active response from the therapist that could include universalizing and de-catastrophizing), praising and giving advice and reassurance. Rockland (1993) concurs, by highlighting the strong therapeutic alliance in SC, and also includes active therapeutic techniques such as reframing, using clarifications and confrontations, and psycho-education. Holmes (1958) attempted to define SC by differentiating between two different types of supportive therapies; the first based on Rogerian counselling and the second having an analytical orientation (the former is the focus of this review). As Winston (1986) concludes, there is some confusion regarding how SC might be operationalized as some employ the term supportive to refer to treatment *objectives*, while others define SC in terms of *techniques*.

In sum, PCT, NDST and SC/ST each value the therapeutic relationship, and attempt to stay as close as possible to the experience of the client in the present relationship. Rather than a mechanistic approach to counselling, a humanistic, non-directive, supportive and/or person centred counsellor strives to conceptualize and engage people in a deeply valuing and respectful way (Cooper, O'Hara, Schmid & Wyatt, 2007). It is the belief in the value of the therapeutic alliance that motivates the person centred counsellor, rather than a concern about specific counselling techniques.

Method

This paper presents the findings of a systematic review of relevant Australian and international studies into the effectiveness of supportive counselling, based on Rogerian principles, including all forms of non-directive, humanistic counselling. The scope of this review includes Person Centred Therapy (PCT) (sometimes also known as Client Centred Therapy: CCT), Non-Directive Supportive Therapy (NDST) and Supportive Counselling or Therapy (SC/ST).

Search strategy

Studies were identified through searching the PsycINFO, Ovid Medline, APAIS (Informit), Web of Science and Social Services Abstracts (Proquest) data bases. We sought feedback from selected Australian counselling researchers to refine the search terms which included: supportive counselling OR non-directive counselling OR Rogerian counselling OR client centred counselling OR person centred counselling AND study OR trial. See Appendix 1 for the specific variations of terms/spelling used in this search.

Additional limits in this initial search were for:

- Peer reviewed publications
- English language
- Full text only

Date limitations were as follows:

- Australian literature over the last ten years
- International literature from the last five years

The search was current as of September, 2013.

Eligibility Criteria

After the data bases were searched as outlined above, the authors scanned the title and abstract of identified papers for the following criteria.

Inclusion criteria

- Papers where client outcomes were clearly defined (in terms of affective, behavioural and/or cognitive outcomes);
- Papers that reported on primary research work including:
 - Meta-analysis of randomised controlled trials ;
 - Systematic reviews of randomised controlled trials ;
 - Randomised controlled trials (e.g. Supportive Counselling vs wait list control);
 - Controlled studies without randomisation; and
 - Other types of quasi-experimental studies e.g. pre and post-test designs only (no control).

Exclusion criteria

- Letters, editorial, news, expert (or otherwise) commentaries;
- Narrative literature reviews;
- Qualitative studies (e.g. interview based studies);
- Descriptive studies including single case studies;
- Expert committee reports or opinions;
- Studies that included analytical (as opposed to humanistic) SC; and
- Studies that included SC in medical trials and targeted physiological changes.

Additional papers were found by examining references within the identified studies. See Appendix 2 for the flow chart for this process. The two researchers determined eligibility of questionable articles (those not clearly falling into a category) through discussion. This ensured reliability of the decision making process of articles included and excluded at each stage.

Data extraction form

A data extraction form was developed (Appendix 3) to record the required information from identified studies. The form recorded details about the therapy alongside various methodological features.

Results

Of the 143 records retrieved from the five data bases, 28 papers met the eligibility criteria to be included in this review. These 28 papers included three meta-analyses and one systematic review and 24 primary papers providing primary data (involving 20 studies). These 24 primary data papers included:

- Ten papers where SC/ST, PCT or NDST was the primary therapy candidate (Appendix 4)
- Three papers where SC/ST, PCT or NDST was compared as an equal therapy candidate to other therapies (Appendix 5);

- Eleven papers where SC/ST, PCT or NDST was the control group (Appendix 6).

Primary data studies (not including systematic or meta-analyses, n=20) were predominately conducted in the USA with two studies originating in Australia (Table 1). Clients' presenting issues or disorders varied across studies, though mostly targeted depression (n=6), managing the symptoms for early onset psychosis (n=3) or promoting adaptive change in the face of infertility, organ loss or multiple sclerosis (n=3) (Table 2). Most targeted adult populations with only three papers (two studies) that focused on children and three papers (one study) on older adults. The context in which the therapy was delivered was broad and included schools, university research centres, General Practice and inpatient/outpatient settings. Most papers described individual therapy with four studies focusing on group or a combination of group and individual therapy.

Table 1: Country of Origin for Eligible Studies

| Country | No. of studies |
|-----------------|----------------|
| USA | 7 |
| Germany | 3 |
| Australia | 2 |
| UK | 1 |
| Canada | 1 |
| Denmark | 1 |
| Norway | 1 |
| Thailand | 1 |
| Iran | 1 |
| The Netherlands | 1 |
| Singapore | 1 |
| Total | 20 |

Table 2: Presenting Problem or Diagnosis of Clients in Eligible Studies

| Presenting issue or diagnosis | No. of studies: |
|--|-----------------|
| Depression including postpartum depression (n=2) | 6 |
| Anxiety, depression, interpersonal difficulties (not differentiated) | 1 |
| Management of symptoms/prevention of progression for early onset psychosis | 3 |
| Adaptive change to organ loss, multiple sclerosis, infertility | 3 |
| Academically at risk children | 1 |
| Disruptive behaviour in children | 1 |
| Medication adherence/compliance | 1 |
| Borderline Personality Disorder | 1 |
| Acute Stress Disorder | 1 |
| Academic performance (of nurses) | 1 |
| Bipolar Disorder relapse | 1 |
| Total | 20 |

Meta-analyses

Three meta-analyses were found in which SC, ST or NDST was included.

Kornør and colleagues (2008) performed a systematic search and meta-analysis to provide an evaluation of the effectiveness of early Trauma Focused Cognitive Behavioural Therapy (TFCBT) – note that SC was not the primary therapeutic candidate in this meta-analysis. Of the five identified RCTs (all from the same research team) all five compared TFCBT to what was called Supportive Counselling (SC), which consisted of “active listening and education about trauma and general problem solving skills. Cognitive restructuring, exposure techniques and other forms of focusing on the individual's specific traumatic experience were avoided” (Kornør et al., 2008, p. 3). The overall relative risk (RR) for a PTSD diagnosis was 0.56 (95% CI 0.42 to 0.76), 1.09 (95% CI 0.46 to 2.61) and 0.73 (95% CI 0.51 to 1.04) at 3–6 months, 9 months and 3–4 years post treatment, respectively. Anxiety and depression scores were generally lower in the TFCBT groups than in the SC groups. On the basis of this meta-analysis the authors concluded that there was evidence for the effectiveness of TFCBT compared to ST in the prevention of chronic Post Traumatic Stress Disorder.

Cuijpers and colleagues (2012) identified 31 studies on Non-Directive Supportive Therapy (NDST) for adult depression, where NDST was compared with control groups, other psychotherapies and pharmacotherapy. NDST was defined as “a psychological treatment in which therapists do not engage in any therapeutic strategies other than active listening and offering support, focusing on participants’ problems and concerns” (p. 281). Most studies (n=18) identified in the meta-analysis compared NDST to CBT. It was found that NDST was effective in the treatment of depression in adults ($g=0.58$; 95% CI: 0.45–0.72) but less effective than other psychological treatments (differential effect size $g=-0.20$; 95% CI: -0.32 to -0.08, $p<0.01$), especially in comparison to CBT. However, when researcher allegiance was controlled, these differences were no longer present. The researchers conclude:

... NDST is rarely thought of as a first-line treatment that merits testing on its own and that it was considered little more than a control condition for nonspecific factors by most investigators... Our meta-analysis suggests that NDST deserves more respect from the research community and is effective in itself and *may be* as effective as other psychotherapies for depression (italics added; Cuijpers et al., 2012, p. 289).

Another meta-analysis was conducted by some of the same researchers (Barth et al., 2013) to examine the comparative efficacy of seven psychotherapeutic interventions for adult depression, one of which was ST. ST was defined as

...an unstructured therapy without specific psychological techniques other than those common to all approaches, such as helping people to ventilate their experiences and emotions and offering empathy. It is not aimed at solutions or acquiring new skills.

It is based on the assumption that relief from personal probes may be achieved through discussion with others (Barth et al., 2013, p. 3).

After synthesizing 198 randomized controlled trials, they found that most of the seven therapeutic interventions had comparable effects on depressive symptoms and achieved moderate to large effects vis-à-vis waitlist. The only significant difference was that Interpersonal Therapy was somewhat more beneficial than ST. At the same time however, the authors point out that as ST in some of the analysed studies was not intended to be therapeutic, dismissing ST on the basis of this evidence, would be unjustified.

Systematic reviews

One systematic review was identified though it needs to be noted that CBT was the primary focus not ST.

Rector and Beck (2012) examined seven RCTs testing the efficacy of CBT for schizophrenia, where four of the seven identified studies compared CBT with a comparison therapy, namely ST (these four studies were reasonably dated and included Pinto, Pia, Mannella, Domenico, DeSimone, 1999; Sensky, et al., 2000; Tarrier, Beckett, Harwood, Baker, Yusupoff & Ugarteburu, 1993; Tarrier, Yusupoff, Kinney, McCarthy, Gledhill, Haddock & Morris, 1998).

The review included studies where ST was defined in various ways, for example one study described ST as a “befriending therapy... [which involved a] sympathetic conversation with a therapist about pleasant or neutral topics” while another defined ST as “basic psychoeducation about the nature and treatment of schizophrenia, crisis management and patient advocacy” (Rector & Beck, 2012, p. 835). It is important to note that the actions of the therapist in both instances are somewhat different, in terms of their level of activity, support and directive-ness, making comparisons problematic. Nonetheless, on the basis of this review, Rector and Beck (2012) identify clinical improvements in the frequency and distress associated with hallucinations and delusions following CBT, compared to ST. They also concluded that while CBT and ST produced significant effects on negative symptoms post treatment, at nine month follow up CBT continued large gains compared to ST which demonstrated slippage. Their overall conclusion is that those receiving CBT provides additional benefits above and beyond the gains achieved with ST.

Studies where SC/ST, PCT or a NDST was the primary therapy candidate (Appendix 4)

Ten papers describing nine studies were identified in which SC/ST, PCT or NDST was the primary therapeutic candidate.

Of the ten papers identified, five papers (four studies) focused on Client or Person Centred Therapy, while the remaining five papers focused on ST or SC. Client centred therapy (CCT) was found to be effective for children with disruptive behaviours or who were academically at risk or for adults in the treatment of anxiety and/or depression. Only one study measured the long term impact of PCT/CCT so it is difficult to ascertain whether improvements across

these studies were sustained after therapy. One study (Eyssen et al., 2013) found no significant changes between CCT (in an occupational therapy model) when compared to treatment as usual on a variety of wellbeing measures for participants with Multiple Sclerosis.

Four papers presented Randomized Controlled Trials (RCTs) where SC or ST was the primary therapeutic candidate compared to either treatment as usual or no intervention and one study compared ST alone with ST and anti-depressant medication. The studies found that SC/ST was effective in the treatment of depression (including post-partum depression) and in enhancing the academic performance of university students. Only one study reported follow up data so again it is difficult to ascertain whether improvements were sustained.

Studies where SC/ST, PCT, NDST was compared as an equal therapy to other therapies (Appendix 5)

Three RCTs were found in which SC/ST or PTC (or in the case of one study, Brief Supportive Psychotherapy: BSP) was included as an equal therapy candidate against other therapies, involving Cognitive Behaviour Therapy (CBT) and/or psychodynamic therapy. On the whole, equivalent outcomes were found across therapies for the treatment of depression, or the symptoms associated with early onset psychosis though the results of one study (Klein et al., 2011) demonstrated some advantages in social problem solving for CBT over Brief Supportive Psychotherapy. No follow up measures were conducted in any of the identified studies.

Studies where SC/ST, PCT or NDST was the control group (Appendix 6)

Eleven papers outlining nine studies were identified in which SC/ST or PCT was employed as the control group compared to various therapies, many with a cognitive orientation (including Problem Solving Therapy, Integrative Psychological Intervention, Adherence Coping Education, Cognitive Processing Therapy and Cognitive Behaviour Therapy). Two specifically employed PCT as the control condition, defined by the quality of the therapeutic relationship and provision of empathy and genuineness. Others delivered SC/ST (or Brief Supportive Psychotherapy) to the control group, which was operationalized slightly differently across studies. For example, Armento and colleagues (2012, p. 211) described ST in terms of encouraging clients to “express depressive thoughts and feelings in a supportive environment” and where the therapist focused on summarising and reflecting but refrained from providing interpretations, feedback or directives. Others however included the provision of general advice in ST (Jørgensen et al., 2013; Meyer & Hautziner, 2012). Another study (Koszyck, Bisserbe, Blier, Bradwejn & Markowitz, 2012) included psycho-education in Brief Supportive Psychotherapy (BSP). Also, there were marked differences in some studies as to the duration of therapy offered in the primary candidate and the control group; for example, participants in the Bechdolf et al., (2012) study received an average of 23.7 sessions if they were in the primary candidate group (Integrative Psychological Interventions) but only 15.8 sessions if they were in the ST group. Format also varied in

some studies, for example, Jørgensen et al., (2013) provided both individual and group mentalization therapy, but delivered ST in group format only.

Six of the nine studies found that the primary therapeutic candidate (including Problem Solving Therapy, Behavioural Activation of Religious Behaviours, Integrative Psychological Intervention, Structural Ecosystems Therapy, Mentalization Based Therapy and Adherence Coping Education) was more effective than ST on some or all outcome measures; four of these reported sustained improvements from the primary therapeutic candidate after therapy. One of these (Koszycki, Bisscherbe, Blier, Bradwejn & Markowitz, 2012) found that BSP proved effective but not to the extent of the primary treatment candidate, on some measures. One study (Jørgensen et al., 2013) found that there were significant changes in both treatment groups (the primary candidate was Mentalization Based Psychotherapy, and the control group was ST) and that only one outcome measure highlighted the superior outcome for the primary therapeutic candidate. Two RCT studies demonstrated that ST/SC was equally effective as the primary candidate (in these cases CBT and Cognitive Processing Therapy) in the relapse rates for bipolar disorder (Meyer & Hautzinger, 2012) and in the treatment of acute stress disorder (Nixon, 2012).

Australian research

Only two eligible Australian studies were found (McGorry et al., 2013; Nixon, 2012). McGorry et al., (2013) compared (i) cognitive therapy plus medication, (ii) cognitive therapy plus a placebo and (iii) ST plus a placebo for young people at ultra-high risk of psychosis. They found no statistically significant differences between the three groups and on this basis concluded that ST is likely to be effective for this client group and carries fewer risks than other conventional therapies. Nixon (2012) compared a cognitive orientated therapy (Cognitive Processing Therapy: CPT) with SC for those with an acute stress disorder. Both interventions were successful in reducing symptoms and these were maintained six months after therapy.

Discussion

Eight of the nine studies in which SC/ST or PCT was the primary, therapeutic candidate, demonstrated that SC/ST or PCT was effective for a range of issues, particularly for adult depression, including postpartum depression (n=2). Few of these studies present follow-up data so it is difficult to ascertain whether improvements were sustained after therapy. Moreover, in the three studies where SC/ST was compared to other therapies as an equal candidate, SC/ST was found to be equally effective as CBT or psychodynamic therapy for the treatment of adult depression. The effectiveness of ST or NDST as a therapy for adult depression and its equivalence to other therapies is further supported by two meta-analyses in this area (Barth et al., 2013; Cuijpers et al., 2012).

The results from those studies in which SC, ST or PCT was not the primary therapeutic candidate are equivocal. Mostly these studies demonstrate the efficacy of other therapies

(especially cognitively orientated therapies) in comparison to SC, ST or PCT. However, there are several methodological problems in these studies. First, there is a problem of how SC/ST was defined and operationalized – these varied across studies so it is difficult to make direct comparisons. Some focused on the therapeutic alliance, others stressed a non-directive, non-structured environment and others included the provision of psycho-education or advice giving. Second, some participants in SC/ST groups received markedly less time than participants in the comparison treatment group (see Bechdolf et al., 2012; Feaster et al., 2010) which means that effective outcomes might be a function of intensity rather than, or in addition to, the therapy delivered. Similarly, the different formats employed in the primary candidate group and the control group (group and individual formats) were problematic. Third, some of the outcome measures employed in these studies favoured the primary therapeutic candidate for example, Klein et al., (2011) used the Social Problem Solving Inventory- Revised (SPSI-R) as an outcome measure when comparing CBT and Brief Supportive Psychotherapy. The SPSI-R gauges the cognitive and behavioural activities by which a person attempts to understand problems in everyday living and find effective coping responses (Morera, 2006), a style more commonly aligned to CBT approaches than Rogerian processes. Finally, a major methodological problem relates to researcher allegiance. Discussing this issue generally, Haaga and Stiles (2000) argue that allegiance effects may account for a greater proportion of the outcome variance in therapy studies, than differences between treatments. Barkham and colleagues (2010, p. 33) point out:

It is invariably the case that research attesting to the benefits of a candidate therapy is typically carried out by researchers with an allegiance to that specific therapy.

Similarly, Watson and colleagues (2003) found that studies conducted by adherents of a specific approach are more likely to demonstrate the superiority of their approach against an alternative finding. Thus, apparent differences between treatments could well be accounted for by researcher allegiance and once these effects are controlled, the possible differential effectiveness of certain treatments might well be clearer. The Cuijpers et al., (2012) meta-analysis found that when researcher allegiance was controlled, differences between NDST and other therapies for the treatment of adult depression were no longer present. Thus, while many of the studies in Appendix 6 might point to the effectiveness of other therapies in comparison to SC, ST or PCT, there are substantial methodological problems in how these studies were implemented, making such claims less definitive.

Across the 28 papers identified in this review, ten papers (seven studies) specifically examined PCT rather than ST, SC or NDST (Alexopoulos et al., 2001; Areán et al., 2010; Feaster et al., 2010; Blanco & Ray, 2011; Blanco, Ray & Holliman, 2012; Bratton, et al., 2013; Eysen, et al., 2013; Gibbard & Hanley, 2008; Koszycki, Bissler, Blier, Bradwejn & Markowitz, 2012; Stiles, Barkham, Mellor-Clark & Connell, 2009). Results across these studies are similar to what was found overall in this review; where PCT was the primary candidate (or equal candidate) effective and equivalent results were found for PCT (Blanco & Ray, 2011; Blanco, Ray & Holliman, 2012; Bratton et al., 2013; Gibbard & Hanley, 2008; Stiles, Barkham, Mellor-

Clark & Connell, 2009) with one exception (Eyssen et al., 2013) which found that PCT was no more effective than treatment as usual. When PCT was delivered as the control condition, the primary therapeutic candidate proved to be more effective (Alexopoulos et al., 2001; Areán et al., 2010; Feaster et al., 2010; Koszycki, Bissler, Blier, Bradwejn & Markowitz, 2012) again reflecting the general methodological concerns in this area.

Another methodological concern in this area is how SC or ST was defined and subsequently implemented. It could be argued that most therapy is supportive and that elements of support are crucial in most if not all therapeutic modalities. Where SC or ST was the candidate therapy (e.g. Simson, et al., 2008) it is unclear whether positive outcomes were due to contact time with a supportive other or due to the specific components of SC/ST or both. Such concerns are due to the nature of how SC or ST is conceptualised in research trials, which varied across studies. Moreover, there needs to be a distinction between SC, ST and PCT, in particular the core Rogerian principles of empathy, genuineness and congruence. We would argue that many studies which include SC or ST should not be seen as research on PCT because the six Rogerian conditions and essential principles were not clearly delineated.

Most research in this area has been conducted in the USA with only two eligible Australian papers; neither Australian study incorporated SC, ST, PCT or NDST as their primary therapeutic focus. The limited work in this area highlights a possible avenue to conduct research in Australian settings and with Australian clinicians and clients. Future studies also need to include therapy comparisons where the therapist is an adherent of each approach and/or where researcher allegiance is controlled. A clear conceptual and theoretical framework of what is meant by SC or ST also needs to be made. Trials for the efficacy and effectiveness of SC, ST, NDST or PCT for various presenting problems, in addition to adult depression, are also warranted.

Conclusion

While some studies allude to the superiority of other therapies over SC, ST, NDST or PCT, there are a number of methodological concerns that make such claims less definitive. In particular, the manner in which these therapies were defined, implemented and tested in many studies created confusion and closer inspection identified discrepancies surrounding definition of the term supportive. Nevertheless, this review found some evidence to support the effectiveness of SC, ST, NDST or PCT, and their equivalence to other therapies, especially in the treatment of adult depression. However due to the small number of studies identified, the need for conducting further RCTs and longitudinal follow-up studies are recommended in order for more robust conclusions to be drawn on the effectiveness of Supportive Counselling.

References

- Alexopoulos, G.S., Raue, P. J., Kiosses, D. N., Mackin, R. S., Kanellopoulos D., McCulloch, C., et al., (2011). Problem-solving therapy and supportive therapy in older adults with major depression and executive dysfunction: effect on disability. *Archives of General Psychiatry*, 68(1), 33-41.
- Arean, P. A., Raue, P., Mackin, R. S., Kanellopoulos, D., McCulloch, C., & Alexopoulos, G. S. (2010). Problem-solving therapy and supportive therapy in older adults with major depression and executive dysfunction. *American Journal of Psychiatry*, 167(11), 1391-8.
- Armento, M., McNulty, J., & Hopko, D. (2012). Behavioral activation of religious behaviors (BARB): Randomized trial with depressed college students. *Psychology of Religion and Spirituality*, 4, 206-222.
- Barkham, M., Stiles, W., Lambert, M., & Mellor-Clark, J. (2010). Building a rigorous and relevant knowledge base for the psychological therapies. In M. Barkham, G.E. Hardy & J. Mellor-Clark (eds.). *Developing and delivering practice-based evidence: A guide for the psychological therapies* (pp. 21-61). London: Wiley.
- Barth, J., Munder, T., Gerger, H., Nüesch, E., Trelle, S., Znoj, H., Jüni, P., & Cuijers, P. (2013). Comparative efficacy of seven psychotherapeutic interventions for patients with depression: A network meta-analysis. *PLOS Medicine*, 10(5), e1001454.
- Bechdolf, A, Wagner, M, Ruhrmann, S, Harrigan, S, Putzfeld, V, Pukrop, R, et al. (2012). Preventing progression to first-episode psychosis in early initial prodromal states. *The British Journal of Psychiatry*, 200, 22-29.
- Blanco, P., & Ray, D. (2011). Play therapy in elementary schools: A best practice for improving academic achievement. *Journal of Counseling & Development*, 89(2), 235-243
- Blanco, P., Ray, D., & Holliman, R. (2012). Long-term child centered play therapy and academic achievement of children: A follow-up study. *International Journal of Play Therapy*, 21, 1-13.
- Bohart, A. (2013). Understanding person-centered therapy. A review of Paul Wilkins' Person-Centred Therapy in focus. *Person-Centred & Experiential Psychotherapies*, 5(2), 138-143.
- Bratton, S., Ceballos, P., Sheely-Moore, A., Meany-Walen, K., Pronchenko, Y., & Jones, L. (2013). Head start early mental health intervention: Effects of child-centered play therapy on disruptive behaviors. *International Journal of Play Therapy*, 22, 28-42.

- Cook, J., Biyanova, T., Elhai, J., Schnurr, P., & Coyne, J. (2004). What do psychotherapists do in practice? An internet study of over 2,000 practitioners. *Psychotherapy* 47(2), 260–267.
- Cooper, M., O'Hara, M, Schmid, P., and Wyatt, G. (2007). *The handbook of person-centered psychotherapy and counseling*. London: Palgrave MacMillan.
- Cuijpers, P., Driessen, E., Hollon, S., van Oppen, P., Barth, J., & Andersson, G. (2012). The efficacy of non-directive supportive therapy for adult depression: A meta-analysis. *Clinical Psychology*, 32, 280-291.
- Eysen, I. C. M. J., Steultjens, M. P. M., de Groot, V., Steultjens, E.M.J., Knol, D.L., Polman, C. H., & Dekker, J. (2013). A cluster randomised controlled trial on the efficacy of client-centred occupational therapy in multiple sclerosis: good process, poor outcome. *Disability and Rehabilitation*, 35(19), 1636-1646.
- Fam, J., Chen, H., & Wang, J. (2011). Supportive counseling for postpartum depression in Asian mothers. *Asia-Pacific Psychiatry*, 3(2), 61-66.
- Feaster, D., Brincks, A., Mitrani, V., Prado, G., Schwartz, S., & Szapocznik, J. (2010). The efficacy of structural ecosystems therapy for HIV medication adherence with African American women. *Journal of Family Psychology*, 24, 51-59.
- Gibbard, I., Hanley, I. (2008). A five-year evaluation of the effectiveness of person-centred counselling in routine clinical practice in primary care. *Counselling and Psychotherapy Research*, 8(4), 215-222.
- Glavin, K., Smith, L., Sorum, R., & Ellefsen, B. (2010). Supportive counselling by public health nurses for women with postpartum depression. *Journal of Advanced Nursing*, 66(6), 1317-27.
- Haaga, D.A.F., & Stiles, W.B. (2000). Randomized clinical trials in psychotherapeutic research: Methodology, design and evaluation. In C.R. Snyder & R.E. Ingram (eds.), *Handbook of psychological change: Psychotherapy processes and practices for the 21st century* (pp. 14-39). New York: Wiley.
- Jannati, Y., Khaki, N., Sangtarashani, E. O., Peyrovi, H., Amiri & Nojadeh, N. (2012). The effect of supportive counseling program on the academic performance of nursing and midwifery students. *Contemporary Nurse*, 43(1), 113-20.
- Jørgenson, C. R. Freund, C., Bøye, R., Jordet, H., Andersen, D., & Kjølbye, M. (2013). Outcome of mentalization-based and supportive psychotherapy in patients with borderline personality disorder: a randomized trial. *Acta Psychiatrica Scandinavica*, 127(4), 305-17.

- Kiosses, D., Arean, P., Teri, L., Alexopoulos, G. (2010). Home-delivered problem adaptation therapy (PATH) for depressed, cognitively impaired, disabled elders: A preliminary study. *The American Journal of Geriatric Psychiatry*, 18, 988-998.
- Klein, D. N., Leon, A. C., Li, C., D'Zurilla, T. J., Black, S. R., Vivian, D., et al. (2011). Social problem solving and depressive symptoms over time: a randomized clinical trial of cognitive-behavioral analysis system of psychotherapy, brief supportive psychotherapy, and pharmacotherapy. *Journal of Consulting & Clinical Psychology*, 79(3), 342-52, 2011.
- Knight, T. (2007). Showing clients the doors: Active problem solving in Person-Centered Psychotherapy. *Journal of Psychotherapy Integration*, 17(1), 111-124.
- Kornør, H., Winje, D., Ekeberg, Ø., Weisæth, L., Kirkehei, I., Johansen, K. et al. (2008). Early trauma-focused cognitive-behavioural therapy to prevent chronic post-traumatic stress disorder and related symptoms: A systematic review and meta-analysis. *BMC Psychiatry*, Retrieved 26th September, 2013 from <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2559832/pdf/1471-244X-8-81.pdf>
- Koszycki, D., Bisslerbe, J. C., Blier, P., Bradwejn, J., & Markowitz, J. (2012). Interpersonal psychotherapy versus brief supportive therapy for depressed infertile women: first pilot randomized controlled trial. *Archives of Women's Mental Health*, 15(3), 193-201.
- McGorry, P. D., Nelson, B., Phillips, L. J., Yuen, H. P., Francey, S. M., Thampi, A., Berger, G. E., et al., (2013). Randomized controlled trial of interventions for young people at ultra-high risk of psychosis: twelve-month outcome. *Journal of Clinical Psychiatry*, 74(4), 349-356.
- Meador, B. & Rogers, C. (1984). Person-centered therapy. In R.J. Corsini (Ed.), *Current psychotherapies* (4th ed, pp. 142—195). Itasca, IL: F.E. Peacock.
- Meyer, T. D., & Hautzinger, M. (2012). Cognitive behaviour therapy and supportive therapy for bipolar disorders: relapse rates for treatment period and 2-year follow-up. *Psychological Medicine*, 42(7), 1429-39.
- Morera, O., Maydeu-Olivares, A., Nygren, T., White, R., Fernandez & Skewes, M. (2006). Social problem solving predicts decision making styles among US Hispanics. *Personality and Individual Differences*, 41, 307-317.
- Nixon, R. D. (2012). Cognitive processing therapy versus supportive counseling for acute stress disorder following assault: a randomized pilot trial. *Behavior Therapy*, 43(4), 825-36.
- Rector, N. & Beck, Aaron, T. (2012). Cognitive behavioral therapy for schizophrenia: An empirical review. *Journal of Nervous and Mental Disease*, 200, 832-839.
- Rockland, L. (1993). A review of supportive psychotherapy, 1986-1992. *Hospital and Community Psychiatry*, 44(11), 1053-1060.

- Rogers, C. (1957). The necessary and sufficient conditions of therapeutic personality change. *Journal of Consulting Psychology, 21*(2), 95-103.
- Ruchiwit, M. (2012). The effect of the one-to-one interaction process with group supportive psychotherapy on the levels of hope, anxiety and self-care practice for patients that have experienced organ loss: an alternative nursing care model. *International Journal of Nursing Practice, 18*(4), 363-72.
- Schofield, M.J. (2008). Australian counsellors and psychotherapists: A profile of the profession. *Counselling and Psychotherapy Research, 8*(1), 4-11.
- Simson, U., Nawarotzky, U., Friese, G., Porck, W., Schottendfield-Naort, Y., Hahn, S., Scherbaum, W., Kruse, J. (2008). Psychotherapy intervention to reduce depressive symptoms in patients with diabetic foot syndrome. *Diabetic Medicine, 25*, 206-212.
- Stiles, W., Barkham, M., Mellor-Clark, J., & Connell, J. (2009). Effectiveness of cognitive-behavioural, person-centred and psychodynamic therapy in UK primary care routine practice: replication in a large sample. *Psychological Medicine, 38*, 677-688.
- Thorne, B. (2003). *Carl Rogers. Key figures in counselling and psychotherapy series*. London: Sage.
- Tursi, M., & Cochran, J. (2006). Cognitive-behavioral tasks accompanied in a person-centered relational framework. *Journal of Counseling & Development, 84*, 387-396.
- Uzenoff, S., Perkins, D., Hamer, R., Wiesen, C. Penn. (2008). A preliminary trial of Adherence-Coping-Education (ACE) therapy for early psychosis. *Journal of Nervous and Mental Disease, 196*, 572-575.
- Watson, J., Gordon, L., Stermac, L., Kalogerakos, F., Steckley, P. (2003). Comparing the effectiveness of process-experiential with cognitive-behavioural psychotherapy in the treatment of depression. *Journal of Consulting and Clinical Psychology, 71*(4), 773-781.
- Winston, A., Pinker, H., McCullough, L. (1986). A review of supportive psychotherapy. *Hospital and Community Psychiatry, 37*(11), 1105-1114.

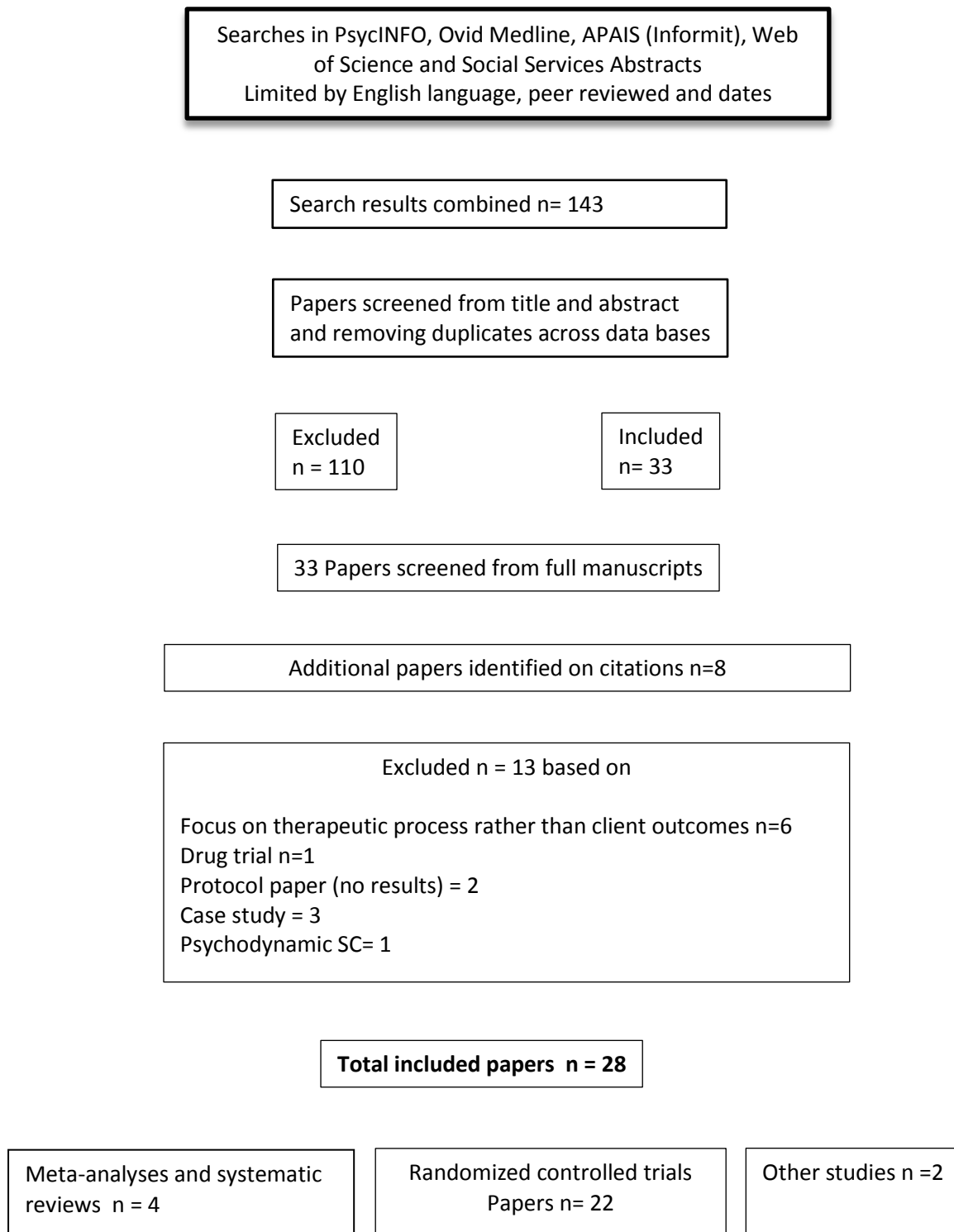
Appendix 1

Search strategy terms/phrases

| | |
|-----|---|
| 1. | supportive counsel |
| 2. | non-directive counsel |
| 3. | Rogerian counsel |
| 4. | client centered counsel |
| 5. | client centred counsel |
| 6. | person centred counsel |
| 7. | person centered counsel |
| 8. | supportive therapy |
| 9. | non-directive therapy |
| 10. | Rogerian therapy |
| 11. | client centered therapy |
| 12. | client centred therapy |
| 13. | person centred therapy |
| 14. | person centered therapy |
| 15. | study |
| 16. | studies |
| 17. | trial |
| 18. | 1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9 or 10 or 11 or 12 or 13 or 14 |
| 19. | 15 or 16 or 17 |
| 20. | 18 and 19 |

Appendix 2

Flow chart of reported studies



Appendix 3

Data Extraction Form

| |
|---|
| 1. Title, author, date of paper: |
| 2. Context of study: |
| 3. Purpose or aim of study: |
| 4. Methodology employed: a. For RCTs: what were the comparison groups? |
| 5. Participant number and demographics: |
| 6. Presenting condition or diagnosis: |
| 7. Outcomes measures: |
| 8. Time periods of data collection for follow up |
| 9. PCT, SC, ST or NDST and how defined: |
| 10. Therapy format a. Individual b. Group c. Combined individual and group |
| 11. Time period for therapy, number of sessions, length of session: |
| 12. Results: |
| 13. Conclusions drawn about the effectiveness of PCT, SC, ST or NDST: |
| 14. Comments, issues, queries regarding the paper: |

Appendix 4

Table 3: Studies Where SC, ST, PCT or NDST was the Primary Therapy Candidate

| Author & date | Intervention name | Duration | Study design | Participants | Outcome measures | Follow up | Conclusion |
|---|--|--|---|---|---|---------------------------|---|
| Blanco and Ray, (2011) | Child Centred Play Therapy (CCPT) | Bi-weekly, 30 minute for 8 weeks for both groups | RCT: CCPT compared to a wait list control group | 21 first graders, (6-7 years of age) academically at risk | YCAT | None | CCPT demonstrated statistically significant increase in YCAT |
| Blanco, Ray & Holliman, (2012) ¹ | Child Centred Play Therapy (CCPT) | 30 minutes over 26 sessions | Pre post design only with single cohort | 18 first graders, under 8 and academically at risk | YCAT | None | CCPT demonstrated statistically consistent improvement in academic achievement scores over 26 months |
| Bratton, et al., (2013) | Child Centred Play Therapy (CCPT) | Average 20 sessions for both groups, twice weekly for 30 minutes | RCT: CCPT compared to reading mentoring | 54 low income preschool children with disruptive behaviours | C-TRF | One week after completion | CCPT resulted in significant decreases in aggression and attention problems. |
| Eyssen et al., (2013) | Client-centred occupational therapy (CCOT) | No time frame reported | RCT: CCOT compared to treatment as usual | 269 patients with multiple sclerosis | DIP;9HPT MFIS; PES; PDQ; SF36; COPM; ECGP; The quality of care through the patient's eyes | None | No significant changes between two groups. Conclusion: "We should seriously reconsider the application of client-centred practice" (Eyssen, et al., 2013, p. 1636). |
| Fam, Chen & Wang, (2011) | Supportive counselling (SC); to address stressors relating to the adjustment to motherhood | Not provided | RCT: SC alone compared to antidepressant medication and SC. | 87 postpartum Asian women | EPDS; GAF | 6 months | No additional benefit combining antidepressants with SC for mild to moderate levels of depression |

¹ The two Blanco et al., (2011, 2012) papers involved the same sample group. They are presented here as two separate studies but counted as one study

| Author & date | Intervention name | Duration | Study design | Participants | Outcome measures | Follow up | Conclusion |
|---|--|---|--|--|---|-------------|---|
| Gibbard, & Hanley (2008) ² | Person Centred Counselling | 6-12 sessions | Pre post design only | 469 clients with anxiety, depression | CORE | None | PCT is an effective intervention for common primary care mental health problems |
| Glavin, Smith, Sørnum & Ellefsen, (2010) Norway | Supportive counselling based on non-directive counselling theory | 1-7 sessions | RCT: SC compared to standard care | 228 postpartum women | EDPS | 3, 6 months | SC resulted in decreased depression score at 3 and 6 months |
| Jannati, Khaki , Sangtarashani, Peyrovi , Amiri & Nojadedh (2012) | Supportive Counselling (SC): problem identification and resolution, planning for the future, monitoring academic progress, applying study skills, concentration. | Held both individually and in large groups over 3 and a half months | RCT: SC compared to no intervention | 60 nursing and midwifery students with poor academic performance | Grade average of the groups before and after the intervention | None | SC effective for students with poor academic performance. |
| Ruchiwit, (2012) | One-to-one interaction process (OIP) in conjunction with group supportive psychotherapy (GSP). Therapy focused on relationships between clinician and other group members, expressing feelings and understanding problems. | Over six weeks in groups. | RCT: OIP and GSP compared to normal nursing practice e.g. health education | 80 participants who had experienced organ loss | Self-constructed questionnaires on hope, anxiety and self-care practice | None | Compared to control group, those that received OIP with GSP had higher mean scores on levels of hope, anxiety and self-care practice. |
| Simson et al., (2008) | Supportive counselling: help clients cope with their stresses and strains. Used questions, guidance and empathy. Focus was on “increasing patient’s adaptive skills, not their self-understanding” (p. 207). | 5 sessions (range 3-11) 30 minutes each | RCT: ST compared to medical treatment as usual | 30 in-patients with diabetic foot syndrome and comorbid depression | HADS; PAID | None | One to one ST can improve the severity of anxiety and depression in patients with diabetic foot syndrome |

² The Gibbard & Hanley (2008) and the Stiles, et al., (2009) papers involved the same sample group. They are presented here as two separate studies but counted as one study.

Note: CCPT = Child Centred Play Therapy. RCT =- Randomised Controlled Trial. YCAT = Young Children’s Achievement Test. C-TRF = Caregiver–Teacher Report Form. CCOT = Client-centred occupational therapy. DIP = Disability and Impact Profile. 9HPT = Nine-hole peg test. MFIS = Modified Fatigue Impact Scale. PES = Pain Effects Scale. PDQ=Perceived Deficits Questionnaire. SF 36 = Short-Form Health Survey Questionnaire. COPM = Canadian occupational performance measure. ECGP = Evaluation of the client-centred process. EPDS = Edinburgh Postnatal Depression Scale. SC = Supportive Counselling. GAF = Global Assessment of Functioning Scale. CORE = Clinical Outcome in Routine Evaluation. OIP = one to one interaction process. GSP = Group Supportive Psychotherapy. HADS = Hospital Anxiety and Depression Scale. PAID = Problem Areas in Diabetes Scale

Appendix 5

Table 4: Studies Where SC, ST, PCT or NDST was Compared as an Equal Therapy Candidate to Other Therapies

| Author & date | Targeted interventions | Duration | Description of SC/ST/PCT/NDST | Participants | Outcome measures | Follow-up | Conclusion |
|---|--|--|---|---|--|-----------|--|
| Klein, et al., (2011) | Cognitive Behavioral Analysis System of Psychotherapy (CBASP) plus medication; Brief Supportive Psychotherapy (BSP) plus medication; Medication alone. | 16 –20 sessions during the 12 weeks of treatment | BSP: emphasizes reflective listening, empathy, evoking affect, therapeutic optimism, and acknowledgment of patients’ assets | 469 participants with chronic depression | SPSI-R HAM-D | None | CBASP plus medication associated with significantly greater improvement in social problem solving than BSP plus medication. The magnitude of the associations between changes in social problem solving and subsequent depressive symptoms did not differ across treatments. |
| McGorry et al., (2013) | Cognitive therapy plus low-dose risperidone; Cognitive therapy plus placebo; Supportive Therapy (ST) plus placebo. | Weekly for 4 weeks then then monthly from months 2 to 12 | Supportive Therapy (ST): emotional and social support, as well as basic problem solving, stress management, and psycho-education. | 115 young people at ultra-high risk of psychosis | CAARMS; SCID-IV; BPRS;SANS; HDRS;GAF; Substance Use Questionnaire; QLS. | None | No statistically significant differences between the 3 groups; all groups improved substantially in terms of negative symptoms and overall functioning. |
| Stiles, Barkham, Mellor-Clark & Connell, (2009) | Cognitive Behaviour Therapy (CBT); Person Centred Therapy (PCT); Psychodynamic Therapy (PDT) | 6-12 sessions | Person Centred Therapy (PCT) | 5613 participants with anxiety, depression and interpersonal problems | CORE | None | PCT recorded equivalent outcomes to CBT and PDT |

Note:

CBASP = Cognitive Behavioral Analysis System of Psychotherapy. BSP = Brief Supportive Psychotherapy. SPSI–R = Social Problem-Solving Inventory–Revised. HAM-D = Hamilton Depression Rating Scale. ST = Supportive Therapy. CAARMS = Comprehensive Assessment of At-Risk Mental States. SCID-IV = Structured Clinical Interview for DSM-IV-TR. BPRS = Brief Psychiatric Rating Scale. SANS = Scale for the Assessment of Negative Symptoms. HDRS = Hamilton Depression Rating Scale. GAF = Global Assessment of Functioning. QLS = Quality of Life Scale. Cognitive–Behavioural Therapy = CBT. Person-centred therapy = PCT. Psychodynamic therapy = PDT. CORE = Clinical Outcome in Routine Evaluation

Appendix 6

Table 5: Studies where SC, ST, PCT or NDST was the control group

| Author & date | Targeted intervention | Duration | Control intervention | Duration | Participants | Outcome measures | Follow-up period | Conclusion |
|---|--|------------------------------|--|------------------------------|---|---|------------------|---|
| Alexopoulos, et al., (2011) | Problem Solving Therapy (PST) | 12 weekly sessions | Person-centered psychotherapy (PCT) a nonjudgmental environment; therapist is genuine, accepting and demonstrates empathy | 12 weekly sessions | 221 adults (aged >59 years) with major depression and executive dysfunction | The World Health Organization Disability Assessment Schedule II. | 24 weeks | PST more effective than PCT in reducing disability. While disability increased at post period, advantage of PST over PCT was retained |
| Areán, Raue, Mackin, Kanellopoulos McCulloch, & Alexopoulos (2010) ³ | Problem Solving Therapy (PST) | 12 weekly sessions | Person-centered psychotherapy (PCT): a nonjudgmental environment; therapist is genuine, accepting and demonstrates empathy | 12 weekly sessions | 221 adults aged >60 with major depression and executive dysfunction | HAM-D The World Health Organization Disability Assessment Schedule | None | PST more effective than PCT in reducing depressive symptoms. |
| Armento, McNulty & Hopko, (2012) | Behaviorial activation of religious behaviours (BARB) | Single, 60 minute session | Supportive Therapy (ST): a supportive, unstructured environment; therapist summarised, reflected, listened. | Single, 60 minute session | 50 mild to moderately depressed undergraduate students | ADIS; BDI EROS; STAI-T; BAI; QOLI; RBB; SWB; WORCS | One month | BARB was superior over ST at one month, resulting in increased religious behaviours, attitude and coping skills |
| Bechdorf, et al., (2012) | Integrative Psychological Intervention (IPI) a combination of CBT, group skills, cognitive | Mean number of sessions 23.7 | Supportive Therapy (ST) included psycho-education, in a supportive, warm, genuine, empathic and | Mean number of sessions 15.8 | 128 early psychosis clients; average age 25 | PANSS; MADRS; Global Assessment Functioning | 12, 24 month | IPI was superior to ST over 24 months, in delaying onset of psychosis |

³ The Alexopoulos, et al., (2011), Areán, et al., (2010) and Kiosses, et al., (2010) papers involved the same sample group. They are presented here as three separate studies but counted as one study.

| Author & date | Targeted intervention | Duration | Control intervention | Duration | Participants | Outcome measures | Follow-up period | Conclusion |
|--|---|--|--|-------------------------------------|---|---|-----------------------|---|
| | remediation & multifamily psychoeducation | | unstructured environment. | | | | | |
| Feaster Brincks, Mitrani, Prado, Schwartz & Szapocznik, (2010) | Structural Ecosystems Therapy (SET) focus on interpersonal interactions between family members to promote health family relationships | Mean hours of therapy received 12.45 | Person Centred Therapy (PCT) a common factors, non-directive approach; focused on therapist-client relationship and unconditional positive regard. | Mean hours of therapy received 5.74 | 156 low income African American women with HIV | GSI; Hassles Scale; Adherence interview questionnaire | 3, 6, 9 and 18 months | SET more likely to move women to high levels of adherence & reduce family hassles compared to PCT. |
| Jørgensen, Freund, Bøye, Jordet, Andersen & Kjølbye, (2013) | Mentalization-based psychotherapy (MBT) | 2 years of twice weekly combined (individual and group), MBT | ST: delivered to a group. Focus on self-reflection solving problems and relational conflicts. At times, advice provided. | 2 years of biweekly group ST | 85 participants with Borderline Personality Disorder | SCL-90 -R, GSI; BDI-II; STAI - T; BAI; SAS-SR; IIP; GAF | None | Significant changes in both groups. Only GAF showed significantly higher outcome in MBT group. |
| Kiosses, Arian, Teri & Alexopoulos, (2010) | Problem Adaptation Therapy (PATH), a home delivered problem adaptation therapy | 12 week intervention | Home delivered ST; involved empathic listening, reflection, emotional processing and encouragement. | 12 week intervention | 30 depressed, cognitively impaired disabled older adults | HAM-D; SDS | None | PATH more efficacious than ST in reducing depression and disability |
| Koszycki et al., (2012) | Interpersonal psychotherapy (IPT) | 12 sessions | Brief Supportive Psychotherapy (BSP); a Rogerian client-centered approach focusing on affect, with psychoeducation about depression. | 12 sessions | Females 18–45 years old who were infertile for ≥1 year and undergoing assessment or treatment for infertility | MADRS; BDI-II; CGI-S = The anxiety/somatization subscale derived from the 17-item HAM-D ; SAS-SR; FPI | 6 months | Participants in both groups improved. IPT produced greater reduction in anxiety than BSP and lower posttreatment scores on the depression. Gains persisted at 6-months. |

| Author & date | Targeted intervention | Duration | Control intervention | Duration | Participants | Outcome measures | Follow-up period | Conclusion |
|---|--|--|---|--|---|--|------------------|---|
| Meyer & Hautzinger, (2012) | Cognitive Behaviour Therapy (CBT) | 20 (50–60 min) sessions over 9 months. | ST: Therapists provided emotional support and general advice. | 20 (50–60 min) sessions over 9 months. | 76 patients with bipolar disorder | BDI; SRMS; BRMS; BRMAS GAF; Medication adherence; LC. | 24 months | No differences in relapse rates between treatment conditions. |
| Nixon, (2012) | Cognitive Processing Therapy (CPT) | 6 individual weekly sessions of 90-min duration. | Supportive Counselling (SC): Nondirective unconditional supportive counselling and facilitate self-understanding. | 6 individual weekly sessions of 90-min duration. | 30 survivors of assault with acute stress disorder. | ASDI; SCID; CAPS. | 6 months | Both groups successful in reducing symptoms. Gains were maintained for both groups at 6-months. |
| Uzenoff, Perkins, Hamer, Wiesen & Penn, (2008). | Adherence Coping Education (ACE); motivational interviewing inductive questioning, reframing, plus treatment as usual. | 14 sessions each lasting 30-45 minutes | Supportive Therapy (ST); providing emotional support and non-illness issues and topics plus treatment as usual | 14 sessions each lasting 30-45 minutes | 24 individuals with early psychosis | Interview of medication compliance; RMIS; ITAQ; PANSS; CDRS; QLS | None | ACE associated with significant decrease in symptoms compared to ST |

Note: PST = Problem-Solving Therapy. PCT = Person Centred Therapy. ST = Supportive Therapy. HAM-D = Hamilton Depression Rating Scale. BARB = Behavioral Activation of Religious Behaviors. ADIS = Anxiety Disorders Interview Schedule. BDI = Beck Depression Inventory. EROS= Environmental Reward Observation Scale. STAI-T = State Trait Anxiety Inventory-Trait. BAI = Beck Anxiety Inventory. QOLI = Quality of life Inventory. RBB = Religious Background and Behaviour Scale. SWB = Spiritual Wellbeing Scale. WORCS = Ways of Religious Coping Scale. IPI = Integrative Psychological Intervention. CBT = Cognitive Behaviour Therapy. PANNS = Positive and Negative Syndrome Scale. MADRS = Montgomery Asberg Depression Rating Scale. SET = Structural Ecosystems Therapy. GSI = Global Severity Index . MBT = Mentalization based psychotherapy. SLC-90-R = Revised Symptom Check List 90 - R. BDI- 11 = Beck Depression Inventory-II. SAS-SR = The Social Adjustment Scale-Self Report. . IIP = Inventory of Interpersonal Problems. GAF = Global Assessment of Functioning Scale. PATH = Problem Adaptation Therapy. SDS = Sheehan Disability Scale. IPT = Interpersonal psychotherapy. BSP = Brief Supportive Psychotherapy. MADRS = Montgomery–Åsberg Depression Rating Scale. CGI-S = Clinical Global Impression-Severity scale. FPI = The Fertility Problem Inventory. SRMS = Self-Rating Mania Inventory. BRMS = Bech–Rafaelsen Melancholia Scale. BRMAS = Bech–Rafaelsen Mania Scale. LC = Locus of Control for health and illness. CPT = Cognitive Processing Therapy. ASDI = Acute Stress Disorder Interview. SCID = Structured Interview for DSM-IV–Patient Version. CAPS = The Clinician-Administered PTSD Scale for children and adolescents. ACE = Adherence Coping Education. ST = Supportive Therapy. RMIS = Rating of Medication Influences Scale. ITAQ = Insight and Treatment Attitudes Questionnaire. PANSS = Positive and Negative Syndrome Scale. CDRS = Calgary Depression Rating Scale. QLS = Quality of Life Scale