This article presents a systematic review of the process research on solution-focused brief therapy (SFBT). We searched published and unpublished studies in English across five databases, five major journals, two book chapters, and four websites to locate studies that investigate why and how SFBT works. Thirty-three studies that used various research methods were located and included for further analysis using a meta-summary approach. The findings supported the significance of the co-construction process within SFBT and the effects of specific types of SFBT techniques. The most empirical support was found for the strength-oriented techniques in comparison to the other techniques and for the co-construction of meaning. Current studies require replications with larger samples and experimental designs that study SFBT process in relationship to outcomes.

Process change studies on therapies use a pluralistic approach to research including quantitative, qualitative, and mixed-methods designs, and are rich in perspectives for helping therapists to identify, explain, and predict the effects of the processes that bring about therapeutic change, thus the “how and why” a therapy works (Elliott, 2010; Nock, 2007). Elliott (2010) identified four major approaches that are used to study therapy process (a) the Quantitative Process-Outcome Design (QPOD), (b) the Qualitative Helpful Factors Design (QHFD), (c) the Microanalytic Sequential Process Design (MSPD), and (d) the Significant Events Approach (SEA). The QPOD samples key processes from one or more therapy sessions and uses these to predict post-therapy outcome. Researchers who use experimental designs consider QPOD to be the most rigorous research method for studying mechanisms of change because this approach aims to establish a causal relationship between specific therapeutic process(es) and therapeutic change (Kazdin, 2007; Nock, 2007).

In contrast, the QHFD emerged over the past 20 years as a result of the popularization of qualitative research often using interview methods to understand the client experiences during the course of their therapy sessions. The MSPD also known as microanalysis focuses on the turn-to-turn in-session interaction between client and therapist. Sequential process studies typically focus on a small number of process variables, which means that they lend themselves to testing theories about fundamental processes of influence in therapy session. In contrast, Change Process Research (CPR) describes the entire course of therapy to understand the process of therapeutic change.
rather than creating a dichotomy between the process and the outcomes (Greenberg, 1986). The SEA combines the basic (CPR) designs and qualitative and quantitative data collection, generally within an interpretive, theory-building framework, and connects those events to postsession progress. SEA covers several different methods: (a) task analysis (e.g., Greenberg, 2007), (b) comprehensive process analysis (e.g., McVea, Gow, & Lowe, 2011), and (c) assimilation analysis (e.g., Stiles, 2005).

SOLUTION-FOCUSED BRIEF THERAPY

Solution-focused brief therapy (SFBT) change processes were originally grounded in the constructivist approaches to communication and social interactional theories (de Shazer, 1991) and over time SFBT also became associated with social constructionism and the philosophical, post-structural views of language such as Wittgenstein’s language games (Bavelas, De Jong, Jordan & Korman; 2014; de Shazer, 1994). Researchers have noted that the specific questioning techniques (e.g., miracle questions, scaling, etc.) are an important means of facilitating changes with clients (e.g., Beyebach, 2014), and that increasing positive expectancies, and positive emotion, such as hope and optimism, may be associated with positive outcomes within SFBT (e.g., Kim & Franklin, 2015; Kiser, Piercy, & Lipchik, 1993; Lipchik, 2002b).

A treatment manual on SFBT was first developed in 2008, and updated in 2013 (Bavelas et al., 2013; Trepper et al., 2012) by the Solution-focused Brief Therapy Association (SFBTA). The research committee identifies active ingredients and the core processes of conversations that are important in SFBT. These ingredients include conversations that involve a therapeutic process of co-constructing, by altering and/or creating new meanings with clients. Co-construction is a collaborative process in communication where speaker and listener collaborate to negotiate meanings, and this jointly produced information in turn acts to shift meanings and social interactions (Bavelas et al., 2013, p. 5). According to the SFBTA treatment manual, clients are specifically asked to co-construct a vision of a preferred future and draw on their past successes, strengths, and resources to make that vision a part of their everyday lives.

Previous Reviews of Process Studies on SFBT

Over the past decade, we found only one published review on the process change research and that was McKeel’s (2012) narrative review that focused on the outcomes achieved using specific SFBT therapeutic techniques. McKeel’s review showed therapeutic techniques, such as solution-talk (e.g., “How have you all managed to keep things from getting worse?”), presuppositional questions (e.g., “What changes have you noticed that have happened or started to happen since you called to make the appointment for this session?”), and the engendering of hope and positive expectations (e.g., using the miracle question by asking “… If a miracle happens and whatever that brings you here gets solved, how would your life be different? How would you think, feel and behave differently?”) in clients toward change increased positive results in client goals within SFBT studies. McKeel (2012) also indicated that techniques, such as the scaling question and miracle question, have also shown positive outcomes in therapy sessions. This review also pointed out several negative outcomes and limitations in the process studies examined in comparison to the growth and quality of the SFBT outcome studies. The Journal of Systemic Therapies recently featured two special sections (Smock-Jordan & Bavelas, 2013; Bavelas & Jordan, 2014) featuring microanalysis studies. The special sections demonstrated important aspects of the co-construction processes within the SFBT sessions. Studies showed, for example, that SFBT used more of the client’s exact words, and used more positive language, than other therapies such as CBT and Motivational Interviewing (MI) (Jordan, Froerer, & Bavelas, 2013; Korman, Bavelas, & De Jong, 2013). Additionally, we found several systematic reviews and meta-analyses of SFBT outcomes (e.g., Bond, Woods, Humphrey, Symes, & Green, 2013; Gingerich & Peterson, 2013; Kim, 2008; Kim et al., 2015; Stams, Dekovic, Buist, & de Vries, 2006) supporting an increasing evidence-base for SFBT; however, none of the systematic reviews examined mechanisms of change for SFBT (Franklin & Montgomery 2013).
AIMS OF STUDY

No systematic reviews have been completed on the SFBT process research. This article will systematically review process studies in English that have been conducted on SFBT including those that use the four major approaches to change processes research that have been identified by Elliott (2010) and all other research designs that can be identified and are relevant to understanding the change processes of SFBT. The purpose of this current review is to summarize the empirical change process literature on SFBT and to review the use of practices and processes in SFBT as reported by the literature.

We will examine studies that look at the active ingredients of therapy, for example, co-construction of meaning and relationship factors, and therapeutic techniques, such as the miracle question and other techniques. It is the intention of the authors to be inclusive of all the change process research and to increase the rigor of this review by following a systematic approach to the review resulting in a meta-summary (Sandelowski & Barroso, 2007) of the results for both quantitative and qualitative process studies on SFBT.

METHOD

Selection Criteria

Our objective was to review (a) all available, (b) process studies of SFBT that were (c) delivered in clinical settings (direct client contact). We reviewed all studies in English, published or unpublished, that purported to study the processes of SFBT. Unpublished studies, dissertations, and conference reports, including published conference proceedings and conference presentations, were reviewed just as published study (Higgins & Green, 2011).

In defining process studies, we started with a four-category conceptual framework based on Elliott’s (2010) model: (a) the Quantitative Process-Outcome Design, (b) the Qualitative Helpful Factors Design, (c) the Microanalytic Sequential Process Design, and (d) the Significant Events Approach. Across each category, we assigned 11 analytical techniques extracted from three methodology articles on change process research (Elliott, 2010; Greenberg, 1986; Woolley, Butler, & Wampler, 2000) that fit a certain category. This conceptual framework was important for this review because change process research is a broad concept that houses a plurality of research designs. Our approach allowed this article to maximize the scope of our search while keeping the focus on all analytical techniques and research designs that are associated with process studies. During review of the abstracts of articles, we found one research design that was not identified in Elliott’s review, recursive frame analysis, and we added this term to our search criteria.

Search Strategy

We used two strategies to create the initial pool of potential studies for review. First, we conducted five electronic databases searches including PsychINFO, Academic Search Complete, Medline, PUBMED, and Education Resource Information Center (ERIC). Within each database, we used *Solution-Focused* or *Solution Focused* or *SFBT* or *Solution-Focused Brief Therapy* AND four different types of Psychotherapy Change Process Research. For example, for type one studies, search within PsychINFO, we used the key words: *Solution-Focused* or *Solution Focused* or *SFBT* or *Solution-Focused Brief Therapy* AND Mechanism of Change* or *Mediator* or *Mediation*. As a result, we conducted four different sets of key word search within each database and repeated five times for the period 1980 to January 2015.

Second, we conducted a comprehensive hand search including all possible sources of studies like (a) major journal search with key words: *Solution-Focused* or *Solution Focused* or *SFBT* or *Solution-Focused Brief Therapy*. We included: Journal of Systemic Therapy; Journal of Marital and Family Therapy; American Journal of Family Therapy; Journal of Family Therapy; and “Family Process”, (b) all additional studies from McKeel’s (2012) book chapter references, and (c) manually searched major Internet resources for additional candidate studies including Solution-Focused Brief Therapy Association at http://www.sfbta.org/. European Brief
Therapy Association at http://ebta.eu/, Alasdair Macdonald’s website at http://www.solutions-doc.co.uk/index.html, which included another McKeel’s Review and Lonnen’s process study, and Bavelas’s list of studies at http://web.uvic.ca/psyc/bavelas/Publications.html. Finally, we contacted experts in the field who had published process studies on SFBT to see if they could identify any other studies. Our search resulted in an initial pool of 272 candidate studies.

Figure 1 shows the search process. We reviewed the title and abstract of the candidate studies and discarded 172 that clearly did not meet one or more of the selection criteria. Finally, two reviewers reviewed the full reports of the remaining studies and excluded those that did not meet our search criteria. When there were questions about a particular study, the first and second reviewer discussed the eligibility of the study until consensus was reached. If the first and second coders were unable to resolve their different opinions, a third reviewer was consulted. Only two articles were brought to a third reviewer and we excluded one of the two articles based on further examination of the article in relationship to our selection criteria. Studies were excluded if they did not use SFBT and did not focus on examining therapy process but on some other focus such as the effectiveness of SFBT. During the review process, we were unable to obtain a copy of one

Figure 1. Flow diagram showing the number of studies at each step in the selection process.
dissertation (Skidmore, 1993) and had to exclude the study for final analysis. As a result, 32 articles were left for coding and analysis. During the analysis, one article (Richmond, Jordan, Bischof, & Sauer, 2014) reported results of two separate studies within one article. After a detailed review of this article, it was unanimously agreed that the two separate studies reported in this one article were not interrelated in any way. Therefore, we decided to report this article as two separate studies in the result section, leaving 33 studies as our final sample.

Data Abstraction and Coding

We extracted data from each of the selected studies using a coding sheet (available as a supplemental file accessible with the article on the JMFT website). After the first five articles were coded using the initial coding sheet, authors met again and revised the coding sheet based on the results of the first five articles. All included studies (including the first five articles) were then coded in a final version of the coding sheet by two coders. Both coders were experienced psychotherapists with expertise in SFBT and research methods. Besides bibliographical information, the final coding sheet recorded the type of change process research design (e.g., process-outcome or microanalytic sequential), specific design of the study (e.g., quasi-experimental design or qualitative interview), demographics of the study population (e.g., age, gender, race), problem addressed in the study (e.g., family relationship, child behavior or anxiety disorders), nature of the intervention (e.g., SFBT alone or SFBT versus CBT) including level of intervention (e.g., individual or family), number(s) of session (e.g., single versus multiple sessions), duration of the session studied (e.g., full session versus excerpt of a session), and providers’ experiences (e.g., graduate level intern or experienced therapists).

The coding sheet also recorded information including SFBT skills (techniques or practices identified), measures (if any), statistical outcome (if any), and qualitative (narrative) themes of the studies (if any). In recording SFBT skills, we included both technique-oriented skills (e.g., miracle question, exception questions) and linguistic (e.g., solution-talk, focus on co-construction) and therapist relationship, and style-oriented skills (e.g. therapeutic alliance). Including this type of information allowed us to capture the complex nature of most SFBT process studies.

Data Analysis

This study used meta-summary, one of the mixed-method research synthesis approaches (Sandelowski & Barroso, 2007), to analyze data. Meta-summary has been suggested to be an appropriate method for reviewing active ingredients of interventions (Heyvaert, Hannes, Maes, & Onghena, 2013) and provides analytic methods for summarizing primary studies that include quantitative, qualitative, and mixed-methods designs (Sandelowski, Voils, Leeman, & Crandell, 2012). Meta-summary follows the logic of meta-analysis and uses a comparability approach where “the differences [between quantitative and qualitative results] are reconciled by converting the one into the other” in order to provide an aggregate summary of primary studies (Sandelowski, Voils, & Barroso, 2007, p. 239). For this study, both quantitative and qualitative results were retrieved from primary studies and were aggregated using a data transformation approach. Using this approach, we converted quantitative results into qualitative themes so that the results would be comparable. Figure 2 summarizes the steps of the analysis.

In order to conduct a meta-summary, quantitative results and qualitative results were first separately retrieved from primary studies. Specifically, [STEP 1], we assigned results from primary studies’ into either quantitative results based on the statistical data or qualitative results based on the reported narrative results and themes. For mixed-method studies, quantitative and qualitative results from the studies were separated and the results were assigned into quantitative or qualitative categories. For quantitative results [STEP 2], we used a vote counting (Voils, Sandelowski, Barroso, & Hasselblad, 2008) method and if $p < 0.05$, then a result was assigned as a positive quantitative result. If $p \geq 0.05$, then a result was assigned as a non-positive quantitative result. To reiterate, the term “positive” was used when there was statistical support for the concept in primary studies, and the term “non-positive” was used when there was no statistical support for the concept. For qualitative results, if a qualitative theme supported the research question, or if a qualitative theme emerged that was reported as a positive finding in the study, then the theme was assigned as a positive qualitative result. If a qualitative theme did not support the research
question, or if a hypothesized theme failed to emerged, then the theme was assigned as a non-positive qualitative theme. [STEP 3] If the reported positive [quantitative] results specified SFBT techniques in relation to therapeutic change, then the result was assigned as a relational positive result (e.g., “clients in the solution-talk group reported a significantly higher ($p < 0.001$) proportion of treatment continuation” is a quantitative relational positive result). However, if the positive [quantitative] results described the process of SFBT in comparison to other therapies, then the result was assigned as a process positive result (e.g., “positive utterance among SFBT therapists was significantly higher than CBT therapists, $p < 0.001$” is a positive quantitative result that indicated process differences between solution-talk and CBT). For clarity purpose, it should be emphasized that the terminology of “relational result” in the context of this study is not about relationship of the client-therapist dyad. It specifically refers to those results that related the techniques or practices of SFBT to therapeutic outcomes.

** For a relational, positive [quantitative] result, it was transformed into “SFBT techniques significantly improve therapeutic outcomes”. For a process, positive [quantitative] result, it was transformed into “SFBT therapists used significantly more process (e.g., client’s own words) than other therapies (e.g., CBT)”. For non-positive quantitative results, they were transformed into either “SFBT techniques did not significantly improve therapeutic outcomes” or “SFBT therapists did not use more of clients’ words than CBT therapists”.

Figure 2. Steps of conducting a meta-summary analysis.
of SFBT to therapeutic outcomes. The same procedure was applied for positive qualitative themes (e.g., “clients reported one of the factors that was helpful to their treatment was the therapist encouraged problem elaboration.” This is a qualitative theme that indicates a positive relationship between problem elaboration and therapy outcomes; and “clients reported their perception of solution-oriented questions are the ones that focus on exception, strengths and resources” is a positive theme that describes the process of asking solution-oriented questions). We did not separate non-positive results/themes into relational or process category because only 14 (out of 116) results/themes from primary studies were non-positive. By the end of [STEP 3], we had six groups of outcomes including (a) relational positive [quantitative] results, (b) process positive [quantitative] results, (c) non-positive quantitative results, (d) relational positive theme, (e) process positive themes, and (f) non-positive qualitative theme. [STEP 4] Then, we transformed quantitative results into qualitative themes based on the statistical data and descriptions of the findings within the primary studies. For any relational, positive [quantitative] results, for example, “clients in the exception question group reported significantly higher degree of change \( (p < 0.001) \)” was transformed into a relational, positive theme: exception question significantly improves clients’ perceived change. For any process, positive [quantitative] results, such as “SFBT group reported significantly higher proportion of preserving clients’ own words \( (p < 0.001) \)” was transformed into a process qualitative theme: SFBT group/therapist preserved a significantly higher proportion of client’s own words. For any non-positive quantitative results, for example, a result was transformed into either “exception questions did not improve clients’ perceived change significantly” or “SFBT group/therapist did not preserve a higher proportion of clients’ own words”. At the end of [STEP 4], with all the quantitative results transformed into qualitative themes, we had two groups of relational positive themes, two groups of process positive themes, and two groups of non-positive themes based on the quantitative and qualitative results that were retrieved from the primary studies. In [STEP 5], we combined the themes from the categories into (a) all relational positive themes, (b) all process positive themes, and (c) all non-positive themes regardless if a theme came from quantitative results or qualitative themes. Thus far, this procedure offered us a pool of aggregated data that were composed of qualitative themes only.

Finally, in order to better understand the results of the aggregated data and to evaluate what SFBT techniques and processes had the most empirical support (with positive quantitative and/or qualitative results from primary studies) based on research findings, we grouped all the positive relational themes, positive process themes, and non-positive themes into additional categories that represented the types of therapeutic techniques and processes that were studied. This additional coding of the findings from primary studies resulted in the aggregated data being categorized and reconfigured into the follow groups of therapeutic techniques and processes. (a) Linguistic and collaborative language (e.g., therapist’s choice of positive language improves clients’ perceived change), (b) Therapeutic relationship and therapists’ style (e.g., therapists who are flexible and do not force clients to explore problems), (c) Strengths and resources techniques (presession change, formulation first session task, scaling question, and exception question), (d) Future oriented techniques (miracle question, goals, end of session homework), and (e) Multiple SFBT techniques and interviews. Procedures for coding and making the transformations of the data included a first coder that transformed all quantitative results into qualitative themes in a way that was previously described in Figure 2, and the transformation were further examined as a confirmation check by the second and third coder who were also familiar with all the original studies (Onwuegbuzie & Teddlie, 2003). In addition, one coder coded the aggregated data into types of therapeutic techniques and processes resulting in the reconfiguration of the data into types of therapeutic techniques and processes. A second coder further recoded the themes as a confirmation check and made sure that the most accurate fit had been achieved in the way the data were configured.

Once aggregated and configured by therapeutic techniques and processes, the data were further analyzed using descriptive statistics reporting the frequency of the positive and non-positive themes across studies. This type of analysis is referred to in the mixed-method, research synthesis literature as a frequency effect size (Sandelowski & Barroso, 2007). In this article, however, we will use the term percentages because the numbers of themes across studies represent the cumulative positive or non-positive support that we have for different SFBT therapeutic techniques and processes as they were reported in the literature.
RESULTS

We identified two studies (6%) published before 1991, eleven studies (34%) published between 1991 and 2000, and twenty studies (60%) published after 2001. Twenty-seven studies (81%) are journal articles and the six are dissertations (19%). Regarding research designs used in the studies, 42.4% of the studies \((n = 14)\) used MSPD and 39.4% of the studies \((n = 13)\) used process-outcome or mechanism of change method of analysis. Four articles (12.1%) used qualitative method of analysis and only two articles (6.1%) used comprehensive or task analysis. Twenty-five studies (75.8%) examined SFBT as an individual intervention, six studies (18.1%) examined SFBT for couples and families, and two studies (6.1%) used SFBT as an intervention for both individuals and family/couple.

Quality of Studies

We assessed the studies on quality indicators that have been recommended in systematic reviews including study designs, measures, sample and population, and intervention fidelity. The study designs were diverse and only 12 studies (36.36%) used an experimental design that examined process along with outcomes. Eighteen studies examined processes only and did not link processes to outcomes. One study (Lloyd & Dallos, 2008) used semistructured qualitative interview to examine the relationship between SFBT components and self-efficacy and self-locus of control, and two studies (Monro, 1998; Simon & Nelson, 2004) used qualitative interview on clients’ perceived helpful factors of SFBT. Only nine studies compared SFBT against another intervention, and eighteen studies did not compare the process of SFBT with another intervention. Six additional studies added SFBT component(s) to an existing treatment or intervention. There were no studies that would meet the gold standard for mechanism of change research as described by Kazdin and Nock (2003), including (a) strong association, (b) specificity, (c) gradient, (d) experiment, (e) temporal relation, (f) consistency, and (g) plausibility and coherence. This is a criticism of the quality of the studies in relationship to the overall confidence of the findings but it is additionally noted that few psychotherapy process studies may meet this gold standard.

There were also strengths and limitations within measures used. Out of the sixteen studies that included some types of measures, only seven studies used standardized rating scales, and five studies used either a therapeutic coding systems or client self-reported survey. The rest of the studies used direct behavioral observations or observational measures, such as the Topic Initiation/Topic Following coding scheme (Beyebach & Carranza, 1997a,b). Studies also used clinical data including progress note (e.g., Franklin, 1996), transcribed videotapes (e.g., Gale & Newfield, 1992), and audiotapes (e.g., Shields, Sprenkle, & Constantine, 1991).

Approximately half of the studies had small, clinical, convenience samples \((n = 16)\) limiting the overall generalizability of the findings. Of these studies, small sample sizes that used part or full sessions of therapy were available and these studies lacked replications with larger samples. Most of the studies \((n = 25)\) reported 20 or less participants in the treatment condition. Only four studies had more than 45 participants for the SFBT group, leaving the other four studies with a treatment group sample size ranging from 21 to 40. Although smaller sample sizes are not uncommon in process research, there were other characteristics of the samples that may limit the conclusions that can be drawn from a synthesis of these studies. There was a lack of diverse populations and several studies did not report about the client characteristics within the studies. Only 14 studies (42%) reported clients’ racial background and they were predominantly Caucasian.

The experience of the therapists delivering the SFBT interventions also varied with 13 studies using experienced therapists and 4 studies using intermediate therapists with at least 2 years of experience. Five studies used both experienced and intermediate therapists and two studies used both experienced therapists and master level interns, while an additional two studies used only the interns. It should be noted that information regarding the therapists’ training, competencies and experiences in using SFBT were generally not available in the primary studies. Limited information could be drawn from the 13 studies that used experienced therapists. For a study’s therapist(s) to be coded as experienced, he/she must meet the following criteria (a) well-known experts of SFBT like Insoo Kim Berg, or (b) a doctoral level therapist with a marriage and family therapy background,
or (c) a licensed clinician with several years of practice experience including SFBT. With this said, however, except those who are well-known experts of SFBT, most studies were not clear about how much actual training that an experienced therapist had in relationship to the practice of SFBT.

Study Findings

Descriptive statistics in Table 1 presented the frequency of the positive and non-positive themes reported across studies. The qualitative themes are first grouped based on the nature of the themes (positive relational themes, positive process themes, and non-positive themes). Then, within each group, themes were further assigned into a configuration of the types of SFBT therapeutic techniques and processes that were examined in primary studies described previously. Overall, 87.9% ($n = 102$) of the themes were positive themes from primary studies, meaning 87.9% of the results from primary studies retrieved either received statistical support or qualitative support for the techniques and practices of SFBT. Out of the 102 themes, 68 themes (66.67%) were

<table>
<thead>
<tr>
<th>Typesa</th>
<th>No. of themes/studiesb</th>
<th>Quant./Qualic</th>
<th>% out of all themesd</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive relational themes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LCL</td>
<td>25/9</td>
<td>11/14</td>
<td>21.55%</td>
</tr>
<tr>
<td>TRTS</td>
<td>6/3</td>
<td>3/3</td>
<td>5.17%</td>
</tr>
<tr>
<td>SRT</td>
<td>14/6</td>
<td>8/6</td>
<td>12.07%</td>
</tr>
<tr>
<td>FOT</td>
<td>10/3</td>
<td>7/3</td>
<td>8.62%</td>
</tr>
<tr>
<td>MTI</td>
<td>13/6</td>
<td>5/8</td>
<td>11.21%</td>
</tr>
<tr>
<td>Total</td>
<td>68 themes</td>
<td>34/34</td>
<td>58.62%</td>
</tr>
<tr>
<td>Positive process themes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LCL</td>
<td>15/8</td>
<td>6/9</td>
<td>12.93%</td>
</tr>
<tr>
<td>TRTS</td>
<td>5/2</td>
<td>3/2</td>
<td>4.31%</td>
</tr>
<tr>
<td>SRT</td>
<td>8/2</td>
<td>0/8</td>
<td>6.90%</td>
</tr>
<tr>
<td>FOT</td>
<td>3/2</td>
<td>0/3</td>
<td>2.59%</td>
</tr>
<tr>
<td>MTI</td>
<td>3/2</td>
<td>0/3</td>
<td>2.59%</td>
</tr>
<tr>
<td>Total</td>
<td>34 themes</td>
<td>9/25</td>
<td>29.31%</td>
</tr>
<tr>
<td>Non-positive themes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LCL</td>
<td>4/2</td>
<td>2/2</td>
<td>3.45%</td>
</tr>
<tr>
<td>TRTS</td>
<td>2/1</td>
<td>2/0</td>
<td>1.72%</td>
</tr>
<tr>
<td>SRT</td>
<td>5/2</td>
<td>5/0</td>
<td>4.31%</td>
</tr>
<tr>
<td>FOT</td>
<td>0</td>
<td>0</td>
<td>0.00%</td>
</tr>
<tr>
<td>MTI</td>
<td>3/3</td>
<td>2/1</td>
<td>2.59%</td>
</tr>
<tr>
<td>Total</td>
<td>14 themes</td>
<td>11/3</td>
<td>12.07%</td>
</tr>
<tr>
<td>Total</td>
<td>116 themes</td>
<td>54/62</td>
<td>100%</td>
</tr>
</tbody>
</table>

Notes. aTypes of techniques and practices of SFBT that were examined in primary studies. LCL = Linguistic and collaborative language, included co-construction and solution-talk; TRTS = therapeutic relationship and therapist style, included positive, client-focused stance, supportive and flexible approach; SRT = strengths and resources techniques, included pre-session change, formulation first session task, scaling question, exception question; FOT = future-oriented techniques, included miracle question, goal setting, and end of session homework; MTI = multiple SFBT techniques and interviews. bNumber of themes reported and by how many studies. cHow many themes were derived from quantitative data and how many were from qualitative data in primary studies. dThe percentage of number of themes out of all themes from primary studies.
positive relational themes and 34 (33.33%) themes were positive process themes. More specifically, 16 articles (including 51 themes) reported positive findings on SFBT techniques when combining all the results across studies (strengths and resources techniques [SRT], future-oriented techniques [FOT], and multiple SFBT techniques and interviews [MTI]) altogether (45%). When looking at the SFBT techniques separately, eight studies (including 22 themes) examined strengths and resources-oriented SFBT techniques (24%), and five studies (including 13 themes) examined future-oriented SFBT techniques and reported positive findings (15%). Six articles (including 16 themes) examined multiple SFBT techniques and interviews combined and reported positive findings (18%). The data also suggest that 13 studies (including 40 themes) examined linguistic and collaborative language and reported positive findings (39%). Additionally, six articles (including 11 themes) examined therapeutic relationship and therapists’ style and reported positive findings (15%).

Concerning non-positive findings, two studies (including four themes) reported non-positive findings of linguistic and collaborative language in relation to positive therapeutic change. One study (including two themes) reported non-positive findings of therapeutic relationship and therapist style in relationship to positive therapeutic change. One study (including five themes) reported non-positive findings of SRT in relation to positive therapeutic change. Three studies (including three themes) reported non-positive findings of multiple SFBT techniques and interviews in relation to positive therapeutic change. All non-positive themes were relational themes/results, and all findings reported for FOT were positive.

A supplemental file accessible with the article online lists all 116 themes based on (row) the nature of themes and (column) a configuration of the SFBT techniques and practices reviewed in primary studies. Eight studies (including 16 themes) examined behavioral oriented outcomes, such as treatment continuation (Beyebach & Carranza, 1997a,b), goal attainment (Lambert, Okishi, Finch, & Johnson, 1998), expressive communication (Shields, et al., 1991), and acceptance (of the problems) (Lloyd & Dallos, 2008). Seven studies (including 15 themes) examined emotional-oriented outcomes, such as optimism (Adams, Piercy, & Jurich, 1991; Johnson, Nelson, & Allgood, 1998), positive affect (Grant, 2012), hope (Bozeman, 1999), and distress (Richmond et al., 2014). Two studies (including four themes) examined perceptual-oriented outcomes including goal clarity (Adams et al., 1991), perceived problem improvement and outcome expectancy (Jordan & Quinn, 1994). This supplemental file also underlined and italicized those themes that used standardized rating scales, behavioral observations and different coding schemes.

**DISCUSSION**

The findings from this study have important implications for clinical practice/supervision, education, and future research. The results of this current review suggests that both SFBT techniques and linguistic/style-oriented methods show positive support and that both may be co-functioning in the change processes of SFBT. Even though, SFBT techniques and linguistic processes are presumed to interact together to create change, the studies on techniques are different than the studies that focus on linguistic processes resulting in the two being discussed separately within this review. Only a few studies, for example, discussed the use of techniques in relationship to linguistic change (e.g., Strong & Pyle, 2009; Strong, Pyle, & Sutherland, 2009). Future researchers may want to pay more attention to how both linguistic processes and techniques co-function together in the change process because a more thorough sequential or systemic analysis would be useful for education and supervision.

Overall findings from this study add to the scientific foundation for SFBT practice and provide support for the active ingredients that have been identified in the SFBTA treatment manual and in other training and clinical literature on SFBT (Berg & De Jong, 1996; Trepper et al., 2012; Bavelas et al., 2013; Taylor & Simon, 2014). This review indicated that the strongest overall findings based on the most positive themes for effectiveness (0.45%) were for all the SFBT techniques combined (strength and resources, future-oriented, and multiple techniques. In comparison to other techniques, the strengths and resources techniques received most positive findings from primary studies (i.e., eight studies support the use of these techniques). These findings support the continued need for clinicians to be thoughtful and purposefully integrate the specific strength/
resource techniques into their work with clients. In addition, supervisors should work to provide feedback to emerging clinicians regarding the appropriate use and timing of all SFBT techniques and in particular, ways to support the strengths and resources of the client. Additionally, educators may want to provide instruction on the strengths and resources techniques as a part of their training in the co-construction process because this review also indicates that education and supervision on SFBT should focus attention on teaching the language skills needed to meaningfully co-construct conversations with clients. Evidence from this review indicated, for example, the significance of the co-construction process within counseling. Of the 33 studies reviewed, 13 studies supported the linguistic techniques and the collaborative language approaches as being important to the process of change for SFBT. This represents the second strongest overall findings based on the most positive themes for effectiveness (0.39%). Only two studies did not show a positive result for the linguistic techniques that were studied.

Findings from this review specifically showed that SFBT applies the purposeful use of language in the form of the co-construction of meaning in a unique way that is different from some other therapies (e.g., client-centered, MI, CBT) and co-construction of meaning is a specific method that is used for building solutions with clients (e.g. Berg & De Jong, 1996; De Jong & Berg, 2013; Tomori & Bavelas, 2007; Korman et al., 2013; Jordan et al., 2013; Froerer & Jordan, 2013). Not only did a large portion of the studies show the use and effectiveness of the co-construction processes within SFBT, but also six of the studies in this review examined co-construction of meaning also made use of microanalysis of communication as a research method. The cumulative microanalysis studies add to our understanding of the change theory and core processes of SFBT. According to Elliott (2010), microanalysis is a potentially useful and rigorous research design for studying theory and sequential analysis within therapy sessions and has not regularly been used in psychotherapy process research; however, this review indicates that it has been frequently used in SFBT process research. We identified no microanalysis studies, however, that showed that the co-constructive processes in SFBT are directly linked to how problems are solved, in other words, how the process is linked to outcome. Additional research is needed to study the co-construction process in relationship to client outcomes.

The fact that studies in this review show the significance of the co-construction of meaning to the SFBT process but do not study these processes in relationship to client outcomes has implications for clinical practice. In the absence of empirical evidence, practitioners using SFBT are encouraged to routinely evaluate how they are using the SFBT language to co-construct meaningful conversations with clients and to also examine the progress of their clients in therapy. SFBT educators and supervisors should also clearly understand the way SFBT uses the co-construction process, how to facilitate this process, and how to evaluate if therapists are learning this process in order to increase the clinical competence with SFBT. The results of this study also suggest that a measure of competence in the linguistic and co-construction process may be necessary for determining fidelity in SFBT research studies because the co-construction process is an active ingredient of SFBT. Outcome studies have not assessed fidelity in this manner but instead identify the use of SFBT techniques as an indicator of fidelity (e.g. Gingerich & Eisengart, 2000; Kim, 2008).

The therapeutic relationship and therapists’ style were other change processes that were examined in this study but there were only five primary studies that found positive results for these processes within SFBT sessions and these showed only a small percentage of the themes that are associated with change processes within SFBT (15%). One additional study also found that therapeutic alliance was not associated with a positive outcome (Wettersten, Lichtenberg, & Mallinckrodt, 2005). The lack of research on therapeutic relationship may be partly due to early statements by Steve de Shazer about not needing to focus on the therapeutic relationship; however, these views were modified in later literature (De Jong & Berg, 2008; Lipchik, 2002b). The findings contrast with the therapeutic literature that shows the significance of the therapeutic relationship as a common factor for therapeutic change and to the clinical literature on SFBT which discusses the importance of the collaborative, empowering, cooperative, and flexible relationship style of the therapist, as being important to success with clients (Lipchik, 2002a; Lipchik, 2011; Beyebach, Morejon, Palenzuela, & Rodriguez-Arias, 1996). This lack of research on therapeutic alliance may also be due to a misunderstanding about what may
contribute to a positive alliance. Froerer and Connie (2016) recently advocated for an alternative view of the therapeutic relationship—this view being consistent with the postmodern, constructivist approach in which a collaborative, client-lead, language is synonymous to a therapeutic relationship and can lead to the client feeling understood and cared for. More attention in SFBT process research needs to be completed that studies the impact of a meaningful and cooperative therapeutic relationship, and how the language process may contribute to this meaningful relationship.

Limitations

First, there is always a possibility that we did not find all the process studies within the proposed timeframe, although, we followed a rigorous search criteria and process making use of methods that have been recommended for systematic reviews. This study is also limited to studies in English and no doubt a broader search in different languages may enhance or even possibly change the findings of this study. The mixed-method research approach, meta-summary that was used to aggregate primary studies while adding strengths to this study by allowing a summarization of findings from diverse study designs also has limitations in that some of the information from different studies may be lost in the recoding and analysis. The configuration of study variables is also based on an analytical qualitative technique, and it may not represent all the quantitative findings within each study or the thick descriptions of the summaries within the qualitative studies. Even with these limitations, we believe that this study provides a contribution to literature by providing a systematic review and analysis of the current process studies on SFBT in English.

CONCLUSION

This review show that SFBT techniques have considerable support across the process studies and that the techniques directed toward the strengths and resources of the clients show the most positive results. The linguistic and collaborative language approaches also have relatively strong support in the SFBT and this finding adds to the empirical support for the co-constructing of meaning. The current findings have limitations in their evidence due to the quality and numbers of the current studies. The next steps for SFBT process research will be to replicate current findings and improve upon research designs regardless of what methods are used. One way to improve the studies is to design prospective studies that can show that the co-constructive processes in SFBT are directly linked to client outcomes. It may be useful to study outcomes that have been found to be significant in effectiveness studies because a normal progression for evidence based practice is to first show a therapy works and then proceed to study how and why it works. Two areas that have shown promise for example, are with internalizing disorders such as depression, (Gingerich & Peterson, 2013) and with problems that occur in children and families (Bond et al., 2013). Samples would need to be large enough to meet the recommended standards for the research designs being used. In particular, the development of larger randomized controlled trials that study both process and outcomes are indicated.

REFERENCES

Note: References marked with an asterisk indicate studies included in this systematic review and meta-summary.


