Journal of Public Child Welfare

Publication details, including instructions for authors and subscription information:
http://www.tandfonline.com/loi/wpcw20

Components of the Solution-Based Casework Child Welfare Practice Model That Predict Positive Child Outcomes

Michiel A. van Zyl\textsuperscript{a}, Anita P. Barbee\textsuperscript{a}, Michael R. Cunningham\textsuperscript{a}, Becky F. Antle\textsuperscript{a}, Dana N. Christensen\textsuperscript{a} & Daniel Boamah\textsuperscript{a}
\textsuperscript{a} University of Louisville, Louisville, KY, USA
Accepted author version posted online: 24 Jul 2014. Published online: 10 Sep 2014.


To link to this article: http://dx.doi.org/10.1080/15548732.2014.939252

PLEASE SCROLL DOWN FOR ARTICLE

Taylor & Francis makes every effort to ensure the accuracy of all the information (the “Content”) contained in the publications on our platform. However, Taylor & Francis, our agents, and our licensors make no representations or warranties whatsoever as to the accuracy, completeness, or suitability for any purpose of the Content. Any opinions and views expressed in this publication are the opinions and views of the authors, and are not the views of or endorsed by Taylor & Francis. The accuracy of the Content should not be relied upon and should be independently verified with primary sources of information. Taylor and Francis shall not be liable for any losses, actions, claims, proceedings, demands, costs, expenses, damages, and other liabilities whatsoever or howsoever caused arising directly or indirectly in connection with, in relation to or arising out of the use of the Content.

This article may be used for research, teaching, and private study purposes. Any substantial or systematic reproduction, redistribution, reselling, loan, sub-licensing, systematic supply, or distribution in any form to anyone is expressly forbidden. Terms & Conditions of access and use can be found at http://www.tandfonline.com/page/terms-and-conditions
Components of the Solution-Based Casework Child Welfare Practice Model That Predict Positive Child Outcomes

MICHEIL A. VAN ZYL, ANITA P. BARBEE, MICHAEL R. CUNNINGHAM, BECKY F. ANTLE, DANA N. CHRISTENSEN, and DANIEL BOAMAH
University of Louisville, Louisville, KY, USA

While a number of studies have shown the efficacy of the solution-based casework (SBC) practice model for child welfare (e.g., Antle, Christensen, van Zyl, & Barbee, 2012), the current analysis examines the top ranked behaviors in cases reaching outcomes of safety, permanency, and well-being in both high adherence and low adherence cases. Sixteen top behaviors seem to have the greatest impact on outcomes, all of which are key to the three major theoretical orientations utilized in SBC. Thus, these results not only narrow in on the key behaviors that drive success in the practice model, but also shows the utility of the theoretical underpinnings of the practice model.

KEYWORDS child welfare, evidence-based practices, policy issues

Over the past decade both public and private child welfare agencies have begun to see the importance of having a casework practice model to guide how front line workers and their supervisors think about and interact with families (e.g., Administration for Children and Families, 2008; Barbee, Christensen, Antle, Wandersman, & Cahn, 2011; Bridge, Massie, & Mills, 2008; Child Welfare Policy and Practice Group, 2008; Christensen, Todahl, & Barrett, 1999; Lawler, Shaver, & Goodman, 2011; Leveille & Chamberland, 2010). Unfortunately, there is some confusion as to the critical components that should make up a practice model.

Received: 12/03/13; revised: 04/24/14; accepted: 05/31/14
Address correspondence to Michiel A. van Zyl, University of Louisville, Kent School of Social Work, Louisville, KY 40292, USA. E-mail: mavanz01@louisville.edu
In 2011, Barbee et al. noted that,

a practice model for casework management in child welfare should be theoretically and values based, as well as capable of being fully integrated into and supported by a child welfare system. The model should clearly articulate and operationalize specific casework skills and practices that child welfare workers must perform through all stages and aspects of child welfare casework in order to optimize the safety, permanency and well-being of children who enter, move through and exit the child welfare system. (p. 623, emphasis added)

An examination of currently adopted child welfare practice models shows that while all are based on values and principles, very few explicitly use theory to guide how to think about and engage with families, how to understand the problem of child maltreatment, how to understand what processes maintain the maltreatment, or how to interrupt those patterns, and prevent and reduce the incidence and impact of child maltreatment (Barbee et al., 2011; Barbee & Cunningham, 2013).

A theory is an organized set of explanatory principles that are susceptible to hypothesis testing. The better theories explain the conditions when one value, such as compassion, should guide a case worker’s actions, and the action that should be taken, compared to the circumstances when another value, such as protectiveness and restraint should guide the case worker’s decisions. The best theories lead to research to test the theory or debunk the efficacy of the theory to predict behavior or outcomes (Popper, 1963). Thus, better theories have an evidence base to support the explanatory validity of the theory. The remaining theories are ideologies that cannot be tested, have not accrued any evidence, or have never been subjected to scientific testing (Kirk & Reid, 2002). Verifiable theories are critical in leading to clearly articulated practice behaviors that can form a schema for workers, can be learned, measured, and checked for fidelity. In the absence of verifiable theories, many current practice models in child welfare are simply a compilation of values and tools that can help a worker navigate through one part of the casework process (e.g., differential response at intake, safety assessment), rather than a well-reasoned and articulated system for thinking and behaving that helps guide the worker seamlessly through the life of a case as all aspects of casework are enacted (Barbee & Cunningham, 2013).

An inattention to cogent theory when building a practice model can lead to difficulties in the capacity of workers to integrate practice models into their daily work with clients. Besides this major missing piece in the development of child welfare casework practice models is the dearth of research on practice model installation or impact of practice model adoption on outcomes. Fortunately, several studies are currently under way. The Children’s Bureau funded five regional child welfare implementation centers from 2008–2013. As a part of that program, states wrote proposals for specific
Components of the Solution-Based Casework

systems change projects. At least 11 states and tribes either installed or developed projects to strengthen their practice models. All implementation projects included an evaluation component.

Over the past 13 years, nine publications have addressed the impact of a particular practice model, solution-based casework (SBC), on learning and outcomes. SBC was developed by a university professor who was working on best practices with the child welfare staff in a Southern state in the mid-1990s (Christensen, Todahl, & Barrett, 1999). The model is explicitly built on three primary theoretical foundations: family life cycle theory (Carter & McGoldrick, 1999), cognitive behavioral theory (Beck & Alford, 2009), and solution-focused therapy (Berg, 1994; White & Epston, 1990).

Family life cycle theory takes a strengths based approach to help orient the worker to the family struggle, in general, and with parenting, in particular. The theory frames the maltreatment as an unhelpful and unsuccessful reaction to the challenging tasks that normally occur during family life development. As staff begin their work in a case they use family life cycle theory to identify the everyday life context in which the maltreatment occurs, which serves to normalize the challenges that every family faces through the life cycle of raising children along the developmental continuum and during key transitions (e.g., divorce, introduction of romantic partners into the family, re-marriage, blending of families, leaving home).

SBC also utilizes a social construction application of humanism and client-centered therapy (Maslow, 1943; Rogers, 1959) encapsulated in solution-focused therapy. This approach serves to unearth the times the family was successful in navigating this and other everyday life events in the family. Focusing on these strengths of the family system and individual behaviors of parents, children and social support network members gives the family and worker hope that the family will eventually navigate this thorny challenge in organizing a developmental milestone or family transition that is at the center of the maltreatment. These theories also ensure that workers will treat all families and each individual in the family with respect and honor.

The final theory derives from the juxtaposition of behaviorist theory and cognitive science as best expressed in relapse prevention and cognitive behavioral therapy (e.g., Larimer, Palmer, & Marlatt, 1999; Rachman, 1997). These approaches note that there are both distal and proximal events, thoughts, and feelings that lead to maltreatment. Determining this sequence of events helps the worker and family understand what has happened, and what problematic patterns exist at the family and individual levels that maintain maltreating behavior.

In SBC, caseworkers are taught to help the family track their interaction around the developmental tasks (e.g., proper supervision of young children), as well as the individual cognitive behavioral pattern of the maltreating adult(s) (e.g., depressive thinking about executing a parenting task, drug use that causes the parent to be unfocused and unable to attend to a young child
who is prone to wander the neighborhood) in order to engage and partner around improved child safety. Families are assisted in developing specific action plans (at both the family and individual levels) to prevent the high-risk situation before it starts, or, if it was not prevented, to intervene early at the first warning signs. They also are assisted in developing a safety back-up plan to “escape” any dangerous situation not prevented or interrupted early.

Documenting the sequence of events and determining what needs to change for safety to be restored to the family is part of the assessment and leads directly and logically to the co-developed case plan (or family agreement) which includes both family level outcomes (FLOs) and individual level outcomes (ILOs). These are written in the family’s own language to: a) show respect for family ownership of the situation, and b) to facilitate investment in change. Table 1 shows the linkage between the theory, the explicit practices that are derived from the theory and the ways that these practices were documented in the case record in one state, during a 10-year period from 1998–2008 (Antle, Christensen, van Zyl, & Barbee, 2012).

SBC was installed in a Southern state from 1996 to 1999 through the support of top administrators, engagement of supervisors, changes in training for front line staff, changes in policy to align with the model, and all engagement, assessment, case planning and monitoring tools and forms held in the Statewide Automated Child Welfare Information System (SACWIS) to document practice (Barbee et al., 2011). Additional training, funded by the Children’s Bureau, was developed and delivered to supervisors and their teams between 2000 and 2003 to enhance the supervision and practice of SBC. A set of studies tested not only the effectiveness of the classroom training and subsequent case consultation reinforcement in the field of classroom knowledge and skills (Antle, Barbee, & van Zyl, 2008; Antle, Barbee, Christensen, & Martin, 2008), the transfer of learning to practice behaviors in the field (Antle, Barbee, Christensen, & Martin, 2008; Antle, Barbee, Sullivan, & Christensen, 2009; Martin, Barbee, Antle, Sar, & Hanna, 2002; Pipkin, Sterrett, Antle, & Christensen, 2013; van Zyl, Antle, & Barbee, 2010) and the effectiveness of SBC practice behaviors on specific child outcomes of safety, permanency and well-being (Antle, Barbee, Christensen, & Sullivan, 2010; Antle et al., 2009; Martín et al., 2002; Pipkin et al., 2013; van Zyl et al., 2010). Subsequently, the professor who helped develop SBC also helped the state create a comprehensive continuous quality improvement tool (CQI) that included 33 key SBC practice behaviors noted in Table 1. Between 2003 and 2008 this research team put the CQI tool online, trained child welfare CQI specialists in how to use the tool and how to enter data so that the research team could analyze the results and generate reports for not only CQI purposes but also to populate the ongoing Program Improvement Plan.

During this period of time, 4,559 child welfare cases were assessed. One recent study analyzing data from those cases found that when workers adhered to SBC, those SBC practices (versus any of the other practices
Components of the Solution-Based Casework measured on the CQI tool) were predictive of safety, permanency and well-being (Antle et al., 2012). Table 2 presents a summary of results of these nine papers. It should also be noted that the relative importance of an SBC practice behavior depends on the nature of the specific outcomes for which that particular task was completed. Antle et al. (2012) found that four SBC factors of intake/investigation, case planning, ongoing services

<table>
<thead>
<tr>
<th>Item #</th>
<th>Theoretical origin</th>
<th>Review criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>Behaviorism, Cognitive Behavioral Therapy (CBT), Relapse Prevention</td>
<td>Is the documentation of the Sequence of Events thorough and rated correctly? How do these differ from each other?</td>
</tr>
<tr>
<td>8</td>
<td>Family Life Cycle Theory</td>
<td>Is the documentation of the Family Development Stages, including strengths, thorough and rated correctly?</td>
</tr>
<tr>
<td>9</td>
<td>Family Life Cycle Theory</td>
<td>Is the documentation of the Family Choice of Discipline (including strengths) thorough and rated correctly?</td>
</tr>
<tr>
<td>10</td>
<td>Behaviorism, CBT, Relapse Prevention</td>
<td>Is the documentation of Individual Adult Patterns of Behavior, including strengths, thorough and rated correctly?</td>
</tr>
<tr>
<td>13</td>
<td>Family Life Cycle Theory</td>
<td>Is the documentation of Child/Youth Development (including strengths) thorough and rated correctly?</td>
</tr>
<tr>
<td>14</td>
<td>Humanism, Solution Focused Therapy</td>
<td>Is the documentation of Family Support or Systems of Support, including strengths, thorough and rated correctly?</td>
</tr>
<tr>
<td>34</td>
<td>Behaviorism, CBT, Relapse Prevention</td>
<td>Is the documentation of the Sequence of Events thorough and rated correctly?</td>
</tr>
<tr>
<td>35</td>
<td>Family Life Cycle Theory</td>
<td>Is the documentation of the Family Development Stages, including strengths, thorough and rated correctly?</td>
</tr>
<tr>
<td>36</td>
<td>Family Life Cycle Theory</td>
<td>Is the documentation of the Family Choice of Discipline (including strengths) thorough and rated correctly?</td>
</tr>
<tr>
<td>37</td>
<td>Behaviorism, CBT, Relapse Prevention</td>
<td>Is the documentation of Individual Adult Patterns of Behavior, including strengths, thorough and rated correctly?</td>
</tr>
<tr>
<td>39</td>
<td>Family Life Cycle Theory, Solution Focused Therapy</td>
<td>Is the documentation of Child/Youth Development (including strengths) thorough and rated correctly?</td>
</tr>
<tr>
<td>40</td>
<td>Humanism, Solution-Focused Therapy</td>
<td>Is the documentation of Family Support or Systems of Support, including strengths, thorough and rated correctly?</td>
</tr>
<tr>
<td>42</td>
<td>Humanism</td>
<td>Was an Aftercare Plan developed with the family, as appropriate?</td>
</tr>
<tr>
<td>51</td>
<td>Humanism</td>
<td>Was the parent involved when changes were made to any of the following: visitation plan, case plan, or placement?</td>
</tr>
</tbody>
</table>

(Continued)
<table>
<thead>
<tr>
<th>Item #</th>
<th>Theoretical origin</th>
<th>Review criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>53</strong></td>
<td>Behaviorism, CBT, Relapse Prevention</td>
<td>Does the case plan reflect the needs identified in the assessment to protect family members and prevent maltreatment?</td>
</tr>
<tr>
<td><strong>54</strong></td>
<td>Humanism</td>
<td>Was the individual/family, child/ren, and foster parents/relative/kinship engaged in the Case Planning and decision-making process?</td>
</tr>
<tr>
<td><strong>55</strong></td>
<td>Humanism</td>
<td>Were non-custodial parents involved in the case planning process, if appropriate?</td>
</tr>
<tr>
<td><strong>56</strong></td>
<td>Humanism</td>
<td>Were the community partners and/or others invited by the family engaged in the Case Planning process, or was there documentation that all efforts were made to engage the family in accepting community partners?</td>
</tr>
<tr>
<td><strong>59</strong></td>
<td>Behaviorism, CBT, Relapse Prevention</td>
<td>Are the primary Family Level Objective/s (FLOs) and Tasks appropriate and specific to the Maltreatment/Presenting Problem?</td>
</tr>
<tr>
<td><strong>60</strong></td>
<td>Behaviorism, CBT, Relapse Prevention</td>
<td>Have services been provided related to the primary FLOs and Tasks?</td>
</tr>
<tr>
<td><strong>61</strong></td>
<td>Behaviorism, CBT, Relapse Prevention</td>
<td>Does the secondary FLO and Tasks address all well-being risk factors identified in the current Continuous Quality Assessment (CQA)?</td>
</tr>
<tr>
<td><strong>62</strong></td>
<td>Behaviorism, CBT, Relapse Prevention</td>
<td>Have services been provided related to the secondary FLO and Tasks?</td>
</tr>
<tr>
<td><strong>63</strong></td>
<td>Behaviorism, CBT, Relapse Prevention</td>
<td>Are the Individual Level Objective (ILO) based on the issues identified in the CQA?</td>
</tr>
<tr>
<td><strong>64</strong></td>
<td>Behaviorism, CBT, Relapse Prevention</td>
<td>Does the ILO and tasks address the perpetrator’s or status offender’s individual pattern of high-risk behavior?</td>
</tr>
<tr>
<td><strong>65</strong></td>
<td>Behaviorism, CBT, Relapse Prevention</td>
<td>Have services been provided related to the ILO and Tasks?</td>
</tr>
</tbody>
</table>

**Case management**

<table>
<thead>
<tr>
<th>Item #</th>
<th>Theoretical origin</th>
<th>Review criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>68</strong></td>
<td>Humanism</td>
<td>Is there documentation that the FSW has engaged the family and community partners in the decision making process?</td>
</tr>
<tr>
<td><strong>69</strong></td>
<td>Behaviorism, CBT, Relapse Prevention</td>
<td>Is there ongoing documentation that comprehensive services were offered, provided or arranged to reduce the overall risks to the children and family?</td>
</tr>
<tr>
<td><strong>70</strong></td>
<td>Behaviorism, CBT, Relapse Prevention</td>
<td>Is the progress or lack of progress toward achieving EACH objective (every FLO, ILO, and Child and Youth Action [CYA] objective) documented in contacts?</td>
</tr>
<tr>
<td><strong>71</strong></td>
<td>Behaviorism, CBT, Relapse Prevention</td>
<td>Is the need for continued comprehensive services documented, at least monthly?</td>
</tr>
<tr>
<td><strong>72</strong></td>
<td>Family Life Cycle Theory</td>
<td>Has the Social Service Worker [SSW] made home visits to both parents, including the non-custodial parent?</td>
</tr>
<tr>
<td><strong>73</strong></td>
<td>Family Life Cycle Theory</td>
<td>Did the SSW make the parental visits in the parents home, as defined by SOP 7E 3.3?</td>
</tr>
<tr>
<td><strong>83</strong></td>
<td>Behaviorism, CBT, Relapse Prevention</td>
<td>Prior to case closure was an Aftercare Plan completed with the family/community partners?</td>
</tr>
<tr>
<td><strong>84</strong></td>
<td>Humanism</td>
<td>Was the decision to close the case mutually agreed upon?</td>
</tr>
</tbody>
</table>

*Note. Bold items were found in analysis to be most predictive of outcomes.*
<table>
<thead>
<tr>
<th>Citation (Author, year, journal/book)</th>
<th>Research design including number of cases reviewed, subjects surveyed</th>
<th>Key findings regarding training outcomes (level 1-participant reactions and level 2-gains in knowledge/skills) and process evaluation results</th>
<th>Key findings regarding transfer of learning to the field and/or practice behavior in the field and/or adherence to SBC in practice</th>
<th>Key findings regarding impact of SBC on parent/family behavior and child welfare outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Martin, Barbee, Antle, Sar, &amp; Hanna (2002). <em>Child Welfare</em></td>
<td>Post intervention assessment design. Case review of 124 child welfare out of home care cases (84 in urban setting and 30 in rural setting) using a case review tool to assess for adherence to SBC and concurrent planning as well as to assess court processes and outcomes.</td>
<td>n/a</td>
<td>SBC was implemented with high levels of fidelity, but particularly with the most complex cases (e.g., presence of mental illness, substance abuse, developmental delays, neglect, emotional or sexual abuse). Workers implementing SBC with high fidelity were more likely to attend sessions with their clients and collaterals.</td>
<td>Higher fidelity to SBC led to: Greater levels of client compliance with keeping appointments. Greater levels of client follow through with collaterals. Greater client task completion in the case plan. Greater client attendance at visitations with children. Overall Kentucky Adoption Opportunities Project (KAOP) cases had better outcomes of permanency (more placed in kinship homes, returned to family or adopted more quickly) than general out of home cases.</td>
</tr>
<tr>
<td>Antle, Barbee, &amp; van Zyl (2008). <em>Children and Youth Services Review</em></td>
<td>Quasi-experimental design comparing training results at pre and post training time periods between (42) supervisors and 195 members of their teams who attended team training on SBC and a waitlist control, matched comparison group of 30 supervisors and 136 members of their teams who did not initially attend the training. Research participants were from three urban and three rural service regions of the state. These analyses focused on the supervisor learning and transfer of that learning.</td>
<td>There was an increase in knowledge of supervisors from before to after the training in the experimental group.</td>
<td>Learning readiness of trained supervisors predicted transfer of learning. The higher the readiness to learn by supervisors the more they reinforced SBC practice skills with workers. Gains in knowledge from before to after training predicted transfer of learning. The more supervisors learned, the more they reinforced SBC practice skills with workers. The more management supported supervisors, the more those supervisors reinforced SBC practice skills with workers. Thus supervisory support of training predicted greater transfer of learning.</td>
<td>n/a</td>
</tr>
<tr>
<td>Citation (Author, year, journal/book)</td>
<td>Research design including number of cases reviewed, subjects surveyed</td>
<td>Key findings regarding training outcomes (level 1-participant reactions and level 2-gains in knowledge/skills) and process evaluation results</td>
<td>Key findings regarding transfer of learning to the field and/or practice behavior in the field and/or adherence to SBC in practice</td>
<td>Key findings regarding impact of SBC on parent/family behavior and child welfare outcomes</td>
</tr>
<tr>
<td>--------------------------------------</td>
<td>---------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Antle, Barbee, Christensen, &amp; Martin (2008). <em>Journal of Public Child Welfare</em></td>
<td>Study 1: Quasi-experimental design. Post-intervention comparison of two training designs 1) the use of a training-of-trainers (TOT) approach (where supervisors trained their workers in how to conduct SBC assessments and case plans) vs. 2) team-based training with extensive case consultation follow up (e.g., supervisors and their teams of workers were trained together by experts in how to conduct SBC assessments and case plans) on the implementation of assessments and case plans of 21 cases from TOT trained workers and 27 cases from team-based trained workers using a case review tool. Study 2: 100 cases were reviewed for compliance to SBC. Cases were split at the median. High compliance cases scored 9 or higher in SBC and low compliance scored 8 or lower in SBC. Cases were pulled from 1 urban and 2 rural areas. 46 SBC cases and 25 non-SBC cases were pulled from an urban area. 5 SBC and 26 non-SBC cases were pulled from a rural area. 51 SBC cases and 49 non-SBC cases.</td>
<td>Study 1 Findings: There was a significant difference in the transfer of learning score between the two groups. The mean transfer score for the TOT group was half that of the team-based training group. Workers in the team training group with high SBC implementation identified more strengths than did those in the TOT/low SBC implementation group. Workers in the team training group had fewer legal actions in their cases than did the TOT group. Workers in the team-based training group with high implementation of SBC were more likely to contact collaterals directly and attend appointments with collaterals than in the TOT low SBC implementation group, respectively. Training a paradigm shifting, complex practice model can be successful and the learning can be transferred to practice in the field, but the training must be delivered by experts and preferably to entire child welfare teams. Study 2 Findings: SBC could be implemented in urban and rural areas. SBC could be implemented with all types of maltreatment, but especially neglect and emotional abuse cases. SBC was particularly effective for chronic CPS families and those with co-morbid factors. SBC workers attended collateral meetings more.</td>
<td>Study 1 Findings: Families in the team-based training group with high implementation of SBC were twice as likely to follow through with outside referrals than in the TOT group with low implementation of SBC. Families in the team-based training group with high implementation of SBC were more likely to complete case planning tasks than in the TOT group with low SBC fidelity. The families achieved 6 times more case goals in the team-based training group with high implementation of SBC than did families served by the TOT/low SBC implementation workers. The families with historical involvement with CPS accomplished more goals than other families but only when they had an SBC practicing worker. Fewer children were removed from the home in the team-based training group with high implementation of SBC than in the TOT group with low implementation of SBC. Study 2 Findings: Families missed fewer scheduled appointments with SBC workers than non-SBC workers. Families were more likely to follow through with referrals to collaterals in SBC than non-SBC group. Families were more likely to complete tasks on the case plan and follow visitation guidelines in SBC than non-SBC groups. Families were significantly more likely to achieve their FLO and their ILO—all clients who achieved these goals were in the SBC group whereas none achieved goals in non-SBC.</td>
<td>Study 1 Findings: Families in the team-based training group with high implementation of SBC were twice as likely to follow through with outside referrals than in the TOT group with low implementation of SBC. Families in the team-based training group with high implementation of SBC were more likely to complete case planning tasks than in the TOT group with low SBC fidelity. The families achieved 6 times more case goals in the team-based training group with high implementation of SBC than did families served by the TOT/low SBC implementation workers. The families with historical involvement with CPS accomplished more goals than other families but only when they had an SBC practicing worker. Fewer children were removed from the home in the team-based training group with high implementation of SBC than in the TOT group with low implementation of SBC. Study 2 Findings: Families missed fewer scheduled appointments with SBC workers than non-SBC workers. Families were more likely to follow through with referrals to collaterals in SBC than non-SBC group. Families were more likely to complete tasks on the case plan and follow visitation guidelines in SBC than non-SBC groups. Families were significantly more likely to achieve their FLO and their ILO—all clients who achieved these goals were in the SBC group whereas none achieved goals in non-SBC.</td>
</tr>
<tr>
<td>Citation (Author, year, journal/book)</td>
<td>Research design including number of cases reviewed, subjects surveyed</td>
<td>Key findings regarding training outcomes (level 1-participant reactions and level 2-gains in knowledge/skills) and process evaluation results</td>
<td>Key findings regarding transfer of learning to the field and/or practice behavior in the field and/or adherence to SBC in practice</td>
<td>Key findings regarding impact of SBC on parent/family behavior and child welfare outcomes</td>
</tr>
<tr>
<td>-------------------------------------</td>
<td>--------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Antle, Barbee, Sullivan, &amp; Christensen (2009). Child Welfare</td>
<td>Quasi-experimental design. Comparison of 40 cases 6 months post training for each of three groups (for a total of 120 cases) including two training groups Experimental Group 1: only classroom training vs. Experimental Group 2: classroom training followed by training reinforcement in the form of case consultations vs.</td>
<td>Training-plus-reinforcement group included information about the family development dynamics in the assessment at a significantly higher rate than did the training-only and comparison groups. The training-plus-reinforcement group set family level objectives related to well-being in the case plans at a significantly higher rate than did either the training only or comparison groups. The training-plus-reinforcement group correctly completed OOH care goals for children in case plans at a significantly higher rate than did the training only or comparison groups.</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Antile, Barbee, Christensen, &amp; Sullivan (2010). Children and Youth Services Review</td>
<td>Quasi-experimental design comparing two groups matched on geographic location, type of caseload, years of experience, and education level. One group was trained in SBC (N = 39) and the other group was not trained in SBC (N = 38). Recidivism of maltreatment in 539 SBC cases and 421 non-SBC cases, 6 months after training were compared between the two groups. Also measured was learning/change readiness, team support for learning/change, organizational support for learning/change.</td>
<td>n/a</td>
<td>n/a</td>
<td>The SBC group had significantly fewer referrals for maltreatment recidivism than did the non-SBC group almost half as many cases of recidivism. The more workers were willing to learn and change, felt supported by their team to learn and change and felt supported by their organization to learn and change the fewer cases of recidivism they had on their caseloads. Key contextual variables of individual willingness to learn, support for learning at the team and organizational levels all helped SBC be implemented and outcomes be achieved.</td>
</tr>
<tr>
<td>Citation (Author, year, journal/book)</td>
<td>Research design including number of cases reviewed, subjects surveyed</td>
<td>Key findings regarding training outcomes (level 1-participant reactions and level 2-gains in knowledge/skills) and process evaluation results</td>
<td>Key findings regarding transfer of learning to the field and/or practice behavior in the field and/or adherence to SBC in practice</td>
<td>Key findings regarding impact of SBC on parent/family behavior and child welfare outcomes</td>
</tr>
<tr>
<td>--------------------------------------</td>
<td>------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Barbee, Christensen, Antle, Wandersman, &amp; Cahn (2011). <em>Children and Youth Services Review</em></td>
<td>How GTO can help in the choice and implementation of child welfare casework practice models like SBC. Leaders must follow tenants of sound organizational theory and implementation science.</td>
<td>n/a This paper shows how the Getting to Outcomes (GTO) Approach led to effective implementation and fidelity of the SBC practice model.</td>
<td></td>
<td>This paper shows how the GTO approach led to positive outcomes for children and families.</td>
</tr>
<tr>
<td>van Zyl, Antle, &amp; Barbee (2010). Chapter in <em>Empirically supported interventions for community and organizational change</em></td>
<td>Quasi-experimental design-experimental group (42 supervisors and 195 workers with 751 cases) vs comparison group (30 supervisors and 136 workers and 421 cases).</td>
<td>Trainees reported that the training was relevant. Relevance predicted learning—the more training was seen as relevant the more learning took place (increase in knowledge on a test from pre to post training period). There was a gain in knowledge from pre to post training period in the experimental group. That knowledge was maintained one month later.</td>
<td>Manager support of supervisor training, learning readiness and gains in learning predicted supervisor reinforcement of training concepts with workers. Training did lead to better assessment of everyday life events in the family, especially if it was reinforced through case consultation after classroom training. In addition, those with training reinforcement also ensured the completion of out of home care goals as well as completion of FLOs. Control group cases had longer time between child-parent visits and between dental visits than did experimental group.</td>
<td>SBC trained workers had half the rate of recidivism on their caseload as did non SBC trained workers. There was a positive correlation between supervisor self-direction in learning as well as transfer of reinforcement skills and drops in recidivism rates—more of both was associated with a greater drop in recidivism over time. There was a positive correlation between organizational learning conditions and a change in recidivism—a greater learning organization associated with a greater drop in recidivism over time.</td>
</tr>
</tbody>
</table>
### TABLE 2 Key Findings From Nine Publications on Solution-Based Casework (SBC) (Continued)

<table>
<thead>
<tr>
<th>Citation (Author, year, journal/book)</th>
<th>Research design including number of cases reviewed, subjects surveyed</th>
<th>Key findings regarding training outcomes (level 1-participant reactions and level 2-gains in knowledge/skills) and process evaluation results</th>
<th>Key findings regarding transfer of learning to the field and/or practice behavior in the field and/or adherence to SBC in practice</th>
<th>Key findings regarding impact of SBC on parent/family behavior and child welfare outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pipkin, Sterrett, Antle, &amp; Christensen (2013). <em>Children and Youth Services Review</em></td>
<td>Mostly focused on how one state used the 10 steps of the GTO Approach to adopt and implement SBC starting in 2008. Included preliminary training results using a post training measurement design and focus groups. Included preliminary baseline survey results in 2008 with 809 parents rating their case workers on being inclusive of families during engagement, feeling respected by their caseworker, and agreement that their worker saw more problems than strengths in their family. Included preliminary baseline survey results in 2008 with 1,420 caseworkers in terms of caregiver involvement in creating the case plan, involvement in identifying service needs and goals in the case plans, having more problems than strengths.</td>
<td>Workers reported that they increased their knowledge about SBC on average 7.3 on a 10 point scale. Supervisors reported that they increased their knowledge about SBC on average 6.2 on a 10 point scale. Both groups reported gaining a good understanding of SBC concepts and that SBC reflected their professional social work values. They also reported that they were not sure why the agency was adopting SBC and wanted more complex case examples in the training. Supervisors were confused about their role in the practice model roll out. Training and involvement of supervisors was revised as a result of these process evaluation results.</td>
<td>Baseline survey results showed that parents were neutral about worker inclusiveness, felt slightly respected by workers, but felt it was a bit difficult to work with their worker, and that their worker saw more problems than strengths in their family. Baseline survey results showed that caseworkers saw the family as fairly involved in creating the service plan, but not involved at all with regard to identifying service needs and goals in the case plan. They saw both strengths and problems in the families at about an equal amount. Preliminary case review results showed that by 2012 family, providers and natural supports were involved in the assessment and planning process in 92% of cases. Actions were taken to involve 75% of mothers and 50% of fathers in case planning.</td>
<td>Preliminary QA results (not directly tied to the SBC implementation evaluation which is still underway), found that the rate of re-victimization of children dropped from 7.1% at the end of 2007 to 6.3% at the end of 2011. The number of dependencies filed dropped from 4,454 in 2007 to 3,628 in 2011.</td>
</tr>
</tbody>
</table>

(Continued)
<table>
<thead>
<tr>
<th>Citation (Author, year, journal/book)</th>
<th>Research design including number of cases reviewed, subjects surveyed</th>
<th>Key findings regarding training outcomes (level 1-participant reactions and level 2-gains in knowledge/skills) and process evaluation results</th>
<th>Key findings regarding transfer of learning to the field and/or practice behavior in the field and/or adherence to SBC in practice</th>
<th>Key findings regarding impact of SBC on parent/family behavior and child welfare outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antle, Christensen, van Zyl, &amp; Barbee (2012), Child Abuse and Neglect</td>
<td>Quasi-experimental design with 4,559 randomly drawn cases that were part of a state's CQI case review process from 2004–2008. The CQI tool included 178 behaviors and outcomes. 33 behaviors were based on the SBC practice model. Outcomes were based on the CFSR Round II definitions of safety, permanency and well-being. Cases were assigned to the high SBC adherence group (HAG) and low SBC adherence group (LAG) based on number of SBC tasks found in the case review. To be in the HAG 22/33 SBC behaviors had to be present in the case record or 66% adherence to the SIC model. To be in the LAG 11 or fewer /33 SBC behaviors had to be present in the case record or 33% or less adherence to the SBC model. Sub-scores were also calculated for phases of the case such as intake/investigation, case planning, ongoing services and case management.</td>
<td>n/a</td>
<td>The 33 items were factor analyzed into the four subscales with high reliability. Intake/Investigation Chronbach Alpha = .83 Case Planning Chronbach Alpha = .98 Ongoing Chronbach Alpha = .90 Case Management Chronbach Alpha = .92 They explained 84% of the variance.</td>
<td>Correlations between the 4 factors and the 7 CFSR outcomes (Safety 1 and 2, Permanency 1 and 2 and Well-being 1, 2, 3) were all significant. Intake/Investigation behaviors predicted safety outcomes. Case Planning and Case Management behaviors predicted permanency outcomes. Ongoing as well as Case Planning and Case Management behaviors predicted well-being outcomes. For all 7 outcomes the HAG cases outperformed the outcome goal and the LAG did not reach the outcome goal. The federal goal for Safety 1 was 83.7%. The mean percentage score for the HAG was 89.98% and for the LAG was 76.5%. The federal goal for Safety 2 was 89%. The mean percentage score for the HAG was 95.53% and for the LAG was 80.66%. The federal goal for Permanency 1 was 52%. The mean percentage score for the HAG was 92.72% and for the LAG was 70.07%. The federal goal for Permanency 2 was 74%. The mean percentage score for the HAG was 89.57% and for the LAG was 66.49%. The federal goal for Well-being (WB) 1 was 67%. The mean percentage score for the HAG was 94.29% and for the LAG was 66.01%. The federal goal for WB 2 was n/a. The mean percentage score for the HAG was 90.58% and for the LAG was 61.99%. The federal goal for WB 3 was 78%. The mean percentage for the HAG was 88.81% and for the LAG was 60.38%.</td>
</tr>
</tbody>
</table>

Note: Bold items were found in analysis to be most predictive of outcomes.
and case management (identified by means of a principle factor analysis [PFA] on the 33 item SBC instrument), correlated highly and significantly with seven CFSR factors of Safety 1 and 2, Permanency 1 and 2, and Well-being 1, 2 and 3. Yet, differences were found in the SBC outcomes at different stages of the case. For example, SBC intake/investigation behaviors were the strongest predictors of safety outcomes, whereas SBC behaviors of case planning and case management strongly predicted permanency outcomes. Lastly, SBC behaviors of case planning, case management, and ongoing casework services were favorable predictors for well-being outcomes.

These studies are helping to build a chain of evidence linking training of supervisors in SBC with their staff, to supervision of SBC, to adherence to SBC behaviors by front line workers, to positive outcomes for children. To date, all of these studies have examined the overall SBC practice model as practiced at various stages of the casework process and the effect on outcomes. The next step was to understand if any particular parts of the model are most predictive of successful outcomes. This type of item analysis would allow us to determine the efficacy of the theoretical underpinnings of SBC as well as the way in which the SBC theories were operationalized in practice and measured during case reviews.

Furthermore, given the complexity of public child welfare systems, the target for SBC implementation, and the many factors in these systems that may prevent or complicate full and uniform implementation of the practice model, it is helpful to target those elements of SBC which would have the greatest potential for improved services. This would improve the suitability of SBC for wide scale implementation in state wide, large county and tribal public welfare systems.

**FREQUENCY AND PRIORITY RANKINGS**

One way of identifying the elements of a practice model such as SBC that are most critical for achieving desired outcomes is an assessment of the relative impact of specific practice behavior completion on outcomes. In general, the relative importance of an SBC practice behavior is reflected in the outcomes of the cases for which that particular task was completed. However, several conditions limit this general statement. First, the achievement of desired outcomes is usually dependent on performance of a combination of practice behaviors and not performance of one task in isolation. If this is true, then it is important to determine the relative importance of task completion in the context of other practice behaviors that are also completed.

A second issue is that in assessing the outcomes of any practice model such as SBC, a distinction can be made between practitioners who adhere to most, if not all, of the elements of the model (high adherers) and those who only perform a few or isolated tasks associated with the model (low adherers).
adherers). Therefore, to control for the first requirement that a full suite of practice behaviors be performed, a differentiation between high adherence and low adherence to a model is essential. Those who adhere to a model to a great extent will probably complete a critical mass of practice behaviors that, in combination, will result in positive outcomes. As noted previously, Antle et al. (2012) found a significant difference between high adherence groups (HAG) and low adherence groups (LAG) of cases for all federal outcomes. A higher degree of use of the SBC model (across all stages of the case) resulted in an increase in each of the key outcomes of safety, permanency and wellbeing. By contrast, lack of adherence to the SBC model resulted in a failure to meet the federal standards for most child outcomes, most of the time. However, these findings do not mean that the low adherence always lead to unsuccessful outcomes. Within the low adherence group some cases had positive outcomes. Therefore, it is important to understand which behaviors are associated with positive outcomes even in cases in which there is low overall adherence. Analyses on the relative frequency of occurrence of practice behaviors should, therefore, be done for both high and low adherence groups separately.

While recognizing these two conditions, it is plausible to assume that, in general, among cases that were reviewed as fully compliant with all CFSR requirements, a task that was completed in a high percentage of cases would be an indication of a high task priority. For example, a practice behavior completed in 80% of successful cases can be viewed as one applicable to a broad spectrum of cases. By contract, a practice behavior completed in 40% of successful cases may be of lower priority when deciding which behaviors to emphasize in supervision, or target for training interventions, or to focus on technology supported innovation.

This study will focus on determining the SBC practice behaviors that are most commonly performed in a broad range of cases that are rated as having achieved a desirable outcome using the second round of the CFSR measurement system (Children’s Bureau, 2013). A focus will be on whether the same practice behaviors are performed in successfully resolved cases that show high adherence compared to those cases that show low adherence. A second focus will be on determining those practice behaviors that are most discriminating of high total CFSR scores.

METHOD

Sample

The sampling frame consisted of 4,559 public child welfare cases from the state selected for the target state’s continuous quality improvement (CQI)
Components of the Solution-Based Casework

process during a 4-year time period (2004–2008). The CQI cases were randomly selected from all nine service regions of the state on a monthly basis and are representative of all types of cases. A total of 867 cases fully met all Round II CFSR requirements described in following text (positive outcomes for Safety 1, 2, Permanency 1, 2 and Well-being 1, 2, 3), after being reviewed by independent CQI specialists, were divided into two samples: The SBC high adherence group (HAG) consisted of those successful cases that involved the use of at least 66% or 22 of the core SBC practice behaviors out of a total of 33 tasks (defined in following text). The SBC low adherence group (LAG) included those successful cases that completed less than 33% or 11 of the core SBC-33 practice behaviors. There were 764 cases in the HAG and 103 cases in the LAG. Cases excluded from the analysis were those that did not meet all Round II CFSR requirements and cases that fell in the middle adherence group for which 12 and up to 21 SBC tasks were completed. Including these middle adherence cases would water down the results and potentially eliminate the ability to assess the impact of high performing items. However, for the CHAID analysis described below, all 4,559 cases were used.

MEASURES

CFSR Measures

The Child and Family Services Reviews (CFSRs), authorized by the 1994 Amendment to the Social Security Act (SSA) and administered by the Administration for Children and Families (ACF) Children’s Bureau, requires the assessment of positive outcomes for children and families. Three outcomes were identified: safety, permanency, and well-being.

In the second round of the CFSR, the outcome of safety was operationalized based on the federal definitions of safety; categorized as safety 1 and safety 2 during the second phase of the CFSR review process. Safety 1 was defined as the protection of children from abuse and neglect, and included specific criteria such as timeliness of investigations and the prevention of recidivism. Safety 2 was defined to include services to prevent removal and risk of harm to children and the maintenance of children in their own homes.

The outcome of permanency was also operationalized according to the federal definitions of permanency, which was grouped into permanency 1 and permanency 2. Permanency 1 included children with permanency and stability in their living situations, elements of foster care, reunification, permanency goals, and adoption of children. Permanency 2 was defined to include the family relationship preservation and connections such as proximity of placement and placement with siblings.
The outcome of well-being was operationalized in three sub-constructs: well-being 1, well-being 2, and well-being 3. Well-being 1 encompassed the enhancement of the families' abilities to meet the needs of their children through worker visits and involvement of the family in case planning. Well-being 2 referred to children meeting their educational needs through services. Well-being 3 referred to children meeting their physical and mental health needs through services.

SBC 33-Item Review Tool

A total of 33 specific items originally developed by the SBC practice model team were used to measure SBC practice behaviors. The 33 items were specific to SBC and represented core elements of the SBC model (Table 1 for a list of the 33 items). The SBC 33-item review tool is a subset of the continuous quality improvement (CQI) tool, which is more comprehensive and included an additional 145 items to accommodate a wide range of policy directed activities often performed by child welfare workers. The content validity of SBC-33 (adequacy of sampling the items that represent core SBC components), was tested in the initial studies (e.g., Antle et al., 2012) through a well-formulated plan and procedure. If a practice behavior described by an item in the SBC review was completed by a worker, a “yes” response was given by the independent reviewer. The response of “no” was indicated if the practice behavior was not completed. However, not all of the 33 SBC items were relevant to each case and if a particular item was not relevant, a “not applicable” response was selected. Percentage scores were calculated for the number of “yes” responses out of all applicable items. Overall adherence of a case was based on the number of applicable SBC items completed. Priority rankings were based on the total percentage of times that a SBC item was completed among the successful ones.

Frequency of Use and Priority Rankings

The percentage of cases for which a particular practice behavior was completed was calculated out of all cases for which that item was relevant. It then was ranked with other SBC items separately for HAG and LAG. A dense ranking method of items associated with successful CFSR scores was used to identify these practice behaviors (Wilcoxin, 1945). In a dense ranking, items that compare equally receive the same ranking number and no gap is left in the numbering. This method is suitable as it is simple and as rankings are determined by mean cohort scores, it is unlikely that items will be ranked equally (Wilcoxin, 1945). Only cases that met all seven CFSR criteria were included in the sample to rank items.
RESULTS

High Frequency SBC Practice Behaviors

As noted above, the cases that met all round two CFSR requirements included in the randomly selected 4,559 CQI cases in the sample, were divided into two sub-samples: an SBC high adherence group of cases and an SBC low adherence group of cases. At the item level, frequencies varied greatly. For the high adherence group of cases, the frequency of yes/no responses (excluding “not applicable”) varied from 56 to 764 across all items. Three items had considerably more “not applicable” and fewer yes/no responses in comparison to other items, indicating that they were not applicable to the great majority of cases. Including these items in the analysis may skew results as a high percentage of use is not representative of the majority of cases. After removing these three items from the analysis (items 42, 83, 84), the range in frequency for responding with a “yes” or a “no” narrowed considerably from 263 to 764, a range of 502. In other words, each of the remaining 30 SBC items was applicable to at least 263 cases and up to 764 cases that were identified as being in the HAG and met all CFSR requirements.

As expected from Antle et al. (2012), few cases in the LAG met all the CFSR review requirements. Also, even when CFSR criteria were met, some of the items (n = 5) were completed by very few (<5) of the low adherence cases (items 55, 62, 61, 83, and 84). After deleting those five items from this part of the analysis, the range of frequencies of endorsed items was 87 and varied from 17 to 103. The top ten rankings of the remaining SBC items are given in Table 3 for both the HAG and LAG successful CFSR cases.

SBC Item Frequencies Used in HAG, LAG and Both Types of Cases

Four items were used with high frequency by both the HAG and LAG groups in the successful cases. Based on the Antle et al. (2012) PCA, the first two of these items (56 and 54) were classified as belonging to the case planning phase of work with families and focused on engagement of community partners, foster parents, and members of the nuclear and extended family in creating the case plans and making critical decisions in the case. The other two were classified as belonging to the ongoing (37) and case management (70) phases of work with families, respectively and focused on documenting strengths and needs in the individual adult patterns of behavior and that were captured in ILOs in the case plan as well as ensuring progress on each FLO and ILO objective.

After eliminating the four items that were jointly used in HAG and LAG cases, a significant difference was found between the HAG and LAG cases in the categories of SBC practice behaviors that occurred with the highest
### TABLE 3  Top Ten Item Impact Rankings (Dense Ranking Method) for High And Low Adherence Groups

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Case work phase</th>
<th>High adherence group (&gt;66%)</th>
<th>Low adherence group (&lt;33%)</th>
<th>Doc Core Solution-Based Casework (SBC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>56</td>
<td>Were the community partners and/or others invited by the family engaged in the Case Planning process, or was there documentation that all efforts were made to engage the family in accepting community partners?</td>
<td>Case Planning</td>
<td>1</td>
<td>5</td>
<td>+</td>
</tr>
<tr>
<td>55</td>
<td>Were non-custodial parents involved in the case planning process, if appropriate?</td>
<td>Case Planning</td>
<td>2</td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>72</td>
<td>Has the SSW made home visits to both parents, including the non-custodial parent?</td>
<td>Case Planning</td>
<td>3</td>
<td>(16)</td>
<td></td>
</tr>
<tr>
<td>54</td>
<td>Was the individual/family, child/ren, and foster parents/relative/kinship engaged in the Case Planning and decision-making process?</td>
<td>Case Management</td>
<td>4</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>62</td>
<td>Have services been provided related to the secondary Family Level Objective and Tasks?</td>
<td>Case Planning</td>
<td>5</td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>71</td>
<td>Is the need for continued comprehensive services documented, at least monthly?</td>
<td>Case Management</td>
<td>6</td>
<td>(11)</td>
<td>+</td>
</tr>
<tr>
<td>51</td>
<td>Was the parent involved when changes were made to any of the following: visitation plan, case plan, or placement?</td>
<td>Ongoing</td>
<td>7</td>
<td>(17)</td>
<td></td>
</tr>
<tr>
<td>61</td>
<td>Does the secondary Family Level Objective and Tasks address all well-being risk factors identified in the current CQA?</td>
<td>Case Planning</td>
<td>8</td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>37</td>
<td>Is the documentation of Individual Adult Patterns of Behavior, including strengths, thorough and rated correctly?</td>
<td>Ongoing</td>
<td>9</td>
<td>8</td>
<td>+</td>
</tr>
<tr>
<td>70</td>
<td>Is the progress or lack of progress toward achieving EACH objective (every FLO, ILO, and CYA objective) documented in contacts?</td>
<td>Case Management</td>
<td>10</td>
<td>9</td>
<td>+</td>
</tr>
<tr>
<td>34</td>
<td>Is the documentation of the Sequence of Events thorough and rated correctly?</td>
<td>Ongoing</td>
<td>(13)</td>
<td>6</td>
<td>+</td>
</tr>
<tr>
<td>40</td>
<td>Is the documentation of Family Support or Systems of Support, including strengths, thorough and rated correctly?</td>
<td>Ongoing</td>
<td>(13)</td>
<td>3</td>
<td>+</td>
</tr>
<tr>
<td>35</td>
<td>Is the documentation of the Family Development Stages, including strengths, thorough and rated correctly?</td>
<td>Ongoing</td>
<td>(14)</td>
<td>4</td>
<td>+</td>
</tr>
<tr>
<td>39</td>
<td>Is the documentation of Child/Youth Development (including strengths) thorough and rated correctly?</td>
<td>Ongoing</td>
<td>(15)</td>
<td>2</td>
<td>+</td>
</tr>
<tr>
<td>42</td>
<td>Was an Aftercare Plan developed with the family, as appropriate?</td>
<td>Ongoing</td>
<td>(17)</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>53</td>
<td>Does the case plan reflect the needs identified in the assessment to protect family members and prevent maltreatment?</td>
<td>Case Planning</td>
<td>(19)</td>
<td>10</td>
<td></td>
</tr>
</tbody>
</table>

**Note.** Boldface indicates words associated with themes.

*Excluded from analysis due to low n.*
Components of the Solution-Based Casework

frequency, \( X^2(2) = 5.57, p < .059 \). As Table 3 demonstrated, three of the remaining six SBC tasks in the top ten tasks of the HAG cases were part of the case planning phase of the work with families (55, 61, 62), two were part of case management (72, 71) and one was part of the ongoing phase of work with families (51). The Case Planning items involved engagement of non-custodial parents in the case planning process, tying secondary FLOs back to risk factors identified in the assessment, and ensuring that services were provided for secondary FLOs. The case management items focused on conducting home visits with both parents and documenting monthly the need for continued comprehensive services for the family. The final top HAG behaviors focused on ensuring that parents were involved in any changes made to visitation plans, case plans and placements.

The top six items in LAG cases that ensured positive outcomes included a crucial case planning item (53) of ensuring that the case plan reflected the needs identified in the assessment to protect family members and prevent maltreatment, but mostly focused on the ongoing phase of the work with families (34, 35, 39, 40, 42). The focus there was documenting the family development stages including strengths of the family, the child/youth development phase, the systems of support available to the family, the sequence of events that led to the maltreatment, and the presence of an aftercare plan.

The high frequency LAG tasks (four of which overlapped with HAG) emphasized the core theoretically based SBC behaviors of clearly understanding and using family and child development stages, systems of supports available to families, the sequence of events that led to maltreatment, engaging the community, family and individual partners in case planning and linking the sequence of events to clearly specified ILOs and FLOS. These ways of thinking about the case were essential to case success even though not all SBC behaviors were documented. HAG cases added more nuanced behaviors such as involving non-custodial parents, ensuring visitation to both parents, zoning in on secondary FLOs and ensuring parental involvement in any case changes.

CHAID Analysis of the Core SBC Documentation Items

To understand the meaning of the differences in the ranking of core SBC documentation items in the HAG and LAG cases, a chi square automatic interaction detection (CHAID) analysis was conducted. This analysis was done on all cases in the total sample (that met and did not meet CFSR requirements) for which all eight items associated with core SBC principles and identified in the priority analysis (Table 2 shows questions 56, 71, 37, 70, 34, 40, 35, and 39) were relevant \((n = 1,464)\). CHAID detects the statistical interaction between categorical explanatory variables (e.g., “task completed” or “task not completed”) and a dependent variable (e.g., CFSR total score). The largest statistical difference is reflected in the first split of the branches.
of the classification tree into two or more categories that are called the initial, or parent nodes, and then the nodes are split using statistical algorithms into child nodes. One may think of the different nodes in the classification tree as representing statistically significant differences in the dependent variable (CFSR total score) between cohorts if all possible differences are tested simultaneously. Similar to regression analysis, the best predictors that account for most of the variance in a dependent variable is identified in the CHAID analysis, in this case “CFSR total score.” In addition CHAID also identifies combinations of item completion status (completed versus not completed) that result in significant different mean CFSR total scores. In other words tasks that most differentiate between different CFSR total scores are identified at each level of a classification tree.

Among the eight core SBC documentation items, the largest difference in CFSR total score for a single item completed or not completed was between those who completed item 34 satisfactorily (Question: Is the documentation of the sequence of events thorough and rated correctly?) and those who did not (Figure 1 presents the parent nodes 1 and 2; scores respectively 2.53 and 5.13). Task 34 was ranked 13th in the HAG and sixth in the LAG cases, indicating that both groups performed it with high frequency, especially the LAG group.

The highest CFSR mean score (5.36) was obtained by the group (represented by child node 8 in Figure 1) who completed items 34 and 70 (Question: Is the progress or lack of progress toward achieving EACH objective—every FLO and ILO objective—documented in contacts?) and task 37 (Question: Is the documentation of individual Adult Patterns of Behavior, including strengths, thorough and rated correctly?). Item 70 was ranked tenth in the HAG and ninth in the LAG, whereas item 37 was ranked ninth in the HAG and eighth in the LAG.

By contrast the lowest mean CFSR score (1.77) was obtained by the group (represented by child node 5 in Figure 1) who did not complete item 34 and item 71 (Question: Is the need for continued comprehensive services documented, at least monthly?). Item 71 contributed to significant differences in the CFSR total score in two levels of the tree diagram, for non-completers of item 34 resulting in the split between child nodes 4 and 5 in Figure 1) and for completers of item 34 who did not complete item 70 (resulting in the split between child nodes 10 and 11 in Figure 1). Item 71 was ranked sixth in the HAG and 11th in the LAG, indicating high rates of completion. Thus, among core SBC documentation items associated with successful CFSR outcomes, two were in the top ten for both HAG and LAG (37 and 70), one was in the top ten for HAG (71) and one was in the top ten for LAG (34). One core SBC documentation item performed in both HAG and LAG cases (56) and three were in the top 10 only for LAG (39, 40 and 35) were not significantly related to CFSR outcomes in the CHAID analyses.
FIGURE 1 Chi square automatic interaction detection (CHAID) analysis of child and family services reviews (CFSRs) total scores based on eight solution-based casework (SBC) priority tasks associated with documentation. The number given in the variable name (e.g., “34”) correspond with the item number in Tables 1 and 2. Descriptions of each variable, e.g., q34p, are given in Tables 1 and 2. “Missing” in Figure 1 refers to cases with missingness in data. At the parent node level the mean CFSR score for “Missing” cases were significantly different from the other two cohorts and they are represented with a separate box in the diagram. At the child node levels, this is not the case and missing cases have similar CFSR mean scores that other categories and they are therefore combined with other groups in boxes in the diagram. The “–” symbol at the bottom of a box in the diagram means that the node further divides into a child node.

DISCUSSION

A close examination of the top 16 behaviors predictive of outcomes across the HAG and LAG cases highlights the importance of theories included in SBC in helping child welfare workers think about, engage and work with the entire family constellation in assessing and interrupting destructive patterns using strengths and supports. A close examination of the 16 most critical practice behaviors are described here within the casework context of engagement, assessment, case planning and working with families towards the successful resolution of the case.
Engagement

The behaviors that demonstrated effective engagement of family members from a humanistic/strengths-based and solution-focused orientation included: Practice Behavior 54—inclusion of individual/family, child/ren and foster parents/relative/kinship engaged in the case planning and decision making process; Practice Behavior 55—inclusion of non-custodial parents involved in the case planning process, if appropriate, and Practice Behavior 56—inclusion of community partners, and others invited by the family engaged in the case planning process. Tasks 54 and 56 were used with high frequency in both HAG and LAG cases and 55 was popular in HAG cases.

All of these behaviors show that simply working with the nuclear family is not enough. Strength-based and solution-focused theory suggests that everyone in the nuclear family as well as appropriate members of the extended family and social support network (including foster families in out of home care situations) must be engaged to give social support and be a part of case planning and decision-making processes in order to keep children safe and ensure that permanency happens. This is consistent with SBC’s origin in theories and thinking that values families, shows them the utmost respect and enlists the support of the larger family and social support system in the community to collaborate together with the child welfare system to ensure that the nuclear family has the help it needs to make the changes necessary to keep children safe. In addition, SBC promotes permanency by engaging the extended family and the broader social network so that children can either be returned to the nuclear family or at least live with members of the extended family. If children must be removed permanently, the process of engaging community members and resource families during the transition helps the foster/adoptive families gain a better understanding of the family origins of the children and the specific issues they have encountered. This knowledge may facilitate attachment between the children and the new family.

A child welfare casework practice model that is based on a theory that both values the family and approaches them with respect and spells out those values in policy and practice behaviors is likely to have an impact on improving child outcomes. In fact, public child welfare agencies are increasingly turning to family engagement as a mechanism for advancing children’s safety, permanency, and well-being (Pennell, Burford, Connolly, & Morris, 2011). Pennell et al. (2011) suggested that family engagement is a way to involve or re-involve the family and their social support networks in caring for children and youth in partnership with professionals. Implicit in this assertion is that family engagement encompasses both natural family and community support systems. Further, Pennell, Edwards, and Burford (2010), described family involvement in team meetings as an opportunity to re-conceptualize what client engagement is, from the worker–parent relationship to a partnership of family, community, public and private agencies. Such
a perspective could significantly increase the likelihood that children will be placed in kin foster homes, have family-group-type permanency goals, exit care faster, and be discharged to family or relatives.

This family and community involvement approach is particularly important for children of oppressed races and ethnicities. The presence of other key participants and community supports may compensate to some degree for the absence of a parent (Crampton, Usher, Wildfire, Webster, & Cuccaro-Alamin, 2011) and overcome implicit racism in the system. For example, Sheets, Wittenstrom, and Gray (2011) found in their study that, family involvement/engagement increased parent and relative satisfaction and empowerment levels compared to standard practice, lowered anxiety among children and increased exits to reunification among African American and Hispanic children. Furthermore, seasoned practitioners note that strong family engagement can overcome a lack of adherence to other key practices because of the power of family buy-in into the assessment and case plan in reaching desired outcomes.

Assessment

The second set of behaviors that predicted better outcomes for children in this study focused on the assessment of what happened in the family to create risk and danger for the child and what needs to change to ensure that children can safely live in the home. Two key SBC behaviors coming out of family life cycle theory and behaviorism as expressed through relapse prevention theory were practice behavior 35—identification of everyday life events that served as the context for the maltreatment and practice behavior 34—the description of the sequence of events that lead to the maltreatment. Both of these practices were critical in achieving outcomes, especially in LAG cases. The first practice speaks to the normalization of struggles in parenting, and the realization for family members (and front-line workers) that every family struggles with these types of developmental milestones, transitions and disciplining moments and there are strategies that can be learned to deal with these types of situations more effectively. The second practice breaks down the distal and proximal variables that led to the maltreatment so that family members are clear about the warning signs that maltreatment could occur again and so that both the family and worker understand what thoughts, emotions and behaviors and patterns need to change to prevent abuse in the future.

The third set of behaviors coming out of solution-focused therapy that impacted outcomes was practice behavior 37—listing the individual strengths of the parents, particularly the one who may have been part of the maltreatment and times in everyday living the family succeeded. This item was particularly frequent in HAG cases. Practice Behavior 39—listing the individual strengths of the children and youth in the family—and Practice
Behavior 40—listing the strengths of the social support network members—were popular with successful LAG cases. So, the assessment did not just focus on the problem and unearthing the sequence of events leading to the problem, but included times the family and individuals in the family managed this same type of situation well and other strengths that can serve as leverage points for preventing future abuse or neglect from occurring.

Both sets of behaviors show the importance of discovering both the micro-processes involved in maltreatment as well as the micro processes in healthy family interactions so as to build on the latter in addressing the former. The impact of these sets of behaviors also point to the importance of moving away from the old paradigms driving child welfare practice which came out of a moralistic and retributive justice orientation (Barbee & Cunningham, 2013). These paradigms assert that people who abuse or neglect their children are inherently bad and criminal, thus are in need of punishment. They do not recognize that parenting is difficult for everyone, nor do they focus on the many successes of families that have come into contact with the child welfare system. The paradigms of distributive justice and the medical model have not been much better. These paradigms at least recognize that many of the factors influencing abuse and neglect are out of the control of the parent (e.g., mental illness, addiction, developmental impairments) and need to be “treated” and thus removed as barriers to good parenting (Barbee & Cunningham, 2013). But, what the medical model and distributive justice models tend to miss is what happened in the historical and current environment of the maltreating parent that influenced their thoughts and feelings that specifically led to the maltreatment. There has been a lack of attention to and a failure to identify in very clear terms what behaviorally needs to change and what patterns need to be interrupted for safety to be assured. Simply going to counseling to treat depression or stopping drug use or participating in general parent education classes will not be targeted enough to get the desired outcomes and for workers and families to know what is necessary to “prove” that the child can safely live in the home again (Barbee & Cunningham, 2013). Nor do these orientations ensure that interventions build on the strengths of the family and times the family successfully navigated difficult milestones or transitions.

Case Planning

The next part of casework is case planning, which in SBC is deeply rooted in humanism, family life cycle theory and a cognitive-behavioral theoretical approach to intervention. In SBC, there is an emphasis on Practice Behaviors 53 and 61—linking the assessment findings with the needs to protect family members and prevent maltreatment and linking the assessment findings with the objectives of the case plan. Both of these case-planning items occurred with high frequency in the HAG cases.
In fact, there are two types of objectives in SBC case planning: a) family level of outcomes to address the family life cycle challenges that served as the context for the maltreatment to occur, and b) individual level outcomes to address the historical and current situational variables, thoughts, feelings and triggers that effected the parent who was abusive or neglectful. Again, these are very specific changes that may include some work on sobriety, but more often targeted on how to keep children safe when the parent drinks, for example. This linkage helps the worker and family keep the eye on the key outcomes.

Practice Behavior 70—evidence that FLOs and ILOs were progressing was a critical item for successful outcomes—and Practice Behavior 51—parental involvement when changes were made to the visitation, case plan, or placement—are both closely linked to the first cluster of family engagement behaviors. Both items occurred with high frequency in HAG cases. They both show that the family engagement is not just something a worker does in the beginning of the case to get the family to open up but something but something the worker does throughout the case to keep the family involved and motivated to move the case and objectives along to resolution. It also circles back to respecting the role of family in the life of a child.

Case Management
The final set of effective practice behaviors focused on ways to support the family’s progress on the FLOs and ILOs to successful closure of the case and maintenance of change once the agency is no longer involved. These are all tied to a cognitive-behavioral theoretical orientation that emphasizes the role of social learning and reinforcement to motivate families to change, to teach families new skills and help those new skills become routine. An additional reason why the use of a cognitive-behavioral theoretical orientation in assessment, case planning and case management may be effective is the linkage to evidence-based practices being utilized in the partnering agencies from which clients receive services (e.g., Kolko, Iselin, & Gully, 2011).

Practice Behavior 71 (frequent documentation of the need for comprehensive services), Practice Behavior 62 (tying services to the FLOs to support the skill development family members need), Practice Behavior 72 (keeping children connected to both parents through frequent visitation when in out of home care) were all popular in HAG cases. Practice Behavior 42 (development of an aftercare plan for continued use of the social support network to maintain the changes made in the family) was frequent in successful LAG cases.

In addition, Practice Behavior 72 also utilizes attachment theory in keeping the connection between children and parents strong through visitation. There is agreement among practitioners and researchers that children whose
parents have contact with them after entering out-of-home care tend to reunify more quickly (Pine, Warsh, & Malluccio, 1993). On the child welfare outcome of reunification, the parent’s level of engagement was significant as a predictor of the likelihood for reunification with his or her child in the Pine et al. (1993) study. Crampton, Usher, Wildfire, Webster and Cuccaro-Alamin (2011) found that parental engagement is important in improving permanency outcomes, and stimulation of high levels of parental participation is feasible through team meetings. However, in the current child welfare system, not only are the levels of parent engagement low and uneven (Alpert, 2005), but parent child interventions are underutilized and services to parents and children are poorly integrated (Kemp, Marcenko, Hoagwood, & Vesneski, 2009). The findings of this study show that tasks that focused on the strengths of the children, adults and the family, and provision of services related to family level objectives were associated with better outcomes as measured by the CFSR. This finding is consistent with Alpert (2007) and Petr and Entriken (1995) who postulated that parental engagement should be fostered through a system that focuses on parent empowerment, respect, and support in the case management-parent relationship. DePanfilis (2000) also proposed the establishment of a “helping alliance” with parents; workers must communicate empathy and concern for all family members and clarify expectations and commitment, while gently asserting authority. In spite of the overwhelming evidence supporting family involvement into child welfare system, there exists limited research regarding the process of integrating family. Williamson and Gray (2011) postulated that training for both child welfare personnel and participating family members was the most critical capacity building activity to support the implementation of family involvement efforts. Our findings identify specific aspects of family involvement/engagement important at specific casework phases with the most impact on CFSR outcomes.

Overall, what these results show is that SBC operationalizes values and principles by tying those to relevant theories to help workers think about cases and engage families in new and effective ways. These behaviors can be coached by supervisors, documented, observed by third party evaluators and linked to outcomes.

Interesting Findings With Regard to Documentation of Core SBC Items

Given the limited time and resources available to child welfare cases, it is reasonable to expect that documentation must be streamlined to be more effective. This does require identifying areas and processes of documentation that will make the most impact on child outcomes. In this study four of the eight documentation items were closely related to the CFSR outcomes. The importance of documentation was prominent in all phases of casework
Components of the Solution-Based Casework

Components included were documentation of: behavior and developmental issues of the child, assessments of adults and the family from a strengths perspective, and the sequence of events. Comprehensive documentation of services on a monthly basis and the progress towards achieving EACH objective were related to case management, whereas, at the case planning phase, documentation of efforts made to engage the family in accepting community partners at family team meetings was of higher importance. The combination of tasks associated with best CFSR outcomes were 37 (documenting individual patterns of behavior including strengths), which was popular in HAG cases; whereas items 34 (sequence of events), and 70 (progress towards achieving both ILOs and FLOs), and not completing tasks 34 and 71 (need for continued comprehensive services) were associated with the worst CFSR outcomes and were particularly associated with LAG cases.

Case planning processes must involve custodial and non-custodial parents, family, foster parents, kinship and community partners to be impactful. A timely care plan had a large effect on a child’s permanency outcome (Whitaker, 2009). Christensen and Todahl (1999), argued that collaborative case planning strategies have the advantage to instill a sense of hope in otherwise hopeless clients in a collaborative, and pragmatic professional relationships, which leads to reduction in the rate of recidivism among clients in the child welfare system. The findings also suggest that, the aftercare planning process associated with the ongoing case work should reflect the needs to protect family members and prevent maltreatment in the future after case closure. Such planning processes should include the extended family to yield the most impact (Mendes, 2005; Ward, Hamilton, Fein, & Maluccio, 1982).

Ultimately all key behaviors flowing from the theoretical underpinnings of SBC were found to be critical in reaching desired child outcomes across a thousand cases in a public child welfare system. Of the remaining 17 SBC behaviors, five were replicas of behaviors documented during the ongoing case rather than simply at the investigative phase; only 12 behaviors did not impact outcomes in this study. These behaviors included some that were similar to those that were predictive, those behaviors that focused on service delivery and those that focused on choice of discipline. The service delivery items and discipline items were aligned with SBC but were not central to the theoretical tenants of the model. However, the items with the greatest impact on outcomes reflected the need to understand in a very specific and organized way the sequence of events leading to maltreatment, the individual pattern of behavior including strengths and progress of achieving each ILO and FLO in the case plan.
Study Strengths and Limitations

There are several strengths of the current research including the large sample size of 4,559 cases, the use of federal definitions/standards for measurement of outcomes and a clearly operationalized practice model with reliable and valid measure of implementation. This was a strong foundation on which to build an analysis of the top ranking behaviors for the high adherence groups as well as behaviors that led to positive outcomes even in the low adherence group. But, despite these strengths, there are some limitations. A weakness in any study using ratings of cases in the administrative database is the strength of the administrative data. Any errors in the data could call into question the validity of results based on such data. One strength of the data in the state studied was the fact that their SACWIS system was operational in the mid-1990s and so had worked through most kinks and data entry error problems by 2004 and certainly by 2008 when the cases used in the study were utilized. Certainly these results must be viewed with a certain degree of caution. Replication of the findings would strengthen the implications. In addition, there is no data currently to discern why some workers were more or less adherent to SBC. It is uncertain whether it was due to: a) individual factors of overall commitment to the field of child welfare, b) overall competence, c) management support or lack of support for the practice model such as differential reinforcement by front line supervisors, or d) peculiar characteristics of the case that encouraged or prevented the accomplishment of specific tasks.

IMPLICATIONS AND FUTURE DIRECTIONS

One implication from these findings is that it helps us better understand what components of SBC make it successful in helping the workforce reach positive outcomes for families and children. Thus, the current study can be added to Table 2 as part of the growing literature on the effectiveness of SBC. In addition, while it is important to develop interventions or models of practice that are based in evidence and can be verified for their efficacy, an emerging notion is that of gleaning common factors or common elements across evidence based interventions and practices that are at the core of each one’s success. This type of emphasis on what is essential helps simplify key behaviors for practitioners, especially in complex cases (Barth et al., 2012; Chorpita et al., 2011; Karam, Blow, & Davis, in press; Lindsey et al., 2013). The second related implication is the usefulness of a child welfare casework practice model based in humanistic, solution focused, family developmental, and cognitive behavioral theories that work in concert to guide practice and achieve positive outcomes for children. Many states and other jurisdictions are already working on developing or adopting a practice model to enhance their work with families and children. This study shows the types of theories,
values and behaviors that should be included in any effective child welfare casework practice model.

A third implication is that of all the many policies front line child welfare workers have to comply with only a handful of practice behaviors are differentially related to outcomes. This finding means that child welfare systems may need to eliminate unnecessary policies and focus on a few key ones that are relevant to: a) engaging the community, extended family and all members of the biological family with respect and cultural competence, b) carefully positioning maltreatment issues within a framework of family life development, c) assessing and teasing out the particular variables that led to the maltreatment, as well as d) what is happening when the family successfully navigates tough terrain. Policies should also be focused on the additional pieces of casework such as: e) carefully linking findings in the assessment with both family level and individual level objectives and outcomes, f) ensuring that children visit both parents regularly, g) ensuring that services support those family level objectives and individual level objectives, and h) ensuring that an aftercare plan is in place to support the family once the case is closed.

The reduction and refinement of policies would be a major change in child welfare systems which are heavily bureaucratic and too compliance driven (e.g., Glisson & Green, 2011; Munro, 2010; Smith & Donovan, 2003). But, such a move, along with professionalization of the workforce (e.g., Barbee, Antle, Sullivan, Dryden, & Henry, 2012; Scannapieco, Hegar, & Connell-Carrick, 2012) would free up much of the time workers spend in compliance documentation so that they could spend more time immersing themselves in the cultures they serve, finding relevant community and family members to help with the situation, time to really engage all relevant parties in understanding the maltreatment and family strengths so as to generate viable remedies, time to really understand what needs to change to keep children safe and more time co-creating case plans with families and working to help them and other partners to achieve success. While this study and Antle et al. (2012) show the efficacy of SBC when adherence is high, one next step is to pair the data of the 4,559 cases with regional, supervisory, and caseworker information as well as more details about the cases themselves (e.g., severity and type of abuse, number of children in the case, issues facing parents in the case) in order to better understand the barriers to practicing SBC with fidelity. This may give some clues as to implementation and maintenance strategies that are needed when installing and running an agency within a particular casework practice model framework. Certainly, other states that adopted SBC are gathering data that can add to the literature on the efficacy of the model for child welfare outcomes. Finally, another next step is to find a way to conduct a randomized controlled trial comparing SBC with practice as usual so that jurisdictions can have more confidence in the strength of the efficacy of the model in achieving positive outcomes.
REFERENCES


**CONTRIBUTORS**

Michiel A. van Zyl, MA (SW), PhD, is a Professor and Associate Dean for Research in the Kent School of Social Work at the University of Louisville in Louisville, KY.

Anita P. Barbee, MSSW, PhD, is a Professor and Distinguished University Professor in the Kent School of Social Work and the Center for Family Resource Development at the University of Louisville in Louisville, KY.

Michael R. Cunningham, PhD, is a Professor in the Department of Communication at the University of Louisville in Louisville, KY.

Becky F. Antle, MSSW, PhD, is an Associate Professor in the Kent School of Social Work at the University of Louisville in Louisville, KY.

Dana N. Christensen, PhD, is a Professor in the Kent School of Social Work at the University of Louisville in Louisville, KY.

Daniel Boamah, MSSW, is a Doctoral Student in the Kent School of Social Work at the University of Louisville in Louisville, KY.