Fidelity Monitoring in the Solution Focused Wellness for HIV (SFWH) Intervention for Women

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Fidelity Monitoring in the Solution Focused Wellness for HIV (SFWH) Intervention for Women

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Background

Solution Focused methods are often interpreted by different practitioners with a degree of flexibility and adaptation to specific practice settings (Lehmann & Patton, 2012). This flexibility is one of the features that makes SFBT a very client-centered approach and has been highlighted as one of the key aspects of successful co-construction of desired outcomes with clients (Franklin et al., 2017). This collaborative approach is possible due to SFBT’s utilization of social constructionist principals in the solution-building process (Blundo & Simon, 2015). While encouraging flexibility of implementation of SFBT, identifying the main tenets of the therapy, including specific techniques and mindsets is helpful to researchers who are interested in determining SFBT’s success in certain clinical and research efforts (Lehmann & Patton; Trepper et al., 2012). To help with this process, members of the Solution Focused Brief Therapy Association (SFBTA) created a treatment manual that outlined these major tenants to serve as a guide and to reach a consensus about how to understand and implement SFBT (Trepper et al.). In publishing their SFBT fidelity instrument, Lehmann and Patton recommended that the field of SFBT focus more seriously on the issues of treatment fidelity in SFBT practice and research. However, continued discussion on the topic has been limited in the peer-reviewed, published SFBT literature. To continue this discussion among SFBT researchers and practitioners, the process for planning, monitoring and reporting fidelity to SFBT in the Solution Focused Wellness for HIV Intervention for women (SFWH) will be presented. The SFWH fidelity monitoring process will be explained in the context of both common SFBT fidelity processes and the latest accepted behavioral intervention research guidelines for the fidelity process.

This article is the third in a series of articles that outlines the research process of the SFWH. The first article explained the process of developing the intervention with expert feedback from SFBT and HIV researchers as well as women living with HIV (Yates et al., 2019). The second article explained the results of a pilot study conducted to examine the effect of the intervention on a small group of women living with HIV (Yates & Mowbray, 2020). This third article will focus on the SFBT fidelity process adopted during the pilot study.

SFWH is a client-centered group counseling intervention that was implemented in community-based HIV case management agencies with the aim of improving the wellness of participants. During pilot testing, a comprehensive approach to fidelity monitoring was adopted to ensure inclusion of each therapeutic component of the intervention (Yates & Mowbray, 2020). This approach was based on guidelines outlined by the Behavior Change Consortium (BCC) of the National Institutes of Health and Tomioka & Braun's Four-Step Protocol for Assuring Replication with Fidelity (2013). This comprehensive approach to fidelity helped to ensure that the results of the pilot study fully explained the effect the intervention had on the wellness outcomes of the women who participated. The approach also aimed to honor the flexible nature of SFBT as it was originally outlined (De Jong & Berg, 2002) as well as incorporating the major tenets of the method outlined in the SFBTA’s published treatment manual (Trepper et al., 2012).
The treatment manual used for this pilot study was designed to be a guide for the counselor based on the three mindsets and eight techniques detailed in the Solution Focused Brief Therapy Association's published treatment manual (Trepper et al., 2012) as well as client and researcher expert input about living with HIV and multidimensional wellness. The SFBT manual describes an expected level of flexibility in the application of the techniques due to the collaborative nature of SFBT. However, the mindsets and techniques have been presented formally according to the intentions of the original SFBT authors, and the Solution Focused Wellness for HIV (SFWH) intervention development process sought to honor that work by using that manual as a basis.

The focus of this article is on the fidelity to SFBT including how it was measured and the frameworks for the fidelity monitoring process itself. To explain the process of planning, monitoring, and reporting fidelity in this project, we will first present the frameworks we used to understand best practices in intervention fidelity monitoring in behavioral research.

Frameworks for Monitoring Treatment Fidelity

Basic treatment fidelity measures such as the use of “treatment manuals, training of implementers, supervision of implementation, and measures of adherence to treatment protocol” are recommended in intervention research (Naleppa & Cagle, 2010, p. 679). However, there is some question as to what extent the use of fidelity measures is helpful, and various fidelity frameworks exist. To provide clarification, the Behavior Change Consortium (BCC) of the National Institutes of Health created a workgroup for treatment fidelity. Their recommendations were used to outline the framework by Bellg et al. (2004). Tomioka and Braun’s Four-Step Protocol for Assuring Replication with Fidelity (2012) offers another framework for measuring treatment fidelity. Each framework offers several strategies and poses both strengths and weaknesses. Together, they provided guidance for measuring treatment fidelity in the current solution focused wellness intervention for women living with HIV.

BCC Framework

According to the Treatment Fidelity Workgroup of the BCC, “treatment fidelity refers to the methodological strategies used to monitor and enhance the reliability and validity of behavioral interventions” (Bellg et al., 2004, p. 443). The authors argue that adopting best practices in treatment fidelity research of health behavior interventions contributes to the development of “innovative, credible and clinically applicable” programs (Bellg et al.). Four areas of focus with underlying goals and suggestions are outlined by the BCC to monitor and improve treatment fidelity, and those include:

1. Study Design
2. Treatment Delivery
3. Receipt of Treatment
4. Treatment Enactment Skills

To address the wellness needs of women living with HIV using Solution Focused Brief Therapy (SFBT) methods, the application of number 1 study design goals and strategies and number 2 treatment delivery goals and strategies and was useful. Those two areas of focus will be discussed in relation to the SFWH intervention study.

Study Design

According to the BCC, focusing on study design ensures that a study can “adequately test its hypotheses in relation to its underlying theory and clinical processes” (Bellg et al., 2004, p. 445). Variables should reflect the active ingredients of the treatment. The intervention should be congruent with relevant theory and pragmatic roots. To ensure consistent treatment dose (or number and length of sessions), an established number of contacts as well as their length of time should be delineated. A scripted curriculum can be created to ensure the consistent delivery of information at sessions. External and self-monitoring instruments can be developed to assess adherence to the dose and record deviations by providers (Bellg et al.). Researchers should also stipulate the minimum and maximum dose, and record frequency (Bellg et al.).

Another BCC treatment fidelity strategy for study design is adequate data collection planning procedures. Gitlin and Czaja (2016) recommend creating a study procedure manual including the codebook, interview protocols, and training...
procedures. They also recommend having a Data and Safety Monitoring Board or DSMB to participate in fidelity assessment and monitoring for an impartial review of treatment fidelity and other data integrity issues. Cook and DeMets (2008) also recommend a DSMB to improve quality control efforts and interim data monitoring.

The benefit of paying close attention to the design of a study is that confounding and bias can be avoided or minimized, allowing for the effect of the treatment to be attributed as completely as possible to the treatment. Also, researchers can claim they treated and measured the condition they intended to. Adequate study design makes the research more trustworthy, replicable and generalizable. Good study design saves time and money because it can prevent unnecessary statistical issues because variables are clear, measurement is accurate and there is no “noise” in the data. Good study design also helps minimize anticipated problems like training issues, provider drift, participant dropout and dosing issues that can affect intervention fidelity (Gitlin & Cjaza, 2016).

**Treatment Delivery**

The delivery of the treatment should focus on ensuring that the intervention is provided in the way it was originally intended. Drifting from the protocol or dose of an intervention or combining it with other interventions during a research study is problematic. Therapeutic drift and contamination mean that study results may not accurately reflect the independent variable and will not be reliable or valid. To ensure that providers adhere to treatment protocol, the BCC advises using recordings, in vivo observation or behavioral checklists to improve intervention fidelity. These techniques improve the standardization of treatment delivery, and helps providers remember the key components of the intervention. Specific strategies for improving delivery of treatment for fidelity purposes include (a) controlling for provider differences, (b) reducing differences within the treatment delivery, (c) ensuring adherence to the intervention protocols and (d) minimizing contamination between treatment and control arms (Bellg et al., 2004).

Provider warmth can be confused with actual therapeutic techniques that affect behavior change in counseling settings, which is problematic for research. One way to distinguish provider warmth from the methods is to monitor the use of specific techniques outlined by the method. This monitoring helps to control for provider differences that could affect research outcomes. Another strategy for mediating provider warmth is to make adjustments during training and supervision to ensure that the characteristics of specific providers are not overshadowing the counseling methods themselves (Bellg et al., 2004).

The use of manuals and scripts can improve fidelity by increasing uniformity so that all necessary components of the intervention are provided. Recordings and observations can be used to check for adherence specific counseling methods during training and research studies (Bellg et al., 2004). Video recordings and meetings with providers can be held to discuss the appropriate application of the counseling methods. Worksheets and tracking sheets can also be used to monitor dose and intensity of sessions (Gitlin & Czaja, 2016).

A strength of strategizing about the delivery of a study is that it enhances the consistency and accuracy of the delivery of the program or counseling method. This ensures that any positive results of a study are truly due to the intervention and no other factors. Alternatively, the weakness of focusing on delivery strategies for fidelity are that they can be tedious, and in smaller studies there may not be enough staff to evaluate the delivery of the intervention closely. For example, checklists may be practical, but reviewing video recordings for fidelity may not be possible. In research with sensitive and vulnerable groups who are frequently exposed to stigma, confidentiality issues can develop with external fidelity monitoring, and could deter people from agreeing to participate. For example, people living with HIV may be willing to attend a counseling group but may not want to be recorded or filmed.

**Tomioka and Braun’s Framework**

In addition to the BCC framework, it is useful to examine Tomioka and Braun’s (2013) framework for improving behavioral intervention fidelity in research. They recognized treatment fidelity issues in health promotion research and implementation that are caused by community planning and organizational capacity issues. They argued that key components of interventions must be delivered with fidelity even as interventions are adapted for new communities. To accomplish fidelity, they offer the following four-step protocol:

1. Deconstruct the program components and make an implementation plan
2. Identify agencies ready to replicate the program and provide staff training
3. Monitor the fidelity of the program delivery with checklists
4. Track program participant outcomes to assure the expected outcomes are achieved

The fidelity approach for the SFWH Intervention for women included steps three Fidelity Monitoring and four Tracking Participant Outcomes from Tomioka and Braun’s framework and those steps are described below before applying them to SFWH.

**Fidelity Monitoring**

Monitoring fidelity involves tools that assess the degree to which practitioners adhere to the program they are implementing. It can also measure their competence in delivering the program and is a critical step in ensuring true replication in research. In the case of Tomioka and Braun’s Hawaii Healthy Aging Partnership (HHAP) program, trainers created a tool to measure eight areas of fidelity and instructors were rated according to three categories (2013). The instrument moved beyond a simple checklist and allowed for monitoring of the degree to which each area was implemented, rather than rating it in a “check yes or no” manner. The tool was used at four different points during the study. This allowed for senior trainers to provide additional feedback when needed and helped identify areas of weakness in training that could be improved in future staff education.

A strength of this type of fidelity monitoring is that research is often available on previously validated checklists. This can make fidelity planning convenient and concrete. Additionally, the checklists are easy to complete and can be done through observation, video recording or be self-administered by practitioners. Another strength is that they can alert researchers to practitioners who are straying from intervention protocol or experiencing therapeutic drift. Rarely, practitioners involved in research studies that are unable to adequately follow intervention protocols after training, monitoring and feedback have been removed from the study to maintain fidelity (Gitlin & Czaja, 2016).

Using checklists for fidelity monitoring may reduce the odds of a type I and II errors in hypothesis testing. Type II errors can occur when the outcome of a study shows that it was not effective, but it actually was because the results were due to fidelity issues such as a different intervention being implemented than the one that was intended. Checklists can reduce the chances of a type I error as well, which occurs when researchers espouse an intervention’s efficacy in error because they actually measured the effect of a different intervention. Measuring a different intervention can occur because it has been contaminated by components of other interventions that the study practitioners are used to implementing.

A weakness of Tomioka and Braun’s fidelity monitoring strategies relates to fidelity checklists (2013). Sometimes a measure has been validated by previous researchers but does not include all the intended elements of the intervention. Therefore, interventionists may need to develop and test a new tool. This could delay research and be costly, possibly delaying potentially helpful treatment in the community. A checklist can oversimplify fidelity monitoring even when all the elements of the intervention are included. Manualizing the intervention and including the key components in worksheets, client forms, and provider instructions promotes better fidelity in combination with monitoring.

**Tracking Participant Outcomes**

Tomioka and Braun (2013) recommend carefully tracking participant outcomes to improve treatment fidelity because the outcomes should reflect the intentions and components of the intervention. This step helps measure achievement of expected outcomes among participants. Tracking outcomes includes both (a) pre-tests and post-tests of participant health status and (b) post-test evaluation of participant satisfaction with the program.

As an example of pre-test and post-test use, Tomioka and Braun (2013) point to fitness assessments included in their health intervention for older adults. The tests were required at baseline and at four-month intervals during the study. Similarly, HIV researchers often use blood tests that monitor the immune system and viral replication status of study participants. These biomarkers known as the CD4 count and viral load can be used to assess whether a wellness intervention is effective and are already collected at regular intervals by prescribers. The HIV biomarkers are associated with ART uptake, and morbidity and mortality for people living with HIV (Aschengrau & Seage, 2014). HIV biomarkers were useful in the Johnson et al. (2015) study of the Making our Mom Stronger (MOMS) intervention, which showed improvement in CD4 counts after women participated in a parenting support and disease self-management program.
To track participant outcomes, satisfaction with programs can be measured in addition to pre-tests and post-tests with instruments. Satisfaction instruments measure how well the intervention was received by participants. To measure satisfaction with the HHAP program, researchers used Likert-type scale questions. The questions measured participants' “satisfaction with the program and confidence to exercise regularly” (Tomioka & Braun, 2013).

Measuring participant health outcomes demonstrates participants’ progress and provides valuable data to community stakeholders. It also is key to reliable data analysis and hypothesis testing. Collecting client satisfaction information also benefits both participants and stakeholders by indicating how well the intervention was accepted by participants. In larger multi-site studies and programs, sites can be compared to evaluate program delivery issues. The client-centered approach of gathering participant feedback gives participants a sense of accomplishment and inclusion in service delivery research. Qualitative feedback about satisfaction and outcomes can be woven into the early phases of the intervention pipeline according to Gitlin and Czaja (2016). This improves translation to real world settings after research is complete.

The drawback of collecting data and satisfaction information is that these procedures add time and cost. Therefore, Gitlin and Czaja recommend collecting qualitative data during the manual development stage when sample sizes are smaller. Collecting biomarker data can be invasive. Cook and DeMets (2008) recommend using existing medical records, when possible, to minimize invasive research procedures. Careful quality control measures are required to ensure the privacy of the participants, particularly when they are members of a vulnerable population, such as people living with HIV.

Treatment Fidelity’s Relevance to Solution Focused Research and Practice

SFBT seeks to be recognized among other behavioral interventions by increasing listings on evidence-based practice registries and clearinghouses. The process for acceptance in these registries and clearinghouses is rigorous and has been a major focus of SFBT researchers in recent years. It is based on submitted studies that are judged on their outcomes and the quality and reliability of the results. This is an increasingly important requirement to be recognized as an effective intervention method to secure access to funding for essential programs in behavioral health, child protective services, juvenile justice and educational settings (Kim et al., 2019). SFBT researchers benefit their field by monitoring and reporting a study’s fidelity planning, monitoring and evaluation because it strengthens those studies for submission to registries and clearinghouses for evidence-based practices.

Excellent work has already been done to strengthen fidelity to SFBT in research studies. Lehmann and Patton’s Solution Focused Fidelity Instrument (2012) was pilot ed with graduate students in social work and included many facets of solution focused methods. The reliability coefficient of the instrument was very good (alpha=.88). Lehmann and Patton indicated that it was important for SFBT researchers to strengthen intervention efficacy testing by monitoring SFBT fidelity but indicated that more research in the area was needed.

Subsequent studies have utilized the Solution Focused Fidelity Instrument with similar reliability results. In a randomized controlled trial applying SFBT to college students to decrease stress and improved wellness, Beauchemin (2018) used the instrument and found results within the acceptable range.

Though paying close attention to fidelity in research is important, some SFBT practitioners and researchers have grappled with the issue of finding a balance between fidelity and flexibility. As some studies have indicated, fidelity including provider adherence to intervention protocols and provider training does not always lead to the best outcomes (Brady et al., 2017). Therefore, SFBT researchers may consider a more flexible approach that allows for differences among providers and program locations.

The utility of flexibility in fidelity monitoring is explained by Washington et al. (2014). Their evaluation of an intervention for older adults that utilized the miracle question, a key SFBT component revealed that some degree of flexibility was necessary. This flexible approach in delivering the miracle question helped to establish the optimal dose and training requirements that would most benefit families and be practical to implement. Similarly, Choi et al. (2011) outlined their adaptation of an HIV prevention curriculum for building safe sex skills. It was modified to fit the needs of women who abused alcohol for implementation in a residential treatment setting. The program was adapted to “speak to the participants’ direct experiences” (Choi et al.). This adaptation created a more culturally competent intervention.

Given the experiences of seasoned clinician-researchers, it seems best to follow suit and adopt a more flexible yet comprehensive picture of fidelity measurement in SFBT intervention research. The reasons for this choice include valuing
cultural competence, improving implementation, acknowledging provider and community differences and honoring the flexibility of the SFBT approach itself.

Cultural competence refers to the ability to respect and consider the diverse backgrounds and experiences of individuals, families and communities. Lee and Green (1999) recommend cross-cultural skills and self-awareness to accomplish this. The National Association of Social Workers (NASW) recommends standards and indicators for cultural competence in clinicians that include self-awareness, cross-cultural knowledge and skills in service delivery (NASW, 2015). This requires researchers to adapt existing evidence-based interventions to meet the needs of diverse people.

Gitlin and Czaja (2016) encourage considering the “cultural relevance or fit of the intervention with the values and preferences of implementers, administrators, and those who may benefit” (p. 393). These stakeholders include participants of the intervention. They posit that interventions must align with the values of those the intervention will affect if they are to be beneficial. For example, if women living with HIV do not value wellness, an intervention focused on a wellness outcome is not going to be effective regardless of strict fidelity to the intervention’s components.

Implementation settings are often significantly divergent from where the intervention was originally developed and tested. In the HHAP study, each clinic and community varied in terms of location, resources, and clinical setting. Therefore, the intervention required some flexibility in delivery to improve implementation.

Washington et al. (2014) had a similar need to allow flexibility in the delivery of their long-term care intervention for families of older adults. Reducing the intervention to a shorter period allowed them to be able to offer it to families that could not have otherwise participated. These are examples of how some degree of flexibility allows for more feasible delivery of effective interventions in the community.

Provider Variability

Provider soft skills sometimes affect client outcomes more than strict fidelity to intervention components. Soft skills include things like coming across as warm and competent and being a naturally good listener. This was highlighted in a Motivational Interviewing study where providers who were more highly scored on fidelity had the poorest outcomes with clients but were rated very highly on provider warmth scales (Wilson et al., 2018). Unexpected outcomes like this may be due to overly scripted interventions coming across as less than genuine to participants. It is possible that providers who went “off script” and adapted their language appeared warmer and more competent, and therefore had better client outcomes. This process of going “off script” may allow the language and flow of the sessions to be more natural to participants. It is reasonable to adopt a fidelity strategy that ensures the key components of an intervention are delivered but allows for some flexibility in how and when they are delivered so that during studies, the soft skills of providers are not given credit for the specific techniques delivered in the intervention. This flexibility can help to ensure that successful techniques are replicated and implemented during subsequent training and implementation. Flexibility in delivery is a strength of the SFBT approach, which through the co-construction of knowledge encourages a more tailored approach to solving problems (Franklin, et al., 2017).

A more flexible view of behavioral intervention fidelity encourages culturally competent approaches like SFBT. It also accounts for differences in providers and improved implementation. Since the goal of intervention research is to inform and enhance practice, it is best to create interventions that will be well received by diverse people, locations, and practitioners. Overly rigid interventions may not be easily replicated and risk abandonment in the field if contextual fit is neglected. Interventions should reflect underlying theories and key components while being flexible enough to be adapted to new areas of need in the community. This allows for more practice-based evidence with vulnerable populations (Gitlin & Czaja, 2016).

Methods for Monitoring Fidelity in the SFWH Intervention for Women

To ensure a more comprehensive approach to fidelity while implementing the SFWH, efforts were made to carefully focus on study design and intervention delivery in a flexible, yet thorough manner. A session-by-session treatment manual with an introduction to the topics gender, health and HIV, Solution Focused Brief Therapy (SFBT) and group leader instructions was used to promote a thorough approach to fidelity. The use of the manual ensured that each component of SFBT was utilized during the sessions and included worksheets to address wellness areas as well as brief
scripts to guide conversations relevant for HIV wellness. The manual was developed in a previous qualitative study that combined research about SFBT, multidimensional wellness and HIV in Women (Yates et al., 2019). Additionally, the group leader attended multiple SFBTA (Solution Focused Brief Therapy Association) conferences that included multiple workshops to ensure adequate training and ongoing practice in SFBT. A self-administered fidelity questionnaire was created and completed after one randomly chosen counseling session. The checklist, which expands on the work of Lehman and Patton (2012) included each of the three mindsets and eight techniques outlined in the SFBT Treatment Manual (Trepper, et al., 2012) and measured the extent to which each technique and mindset was delivered in the session. Practitioner self-monitoring of a single session was practical in this case due to the limited time and resources of implementation during the group leader’s doctoral studies and was appropriate due to the stigmatizing nature of living with HIV. During primary training in SFBT, much more frequent monitoring for fidelity and feedback from trainers is recommended, including the use of direct observation and video recording of sessions.

Our detailed plan for monitoring treatment fidelity during the pilot study of the SFWH Intervention for Women is outlined in Table 1. The plan includes components from the BCC’s framework including the strategies of study design and treatment delivery. It also includes components from Tomioka and Braun’s (2013) framework including strategies for monitoring fidelity and tracking outcomes.

### Table 1

<table>
<thead>
<tr>
<th>Framework</th>
<th>Strategy</th>
<th>Plan</th>
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<tbody>
<tr>
<td>BCC</td>
<td>Study Design</td>
<td>● Create DSMB&lt;br&gt;● Establish therapeutic “dose” by indicating the number of sessions (6) as well as the hours of each session (1)&lt;br&gt;● Ensure dose equality in sessions&lt;br&gt;● Create session by session manual with expert feedback and client experts (qualitative focus group data)&lt;br&gt;● Include provider instructions, scripts, worksheets and participant goal tracking sheets&lt;br&gt;● Use role plays and expert feedback in trainings&lt;br&gt;● Annual SFBT training for provider</td>
</tr>
<tr>
<td>BCC</td>
<td>Treatment Delivery</td>
<td>● Use SFBT trained provider to deliver the intervention&lt;br&gt;● Require use of the manual during sessions. Ensure that the 3 SFBT mindsets and 8 techniques reflected in worksheets&lt;br&gt;● Use reminder calls and texts the day before each group&lt;br&gt;● Update contact information at each session&lt;br&gt;● Use calendar at first meeting to avoid missed sessions&lt;br&gt;● Provide refreshments, transportation, childcare or parent-friendly timing&lt;br&gt;● Provide mobility and visual assistance&lt;br&gt;● Provided small incentive to participants</td>
</tr>
<tr>
<td>Tomioka &amp; Braun</td>
<td>Monitor Fidelity</td>
<td>● Adapt existing fidelity instrument to include extent to which each SFBT technique was used&lt;br&gt;● Self-administer fidelity instrument after one session</td>
</tr>
<tr>
<td>Tomioka &amp; Braun</td>
<td>Track Outcomes</td>
<td>● Collect biomarker data (CD4, viral load) before and after intervention from existing records&lt;br&gt;● Give 5 Factor Wellness Inventory before and after intervention&lt;br&gt;● Give Solution Building Inventory (SBI) before and after intervention (Jordan, 2014)</td>
</tr>
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</table>
Ethics

We received approval from the University of Georgia Institutional Review Board of the Human Subjects Office before recruitment began. We also received permission to conduct the study from the Executive Director of the community agency. As an incentive to participate, we provided $20 gift cards to participants as well transportation and childcare vouchers. The incentives received by the research participants were designed to be large enough to compensate them for their time and limit burdens of transportation and childcare. The incentives were small enough that they would not be coercive. The women receiving the intervention could decline to participate at any time with no fear of detrimental effects to the case management services at the study agency. We used participant numbers to organize the data in a way that protected the identities of the women who participated in the study.

Results

Fidelity to SFBT was encouraged and monitored in several ways during the SFWH Intervention for Women. The training of the facilitator in SFBT, the development of a treatment manual, a fidelity checklist and a rigorous study design were the fidelity improvement and monitoring techniques that were used. The group leader completed a fidelity checklist at one randomly chosen session to evaluate adherence to the SFBT components and the results are displayed in Table 2. It measures the extent to which each SFBT component was used by the facilitator.

Table 2

<table>
<thead>
<tr>
<th>Solution Focused Brief Therapy Fidelity Checklist Results from SFWH Intervention for Women Pilot Study</th>
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<tbody>
<tr>
<td><strong>SFBT Mindsets</strong></td>
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<tr>
<td>Future-oriented</td>
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<tr>
<td>Strengths-oriented</td>
</tr>
<tr>
<td>Client as expert (stance of not knowing)</td>
</tr>
<tr>
<td><strong>SFBT Techniques</strong></td>
</tr>
<tr>
<td>Best hopes question</td>
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<tr>
<td>Scaling</td>
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<tr>
<td>Therapeutic Break</td>
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<tr>
<td>Genuine Compliments</td>
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<tr>
<td>Miracle Question</td>
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<tr>
<td>Finding Exceptions</td>
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<tr>
<td>Goal Setting</td>
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<tr>
<td>Relationship questions</td>
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<tr>
<td><strong>Total/Average</strong></td>
</tr>
</tbody>
</table>

Note. Developed from the Solution Focused Fidelity Instrument and the Solution Focused Brief Therapy Treatment Manual (Lehmann & Patton, 2012; Trepper et al., 2012)

Solution Focused Brief Therapy Fidelity Checklist

We used a treatment manual developed with input from experts in SFBT, HIV and with feedback from women living with HIV as a means of improving treatment fidelity (Yates et al., 2019). During the initial intervention development phase, we incorporated components in the treatment manual published by the Solution Focused Brief Therapy Association (Trepper et al., 2012) into scripted suggestions and session-by-session instructions for the SFWH intervention. Behavioral intervention researchers recommend the use of a manual to improve fidelity. As suggested by Gitlin and Czaja (2016) we used worksheets and tracking sheets to ensure equivalent "dose" and intensity of sessions. The member of the research team who delivered the intervention received SFBT training updates over a four-year period in addition to previous academic training.
The manual was used as instructed for each session, and each session in the manual was delivered as written. Participants were offered each session. However, some participants did not attend all offered sessions. The range of sessions attended was from 0 (no sessions) to 7 (all sessions). The average “dose” or number of sessions received by participants was 3.07 (SD=2.60).

Fidelity was monitored by an SFBT checklist that included the techniques and mindsets endorsed in the SFBT treatment manual. The checklist was self-administered at one session. The results indicated that 70% of SFBT techniques and mindsets were adhered to in the randomly monitored session.

Though it may seem low, we believe that 70% fidelity to SFBT in a single monitored session represented adequate fidelity given the flexibility of the model of SFBT (each technique of SFBT does not necessarily need to be utilized in every session). For example, one technique “the miracle question” was not used in the session that was monitored, and scaling questions were used the most heavily among all eight techniques. All three mindsets (strengths-orientation, future-focus and client-as-expert) were utilized in the monitored session.

It is interesting to note that had we used a the previously validated SFBT fidelity checklist, the score of the session would have been 77%, which is slightly higher than our result of 70% (Lehman & Patton, 2012). This was due to measuring the extent to which each technique or mindset was used on a scale of 1-10. Scoring each technique according to how much it was used, gave a slightly different result, and in this case showed that we delivered less SFBT technique in the session. However, we were still able to achieve statistically significant improvements in the multidimensional wellness of the women who participated in the study (Yates & Mowbray, 2020).

Several limitations of the fidelity monitoring process for this study are notable. First, the use of a treatment manual with worksheets and suggestions for therapeutic conversations is not a foolproof way to ensure all aspects of SFBT are offered in an intervention. Second, using the newly adapted SFBT fidelity checklist rather than the previously validated Solution Focused Fidelity Instrument means the checklist was not a formally validated instrument with established reliability. Though the checklist shows promise for monitoring SFBT fidelity, a study to determine its Cronbach’s Alpha level would be necessary to justify future use in research.

**Conclusion and Implications**

Behavioral intervention research in community-based settings can be difficult to monitor, measure and report. Yet, delivering interventions as intended is key to telling the truth when reporting results, and is of importance during pilot studies when new interventions are being developed and tested. The SFBT field continues efforts to be formally identified as an evidence-based practice on national registries and clearinghouses (Kim et al., 2019). Perhaps a comprehensive and transparent approach to fidelity in published in SFBT studies could support these efforts. To improve fidelity during the pilot testing of the SFWH Intervention for Women, a treatment manual, leader training and a fidelity monitoring instrument were used. The results indicated that adequate fidelity to SFBT was achieved, and the intervention was delivered as intended with favorable results (Yates & Mowbray, 2020).

In addition to the use of a fidelity checklist, we recommended SFBT researchers discuss the additional ways they have planned and monitored intervention fidelity in their studies. We believe this will enhance researchers’ abilities to offer valid results to the research community, and to meet the needs of the communities they serve.

The NIH BCC has proposed multiple strategies for monitoring fidelity to improve the reliability of behavioral intervention research results (Bellg et al., 2004). The best hope of these fidelity improvements is that the research can be more applicable to the communities researchers are serving. Gitlin and Czaja (2016) provide recommendations for planning adequate fidelity measures for studies, and Tomioka and Braun (2013) provide a framework for fidelity monitoring in studies. The use of adequate training, adherence to key intervention components and using a detailed treatment manual are strategies for improving fidelity monitoring and reporting in behavioral intervention studies. Using these concrete strategies for improving intervention fidelity will help to produce SFBT research that is reliable and valid. The flexible nature of SFBT means that not all techniques will be implemented in every SFBT study, but adequate fidelity to the model can still be achieved by implementing the mindsets and some of the techniques outlined by the SFBTA’s published treatment manual (Trepper et al., 2012). Research that is both clinically flexible and reliable may guide practitioners in the use of evidence-based practice to benefit the field of SFBT.
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