Solution-Focused Brief Therapy for Individuals With Alcohol Use Disorders in Chile

Karla González Suitt¹, Pablo Geraldo², Marlene Estay¹, and Cynthia Franklin³

Abstract

Purpose: This article presents a pilot study exploring the applicability of a linguistically adapted, solution-focused brief therapy (SFBT) program, implemented by social workers in Chilean primary care. Method: We completed a single-case design with eight replications. To analyze the results of the program on participants’ alcohol use and other related variables, we conducted visual and percentage of nonoverlapping data analyses. Results: Social workers successfully implemented 10 of the 13 SFBT techniques. Although results need to be interpreted with caution, positive trends were observed. Participants increased their “percentage of days abstinent,” diminished “consequences of alcohol use,” decreased their “depression index,” and increased their “self-reported well-being.” Discussion: Results are consistent with previous studies on SFBT and alcohol use. Exception and coping questions may serve to increase abstinent days. SFBT focus on issues other than alcohol that are important to clients could help to reduce harm on individuals who use alcohol.

Keywords
alcohol use disorders, solution-focused brief therapy, Chile, primary care, single-system design, outcome study

Alcohol use disorders (AUDs) are a major public health problem in the world that is associated with a reduced life expectancy, mental health conditions, and familial and social problems and are also a direct cause of death (Rehm & Monteiro, 2005; World Health Organization, 2014). Chile reports the highest average amount of alcohol consumption in the Americas, citing the highest percentage of population with AUDs (8.5%). This has resulted in serious health consequences, namely, the highest alcohol attributable fraction to cirrhosis among Latin American countries, which was 66.3% for men and 66.9% for women who have the disease (World Health Organization, 2014, 2015). In addition, the proportion of the Chilean population whose deaths were wholly attributable to alcohol use was almost 2 times greater (9.8%) than the proportion of the worldwide population that met that indicator (5.9%; Castillo-Carniglia, Kaufman, & Pino, 2013; World Health Organization, 2014). Mental health conditions, such as anxiety, depression, and social problems like domestic partner violence, are also frequently associated with AUDs. This is true among both adolescent and adult populations in Chile (Basso Musso, Mann, Strike, Brands, & Khenti, 2012; Toledo, Pizarro, & Castillo-Carniglia, 2015; Rojas et al., 2012; Vizcarra, Cortés, Bustos, Alarcón, & Muñoz, 2001a, 2001b), pointing to a need for behavioral health interventions that can address comorbid AUDs and mental health conditions.

In response to the pervasive use of alcohol and its associated problems, Chile created a National Alcohol Policy. Consequently, in 2006, the Chilean Ministry of Health launched a program to provide alcohol and drug treatment for individuals who were arrested for noncriminal offenses (e.g., driving under the influence, neighborhood disturbance, family violence) as a complement or alternative to punishment (Ministerio de Salud de Chile, 2006). In 2007, Law No 19,966 established “Explicit Health Guarantees,” which stipulate that private and public health insurance companies must provide quality coverage that is accessible, timely and that covers 69 diseases including AUDs (Aprueba Garantías Explicitas en Salud del Régimen General de Garantías en Salud/Ley 19.966, 2013). In addition, this Law mandated that the Alcohol Use Disorders Identification Test (AUDIT) be applied in the primary care setting and be part of the screening for alcohol use. The expectations are that this measure will be used to identify individuals that can be provided with brief interventions (BI; Ministerio de Salud de Chile, 2010). In 2010, 50% of Chilean individuals with mild to moderate AUDs were treated in primary care settings with some type of BI (Minoletti, Rojas, & Horvitz-Lennon, 2012),

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underscoring the importance of developing culturally relevant and effective BIs that can be implemented in primary care settings. It is important to note that public primary care provides health services to about three quarters of the Chilean population and that 60% of them belong to low-income families (Fondo Nacional de Salud, 2015).

**Bls for AUDs in Primary Care**

Bls are defined as “any therapeutic or preventive activity delivered by a health worker within a short period of time” (Babor, 1994, p. 1128) oriented to detect problematic use of alcohol, and elicit change in individuals and its length may be from a single 15-min session up to four sessions (Babor, 1994). Every indication is that BIs are effective and have potential for use in high demand settings, such as primary care, because they allow practitioners to implement effective interventions that are low cost in terms of time and resources (Substance Abuse and Mental Health Services Administration, 2012). For example, one review of 29 studies on BIs in primary care settings showed similar outcomes in alcohol consumption when compared to extended interventions (Kaner et al., 2007). Other studies have also shown that, in different settings and countries, BIs have had significant effects on drinking-related outcomes, measured up to 12 months after the intervention (Bertholet, Daeppen, Wietlisbach, Fleming, & Burnand, 2005; Bien, Miller, & Tognan, 1993; Moyer, Finney, Swearingen, & Vergun, 2002; Vasilaki, Hosier, & Cox, 2006). Specifically, solution-focused brief therapy (SFBT) was found to be efficacious for patients with AUDs (mild to severe; Hendrick, Isebaert, & Dolan, 2012) and with Level 1 alcohol users with comorbid depressive symptoms (Smock et al., 2008). Different ranges of AUDs and depressive comorbid symptoms are common among patients treated within Chilean primary care settings (Minoletti et al., 2012). None of the BI studies mentioned, however, were conducted in Chile, despite the recommendations by the Ministry of Health to universally implement BIs in primary care.

There is a definite need to implement and study BIs for AUDs in primary care settings in Chile. This need is driven by the pervasiveness of AUDs, policy and program mandates, and the practicalities of addressing behavioral health disorders within primary care. In addition, BIs can be used by different health-care professionals, and promising research indicates that BIs in primary care are effective and that their implementation remained effective regardless of the health provider that delivered the BI (O'Donnell et al., 2014; Sullivan, Tetrault, Braithwaite, Turner, & Fiellin, 2011). In this vein, Cochran and Field (2013) suggested that social workers could play key roles in the implementation of BIs in the primary care settings. In order to prepare social workers for these roles within primary care in Chile, decisions need to be made on what BIs to implement and study, since these practitioners may implement several different types of BIs for AUDs. We believe that in Chile, BIs for AUDs also need to include a relational approach (e.g., mental health and family dynamics), because in Latin America, and specifically in Chile, there is an important association between alcohol use and these factors (Gonzalez, Franklin, Cornejo, Castro, & Jordan, 2017).

**Linguistically Adapted Solution-Focused Brief Interventions (SFBT)**

Even though BIs for AUDs have been implemented within diverse ethnic/racial groups and countries (e.g., Botvin, Schinke, Epstein, Diaz, & Botvin, 1995; de Shazer & Isebaert, 2003; Field, Caetano, Harris, Frankowski, & Roudsari, 2010; Rodriguez-Martos et al., 2005), most of research has not reported results disaggregated by race. This includes the SFBT (Franklin & Montgomery, 2014; O’Donnell et al., 2014). Culturally adapted interventions with Latinos have been shown to be more effective than those that are not culturally adapted, suggesting that SFBT may also benefit from linguistic and other cultural adaptations (Field & Caetano, 2010; Lee et al., 2013). In this regard, no specific studies on SFBT with AUD have been reported in Chile, suggesting that a minimum linguistic adaptation and subsequent study are warranted.

One Randomized Control Trial (RCT) on SFBT that was implemented in Chile was with patients presenting somatoform symptoms, and this study showed effectiveness in symptom reduction, service utilization, and medical expense reduction (Schade, Torres, & Beyebach, 2011). The results of this SFBT study suggest that SFBT can be effectively applied to mental health conditions. In addition, SFBT has been implemented in Mexico (another Spanish-speaking Latin American country) with AUDs (Cordero, Cordero, Natera, & Caraveo, 2009). Among this, study’s findings were that individuals with lower incomes and more severe AUDs had better outcomes and that individuals who sought to modify problems associated to alcohol use were more likely to remain abstinent and to actually modify their alcohol-related problems than clients who wanted to modify their drinking patterns (Cordero et al., 2009). None of these studies reported a linguistic or cultural adaptation of SFBT to either Chilean or Mexican culture, indicating that modifications may be warranted for future studies that are conducted with Spanish-speaking populations.

SFBT researchers suggest that the approach is consistent with the notions of *familismo* and *personalismo* because SFBT considers an interpersonal context and relies on cooperation (Corcoran, 2000; Oliver, Flamez, & McNichols, 2011). A recently conducted study on the linguistic adaptation of SFBT to the Chilean population suggests that individuals value the inclusion of significant others in treatment for AUDs.
training in this BI. The target population of the intervention

The purpose of this study was to conduct a pilot test of the intervention targeting AUDs and for further research on its efficacy and comparisons to other BI interventions. We hypothesized that social work practice utilizing SFBT in Latin America (Gonzalez et al., 2017) will be effective. This study was submitted for review and determined by the Institutional Review Board of The University of Texas at Austin.

Rationale for the Study

AUDs are serious health and social problems in Chile and are likely to co-occur with mental conditions such as depression and anxiety disorders; they can also result in family problems, such as domestic violence and child abuse. For these reasons, it is important for BIs for alcohol use to be able to treat depressive and anxiety symptoms as well as family relationships. SFBT is a mental health intervention that has shown promise in impacting alcohol use, mental health conditions, and family relationships, and it harmonizes with the notions of personalismo and familismo that characterize Latino culture (Corcoran, 2000; Oliver et al., 2011). The SFBT intervention can also be applied within primary care. From an exhaustive literature review prior this study, we learned that there are no linguistic adaptations of SFBT that have been implemented for AUDs in Latin America (González Suitt, Franklin, & Kim, 2016). Therefore, this study presents a pilot test of a linguistically adapted SFBT that is delivered by social workers in a primary care setting. The linguistic adaptation of SFBT has been reported elsewhere (Gonzalez et al., 2017), and the focus of this present study is to examine to what extent Chilean social workers are able to adhere to the SFBT intervention and to further investigate the outcomes as they relate to alcohol risk and usage and depression and mental well-being. Examining the applicability of a linguistically adapted SFBT by Chilean social workers will set the basis for the effectiveness of SFBT in primary care with AUDs and for further research on its efficacy and comparisons with other interventions such as motivational interviewing or cognitive behavioral therapy. We hypothesized that social workers would be able to adhere to the SFBT approach as measured by a fidelity instrument. In addition, we expected that, after the SFBT intervention, individuals would improve their alcohol use patterns and other factors associated to alcohol use, such as consequences of alcohol, depression, self-reported well-being, and family relationships.

Method

The purpose of this study was to conduct a pilot test of the linguistic adaptation of SFBT by social workers who received training in this BI. The target population of the intervention was low-income individuals who used alcohol and who received primary care. To that end, five social workers received a 30-hr training in SFBT. Each social worker implemented SFBT with two clients while receiving direct supervision of their work. This study was submitted for review and determined by the Institutional Review Board of The University of Texas at Austin.

Participants

Two women and six men between 38 and 60 years of age participated in this study. Individuals in this study were patients to two primary health clinics in southern Santiago, Chile, and presented a moderate to severe risk level of alcohol use as measured by the AUDIT (part of the preventive examination undertaken regularly in the clinic). To participate in this study, individuals had to be between 18 and 65 years of age, able to verbally communicate with others, willing to participate in the intervention, and willing to fill out measures forms. Individuals were excluded if they presented a severe and untreated mental illness such as schizophrenia.

Procedures

Sampling procedures. Study participants were recruited through three strategies: referrals from medical or paramedical personnel who detected any AUD as measured by the AUDIT, self-referrals from people in the community who heard of the research project through flyers and signboards, or from referrals from a third party that told them about the project. Study participants received compensation of 3,000 Chilean pesos (about US$5) for coming to the clinic to fill out the measures forms. Each time a patient was referred, the Principal Investigator (PI) called the potential participant for a meeting to invite him or her to the project. The potential participants received information about the project and were advised of their rights. Additionally, participants signed a written informed consent.

Linguistic adaptation. The official manual of the SFBT Association (Bavelas et al., 2013) was translated into Spanish by the PI and subsequently reviewed and edited by a Chilean psychologist who is an expert in SFBT. The manual was further back translated by another professional social worker. This material was complemented by other literature related to the development of SFBT in Latin America and Spain (e.g., Beyebach, 2014; Schade et al., 2011). In addition, each of the interventions detailed in the manual (e.g., asking for exceptions, coping questions, scaling questions, future-oriented questions) were supplemented with the linguistically adapted questions that were formulated in a previous stage of the study (Gonzalez et al., 2017). These linguistically adapted questions were written in Spanish based on cognitive interviews conducted with Chilean individuals and then were back translated to English by two social workers who are native English speakers and who are also fluent in Chilean Spanish.
researchers who validated them as being consistent with the approach. These materials are available from the main author.

Training. Four social workers received 30 hr of training consisting of five 4-hr sessions (20 hr), which involved an exhaustive review of the translated manual, other complementary materials of SFBT such as videos of Insoo Kim Berg, and role-playing practice and analysis. In addition to that, social workers received 10 hr of direct supervision in their workplace. The trainer was an MSW and PhD student, who was an advanced practitioner with 10 years of clinical practice in primary care settings and with underserved families and who received training in SFBT leading to the International Solution-Focused Practitioner Certificate.

Intervention. Prior research has shown that the average length of SFBT treatments is three to six sessions (Gonzalez et al., 2016; Kim et al., 2016), which is consistent with the length of BIs previously stated and other research indicating that commonly, individuals dropout from mental health treatment before the fifth session (Wells et al., 2013). Thus, we provided three individual sessions of SFBT to eight patients with AUDs. Sessions lasted between 30 and 60 min and consisted of therapeutic encounters between a social worker and a patient. We designed a protocol (available from the first author) for each session, including the main techniques of SFBT, scale questions, relationship questions, a break, compliments, and first-session formula task (Bavelas et al., 2013). These interventions were previously linguistically adapted to Chilean culture and reported elsewhere (Gonzalez et al., 2017). Toward the end of each session, social workers took a break to summarize strengths and useful information regarding the strategies that the client has already developed. After resuming from the break, the practitioner provided a solution-focused feedback to the client and a suggestion (or homework). The suggestion usually consisted of doing more of what works or observing when exceptions occur. First and subsequent sessions had the same structure. However, the second and third session included what has worked well, specifically during the period between the last session and the current and enhancing the exceptions and strategies that will help the client to reach his or her desired future. At the end of the third session, the social worker and the client completed a certificate, stating that the client has successfully participated in the treatment. The certificate had a written statement in which the client acknowledged his or her strengths and exceptions that will help him or her to advance toward the solution.

Interviews. After the intervention was complete, social workers were interviewed individually to gather their feedback regarding the applicability of the SFBT approach with the Chilean population in primary care settings. This interview followed a semistructured format that consisted of reviewing each of the interventions contained in the manual and discussing whether some changes or suggestions to improve the model should be done for future interventions.

Measures

Background information. Age, gender, relationship status, educational attainment, income, and job status will be observed at baseline.

Alcohol, Smoking, and Substance Involvement Screening Test (ASSIST). This is an 8-item questionnaire developed by the World Health Organization that aims to detect at-risk substance use and predict low, moderate, and high risks due to substance use in primary care settings (Humeniuk & Ali, 2010). These classifications mirror the substance use disorders continuum toward which the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5) and the International Statistical Classification of Diseases and Related Health Problems, Eleventh Edition (ICD-11) are trending (Humeniuk & Ali, 2010). For moderate AUDs, the sensitivity was 83% and the specificity was 79%, and for severe AUD, the sensitivity was 67% and the specificity was 60% (Humeniuk & Ali, 2010; Humeniuk et al., 2008). The validation in Chile (n = 400) was developed in several settings such as primary care, policy stations, and working places (Soto-Brandt et al., 2014). In terms of convergent and discriminant validity, the cutoff points that provided the best level of sensitivity and specificity were ≥11 for moderate risk (sensitivity 86%; specificity 78%) and ≥21 for high risk (sensitivity 81%; specificity 54%). This screening instrument was used to measure high-risk alcohol use in participants before and after the intervention because this is the instrument employed in the first trial of BIs for substance users in Chile. Therefore, using this measure will result in comparable outcomes. This instrument was administered at the baseline and at 1-month follow-up.

Timeline Follow-Back (TLFB). This is a self-reporting tool to observe the quantity and frequency of consumption (Sobell & Sobell, 1992). It consists of a calendar to record clients’ quantity and frequency of alcohol consumption during the prior week. Several variables can be calculated from the information gathered by the TLFB, namely, maximum amount of drinks in 1 day, average drinks per week, total amount of drinks in the past week, percentage of days abstinent, and number of times/day of heavy drinking. The TLFB has been validated with several populations in several settings and modalities (Sobell et al., 2001; Sobell, Brown, Leo, & Sobell, 1996). It was also validated in Mexico, using the validity criterion of comparing the TLFB to a self-monitoring measure of quantity and frequency (Annis et al., 1996). Intraclass correlations were higher than .90 for total number of drinks, number of drinks per drinking days, number of days with one to four drinks, number of days of heavy drinking, and number of abstinent days (Sobell et al., 2001). For interpreting the TLFB, the cut points are defined in relation to patterns of alcohol use that determine at-risk alcohol use, heavy drinking episodes, and their frequency or other patterns that researchers define depending on the setting. For example, Ayala, Cardenas, Echeverria, and Gutierrez (1995) and Ayala, Echeverria, Sobell, and Sobell
(1997, 1998) categorized drinking patterns according to the number of drinks consumed in one occasion (low = 1–4 drinks, moderate = 5–9 drinks, and excessive = 10 or more drinks). This instrument was employed at the baseline and at a 1-month follow-up to create a reconstructed record based on the client memory. In addition to this tool, a calendar to record the daily alcohol use was provided to participants to be completed during treatment.

**Patient Health Questionnaire (PHQ-9).** This is a self-administered instrument that was designed to be employed in primary care settings and corresponds to the depression module of the Primary Care Evaluation of Mental Disorders screening questionnaire for depressive symptoms (PRIME-MD), a tool for identifying several mental health disorders (Kroenke, Spitzer, & Williams, 2001). The tool reflects the nine depression symptoms of the DSM IV and has been found to have high convergent validity \( r = .73; p < .0001 \) with the short version of the Beck Depression Inventory when detecting depression severity (Martin, Rief, Klaiberg, & Braehler, 2006). The PHQ-9 has been translated into Spanish and validated in Chile with adult populations (Baader et al., 2012). In Chile, the convergent validity of the PHQ-9 was measured against the Hamilton Depression Rating Scale with 88% of sensitivity (major depression) and 92% of specificity (no depression; Baader et al., 2012). This instrument was administered at the baseline, at the beginning of treatment, 2 weeks after the beginning of treatment, and at a 1-month follow-up.

**Family Health (Salud Familiar; SALUFAM).** This is a 13-item screening instrument that was developed by a Chilean team using questions from several instruments and that assesses familial aspects such as agreement, cohesiveness, emotional expressions, conflict, commitment, trust, social support, labor stressors, familial stressors, and health stressors (Püschel, Repetto, Solar, Soto, & González, 2012). The final version of the instrument contains the dimensions of “agreement” and “family support.” Answers range from never = 1 to always = 5. The SALUFAM was found to be efficacious in terms of predicting health vulnerability associated with familial risk. The cut point was established at 3.7 points wherein families receiving scores \( \leq 3.7 \) reflect lower agreement and family support, which suggests higher health vulnerability (Püschel et al., 2012). This instrument was administered at the baseline and at a 1-month follow-up.

**Short Inventory of Problems (SIP).** This is a short 15-item instrument that derived from a longer instrument named DrInC (Miller, Tonigan, & Longabaugh, 1995). It includes five dimensions of alcohol-related consequences. The correlations between the SIP and the Drinker Inventory of Consequences (DrInC) were \( r \geq .80 \) and accounted for 92% of the variance that these two scales shared (Forcehimes, Tonigan, Miller, Kenna, & Baer, 2007). Recently, a Spanish version was validated among Latinos in the United States who were injured and received emergency medical care (Marra, Field, Caetano, & von Sternberg, 2014). Through a confirmatory factor analysis, the study found that the English version (with Caucasian and Latino samples) and the Spanish version (with a Latino sample) were equivalent in terms of reliability and construct validity (Marra et al., 2014). They reported an internal consistency of \( \alpha = .94 \) for the Spanish-language version and similar values for the other versions as well, and the factor loading for the 15 items varied from .51 to .81 in the Spanish-language version (Marra et al., 2014). Authors also found that the English and Spanish version had strict factor invariance, which means that the two versions are comparable in terms of each of their items (Marra et al., 2014). This instrument has not been normed and can be interpreted as higher scores, indicating higher severity or in terms of amount of consequences reported (higher number suggesting higher severity). The SIP was administered at the baseline and at a 1-month follow-up.

**Outcome Rating Scale (ORS).** This 4-item self-reporting measure gathers information about three areas, specifically, individual, interpersonal, and social, and also contains an overall well-being score. The ORS was designed as an alternative to a longer instrument called the Outcome Questionnaire (45 items). The internal consistency was over .90, and test–retest reliability were higher than .80 (Bringhurst, Watson, Miller, & Duncan, 2004). The ORS has been validated with clinical populations, demonstrating positive variation after psychotherapy (Miller, Duncan, Brawn, Sparks, & Claud, 2003). It was translated to Spanish and tested in Chile with an internal consistency of .78 and a content validity through an expert panel (Cantuarios, Cofré, Mahaluf, & Sepúlveda, 2009). This instrument was applied at the beginning of each session and served to establish therapeutic goals and challenges in each area.

**Solution-focused fidelity instrument.** We provided a 30-hr training to four social workers, each of whom implemented three sessions of SFBT to two patients. Sessions were audio-taped and/or observed through a one-way mirror. To check for fidelity of the implementation of the SFBT approach by trained social workers, the interventions were audio-recorded and analyzed by the PI and independently by another practitioner that was an expert in SFBT. To this end, the translated version of the solution-focused fidelity instrument (Lehmann & Patton, 2012) was employed. This is a 13-item tool that asks for 13 specific SFBT interventions. This instrument was reviewed in accordance to the prior linguistic adaptation of the approach in order to maintain consistency and coherence among the language aspects, the manual, the training delivered to social workers, and the evaluation of its fidelity.

Measurements were administered in a private room by the PI or a trained research assistant. The implementation of baseline measures lasted an hour, on average, whereas measures in the second, third, fourth, and fifth observations took 15–30 min. The follow-up interview took about 45 min (see Table 1).
tioners. In this regard, we observed the frequency with which the social workers adhered to the items during each session and the frequency with which they employed each technique. This information was complemented with a content analysis of the social workers’ interviews that were conducted with the social workers who implemented the model. The goal of the content analysis followed a deductive or directive approach since it was focused on examining a specific and predetermined issue—the applicability of SFBT interventions (Elo & Kyngäs, 2008; Hsieh & Shannon, 2005).

**Descriptive analysis.** To analyze participants’ demographic information and baseline reports of outcome variables, we conducted descriptive analyses and also included participants who dropped out of the intervention. We also ran t-test and χ² analysis in order to explore any significant differences between participants who completed the treatment and participants who dropped out.

**Visual analysis.** We examined outcome measures applied in the six observations—percentage of days abstinent, average of alcohol use during the last period, maximum amount of drinks during the last period, and ORS—following a visual analysis across all subjects, to observe their trends at baseline, intervention, and follow-up phases (Kratochwill et al., 2010).

**Percentage of nonoverlapping data (PND).** We also conducted PND analysis to examine the efficacy of the program on the outcome variables “percentage of days abstinent,” “average of alcohol use during the last period,” “maximum amount of drinks during the last period,” “ORS,” and “depressive symptoms.” PND is a commonly employed nonoverlap method in which we observed “the percentage of Phase B data exceeding the single highest Phase A data point” (Parker, Vannest, & Davis, 2011). Since Phase B had only three observations, the calculated PND can only result in 0%, 33%, 67%, or 100%. Thus, the results must be interpreted considering these restrictions.

**Results**

**Recruitment and Participants**

Sixteen patients in two primary clinics located in southern Santiago, Chile, were invited to participate, 15 of those agreed to participate, 9 finished the treatment, and 8 completed all the measures. Four social workers were trained in SFBT between January and April 2016 and implemented the program between April and July 2016. As shown in Table 2, participants who completed the intervention had 49 years of age in average, and two of the eight participants were women. Half of participants were in a partner relationship. Five of the eight only completed middle school while the other three completed high school. The income reported by participants was US$337 in average. Family size varied from unipersonal families up to eight members. Six of the eight participants had a job.

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**Table 1. Measure Administration by Phase.**

<table>
<thead>
<tr>
<th>Measures</th>
<th>Estimated Application Time</th>
<th>Phase A</th>
<th>Phase B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Background</td>
<td>5 min</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>ASSIST</td>
<td>5–15 min</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>TLFB</td>
<td>10–20 min</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>PHQ-9</td>
<td>5–10 min</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>SALUFAM</td>
<td>5–10 min</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>SIP</td>
<td>5–10 min</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>ORS</td>
<td>2 min</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

Note. ASSIST = Alcohol, Smoking, and Substance Involvement Screening Test; TLFB = timeline follow-back; PHQ-9 = Patient Health Questionnaire; SALUFAM = Salud Familiar; SIP = Short Inventory of Problems; ORS = Outcome Rating Scale.

**Recruitment and Participants**

- Sixteen patients in two primary clinics located in southern Santiago, Chile, were invited to participate, 15 of those agreed to participate, 9 finished the treatment, and 8 completed all the measures.
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- As shown in Table 2, participants who completed the intervention had 49 years of age in average, and two of the eight participants were women. Half of participants were in a partner relationship. Five of the eight only completed middle school while the other three completed high school.
- The income reported by participants was US$337 in average. Family size varied from unipersonal families up to eight members.
- Six of the eight participants had a job.
Twenty sessions were supervised via one-way mirrors, audio-or video-recorded, or both. As Table 3 shows, 10 of the 13 SFBT techniques measured by the fidelity instrument were implemented in 17 (85%) or more sessions. Three techniques were not consistently implemented by the social workers: “asking the client what he or she expected from the session,” “eliciting clients to state needs related to the goals of the therapy,” and “asking clients for feedback about the helpfulness of the session.” Social workers assessed their performance with the same instrument, and, in general, there was consistency between their responses and the analysis of the sessions.

Social workers, however, had the perception of having implemented more often the techniques that in the analysis of the sessions were identified as having been less frequently implemented. In addition, the sessions also involved problem-centered questions as clients presented their problems. When problem talk appeared repeatedly in a session, the trainer supervised the subsequent sessions to coach social workers in moving from problem talk toward solution talk, which was a strategy to foster fidelity with the practitioners. Each social worker was supervised directly in at least three sessions, in which the trainer provided feedback before, during, and after the session. Sessions lasted between 30 and 60 min, and all sessions included a break.

After finishing the program, we interviewed the four social workers regarding their perceptions of the process. All four social workers stated that the concrete and easy-to-practice techniques were what they liked the most, where having the manual available was crucial. Two social workers highlighted the solutions- and resources-centered aspect as one of their favorite things of the approach. Regarding the difficult aspects, one social worker identified “staying silent,” another one indicated “keeping the structure of the session,” and two others found it difficult to intervene with individuals who had some cognitive damage or cultural deprivation because they needed to make an effort to reformulate some questions. In terms of changes to the program, three of the four social workers asserted that although the program is brief, three sessions may be too brief for some cases and that, in more complex cases, they would add more sessions and follow-ups. One social worker expressed that the fact that patients were compensated for participating in the study was confusing for her patients, and she suggested providing another type of compensation or giving the compensation at the end of the program. Three social workers suggested adding more hours of training and supervision including more instances of feedback from the trainer; and two social workers thought that this approach should be employed with other conditions that are treated in primary care settings.

Table 2. Descriptive Data per Subject at Baseline.

<table>
<thead>
<tr>
<th>Subject</th>
<th>Age</th>
<th>Sex</th>
<th>Partner Relationship</th>
<th>Education Attainment</th>
<th>Monthly Income (US$)</th>
<th>Family Size</th>
<th>Work</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>51</td>
<td>M</td>
<td>No</td>
<td>MS</td>
<td>550</td>
<td>1</td>
<td>Yes, independently</td>
</tr>
<tr>
<td>2</td>
<td>49</td>
<td>W</td>
<td>No</td>
<td>HS</td>
<td>250</td>
<td>2</td>
<td>Yes, independently</td>
</tr>
<tr>
<td>3</td>
<td>53</td>
<td>M</td>
<td>Yes</td>
<td>HS</td>
<td>550</td>
<td>8</td>
<td>Yes, with a contract</td>
</tr>
<tr>
<td>4</td>
<td>60</td>
<td>M</td>
<td>No</td>
<td>HS</td>
<td>250</td>
<td>1</td>
<td>Yes, independently</td>
</tr>
<tr>
<td>5</td>
<td>58</td>
<td>M</td>
<td>Yes</td>
<td>MS</td>
<td>150</td>
<td>1</td>
<td>Yes, independently</td>
</tr>
<tr>
<td>6</td>
<td>42</td>
<td>W</td>
<td>Yes</td>
<td>MS</td>
<td>250</td>
<td>5</td>
<td>No</td>
</tr>
<tr>
<td>7</td>
<td>38</td>
<td>M</td>
<td>No</td>
<td>MS</td>
<td>150</td>
<td>1</td>
<td>No</td>
</tr>
<tr>
<td>8</td>
<td>43</td>
<td>M</td>
<td>Yes</td>
<td>MS</td>
<td>550</td>
<td>5</td>
<td>Yes, with a contract</td>
</tr>
<tr>
<td>Average</td>
<td>49</td>
<td></td>
<td></td>
<td></td>
<td>337</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

Note. M = male; W = woman; MS = middle school; HS = high school.

Table 3. Frequency Analysis of Interventions by Session.

<table>
<thead>
<tr>
<th>The Social Worker</th>
<th>1 (5)</th>
<th>2 (8)</th>
<th>3 (6)</th>
<th>Total f (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asked what the client wanted out of today’s session</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>9 (45)</td>
</tr>
<tr>
<td>Asked “what’s better” in today’s session</td>
<td>5</td>
<td>8</td>
<td>7</td>
<td>20 (100)</td>
</tr>
<tr>
<td>The client’s stated needs for today’s session were related to overall goal(s) for therapy</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>3 (15)</td>
</tr>
<tr>
<td>Summarized the client’s comments during today’s session</td>
<td>4</td>
<td>7</td>
<td>6</td>
<td>17 (85)</td>
</tr>
<tr>
<td>Complimented the client’s strengths/resources during today’s session</td>
<td>5</td>
<td>8</td>
<td>7</td>
<td>20 (100)</td>
</tr>
<tr>
<td>Asked exception/difference questions during today’s session</td>
<td>5</td>
<td>7</td>
<td>7</td>
<td>19 (95)</td>
</tr>
<tr>
<td>Asked amplifying questions during today’s session</td>
<td>5</td>
<td>8</td>
<td>7</td>
<td>20 (100)</td>
</tr>
<tr>
<td>Asked reinforcing questions (e.g., summarizing/complimenting) of the client’s reported change in today’s session</td>
<td>5</td>
<td>8</td>
<td>7</td>
<td>20 (100)</td>
</tr>
<tr>
<td>Was able to help the client behaviorally describe a next small step of progress</td>
<td>5</td>
<td>7</td>
<td>6</td>
<td>18 (90)</td>
</tr>
<tr>
<td>Asked scaling questions during today’s session</td>
<td>5</td>
<td>8</td>
<td>7</td>
<td>20 (100)</td>
</tr>
<tr>
<td>Asked coping questions related to the client’s abilities that emerged during today’s session</td>
<td>4</td>
<td>7</td>
<td>7</td>
<td>18 (90)</td>
</tr>
<tr>
<td>Asked questions to help the client think about how changes will affect the client’s family and important others in their life</td>
<td>4</td>
<td>7</td>
<td>7</td>
<td>18 (90)</td>
</tr>
<tr>
<td>Asked for feedback on the helpfulness of the session today from the client</td>
<td>3</td>
<td>5</td>
<td>5</td>
<td>13 (65)</td>
</tr>
</tbody>
</table>

Fidelity of the Intervention

Twenty sessions were supervised via one-way mirrors, audio-or video-recorded, or both. As Table 3 shows, 10 of the 13 SFBT techniques measured by the fidelity instrument were implemented in 17 (85%) or more sessions. Three techniques were not consistently implemented by the social workers: “asking the client what he or she expected from the session,” “eliciting clients to state needs related to the goals of the therapy,” and “asking clients for feedback about the helpfulness of the session.” Social workers assessed their performance with the same instrument, and, in general, there was consistency between their responses and the analysis of the sessions.
Results of Pilot Implementation

A global visual analysis was conducted to examine trends of changes in outcome variables before and after the intervention. As such, the three outcome variables of alcohol use, percentage of days abstinent, “daily average of drinks,” and “maximum amount of drinks in 1 day,” changed in the expected trend—a decrease in

Figure 1. Comparative global visual analysis of alcohol use patterns during Phase A and Phase B.
Nevertheless, the magnitude of the changes had high variation across participants (see Figure 1a–c). The variables “alcohol use risk level” measured by the ASSIST tool and “consequences of alcohol use,” measured by the SIP tool, both observed only at baseline and at a 1-month follow-up, showed the same tendency (see Figure 2a and b). In the former, the variability
of scores increased in the follow-up, while in the latter, the variability of scores appeared to be more stable. Participants showed an increase in “self-reported well-being” and a decrease in “depression index” (see Figure 3a and b). In addition, “family health” was the only outcome variable that did not change in the expected trend.

Further, we conducted PND analyses to quantify trends observed in visual analyses. As discussed previously, even when the observed trends in visual analyses moved in the expected direction, when observing the data per subject, differences emerged. Figure 4 shows PND analyses and visual representations for percentage of days abstinent during the last period per subject. The results across subjects are mixed. As shown in Figure 4, Subjects 1 and 4, both men, reported 100% abstinence following the second observation, and this behavior was reported by them throughout all the subsequent observations. Thus, the PND analysis for these two cases is 0%. Although this analysis suggests that the program did not have any effect on the decision that these two individuals made regarding stop drinking, it may be possible that the program contributed to their decision or that change may have occurred before treatment, so that three sessions of SFBT may have helped them to maintain abstinence. In parallel, PND analysis reveals that Subjects 2 (woman), 5, 6 (woman), and 8 showed at least two observation points in higher levels of percentage of days abstinent during Phase B, compared with the highest point of Phase A, which is a PND of 67–100%.

Regarding “average of alcohol consumption” and “maximum amount of drinks,” presented in Figures 5 and 6, respectively, trends are observable across subjects, showing a slight decrease of alcohol consumption in Subjects 3, 5, and 6 (woman) and a slight decrease in maximum amount of drinks in 1 day in Subjects 2, 5, 6 (woman), and 7. The complementary PND analysis showed that most of subjects diminished their level of alcohol use at only one observation point during Phase B (33%), when compared with the lowest point of Phase A. Only Subject 8 reported that the tree observation points on Phase B were under the lowest point of Phase A (100%).

In summary, subjects who did not stop drinking alcohol at the beginning of the study—2 (women), 3, 5, 6 (women), 7, and

Figure 4. Percentage of days abstinent per subject.
showed in at least one of the variables of alcohol use patterns a favorable trend, such as increasing days abstinent or decreasing average of alcohol consumption, or decreasing maximum of alcohol use in 1 day. However, PND analyses suggested that most of changes were not significant and that positive trends are stronger in percentage of days abstinent. Future case studies should consider more observation points and longer periods of follow-ups, so that it is possible to gather stronger evidence of changes.

In addition to alcohol patterns, we conducted PND analysis for self-reported well-being, presented in Figure 7. This analysis showed that six of the eight subjects reported having improved their perceptions regarding personal, family and friends, social relationships, and general well-being in at least two observation points during Phase B compared with the highest point of Phase A (67–100%). Subjects who decided to stop drinking before treatment showed different tendencies. While Subject 1 reported only once in Phase B a better level (33%), Subject 4 reported the three observation points during Phase B better levels of self-reported well-being (100%).

Discussion and Applications to Practice

This study explored the implementation and effectiveness of an SFBI intervention with patients referred for AUD using single-case designs at two primary clinics in urban low-income neighborhoods in Santiago, Chile, implemented by social workers. Eight of the 15 participants in the study finished a three-session SFBI that was linguistically adapted for this population. Frequency analysis of the fidelity measure indicated that the social workers who delivered the SFBI intervention adhered to at least 10 of the 13 techniques identified in the fidelity instrument, and direct supervision was additionally helpful to reinforce individual social workers’ fidelity to the model. These results resonate with the positive reception that practitioners reported regarding the model. On the other hand, the items that social workers implemented the least—“asking the client what he or she expected from the session,” “eliciting clients to state needs related to the goals of the therapy,” and “asking clients for feedback about the helpfulness of the session,” involve the clients’ active participation that should be elicited by therapists during the intervention. Paradoxically, social workers
perceived that they did implement these interventions more consistently than they actually did. Three possible explanations appear regarding these findings. First, since the protocol designed for the treatment focused more on specific techniques of SFBT and did not include these aspects textually, social workers may have not implemented actions that resulted in client’s self-determined goals or closely following the clients’ language or the co-construction process during sessions. All are essential elements necessary to carry out the SFBT change process (Franklin, Zhang, Froerer, & Johnson, 2016). Second, a confusion may have existed in terms of future-oriented questions that ask for what the client wants in regard to how these questions relate to the goals of the session and the therapy. Third, social workers may have not grasped the importance of asking for feedback about each session as a way to assess themselves and empowering clients, which is consistent with social workers’ perceptions regarding the need for more training and supervision. Future trainings with social workers and an improved version of the protocol will emphasize the inclusion of interventions that consider the client-centered and resource perspectives of SFBT including the importance of co-construction and the building of client cooperation and competencies. Social workers provided feedback on the program and suggested increasing the number of sessions and follow-ups, expanding the approach to other health issues in primary care and giving other types of compensation to participants. All of these are challenges to explore in future empirical studies and to consider for social workers in their clinical practice.

Overall, this study showed mixed but promising trends and outcomes that can be further explored in future studies. Regarding alcohol outcomes, the clearest trend among participants who completed the treatment was the decrease in percentage of days abstinent at the 1-month follow-up. These results are consistent with other studies on SFBT with alcohol users (de Shazer & Isebaert, 2003; Hendrick et al., 2012). The variability of alcohol use frequency and quantity across the eight participants and their progression throughout the six observations contributed to mixed results in other alcohol outcomes such as “average of daily drinks” and maximum amount of drinks in 1 day which, observed globally, changed in the expected direction. Studies with patients that present more similar profiles and/or bigger samples should explore how these outcomes vary.
change over time. In addition, future studies of SFBT with alcohol use should consider longer follow-up ranges. Interestingly, the variable percentage of days abstinent is a clear representation of an “exception day.” Thus, practitioners working with individuals with alcohol consumption may explore abstinence through exception questions and may recommend more of what works so that clients increase their days abstinent, maintain abstinence, and consequently, decrease alcohol use. Another SFBT technique that may serve to decrease alcohol use during consumption days may be exploring through coping questions such as what helped clients to stop drinking during days that they drink less than the average?

An interesting point is that participants who completed the treatment showed a decrease on their “alcohol use risk level” as measured by the ASSIST tool. In terms of clinical impact, participants moved from high risk to moderate risk (Soto-Brandt et al., 2014). Nevertheless, changes across participants varied from an increase of 7 points to a decrease of 30 points where, again, differences in subjects’ alcohol use patterns suggest that results must be interpreted with caution, and future research including larger samples may help to explain how SFBT treatment has different effects depending on clients’ characteristics.

Another important finding is that individuals who completed the treatment reported a marked decrease in consequences of alcohol use and depression index as well as a significant increase in their self-reported well-being, suggesting a possible harm reduction in which SFBT helped individuals improve in areas different to alcohol outcomes. These results may relate to the focus of SFBT on clients’ developing their own solutions and goals, which often resulted in work on a client’s own behavior, family relationships, and living conditions instead of a singular focus on abstinence or alcohol use decrease. The depression index as measured by the PHQ-9 at a 1-month follow-up, for example, decreased 5.3 points, on average, which is considered clinically significant (Löwe, Unützer, Callahan, Perkins, & Kroenke, 2004). Further explorations should be conducted on this issue to examine how client characteristics and level of symptoms may impact the effectiveness of the SFBT intervention. The improvements found in this study on the depression index and self-reported well-being outcomes for alcohol users who finished the treatment specifically

Figure 7. Self-reported well-being.
build on the study by Smock and colleagues (2008), where individuals participating in an SFBT intervention experienced a significant diminishment of their depressive symptoms and a significant increase in their psychosocial well-being. These findings further support previous research that has repeatedly shown that SFBT is an effective intervention for internalizing disorders, demonstrating decreases in depression and anxiety symptoms (Gingerich & Peterson, 2013; Kim et al., 2016; Schmitt et al., 2016).

The results of this study must be interpreted with caution. Even when some results showed visual differences, the small sample and limited number of measures only allow for identifying trends regarding expected outcomes. In addition, including only self-report measures to assess alcohol use also limits the interpretation of the results. Future research should include larger samples, more observations, blood or breath alcohol concentration measure, and/or longer follow-ups to increase internal validity. In terms of the training and preparation of practitioners, the fact that therapists needed more coaching to implement skills associated with the active participation of the clients indicates that future studies should examine whether adherence improves with better training on the change process of SFBT and whether social workers employed other specific strategies that are beyond what the fidelity measure assessed.

This is the first study to examine the effectiveness of a linguistically adapted version of SFBT on alcohol use in primary care within Latin America. Results are promising, although the study design suggests that findings must be interpreted with appropriate caution. SFBT showed reductions in alcohol risk and patterns of usage among participants. Improvements in alcohol consequences, depression, and well-being were also found and were clinically significant. Interestingly, even in cases where alcohol use did not decrease markedly, other mental health and well-being measures, including alcohol consequences, still improved, suggesting a possible harm reduction from the use of SFBT. These results complement other research studies on SFBT that have shown similar findings. Future research needs to focus on larger studies with randomized-controlled designs and longer follow-up periods to substantiate these findings. In sum, practitioners employing SFBT with alcohol users should continue exploring abstinent days through exception questions and should continue focusing on factors different than alcohol patterns that refer to clients’ well-being from their own perspective, which may contribute to improve health aspects such as depressive symptoms, anxiety, and consequences of alcohol use.

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Consumo de Drogas y Alcohol (SENDA) website, http://www.senda.gob.cl/media/boletines/Boletin%20Consumo%20de%20alcohol%20y%20violencia%20en%20la%20pareja.pdf


