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Systematic Transcreation of Self-Help Smoking Cessation Materials for Hispanic/Latino Smokers: Improving Cultural Relevance and Acceptability

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Abstract

Smoking-related illnesses are the leading causes of death among Hispanics/Latinos. Yet there are few smoking cessation interventions targeted for this population. The goal of this study was to “transcreate” an existing, previously validated, English language self-help smoking cessation intervention, titled *Forever Free®: Stop Smoking for Good*, for Spanish-speaking smokers.

Rather than simply translating the materials, our transcreation process involved culturally adapting the intervention to enhance acceptability and receptivity of the information. We utilized a multi-phase qualitative approach (focus groups and learner verification interviews) to develop a linguistically and culturally relevant intervention for the diverse sub-ethnic groups of Hispanic/Latino smokers.

Focus group findings indicated a need to underscore several additional cultural characteristics and themes such as the need to address familism and unique stressors faced by immigrants and to provide information regarding nicotine replacement therapy. Learner verification findings indicated a need to further emphasize financial and social benefits of quitting smoking and to discuss how family and friends can support the quit attempt.

These steps led to the development of a Spanish-language smoking cessation intervention titled, *Libre del cigarillo, por mi familia y por mí: Guía para dejar de fumar*, that is currently being tested in a national randomized controlled trial.

Introduction

Although the prevalence of current cigarette smoking in the US has dramatically declined over the past 10 years from 20.9% in 2005 to 15.1% in 2015 (Jamal et al., 2016), cigarette smoking remains the leading cause of preventable disease and death in the US, accounting for more than 480,000 deaths every year (USDHHS, 2014). Hispanics/Latinos comprise 17.6% of the total US population and represent the largest ethnic or racial minority group in the US (US Census Bureau, 2016). The prevalence of cigarette smoking among Hispanics/Latinos is generally lower than the prevalence among other racial/ethnic groups in the US, with the exception of non-Hispanic Asians (Martell, Garrett, & Caraballo, 2016). In 2015, 10.1% of Hispanic adults in the US smoked cigarettes, compared with 15.1% among US adults overall. However, there are significant differences in smoking prevalence among subgroups in this population. For example, Puerto Ricans and Cubans have the highest rates of smoking among Hispanics/Latinos (25.5% and 19.8% respectively) (Martell et al., 2016). When examining smoking rates among Hispanics/Latinos, a key consideration is the role of acculturation, which is defined as the adoption by immigrants of values, attitudes, and behaviors of the surrounding new culture. Prior research has demonstrated an increased probability of smoking among Hispanics/Latinos who were born in the US, particularly women (Kaplan et al., 2014; Merzel et al., 2015).

Although Hispanics/Latinos smoke fewer cigarettes and are more likely to be non-daily smokers, the leading causes of death among this population are smoking-related (National Center for Health Statistics, 2016). Cancer and heart disease are the first and second leading causes of death, respectively among Hispanics/Latinos and tobacco use is a key risk factor for both (CDC, 2015). Thus, reducing tobacco use among Hispanics/Latinos is a significant public health issue. The importance of promoting smoking cessation among Hispanics/Latinos is underscored by evidence that indicates they suffer disproportionately from tobacco-related morbidity and mortality (e.g., lung cancer is the leading cause of cancer death among Hispanic/Latino men and the second leading cause among Hispanic women), as well as, or perhaps due to, disparities in access to and use of smoking cessation services and interventions (CDC, 2015; Merzel et al., 2015; Simmons, Piñeiro, Hooper, Gray, & Brandon, 2016; Trinidad, Perez-Stable, White, Emery, & Messer, 2011). This may in part be due to income-related factors, as Hispanics/Latinos are disproportionately represented in lower socio-economic status (SES) groups and often experience low household incomes, financial strains in addition to discrimination and language barriers. All of these factors are associated with poorer success rates among those attempting to quit smoking (Kendzor et al., 2010, 2014). Currently, there are a limited number of smoking cessation services and interventions available that are targeted for Hispanic/Latino smokers (Webb, Rodriguez-Esquivel, & Baker, 2010). Access to evidence-based smoking cessation is particularly restricted for individuals with limited or no English proficiency. For example, according to US Census Data (2013), 43% of the population that speaks Spanish at home reports that they “speak English less than very well.” There have been multiple calls for adapting interventions for Hispanic/Latino smokers (Marin et al., 1990; Perez-Stable, Marin, & Posner, 1998; Simmons, Quinn, et al., 2011; Wetter et al., 2007). These findings highlight the importance of the development of culturally relevant, low-cost, and easily accessible smoking cessation interventions for diverse populations of Hispanics/Latinos to reduce the overall prevalence of smoking in this unique population.

Direct translation of health education materials from English to Spanish without appropriate linguistic, literacy, and cultural considerations can result in interventions that contain inaccuracies and awkward language; thereby reducing acceptability and impact (Solomon et al., 2005). Further, studies indicate that health education efforts focusing on promoting behavior change are more successful when *transcreated* and available to the intended population in their native language (Bender, Harbour, Thorp, & Morris, 2001). These are important considerations, as low health literacy interferes with the capacity to obtain, process, and understand basic health information needed to make appropriate healthcare decisions (Kutner, Greenberg, Jin, & Paulsen, 2006). As such, the process of taking materials originally intended for an English-language audience and translating and adapting them for another audience (in this case an Hispanic audience) is termed “transcreation” (Castro, Barrera, & Steiker, 2010; Simmons, Quinn, et al. 2011; Solomon et al., 2005). The process of transcreation involves infusing culturally relevant themes (e.g., familism in Hispanic/Latino population), images (e.g., photos of target audience, food), and context (e.g., culturally relevant vignettes reflecting needs and values of the target population) into the materials. During this process, the text is not merely translated into another language, but reconstructed to meet the health literacy and informational needs of the new target

population while maintaining theoretical and empirical basis (Castro et al., 2010; Quinn Hauser, Bell-Ellison, Rodriguez, & Frias, 2006; Simmons, Cruz, Brandon, & Quinn, 2011; Simmons, Quinn, et al. 2011; Solomon et al., 2005).

This study describes the steps involved in “transcreating” an existing validated English-language self-help smoking cessation intervention, titled *Forever Free® Stop Smoking for Good* (SSFG), for smokers who prefer to receive health information in Spanish. The SSFG intervention is comprised of 10 booklets and 9 supportive *My Story* pamphlets, both designed to assist current smokers with initial cessation as well as relapse prevention. The SSFG intervention was selected to be transcreated because it has demonstrated efficacy in a recent randomized controlled trial (Brandon et al. 2016) and was shown to be highly cost-effective. Moreover, the self-help modality has high potential for reach and public health impact because it can be easily disseminated widely to underserved populations.

Methods

Intervention Development: Transcreation process

We used a multi-phase qualitative approach to ensure the booklets were linguistically and culturally relevant for diverse sub-ethnic groups of Hispanic/Latino smokers.

Phase I: Formative research—We conducted focus groups to explore novel and culturally relevant smoking cessation themes and content for the intended audience, as well as obtain feedback on the existing English version of SSFG intervention. The existing English-language SSFG intervention comprises 10 booklets and 9 supportive pamphlets. The first booklet provides a general overview about quitting smoking, and each of the remaining nine booklets includes more extensive information on a topic related to quitting smoking and maintaining abstinence: *Smoking Urges; Smoking and Weight; What if You Have a Cigarette?; Your Health; Smoking, Stress, and Mood; Lifestyle Balance; Life without Cigarettes, The Benefits of Quitting Smoking, and The Road Ahead*. In addition to the 10 booklets, there are 9 pamphlets (*My Story: How I Quit Smoking*) that reinforce key messages about quitting smoking (e.g., dealing with stress, keeping weight gain in perspective, finding other forms of positive reinforcement). To further enhance a sense of social support, the messages in the pamphlets are communicated via a first-person narrative from former smokers, incorporating photographs of the purported speakers.

We recruited bilingual smokers via newspaper advertisements, flyers, and health care provider referrals. Participants who fit the inclusion criteria (i.e, 18 years or older, able to speak and read English and Spanish, 1 year history of smoking, and smoking 5 cigarettes per week) were scheduled to attend one of six scheduled focus groups. Eligible participants completed informed consent in their preferred language followed by a questionnaire consisting of basic demographic, smoking history, and acculturation questions. Two trained bilingual, native Spanish-speaking individuals moderated the groups. The focus groups lasted approximately 1.5 hours, refreshments were provided, and participants were compensated for their time with a \$30 gift card. This study was approved by the Chesapeake Institutional Review Board (IRB).

We developed a semi-structured interview guide for the focus groups. Specifically, we used, open-ended questions to assess: (a) smoking identity; (b) cessation experience; (c) facilitators and barriers to cessation; (d) cultural characteristics related to Hispanic/Latino smokers; (e) participant feedback on the visual elements of the booklets; and (f) study name for the new series of booklets. Examples of questions included the following: “What would you say are your reasons/situations for smoking?”; “Overall, how much is smoking part of who you are?”; “What do you like about smoking?” We showed participants the complete English-language booklet series (SSFG) and they were given sufficient time during the focus groups to review the booklets and share their perspectives regarding their visual appeal. They were asked questions such as, “Are there any specific things that will make these booklets more appealing to Hispanic smokers?” and “What is your impression of the booklets and pamphlets?” Summaries of the results were used by the research team to guide changes to existing booklets and supportive pamphlets, and to develop additional content unique to the Hispanic/Latino smokers. The next step was translating the SSFG booklets from English to Spanish with a certified bilingual translator. Spanish vocabulary and intonation can vary depending on the country of origin (Solomon et al., 2005); therefore, the initial translation was then independently reviewed by multiple bilingual professionals representing diverse countries of origin to ensure the language used in the booklets would be understandable to smokers from different Spanish-speaking backgrounds (e.g., Spanish, Mexican, Puerto Rican, Cuban, Central and South American).

Phase I Data analysis—All interviews were audiotaped, transcribed and coded to help determine when saturation occurred (i.e., no new information was obtained from the focus groups; Krueger & Casey, 2009), and then analyzed using ATLAS.ti.6.2. Content analysis was performed to identify major themes in the Hispanic/Latino community smokers with regard to smoking cessation and relapse. Three members of the research team who had been trained in qualitative research reviewed the audio files and transcriptions to develop a code list based on the aims of the study and the questions in the interview guide. Open coding was also used to identify emergent themes. For measuring degree of agreement between coders, we used the kappa index (Cohen, 1960). Kappa values of between 0.40 and 0.75 indicate good levels of agreement (Landis & Koch, 1977). An overall reliability of 89% was reached between coders.

Phase II: Learner verification—During Phase II, a series of individual learner verification interviews were conducted with participants who fit the following criteria: smoking 5 tobacco cigarette/week over the past year, age 18 years, not currently enrolled in a face-to-face smoking cessation program, monolingual Spanish-speaking, or bilingual Spanish-English and prefer receiving their health information in Spanish. Learner verification enhances the suitability of education materials by assessing attraction, comprehension, self-efficacy, cultural acceptability, and persuasion elements of the intervention. This process allowed us to verify the changes as a result of the focus group findings, reduce language miscommunication, and confirm the cultural saliency of the new content and visuals. Twenty participants were recruited, 10 for each over two iterations. Eligible participants completed informed consent and a questionnaire identical to the one

administered during the focus groups. Each interview lasted approximately 60 minutes, and participants were compensated \$30 for their participation.

We developed a semi-structured interview guide for the learner verification interviews according to each assessed element. The learner verification interview guide assessed various aspects of the materials: booklet titles, pamphlet titles, covers, reasons to quit, smoking aids, behavioral and coping skills, healthy snacks, daily hassles, benefits of quitting smoking, a cost savings table, financial benefits, social benefits, pictures, and word// language/linguistic meanings. During the interview, we directed participants to specific examples/sections in the booklets that corresponded to each of these various aspects. Examples of questions that evaluated the suitability of the new Spanish booklets included the following: “Overall, is there anything about the booklets that bothers you?”; “What do you think is the main message? Which cover do you find more attractive?”; “Overall, what did you think about the personal stories that were scattered throughout the booklets?”; “Do you feel the suggestions given in these booklets are realistic and doable? Could you do them?”; “Do you think these booklets would encourage you to quit smoking?” Interviews were audio recorded, and data were tabulated and summarized to direct modifications and revisions for the next draft. Data collected from this phase resulted in substantial layout, graphic, and visual modifications.

Phase III: The final Booklets and Pamphlets created—During Phase III, we used feedback from the participant interviews (focus groups and learner verifications) and the research team to produce the final set of booklets and pamphlets. Language, photos, graphics, and content reflected the Hispanic/Latino culture. Additionally, content for the personal vignettes contained throughout the 10 booklets and the 9 supportive pamphlets were derived from experiences and perceived benefits and barriers to quitting smoking as relayed during the focus groups as well as from the existent literature related to unique barriers and issues relevant for Hispanic smokers (e.g., acculturation influences on smoking, concerns about pharmacotherapy, higher rates of non-daily and light smoking). This process assisted us in the creation and cultural adaptation of the intervention for Spanish-speaking smokers entitled *Libre del cigarillo, por mi familia y por mí: Guía para dejar de fumar*.

Measures

Participants who met the inclusion criteria and provided informed consent completed a questionnaire packet in their preferred language (i.e., English or Spanish). The following questionnaires were included: (1) a demographic and smoking history form including questions related to income and financial resources (Canino et al., 2009; Kessler & Üstün, 2004); (2) The *Fagerström Test for Nicotine Dependence* (FTND; Heatherton, Kozlowski, Frecker, & Fagerstrom, 1991; Spanish version by Becoña & Vazquez, 1998), a standard and validated measure of nicotine dependence, with higher scores indicating greater dependence; and, (3) the *Short Acculturation Scale for Hispanics* (SASH; Marin, Perez-Stable, Marin, Sabogal, & Otero-Sabogal, 1987), which assessed level of U.S. acculturation. It included 12 items with three subscales: language use, media, and ethnic social relations.

Results

Participant Characteristics

Focus group participants (N =23) represented diverse countries of origin including Colombia, Cuba, Puerto Rico and United States, although the majority (82%) were of Cuban or Puerto Rican descent (see Table 1). The majority of participants were male (70%) with a mean age of 39.7 years (range 18–63), and smoked a mean of 16 cigarettes per day (CPD) (see Table 2). The mean of years living in the US were 25.7, and the mean score of the SASH was 2.96. Learner verification participants (N =20) were primarily of Cuban or Venezuelan descent (75%) (see Table 1). The majority of participants were male (65%), had a mean age of 40.2 years range (19- 68), and smoked a mean of 16.6 CPD (see Table 2). The mean of years living in the US were 9.1 and the mean score of the SASH was 3.07.

Focus groups: Key findings

An array of cultural key themes emerged, including familism (defined by sense of attachment, loyalty and collective well-being among the nuclear and extended family; Steidel & Contreras, 2003), and religion and spirituality as a coping mechanism. Additional emergent themes included the traditional role of coffee consumption as a trigger for smoking and experiencing urges to smoke in response to stressors relating to the immigration experience (e.g., difficulties with language, problems with transportation, lack of community). Most frequently mentioned was the cultural key theme of *familism*. A smoking specific theme that emerged was negative experiences and perceptions regarding the use of nicotine replacement therapy (NRT). Below are the key themes identified in the Focus Groups. Table 3 displays the representative quotes for each key theme.

Key themes

Familism—A strong and reoccurring theme that emerged among participants was the role of their family in their smoking. Many participants mentioned how important their family's opinions are to them, particularly the opinion of the mother. Family also was identified as being both a motivator in quitting (being surrounded by family was a reason to smoke less) and a trigger for smoking more (due to family concerns and stress).

Religion and spirituality—Participants frequently mentioned the pivotal role that religion plays in their Hispanic/Latino community and expressed that religion was a source of support when quitting smoking.

Trigger for smoking - Coffee—The majority of participants mentioned the role of coffee as both a trigger for smoking and as an important cultural characteristic of Hispanic/Latino life. Participants expressed that drinking coffee represents a social experience and a way of showing respect to visitors in your home.

Unique stressors relating to immigrants experience—A key theme that emerged was related to challenges that immigrations face related to language, finances, transportation, lack of community, knowledge of the law, etc. These difficulties impacted

their smoking as participants reported that they represented stressors which resulted in urges to smoke.

Negative perceptions about pharmacotherapy for smoking cessation—Despite high awareness of NRT (e.g., nicotine patch and gum were most frequently mentioned), the majority of participants voiced negative comments regarding NRT. These concerns included a negative perception about the efficacy of NRT. Some participants believed that using NRT would lead to dependence similar to their current dependence on cigarettes.

Design of the materials—Overall, participants expressed a preference for color pictures inside the booklets and liked the bright color palette used throughout the materials. Suggestions were made to increase the interactive components throughout the booklets.

Changes made to booklets based on focus group findings

Based on the strong and reoccurring theme of familism, we decided to develop an additional booklet to be added to the series for loved ones. This booklet, *Para mis familiares y amigos*, was written specifically for family and friends with the goal of providing them with the tools necessary to support their loved one's quit attempt. We also included a greater number of photos of families to reflect the concept of familism. Also, the theme of familism and social support was further incorporated through vignettes. Coffee references and coffee consumption in the context of smoking were added to improve appeal and acceptance of the booklets. We included difficulties experienced by individuals who had recently come to the US (immigrants) to increase the cultural salience of the text (e.g., we added an appointment with immigration, as well as content on financial problems and transportation issues as triggers to smoke). Stories and photos regarding people from different backgrounds and nationalities were also added to reflect the diversity among Hispanic/Latino ethnicity. Finally, we added information regarding NRT to address misconceptions.

Learner verification findings

Findings from the learner verification interviews resulted in revisions and modifications to the booklets that included the need to further expand the sections on cessation aids and include additional culturally salient daily stressors; further emphasize the financial and social benefits of quitting smoking; and describe ways in which family and friends can support the quit attempt. These modifications were completed through vignettes and adding text to increase the cultural relevance of the content. This was accomplished by reviewing the literature and by making adaptations on the basis of testimony that the Hispanics/Latinos provided during Phase I. Although visual elements of the materials were well received, findings from the learner verification interviews resulted in the addition of more family images on the cover and in the booklets.

Examples of changes made to booklets based on learner verification findings

Attraction—We implemented design changes in which the font for booklet titles increased in size and were bolded. Various cover options were provided and evaluated and based on feedback. We added photos of families and cigarette packs.

Comprehension—All participants had used NRT and would use it in the future; however, they reported misinformation about these products. Despite modifications made after Phase I, misperceptions about NRT continued to emerge during Phase II. Therefore, we modified and enhanced our discussion of NRT and smoking cessation pharmacotherapy and addressed concerns about addictiveness, by adding statements such as: “although they contain nicotine, it is not common for people to become addicted to these medications.” We simplified an activity to calculate the lifetime costs of cigarettes.

Cultural and linguistic acceptance—We incorporated suggestions to include difficulties experienced by family members in the participant’s home country as a daily stressor. We altered the list of healthy snack ideas to reflect the preferences endorsed by participants. To increase the relevance and appeal of the materials, we also included photos of people, places (e.g., famous monuments from different countries), food (e.g., tamales and Fajitas from Mexico), and activities (e.g., playing dominoes represents a popular activity in Cuba, Puerto Rico, and Dominican Republic) to reflect the diversity among Hispanics from different countries of origin.

Persuasion—In the booklet for family members and loved ones, we included more examples of ways for the loved one to be supportive (e.g., asking the person trying to quit if going for a walk would be helpful).

Perceived efficacy—A suggestion to spend more time with family and friends who do not smoke or call a friend was added to the behavioral coping skills list. We added a bullet point about cognitive coping skills regarding money that can be saved by smoking cessation.

Discussion

There have been calls for adapting interventions for Hispanic/Latino smokers (Marin et al., 1990; Perez-Stable et al., 1998; Simmons, Quinn, et al., 2011; Wetter et al., 2007). Given the limited Spanish-language smoking cessation resources, the purpose of this study was to transcreate the existing, validated English-language SSFG self-help smoking cessation intervention, into a series of culturally relevant and acceptable materials for smokers who prefer to receive health information in Spanish. It is important to note that we were not proposing to develop a *de novo* intervention. Rather, the Spanish-language smoking cessation intervention was building upon content of the existing English-language intervention, which was based on cognitive behavioral theory and relevant literature related to smoking among Hispanic/Latinos. Our approach to developing a Spanish version of the SSFG booklets extended beyond the common practice of literal translation of the text.

Hispanic/Latino populations have several distinctive cultural values and characteristics such as familism (family orientation), simpatía (harmonious social relations), respeto (respect for elders, authorities such as physicians and clerics), personalism (an orientation toward people over ideas and abstractions), and fatalismo or fatalism (attitude that comprises the belief that one’s destiny is out of their control) (Lorenzo-Blanco, Unger, Ritt-Olson, Soto, & Baezconde-Garbanati, 2013; Zinser, Pampel, & Flores, 2011). Findings from the focus groups indicated some of these cultural characteristics -particularly familism- as emerging

key themes that were incorporated into the booklets. Familism is an important cultural value often reported in Hispanic/Latino cultures (Katiria-Perez & Cruess, 2014; Stiedel & Contreras, 2003). For this reason, the booklets were adapted to emphasize how family members can help during the cessation attempt. In accordance with the findings from the focus groups, we created a booklet for loved ones to read to support the person who is trying to quit smoking. Given that familism has been consistently linked to social support among Latinos (Taylor, Larsen-Rife, Conger, & Widaman, 2012), this new booklet could be very helpful in the process of smoking cessation for this group.

Previous research has found that Hispanic/Latino smokers have limited access to a wide range of smoking cessation services and that the use of smoking cessation aids is relatively low among Hispanic/Latino smokers (Kaplan et al., 2014; Levinson, Pérez-Stable, Espinoza, Flores, & Byers, 2004; Merzel et al., 2015). Our findings indicate misinformation, misconceptions, and negative perceptions of FDA-approved pharmacotherapies among this population. These results are consistent with prior research that shows Hispanics/Latinos use NRT far less than non-Latino whites (e.g., Levinson et al., 2004), and that Hispanic/Latino misconceptions about smoking dependence and NRTs explains their underuse (Zinser et al., 2011). The relatively low use NRT may be due to income-relate factors and limited information; therefore, we adapted the booklets to emphasize the financial benefits of quitting smoking, and we added information about FDA-approved cessation aids in accordance with the findings indicated in the focus groups and learner verification interviews. These included vignettes addressing the misconceptions and lack of information about NRT. Clearly, further research is needed on the origin and parameters of Hispanic/Latino reluctance to use smoking cessation pharmacotherapies, and how best to address it within interventions.

Self-help interventions written in Spanish may present a cost-effective opportunity to increase the reach of smoking cessation interventions among this population. Indeed, a recent study found that delivering written smoking cessation materials in their preferred language (English or Spanish) to a sample of bilingual Hispanics/Latinos resulted in greater intended utilization and self-reported smoking cessation compared with materials delivered in their less preferred language (Rodríguez-Esquivel, Webb Hooper, Baker, & McNutt, 2015).

Smoking among Hispanics/Latinos may reflect a coping response to stress associated with the acculturation process (Abraido-Lanza, Chao, & Flórez, 2005; Kaplan et al., 2014; Merzel et al., 2016). Kendzor et al. (2014) pointed out that acculturated Latinos of Mexican descent may be more likely to perceive everyday discrimination, which could have a greater influence on cessation outcomes. Findings from the learner verification interviews indicated several factors related to acculturative stress and suggested the need to expand the section on daily stressors associated with the immigration experience: feelings of loneliness/isolation, lack of community, cultural differences and language issues.

The present study had some limitations. The results are not intended to be generalizable to other populations, only to the Hispanic/Latino population of smokers. However, even within this population, qualitative research has limited generalizability and results may vary if

interviews were conducted in different geographic areas. Indeed, there is a considerable heterogeneity in smoking behaviors among Hispanic/Latino sub-ethnicities. Although the samples for the focus groups and learner verification interviews were recruited in a single state (Florida), we were able to obtain perspectives from a diverse representation of Hispanic/Latino sub-ethnicities and countries of origin to ensure the Spanish used in the booklets was understandable across various nationalities. We also used multiple bilingual professionals representing diverse countries of origin in the translation process. Although the ideal number should be 6–10 participants per focus group (Powell & Single, 1996), logistical and scheduling difficulties led to our focus groups being conducted with an average of 3–4 participants. Future research should consider the use of alternate newer focus group methodologies (online, telephone) to engage hard-to-reach populations (Koskan, Rice, Gwede, Meade, Sehovic, & Quinn, 2014; Tate et al., 2009).

We believe that the multi-step process of transcreating the original and effective English-language SSFG self-help intervention for Hispanic/Latino smokers increases the likelihood that our materials are culturally relevant and efficacious. From Phase I participants, we were able to obtain valuable feedback regarding the existing English-language version of the materials, in addition to suggestions for enhancing the cultural relevance of the booklets. For Phase II, we recruited a monolingual/Spanish-preferring sample that represented our intended audience for this intervention and thus was critical for assessing overall acceptability of the Spanish-language intervention. However, future research is needed to test whether interventions, such as this, that integrate cultural relevant information for Hispanic/Latino smokers are indeed more efficacious than non-tailored interventions. We are currently conducting a nation-wide randomized controlled trial to assess if the Spanish-language version of the SSFG booklets retained the efficacy of the original English version for smoking cessation. This is an important step, as Hispanics/Latinos are underrepresented in smoking cessation studies (Cox, Okuyemi, Choi, & Ahluwalia, 2011; Webb et al., 2010), and only a limited number of trials have tested culturally sensitive cessation interventions among this population; fewer using experimental designs (Castro et al., 2013). Future studies may also seek to evaluate the impact of cultural adaptation of existing English-language materials for Hispanic smokers who prefer to receive their health information in English.

The qualitative results reported in this study provided important insights into strategies to enhance the cultural relevance and acceptability of smoking cessation interventions targeted for Hispanic/Latino smokers. This study utilized and extended previous research that suggested ways in which the cultural relevance and acceptability of Hispanic/Latino health interventions can be enhanced (Perez-Stable et al., 2001; Simmons, Quinn, et al., 2011; Wetter et al., 2007), and it exemplifies a systematic strategy that could be used to transcreate interventions for other underserved ethnic populations.

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Table 1

Participant characteristics.

	Focus groups (N=23)			Learner verification (N=20)		
	%	M	SD	%	M	SD
Gender (Female)	30.4			35.0		
Age (years)		39.7	13.8		40.2	16.5
Median annual household income						
Under \$10,000	39.1			26.3		
\$10,000–\$19,999	30.4			26.3		
\$20,000–\$29,000	8.7			15.8		
\$30,000–\$39,999	8.7			15.8		
\$40,000–\$49,999	4.3			5.3		
Over \$50,000	8.7			5.3		
Education						
high school	39.1			45.0		
Some college or associate's degree	43.5			35.0		
4-year college degree	17.4			20.0		
Employment						
Employed	54.3			66.7		
Unemployed	22.7			22.2		
Retired	4.5			11.1		
Enough money to						
pay off debts (yes)	36.4			65.0		
buy medication (always or often)	40.9			70.0		
see a doctor (always or often)	55.0			50.0		
Marital status						
Single	81.8			25.0		
Married or cohabitating	9.1			55.0		
Divorced	9.1			20.0		
Birth Country						

	Focus groups (N=23)			Learner verification (N=20)		
	%	M	SD	%	M	SD
Colombia	8.7			0.0		
Cuba	21.7			45.0		
Puerto Rico	26.1			10.0		
Venezuela	0.0			20.0		
Syria	0.0			5.0		
Spain	0.0			5.0		
United States	43.5			10.0		
Race						
American Indian/Alaska Native	13.0			0.0		
Asian	4.3			0.0		
Native Hawaiian or Other Pacific Islander	4.3			5.0		
Black or African American	17.4			10.0		
White	65.2			85.0		
Did not respond	17.4			5.0		
Years in the U.S.	25.70	16.21		9.19	12.3	
SASH Acculturation Score Total (1–5)	2.96	0.68		3.07	0.66	
Language Scale	2.76	0.89		1.72	0.72	
Media Scale	3.39	0.96		2.70	0.88	
Social Scale	2.79	0.60		2.51	0.57	

Note. SASH = Short Acculturation Scale for Hispanics.

Table 2

Smoking history.

	Focus groups (N=23)			Learner verification (N=20)		
	%	M	SD	%	M	SD
Years smoked		19.04	10.59		19.15	12.35
Number of cigarettes on days smoked		16.0	7.7		16.6	12.1
FTND						
Low	14.3					18.8
Low to Moderate	19.0					12.5
Moderate	66.7					62.5
High	-					6.2
Smoking Pattern						
Daily	91.3					90.0
Non-daily	8.6					10.0
Type of cigarettes						
Menthol	47.8					25.0
Regular	43.5					75.0
Both	4.3					0.0
Do not know	4.3					0.0
Other tobacco products used						
Smokeless tobacco	13.0					5.0
Cigars	21.7					25.0
Pipe	13.0					5.0
Cigarillos	13.0					10.0
E-cigarette use	36.4					5.3

Note. FTND = Fagerström Test for Nicotine Dependence.

Table 3

Key themes and illustrative quotes from Focus Groups.

Key theme	Quote
Familism	<p>“When I go to see my mom and I give her a kiss, she says “Oh my God you smell like an ashtray! It is horrible!”</p> <p>“The time I quit smoking I told my family soon [after] and they were happy, “Ah you finally stopped smoking. Good”, it is like not wanting to disappoint them that helped me to extend the time I was smoke free.”</p>
Religion and spirituality	<p>“I go to church and I feel bad because sometimes, I’ve been going to the church a long time, and I have been trying to quit smoking a very long time. At church they have freed me in thousands of ways and I say, My God, I can’t, God get me out of this vice.”</p> <p>“And religion, that is one of the biggest programs that I recommend [for quitting smoking] to people. Serve God, because God has control of everything.”</p>
Trigger for smoking - Coffee	<p>“Smoking, yes is a habit such as saying coffee; my mom, dad, the family smokes and is a tradition, such as having coffee and that it never hurts.”</p> <p>“Routine, recognizing the routine, after dinner, a coffee. Every morning I get up and [drink] coffee, I’m Cuban, one without the other (coffee and cigarette) you are –something’s missing.”</p>
Unique stressors relating to immigrants experience	<p>“Economic situation and language are the biggest difficulties for me. For example, my dad’s case [is] that [he] only speaks Spanish; I know there are situations that he finds daily where it’s frustrating because he can’t communicate at all. So if someone is trying to translate for him, he gets mad and smokes.”</p> <p>“I woke up one day and said that I didn’t want to smoke anymore and I quit. I went about nine months without smoking. But I started working at a new job and I had problems with the language- I couldn’t speak Spanish [at work]- the pressure, and I began to smoke.”</p>
Negative perceptions about pharmacotherapy for smoking cessation	<p>“For me that’s all chemistry, I don’t believe in that, I believe in will power. They told me that that was bad having those gums.”</p> <p>“You don’t do anything with the gum, with the patch and with all those kind of medications, if you don’t want to quit, you are not going to quit.”</p>
Design of the materials	<p>“It’s good that you used kind of drastic colors...But it doesn’t have, like a tracking system...It should be like a working workbook.”</p> <p>“The colors are nice. This is eye catching.”</p>