### **Sex Education for Hmong American Youth:**

Challenges and Lessons Learned<sup>1</sup>

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#### Abstract

Teen pregnancy is a significant health and social concern. Hmong Americans have some of the highest adolescent pregnancy rates in the nation; yet, there are very few culturally competent programs developed to prevent teen pregnancy in this community. The purpose of this paper is to examine the efficacy and implementation challenges of two sex education programs specifically adapted for Hmong American youth. This study assessed two cohorts of Hmong American youths (n = 53 and n=50), ages 11 to 15 years (mean = 12.96, SD = 0.72) and four interviews with program facilitators. Results showed a significant main effect for the perceived sexual health knowledge scale for cohort one (F(1,52) = 221.39, p < .001;  $n^2 = .81$ ) and no gender effects for either cohort. Staff interviews showed four main challenges for program implementation, including lack of sex conversations in the home, lack of culturally relevant curriculum, time constraints and program setting, and issues within community partnerships. Implications for future sexuality education programs are discussed.

**Keywords**. Asian Americans, Hmong Americans, Sexuality Education, Sexual Health, Program Evaluation, Mixed Methods.

#### **INTRODUCTION**

Since the 1990s, the teen pregnancy rate has declined significantly. For example, between 1991 and 2016, birth rates among women 15 to 19 years old dropped 67% from 61.8 to 20.3 births per 1,000 women (Martin, Hamilton, Osterman, Driscoll, & Drake, 2018). While there has been a decline in teenage birth rates nationally, sexual activity among teenagers still remains high. The Youth Risk Behavior Surveillance (YRBS), a national report of youth in grades 9-12 in 50 United States, showed that of the 14,765 students surveyed, 52.2% of youth had some form of sexual contact (CDC, 2018). These sexually active youth are at increased risks of engagement in unprotected sex and contraction of sexually transmitted diseases (Rangel et al., 2006), unintentional pregnancy and abortion (Kirby, et al., 2007), and long-term outcomes, including high frequency of dropping out of school, receiving public assistance, and living in poverty (CDC Vital Signs, 2014; Hoffman & Maynard, 2008; Kaye & Chadwick, 2006).

Despite the continued declining teen birth rates in the United States (Martin et al., 2018), race and ethnic disparities still exist within adolescent sexual health data (Hamilton & Ventura,

2012). While aggregate data show that Hispanic (31.9 births per 1,000 teens) and African American (29.3 births per 1,000 teens) youth have the highest prevalence of teen birth rates compared to Asian American adolescents (3.9 births per 1,000 teens) (Harris & Cheney, 2015; Martin et al., 2018), disaggregate data within the Asian American population show that Hmong American youth face significantly higher risks of being pregnant (Hutchison & McNall, 1994; Lee, Xiong, & Yuen, 2006). Unfortunately, most research and aggregate data tend to lump Hmong Americans into the larger Asian American population, which result in very few studies being initiated to examine teen pregnancy or its prevention within the Hmong American community (Lee, Xiong, & Yuen, 2006; Meschke & Peter, 2014). To address this research gap, this paper examines the efficacy and implementation challenges faced by two sex education programs specifically designed for Hmong American youth (i.e., the Making Choices and the Peer Education programs).

## **Hmong American Adolescent Sexual Health in Context**

Gender Roles and Norms. The first Hmong refugees arrived in the U.S. during 1975, as a result of their involvement in the Vietnam War. Prior to coming to the U.S., Hmong were subsistence farmers from Southeast Asia who lived within well-defined patriarchal clan structures (Lee, 2001, 2007; Ngo & Leet-Otley, 2011; Nguyen et al, 2011). Within this structure, men held positions of power and authority both within households and clans while women assumed roles associated with motherhood and marriage (Lee, 2007; Ngo & Leet-Otley, 2011; Nguyen et al, 2011).

Today, there are over 260,000 Hmong Americans living in the United States, and 62% of its population is under the age of 25 years (Pfeifer, Sullivan, Yang, & Yang, 2012). While many of these young Hmong Americans are born and raised in the U.S., traditional gender roles remain

active in many Hmong American communities (Ngo & Leet-Otley, 2011). For some Hmong American parents, the maintenance and promotion of traditional gender roles is a way to preserve their traditional values and maintain consistency within their cultural and ethnic identity (Lee, 2001). As such, they often enforce stricter restrictions on their daughters regarding household chores, dating practices, expectations for marriage, and interactions with males (Lee, Xiong, & Yuen, 2006).

Early Marriage and Teenage Pregnancy. One traditional gender role still affecting multiple young Hmong American women is the issue of early marriage. Within the traditional Hmong community, early marriage was a necessary means to support an agrarian lifestyle as early childbearing and large households were needed to help with crop production. As a result, puberty was not considered a normative developmental stage, but rather as a marker of adulthood and marriage eligibility (Lee, Xiong, & Yuen, 2006; Vang & Bogenschutz, 2011). Most first-generation Hmong immigrants were typically married before age 18 with some Hmong immigrant women marrying as young as 13 (Donnelly, 1994; Hutchison & McNall, 1994). Additionally, early marriage within the traditional Hmong community was used as a culturally normative way of managing pregnancy; families encouraged marriage as soon as the teen became pregnant (Lee, Xiong, & Yuen, 2006; Vang & Bogenschutz, 2011). Though this solution was culturally acceptable within traditional communities, the early marriage of Hmong teenagers is a serious concern in the U.S.

After four decades of residence in the U.S., adolescent pregnancy remains prevalent in the Hmong American community. In Minnesota, where Hmong Americans represent the majority of the Asian American population (Pfeifer, Sullivan, Yang, & Yang, 2012), the Asian American adolescent birth rate (40.6 per 1,000) is three times the national average (14.6 per

1,000; Folker, 2012). Disaggregated 2003 birth record data from Ramsey County, the Minnesota county with the largest Hmong American population, shows that Hmong American adolescents had the highest teen birth rate of 117 per 1,000 Hmong American females, ages 15-19. This rate exceeded that of the African American (115 per 1,000 births), Latino (87 per 1,000 births), and Caucasian teens (26 per 1,000 births; Meschke, 2003).

Looking at the wider U.S., a 2011 study by Vang and Bogensshutz revealed that 31.7% of the 186 participating Hmong American women were married before the age of 17 and almost one in five (19%) gave birth to their first child by age 18. This study also revealed that marriage in adolescence was associated with lower educational attainment, lower yearly income and higher levels of marital stress. Pa Der Vang and Pa Her (2014) found that 75% of the 12 Hmong American women they interviewed received verbal messages from their family that demonstrated an acceptance and encouragement of early marriage as a rite of passage. These messages often included concepts such as "being a good wife," as a means of shaping their daughters' values and beliefs regarding marriage (Vang & Her, 2014). In contrast, a 2012 California survey of 202 Hmong American parents of adolescents revealed that parents preferred females marry at 21.3 and males at 22.4 years. In addition, 93.6% agreed that Hmong adults should be involved in teen pregnancy prevention (Meschke, & Peter, 2014). These studies offer some evidence that the traditional gender roles associated with early marriage is related to teenage pregnancy rates within the Hmong community; however, little research considered what role, if any, early marriage may play in the development of Hmong American women's sexuality.

Sex Conversations and Stigma. While conversations in Hmong American households about cultural expectations by gender are normative, little is known about parent-child

communications regarding sexual health. The majority of the literature discussing sex conversations within Asian American families highlights that sex is still relatively taboo and rarely discussed in family conversations (Lee et al., 2013; Okazaki, 2002). For Hmong Americans, speaking directly about sex is considered culturally impolite as it embarrasses both the speaker and listener (Meschke & Dettmer, 2012; Spring & Lochungvu, 2003), making it difficult for many youth to discuss important sexual health issues with their parents. When sex conversations occur in Asian American households, they contain very little educational information and are instead an avenue for parents to express sexual values and expectations (Kim, 2009). Sex conversations between Asian American parents and their daughters generally serve three main purposes: (1) to restrict sexual activity; (2) to find out information about their daughter's sexual practices; and (3) to prevent ongoing sexual behavior (Kim, 2009). Consequently, many Hmong American female adolescents have reported avoiding conversations with their parents about sexual activity (Meschke & Dettmer, 2012) as they feel that parents and friends will disapprove of their early sexual initiation (Schuster, Bell, Nakajima, & Kanouse, 1998). Cultural and social factors together with high teen pregnancy estimates in the Hmong American community emphasize the tremendous need to reduce teen pregnancy and promote sexual health for Hmong American adolescents. Sex education provides a promising strategy to address this pressing issue.

### Sex Education and the Promotion of Adolescent Teen Sexual Health

Sex education programs designed to enhance adolescent sexual health outcomes — including teen pregnancy prevention— have been well-documented in the literature (Eisenberg et al., 2007; Kirby, 2001; Lindberg & Maddow-Zimet, 2011). While most existing sexual health programs have leaned strongly on abstinence-only curriculum, the use of comprehensive sex

education programs is supported as the best method to achieve healthy sexual outcomes (Ott & Santelli, 2007; Meschke & Peter, 2014). Kirby's extensive 1999 review summarily endorsed comprehensive sex education as the best curriculum for the prevention of teen pregnancies and promotion of healthy adolescent sexual behavior, a conclusion that has received multiple subsequent endorsements (e.g., Eisenberg et al., 2008; Kohler, Manhart, & Lafferty, 2008; Lindberg & Maddow-Zimet, 2011).

Comprehensive (or abstinence-plus) sex education programs highlight the importance of abstinence while providing information on birth control methods, condom use to prevent pregnancy and STIs, and forming healthy relationships (Kohler, Manhart, & Lafferty, 2008). While these comprehensive sex programs have been effective in promoting healthy sex outcomes, the inclusion of controversial content (e.g., condom use) in these programs can make it challenging to implement in diverse community and education settings. As a result, very few comprehensive sex education programs have been targeted or culturally adapted for use within the Hmong American community.

# **Challenges of Implementing Sex Education Programs for Hmong**

Lack of Research. One of the greatest challenges faced when implementing sex education within the Hmong American community is the lack of pre-existing studies and programs adapted for use with this community. Harris and Cheney's (2018) systematic review of 15 positive youth development interventions targeting sexual health in minority adolescents found that half of the programs targeted African-American and Latino youth while the remaining half simply targeted other minority youth. None of these programs, however, were developed to explicitly target Asian American groups or Hmong Americans. In their review of 122 studies published between 2004 and 2015 that targeted sexual health needs, Lee, Florez, Tariman, McCarter and Riesche

(2015) could only identify 18 articles that included Asian American adolescents. Of those articles, only five sexual health education programs were designed to prevent teenage pregnancy, HIV and STIs, and also recruited Asian American adolescents. However, none of these studies and programs included Hmong American participants.

Invisibility of Hmong Americans. Asian Americans are underrepresented in both sexual health literature and programing. When Asian American populations are included in research, the data are not disaggregated. This is problematic because subgroups included under the umbrella term "Asian American" often differ significantly in both language and immigration context (Lee et al., 2013; Tong, 2013). Hence, interventions developed for "Asian Americans" do not account for the specific cultural needs of subgroups like Hmong Americans, which in turn creates a significant barrier to the collection of data and creation of evidence-based interventions that are most beneficial for this community. The need for disaggregate data is reaffirmed by Viste (2007) who sought to develop and implement a birth defects prevention program for the Hmong American population in Wisconsin. Viste was unable to collect all Hmong American birth-specific data from the state as the "Laotian/Hmong" category was not created in Wisconsin until after 2000. Prior to that date, "Hmong" had been categorized under the "Asian/Pacific Islander" bracket. As Viste (2007) notes, this "homogenizing" of groups becomes a barrier to ensuring culturally appropriate and accurately focused programs (p. 761).

Cultural considerations. At the time of writing, there are few articles discussing the cultural barriers faced by sexual health education interventions implemented within the Hmong American community. Those articles that have been published are limited to issues within birth defects (Viste, 2007) and cervical or breast cancer (Lu et al., 2012; Tanjasiri et al, 2007). Within these three articles, language is identified as the most significant cultural barrier facing Hmong

Americans (Lu et al., 2012; Tanjasiri et al, 2007; Viste, 2007) with a common recommendation being the translation of program materials and contents into Hmong. On the surface, this is a useful recommendation; however, a more nuanced, culturally relevant, and context-specific analysis is needed as many programs still face significant challenges in addressing the differences in literacy level or Hmong language ability within the Hmong American community (Viste, 2007). Other significant cultural issues identified include: the development of culturally appropriate messages; a consideration of Hmong beliefs and views regarding health; an awareness of the different ways of knowing and attitudes toward Western health systems and medications; acculturation issues; and a respect for the hierarchy and roles of community elders (Lu et al., 2012; Tanjasiri et al, 2007; Viste, 2007). The limited research on cultural issues associated with the implementation of sexual health programing in Hmong American communities illustrates how an intervention's success is dependent on the extent to which its content is both culturally competent and culturally relevant.

The field of sexual health promotion clearly needs research that explores the barriers and successes of implementing sexual health education programs within the Hmong American community. The purpose of this paper is to examine the efficacy and implementation challenges faced by two sex education programs specifically adapted for Hmong American youth (i.e., the Making Choices and the Peer Education programs). Specifically, we are interested in the following research questions:

- 1. What implementation challenges are faced by Hmong focused sex education programs?
- 2. Can culturally competent education enhance perceived sexual health knowledge?
- 3. Do program outcomes differ by gender?

<sup>&</sup>lt;sup>3</sup> These are pseudonyms to protect the identity of the participants.

4. What benefits of program attendance do participants report?

### **METHODS**

## **Sex Education Programs for Hmong Youth**

Making Choices Program. Making Choices is a cultural adaptation of the 8-week Making Proud Choices curriculum (Jemmott, Jemmott, & Fong, 1998; Villarrul, Jemmott, & Jemmott, 2006), which had been implemented and evaluated with different racial/ethnic youth (Jemmott, Jemmott, & Fong, 1998; Villarrul, Jemmott, & Jemmott, 2006), but had not been previously assessed for effectiveness with Hmong American youth. Two sessions from the evidence-based, abstinence only curriculum, Managing Pressures Before Marriage (Blake, Simkin, Ledsky, Perkins, & Calabrese, 2001) were added for a total of 10 sessions. The goal of Making Choices was to improve the sexual health of youth ages 12 to 14 years old by reducing risks and increasing protective factors related to teen pregnancy. Participants met weekly for 50 minutes with trained facilitators. Each session included a mini lecture (e.g., puberty and body change, puberty, adolescence, and Hmong culture), participation in small group discussions, engagement in role playing and/or games, and a quiz that assessed the learning objectives.

Peer Education Program. The Peer Education Program is a culturally-specific peer education program that used the *Making Proud Choices* curriculum (Jemmott, Jemmott, & Fong, 1998; Villarrul, Jemmott, & Jemmott, 2006) to train Hmong American youth, ages 13- to 17, to serve as peer educators. Peer educators completed 24 hours of training on various topics, including: reproductive anatomy, consent, LGBTQ issues, healthy relationships, sexual behaviors, sexual health, and relationship skills. Once trained, peer educators were tasked with talking to other youth or their network of peers in the community about sexual health. In 2016,

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the program trained 27 peer educators who initiated one-to-one conversations with 895 individuals in their communities.

# **Implementation and Pilot Data**

*Procedure.* A pre- and post-test design was used to evaluate Making Choices across two cohorts (2012/13 and 2013/14). A short survey measure was designed to assess youth's sexual health knowledge. In cohort one, 1,104 youth registered for Making Choices with 80 (77%) of those youth completing the program, and 53 completing the retrospective survey. In cohort two, 149 youth registered, 83 (56%) completed, and 50 youth submitted both pre- and post-tests.

For both cohorts, the sample (n=104) included 49 males and 54 females, ages 11 to 15 years (mean = 12.96, SD = 0.72). Most youth (94%) participated while in  $7^{th}$  or  $8^{th}$  grade, were born in the United States (70%), and attended schools where more than 80% of the students received free/reduced price school meals (See Table 1).

Table 1. Demographic Characteristics of Participants

Demographic	First Col	nort	Second	Cohort	
Variables	N	%	N	%	
Gender					
Male	30	56.60	19	38%	
Female	23	37.74	31	62%	
Age					
11-12	28	52.83	5	10%	
13-14	24	45.28	45	90%	
15 and older	1	1.89	0	0%	
Mean (SD)	12.58 (0	.77)	13.34 (0	).66)	
Grade					
$6^{th}$	0	0%	5	10%	
$7^{ m th}$	33	62.26	22	44%	
8 <sup>th</sup>	20	37.74	23	46%	
Birth Place					
U.S.A.	13	76.47	34	68%	
Other	4	23.53	16	32%	

*Measures.* Demographic questions included age, grade, gender, race or ethnicity, family structure, country of birth, age of arrival (if born outside the U.S.), parent's age, parent's education, and family socioeconomic status. The *perceived sexual health knowledge scale* utilized twelve curriculum-relevant items selected from existing research in consultation with a Hmong advisory group and program staff. Items included "How much do you know about the human body?" and "How much do you know about ways to prevent HIV/STD infections?" Youth responded on a 5-point scale (1 = not at all to 5 = a lot. These twelve responses were summed to create a cumulative score (12-60).

Three open-ended questions were included to assess participants' motivation to attend the sex education program, what the youth learned from the program, and what they would like to see change about the program. Specifically, we asked: (1) "What brings you to this program? In other words, why are you taking this program?"; (2) "What was the most positive thing about this program for you?"; and (3) "If you could change one thing about this program to make it more helpful to you, what would that be?"

Analysis. Mean substitution (Roth, Switzer, & Switzer, 1999) was used to address the approximately 5% random missing data across items using IBM SPSS, version 22. An ANOVA was used to test gender differences of the 12 pre-test versus post-test health knowledge scores. Paired t-tests were conducted on the pre- and post-test measures of the 12 sexual health knowledge items to assess significant change in the knowledge measures. Since running a multiple comparison analysis can inflate Type I error, a Bonferroni-correction made for multiple comparisons was used by dividing the desired alpha level (0.05) by the number of tests (i.e., 12 tests for items). As a result, the corrected alpha level is 0.004. The open-ended questions were

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analyzed thematically using content analysis Moreno et al., 2010). Results are reported using pseudonyms to maintain anonymity.

#### RESULTS

*Preliminary Results*. The ANOVA results showed no gender effect for either cohort, F(1,52)=2.60, p=.11 for cohort one and F(1,49)=3.79, p=.06 for cohort two (see Table 2). However, there was a significant main effect for the perceived sexual health knowledge scale for cohort one (F(1,52)=221.39, p<.001;  $n^2=.81$ ) and cohort two (F(1,49)=21.04, p<.001,  $n^2=.30$ ). The magnitude of the difference between pre- and post-test scores was larger for cohort one than cohort two, perhaps partly due to different evaluation methods (retrospective vs. pre- and post-tests) as measured by the eta-squared ( $n^2$ ) or the square of the correlation ratio. According to Richardson (2011),  $n^2$  "measures the proportion of the total variance in the dependent variable that is associated with the membership of the different groups defined by the independent variable" (p. 135).

Table 2. Changes in Primary Outcomes from Pre-test to Post-test for Both Cohorts

	Pre-test	Post-test			
Outcomes	M (SD)	M (SD)	_ 	p	$\eta^{\scriptscriptstyle 2}$
Cohort 1					
Sexual Health Scale	35.02 (1.14)	51.64 (0.83)	221.39	<.001**	0.81
Cohort 2					
Sexual Health Scale	35.21 (1.70)	42.71 (1.21)	21.04	<.001**	0.30

Given the breadth of topics covered during the intervention (i.e., ten topics for ten weeks), we also ran two paired t-tests on all 12 items to determine the content areas the youth gained the most from during the intervention. Using the conservative corrected alpha level ( $\alpha$  = 0.004) to assess both cohorts, youth in the first cohort, on the average, reported similar gains across all 12 items. On the contrary, scores for youth in the second cohort varied by content area (Tables 3 and 4). For example, participants reported significant change of knowledge on

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reproduction, contraceptive, safe sex, and abstinence but not on puberty, pregnancy, coping with stress, and peer pressure.

Table 3. Paired T-test for the Sexual Health Items, Cohort One

	Pre	-test	Post-test			
Items	M	SD	M	SD	t(52)	p
Body	2.91	0.99	4.19	0.76	9.45	<.001
Reproduction	2.94	0.93	4.19	0.81	10.36	<.001
Puberty	3.19	1.13	4.69	0.54	9.69	<.001
HIV_STD	2.42	1.23	4.42	0.77	10.61	<.001
HIV_STDP	2.62	1.32	4.21	0.84	9.37	<.001
Pregnancy	3.68	1.14	4.69	0.54	7.98	<.001
Contraceptive	2.62	1.04	4.08	0.90	10.09	<.001
Safe-sex	3.23	1.17	4.62	0.66	9.41	<.001
Coping with stress	2.58	0.86	4.00	0.86	11.59	<.001
Peer pressure	2.65	0.88	4.08	0.90	12.55	<.001
Abstinence	2.58	1.12	4.02	0.97	9.71	<.001
Benefits	3.40	1.13	4.43	0.74	8.82	<.001

Table 4. Paired T-test for the Sexual Health Items, Cohort Two

	Pre	-test	Post-test			
Items	M	SD	M	SD	t(52)	p
Body	3.06	1.10	2.97	0.74	-0.60	.531
Reproduction	2.58	1.23	3.22	1.00	3.32	.002
Puberty	3.18	1.22	3.59	0.84	2.10	.041
HIV_STD	2.50	1.23	3.48	1.07	4.43	<.001
HIV_STDP	2.23	1.31	3.52	0.97	6.66	<.001
Pregnancy	3.51	1.30	4.02	0.89	2.80	.007
Contraceptive	2.59	1.41	3.37	1.17	3.78	<.001

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Safe-sex	2.63	1.35	3.84	1.06	6.14	<.001
Coping with stress	2.86	1.34	3.31	0.97	2.67	.010
Peer pressure	2.82	1.42	3.18	1.08	1.97	.054
Abstinence	2.84	1.49	3.78	1.02	4.07	<.001
Benefits	3.66	1.42	4.03	1.00	2.30	.026

What Youth Said They Gained from Attending the Choices Program. The 50 participants in cohort 2 responded to the open-ended question. The most common answer (66%) was learning about self, the body, and relationships with others. A girl named Foua wrote, "They taught me about human bodies and to choose more wisely if you want to have sex" (ID#129). A boy named Chai wrote, "I learned a lot about safe sex and infections...It was really helpful to be safe from those diseases" (ID#109). Mee wrote, "Getting to talk about things I might not be able to talk with my parents or other people around me" (ID#149).

The second most frequently mentioned theme (20%) was a sense of belonging and being respected in the program. Most of the youth shared that the program was a place for them to spend time with friends with other youth, express themselves, discuss their cultural practices, and be respected as Hmong American students. Moony said in this program..."people are actually listening and being respectful" (ID#141). A boy named Nai said, "Because I can talk about my feelings to others in this program" (ID#131).

### **Challenges of Implementing Sex Education for Hmong American Youth**

To assess the implementation challenges, interviews were conducted with facilitators of Making Choices and Peer Education programs.

*Procedures*. All facilitators were invited to participate in face-to-face interviews with a trained research associate. All interviews took place in a private location, to encourage

participants to speak openly about their experiences. All interviews were conducted in English and lasted between one to two hours.

*Program Staff.* Of the five facilitators, four were interviewed: three Making Choices facilitators and one Peer Education staffer. The participants included three females and one male, aged 30 or younger. All participants were Hmong Americans, bicultural, bilingual, and trained in delivering the adapted Making Proud Choices curriculum (Jemmott, Jemmott, & Fong, 1998; Villarrul, Jemmott, & Jemmott, 2006).

Staff Interview Questions. Using a semi-structured interview approach, interview questions were grouped into three sections: general culture questions, program background questions and implementation challenges and strategies. Questions in the general culture section inquired about sexual health issues within the Hmong community and included questions like "Based on your experience, do you think there is a need for sexual education in the Hmong community?" and "Do you think there are sexual health areas that do not fit in well with the Hmong culture?" These questions allowed the researchers to understand the current context of sexual health issues in the Hmong community and identify areas of incongruence.

Questions in the program background section allowed researchers to explore the reasoning for use of specific curriculums and how these programs were culturally adapted.

Questions included in this section were "Why did you choose a curriculum that focused on comprehensive sex education and not abstinence-only?" and "How were the sessions culturally adapted? Can you give examples?" The final section of the interview focused on exploring the difficulties and/or challenges of implementing the programs within the Hmong community.

Questions in this section included "Can you give us some examples of the challenges you ran into as you implemented your program?" and "What were some strategies that the program used

to ensure cultural competency of the program?" Questions in each section were often followed up with several probing questions to gain an in-depth understanding of the implementation process.

Staff interview analysis. A consensual qualitative analysis approach (Hill, Thompson, & Williams, 1997) was used to analyze the open-ended questions from the survey and staff interviews. A consensual qualitative research calls for "the use of multiple researchers, the process of reaching consensus, and a systematic way of examining the representativeness of the results across cases" (p. 3). Prior to the analysis, three upper-level undergraduate students were trained by the second author to analyze, synthesize, and interpret the open-ended questions based on this approach. They first entered all the responses from the open-ended questions from the survey and staff interviews into a Microsoft Word document. Next, the team of students and the second author read the responses under each open-ended question line-by-line independently and highlighted words, phrases, and/or meaning units. Third, they came together to discuss the meaning of words, phrases, and/or meaning units as a team. Fourth, they grouped words, phrases, and/or meaning units. Finally, themes were created for each group of words, phrases, and/or meaning units. Finally, themes were prioritized based on the frequency of words, phrases, and/or meaning units.

Results. Based on the staff interviews, four challenges surfaced across the four staff's discussions: (1) lack of sex conversations in the home; (2) lack of cultural relevance of the curriculum; (3) time constraints and program setting; and (4) community partnerships.

Lack of Sex Conversation in the Home

<sup>&</sup>lt;sup>4</sup> When reporting, all names used here are pseudonyms to protect the privacy of participants.

The lack of conversations about sex in Hmong homes was one of the first challenges that appeared in the staff interviews. While this was not a direct challenge to implementation, it highlights an important issue. When asked if there is a need for sex education in the Hmong community, Staff X agreed and noted, "It's because there's no conversation in the home because the topic is also very sensitive and there's not a lot of knowledge that is behind reproductive health care. In terms of how do you protect yourself as a Hmong woman." Staff Y also emphasized this point, "Conversations between Hmong families do not revolve around sexual health. Sex is still taboo, and youth have to rely on peers and schools for information." The lack of conversations about sex in the home not only translates into a lack of knowledge about reproductive care, but also the inability to communicate about sexual health resources in a culturally meaningful way. As Staff X explained, "with the Western time, now there's a lot of advanced medical practices that is also not taught in the culture, in the community. Then that makes it hard for people to talk about it in terms of culture because that information is not there." This cultural barrier affects both younger and older Hmong American generations and permeates through other cultural barriers such as language. Staff X noted. "even if they are fluent in English and they know where they can find resources, they don't necessarily have the knowledge to have those kinds of conversations about, you know, sexual health or teen pregnancy." In some cases, the lack of sex communication in the home may also indicate an underlying cultural resistance. As staff Y explained "It's a cultural barrier within the community. They don't have a general understanding of scientific practices regarding health and so they don't see the value or importance of sexual health."

Lack of Cultural Relevance of the Curriculum

A second challenge faced by both programs was the lack of cultural relevance in the curriculums used. While both programs used the Making Proud Choices curriculum, it was not developed for use within the Hmong American community. Staff X noticed, "this curriculum was used mainly with Black students. It was never used with refugees or immigrants." Yet the use of the Making Proud Choices curriculum is strongly supported by funders due to its evidence-based status, even though the program has never been formally adapted and tested within the Hmong American population. As a result, the curricular content may not reflect cultural translation within the Hmong context. Staff X spoke about this challenge, "talking about birth control and condoms, there really is no language in the Hmong language for this. I actually bring in the demos, the actual products, and show it, and that makes it easier. In terms of cultural appropriateness, I feel like it's not something normal we would teach because once again, there is no language for it." In order to address this challenge, both programs applied several adaptations to ensure cultural relevance to the Hmong American context. For example, Staff X described purposefully removing non-relatable content, "There are some videos within the curriculum that I decided not to show because the majority of the videos don't reflect any people who look like the Hmong students. It just doesn't relate to our students." Another major adaptation used by both programs was selecting Hmong American educators. As Staff Y noted, "Having Hmong facilitators made youth feel comfortable and they responded well to the Hmong facilitators as they saw them as role models. Also, as some youth did not speak English, Hmong facilitators were able to translate information and also bridge the gap between the youth and the parents." Other adaptations included the use of Hmong words and language and the inclusion of content related to Hmong cultural identity and history.

Time Constraints and Program Setting

The third largest challenge faced by both programs related to time constraints and limitations to the program setting. For both programs, the setting largely affected both the nature of the content delivered and the length of time for sessions. While working in the school setting allowed better access to Hmong American youth to the Making Choices program, it also came with many drawbacks. Several staff working within the school setting spoke about the difficulties they faced in acquiring a space and time during the school day for the program due to the school's scheduling limitations. As a result, the staff reported that most schools placed "our [Making Choices] program during the lunch hour where students could be excused to attend prior to or immediately after lunch." Staff O highlighted the effect this had, "This limited space and time had been our greatest challenge implementing the program." Staff D concurred, "Times allocated by certain schools for our program were limited to only 30 minutes during the lunch hour, making it hard for us to implement the program successfully."

In the case of the peer educator program, attempts to work within the school system were unsuccessful. As staff X noted, "we haven't been able to apply it [the curriculum] to the schools because of a lot of different views on the program, but we've successfully implemented in a partnering community organization." Within this community organizational context, time constraints were still a significant issue as programs had to remain flexible to the needs of participants. Staff X noted that the length of the program "depends on the weekday or weekend. Shorter time frames of the program are more successful if held during the weekends and longer time frames are better and happen more during the weekdays because of school."

As programs adapt to the cultural and implementation needs of the Hmong American community, it is imperative that evaluative data are gathered. However, the issue of time

constraints not only affected the length and duration of the program and program activities but also impeded the ability of the staff to collect evaluation data for the school-based program. Staff reported that it was challenging to fit an evaluation survey, especially one that is long, into the regular program. Similarly, they also reported that the youth did not want to spend a lot of their time filling out a "long, boring survey." Although the survey had been adjusted to 10-15 minutes in length, it was still difficult to administer during the regular schedule.

### Community Partnerships

A fourth challenge, highlighted primarily by the Making Choices program, was the issue of community partnerships. In this program, the community partnership hindered the program implementation as the agency faced significant organizational issues. As Staff Y explained, "we had many issues with staff turnover and the organization was experiencing many changes that affected the program." The high staff turnover was a challenge, partly due to the nature of small non-profit organizations and partly due to the organization's instability at the time of the program. As a result, more than 75% of the staff in the organization left the agency between 2011 and 2013, including the original two staff who initiated the program. The effects of these changes were huge, as Staff O observed, "Due to the high staff turnover and our organizational instability, we had lost some of our previous partnering schools." Similarly, Staff D stated, "Our ability to collaborate with other agencies for our work and get the youth into our program depends on our organization's reputation. When we don't have a good reputation, it's hard to go out there and sell our program." Staff Y had a similar perspective, "It was frustrating to see the high staff turnover rate, especially staff on our program. It's extremely difficult to hire new staff, train them, and send them out there to establish trust and relationships with schools and youth who have a lot of doubts about our program."

While the peer educator program did not face these community partnership challenges with their partnering organizations, they did face issues with developing relationships with the school agencies due to negative public opinion of their organization's reputation and practices.

#### **DISCUSSION**

Although the Making Choices program showed an increase in perceived sexual health knowledge and both programs attracted sufficient community interest and participation by Hmong American youth, we identified many challenges in implementation. These challenges included the lack of culturally relevant sex education curriculum, challenges in integration of sex education programs into the regular school curriculum, and lack of open conversations about sex in Hmong American homes.

## **Challenges**

Sexual Health Knowledge. Our findings suggest there is a need and desire for increased sexual health knowledge within the Hmong American community, since the majority of the literature and staff interview data show that sex is still relatively taboo and rarely discussed in family conversations (Lee et al., 2013; Okazaki, 2002). In addition, our data also suggest that certain sexual health concepts (i.e., condoms, HIV, STDs/STIs, contraception) do not have direct translations in the Hmong language. As such, sexual health programs must implement culturally appropriate approaches (i.e., clan- or lineage-based approaches) that focus less on the use of scientific terms (e.g., contraception, STDs, HIV, condom use) and more on clarifying and explaining specific processes. This means that sexual health educators must also serve as cultural interpreters to help bridge the gap between Western concepts and Hmong culture.

Participant Availability. Scheduling was the second largest challenge faced by both programs as scheduling logistics were strongly influenced by program setting and participant

availability. Schools often provided easy access to large adolescent populations; however, the school setting itself created implementation problems. In the case of Making Choices, the school setting restricted implementation time, which may have reduced student participation (i.e., 33% for cohort one and 44% for cohort two registered for but never attended the program). To promote program "buy-in" and allow the program to be integrated into existing course schedules, school administrators need to be approached early in the implementation process (Doherty & Carroll, 2002) and a clear understanding of program expectations need to be established to promote program fidelity.

Unlike the Making Choice program, the Peer Education program was conducted with partnering community organizations. Working with community organizations gave the Peer Education program more freedom in the choice of content delivery, but it also presented unique time constraints. As a majority of the Hmong American parents were working outside of the home, the program had to adapt to the time availability of the youth participants, which in turn dictated both the session schedule and duration, forcing the program to account for the transportation of youth to and from the program site. Future Hmong sexual health programs must consider factors imposed by the program setting as both school- and community-based programs face unique challenges.

Community Partnerships. Regardless of the program location, community partnerships are vital to its success. Our findings suggest that the reputation and consistency of the implementing organization and its facilitators are important factors. While we cannot discern whether the high staff turnover experienced by Making Choices was unique or atypical, we can note that organizational instability has a significant and lasting effect on community trust. In the Hmong American community, established programs have spent a considerable amount of time

building and maintaining their relationships and reputations. This foundational work allows the organization to garner community trust, which then promotes community participation and openness. Organizational instability threatens this balance by not only impeding program delivery and reducing integrity, but also by damaging future relationships between the community and organizations with a similar mission. Maintaining community trust is critical to the Hmong American community because it utilizes a clan structure; therefore, the effects of a broken relationships may have a larger radius than is the case with other cultural groups.

### **Best Practices**

Despite the earlier reported sensitivity of sex education (East, 1998; Meston, Trapnell, & Gorzalka, 1998) and the lack of family conversations about sexual health, participation in Making Choices and Peer Education was generally positive. In Making Choices, over a hundred youth registered each year, with roughly 64% completing the program with parental consent. This participation level suggests parental approval of and support for comprehensive sex education for Hmong American youth (Meschke, 2003; Meschke & Peter, 2014). Within the Peer Education program, parents actively sought out participation for their children through online advertisements. Many of these parents have personally experienced teenage pregnancy, and future studies need to consider if the support for comprehensive sex education is related to a desire to communicate about their own sexual health experiences with their children. In both these programs, the willingness of youth and parental consent for participation suggests either a cultural or a generational shift toward an increased openness to discussions on sexual health. It is important for future sexual health programs to promote the continued growth in open communication about sexual health in Hmong American households. One way to achieve this

growth is to increase the involvement of Hmong American parents in sexual health programming.

If openness to participation in sexual health education in the Hmong American community is to increase, so must the number of culturally relevant sexual health programs. One way to achieve continued "buy in" by stakeholders is to increase the number of Hmong American facilitators, which this study has found to be a successful strategy for promoting cultural competence and increasing community trust. The Hmong American facilitators who participated in this study were considered to be cultural insiders because they: were able to speak Hmong; had a deep understanding of the culture and community; and could help youth navigate the content by providing relatable and culturally relevant personal experiences.

The inclusion of content on Hmong history and identity in the sexual health program curriculum is also a critical success strategy. This content supports Hmong American youth's understanding of sexual health while also fostering a sense of positive identity development within a culturally relevant framework. While these adaptations have increased the cultural relevance of these programs within the Hmong community, more research is needed in order to understand how these adaptations affect the effectiveness and fidelity of these sexual health programs. Future research should consider these issues.

Finally, although the involvement of community-based organizations in the implementation of the program's activities is critical, perceptions by a community of a partnering organization's quality and the trustworthiness can impede or support the success of a program. It is important that future sexual health programs utilize a collaborative approach with community-based organizations if it is to foster understanding and openness to the process.

#### **CONCLUSION AND LIMITATIONS**

This study investigates the process of implementing sexual health education programs within the Hmong community by examining the implementation strategies and challenges faced by two sex education programs specifically adapted for Hmong American youth (i.e., the Making Choices and the Peer Education programs). Findings revealed that the Making Choices program can be effective in enhancing the perceived sexual health knowledge of Hmong American youth.

Nonetheless, participant data and interviews with program implementers of both programs suggest a need for more culturally relevant sexual health programs within the Hmong American community. Hmong American parents and youth are open and receptive to sexual health education. However, as this research has found, cultural adaptation is central to building cultural relevance in sexual health programing in the Hmong community. This research also finds that special consideration needs to be given to cultural barriers such as the lack of language of sexual health terminology and the use of key strategies such as the employment of Hmong American facilitators. More studies are needed, however, to better analyze if Hmong American teenage pregnancy is actually reduced through culturally adapted sex education programs.

Despite the study's contributions to understandings of sexual health promotion for Hmong American youth, there are several limitations. First, the study utilized convenience sampling which may inflate results due to selection bias. Additionally, as the study was cross-sectional and did not use a randomized control group, it is difficult to conclude that Making Choices is an effective program in changing Hmong American youth's perceived sexual health knowledge, skills, and behavior. More rigorous studies with multi-year follow-ups are needed to assess whether the Making Choices program is effective in preventing teen pregnancy and sexually transmitted infections with this population.

Second, the lack of reliability and validity of the perceived sexual health scale is a real limitation for the current study. Although the scale was co-developed with staff and youth to be developmentally and culturally appropriate and pilot tested with multiple cohorts prior to the present study, this scale has never been tested formally. Thus, the validity of the scale is questionable, and more importantly, cannot be compared to other studies, especially those evaluating Making Proud Choices (Jemmott, Jemmott, & Fong, 1998; Villarrul, Jemmott, & Jemmott, 2006). Future studies need to test measures developed for these curricula and employ them in order for the results to be comparable.

Finally, due to budget limitations and the challenge of using school identification numbers, the students included their names on their completed surveys reducing the anonymity of the data. This lack of anonymity, coupled with cultural taboos around discussing sexuality in the American Hmong community, might have affected students' willingness to be honest and open in the completion of their surveys.

Despite the limitations, the study provides valuable insight into sexual health education with Hmong American youth. Although language and other cultural challenges may restrict family communication about sexual health, parents are nonetheless supportive of sexual education for their sons and daughters as indicated by the high rate of parental consent.

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#### **Author Bios**

## **Nancy Lo**

Nancy Lo is an international doctoral candidate in the Department of Family Social Science at the University of Minnesota. Her research focuses on ethnic identity development in multiethnic and immigrant families. Nancy holds a master's degree in counseling psychology with a concentration in couple and marriage therapy from the University of St. Thomas. Prior to her doctoral program, Nancy worked as a program coordinator for a violence prevention program at Belize Red Cross to promote healthy family development.

## Zha Blong Xiong, Ph.D.

Dr. Xiong is an Associate Professor in the Department of Family Social Science at the University of Minnesota. Dr. Xiong received his B.A. degree from Winona State University in 1991, majoring in Psychology; his M.A. in 1997 and his Ph.D. in 2000 in the Department of Family Social Science at the University of Minnesota. Dr. Xiong research focuses on the influence of family, community, and school social capital on children's adjustment. He publishes widely on intergenerational relations and Hmong children and youth educational issues, and serves on several community organizations' boards and advisories, including the Hmong National Development, Hmong American Partnership, the Hmong 18 Council, and the Journal of Southeast Asian American Education and Advancement.

# Laurie L. Meschke, PhD

Laurie Meschke is an Assistant Professor in the Dept. of Public Health at the University of Tennessee. Dr. Meschke utilizes both qualitative and quantitative methodology in addressing adolescent and sexual/reproductive health issues. Over the past two decades, Dr. Meschke has worked extensively with the Hmong American community addressing teen pregnancy prevention, mental health, and parent-adolescent communication. Currently, Dr. Meschke is using community-engaged research methods to address opioid use disorder and to evaluate sexual assault prevention across the state of Tennessee.

# **Vern Xiong**

Vern Xiong is a research specialist and grant writer with Civitas LLC, a national community development consulting firm based in Charleston, South Carolina. In his 5 years with Civitas, his experience has spanned housing studies and community development projects across the country, including but not limited to, housing needs assessments and Housing and Urban Development entitlement grant planning. In addition to his work with Civitas, Vern has worked on international development projects for nonprofits working in South and Southeast Asia. Coming from a refugee family, Vern has a special interest in helping displaced people and secondary migrants adapt, make healthy living choices, and grow with their new communities. Vern earned a Bachelor of Art from Greenville College, Illinois and a Certificate in Grant Proposal Writing from Fort Hayes State University.

#### Kia Moua Kehrer

Kia has an Associate of Applied Science in Fashion Design from the International Academy of Design and Technology Chicago, a Bachelor of Fine Arts in Communications Design from Southern Illinois University Carbondale, and a Masters of Business Administration from Bethel

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University. She joined the Midwest Regional Children's Advocacy Center (MRCAC) in June 2015 to provide overall administrative support to the program. Ms. Kehrer has extensive experience developing online course curricula utilizing adult learning best practices in her role on the MRCAC team. She began non-profit work through the City of St. Paul Americorps Vista Program back in 2010, and has since gained many years of non-profit and community experience and knowledge.

## **Mary Xiong**

Mary's background is in community organizing and public health education and promotions. She was a SoLaHmo community-based participatory action researcher of the first Immigrant Microbiome Project within the Hmong and Karen community through the University of MN Knights Lab and a coordinator for the We Can Prevent Diabetes Research project through Open Cities Health Center. Mary remains an active member in community projects, events and issues impacting refugees, immigrants, and other people of color. Currently, she is a member and an appointed Chair for the Hmong Health Care Professionals Coalition 2019-2020 and is an Education and Outreach Program Manager for Planned Parenthood North Central States Hmong youth and parent-child programs within the metro-area of Minnesota.