



Enhancing Outcomes for Immigrant Populations: Effects of a Culturally-Relevant Pilot Intervention

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Abstract

Little progress has been made in developing culturally-relevant interventions that can improve the lives of Asian Americans, especially for those with immigrant backgrounds. This is particularly concerning for the elderly Asian immigrant population, as they are at risk for experiencing stress and other adverse outcomes due to barriers such as language and communication difficulties, access to health care, and financial instability. One major challenge in this research is the low availability of interventions considered to be appropriate or by this population. The present study sought to address this gap by utilizing an interdisciplinary and community-based participatory research approach to intervening with elderly Vietnamese American immigrant adults. Specifically, an ancient form of Chinese movement was used as an intervention to improve mental and physical health of elderly Asian immigrant adults. A mixed-methods, waitlist control design was used to determine differences in outcomes between the intervention and control groups. Results from self-report and behavioral measures of psychological and physical health, as well as focus group data, suggest the intervention is effective at improving aspects of various psychological and mental and physical health outcomes. Findings show promise that a culturally-embedded intervention (e.g., with aspects and components that are salient for and endorsed by our target population) may be necessary in enhancing the health of Asian American immigrants.

Introduction

- The Asian American population in the U.S. is the fastest growing racial/ethnic minority group in the U.S. (U.S. Census, 2010)
- Despite the well-documented disparities in mental health and health for this group, little progress has been made in developing culturally-relevant interventions that can improve the lives of Asian Americans, especially for those with immigrant backgrounds
- This is also concerning due to findings from the Surgeon General's Report (2001) demonstrating that:
 - Culture is important and cultural issues are involved in quality of care
 - Ethnic minorities bear a greater burden from unmet mental health needs
 - Disparities involve less access and lower quality of care and are not due to differences in prevalence rates (i.e., needs are similar)
 - Many ethnic minority people do not seek treatment
- These issues are particularly concerning for the elderly Asian immigrant population, as they are at risk for experiencing stress and other adverse outcomes due to barriers such as language and communication difficulties, access to health care, and financial instability
- One major challenge in this research is the lack of culturally-relevant interventions for this group
 - Few interventions have included components that may be deemed salient or appropriate by this population
- Using an interdisciplinary, community-based participatory research approach, the current study tested a movement intervention to determine its effects on psychological (e.g., depression, stress) and physical (e.g., energy level, role limitations) health outcomes with elderly Vietnamese American immigrant adults

Method

Participants

Participants were recruited from a community agency in North California that provides social services to Asian immigrant populations. Participants were eligible for the study if they 1) were between the ages of 60- to 75-years-old, 2) are an immigrant from an Asian country, and 3) passed a physical health screen administered by UC Davis School of Nursing faculty and graduate students. Recruitment efforts resulted in two cohorts of elderly immigrant adults, all of whom reported to be immigrants from Vietnam. Additional demographic information is presented in Table 1.

Characteristic	n	%
Treatment Condition		
Intervention	38	52.05
Control	35	47.95
Gender		
Female	35	47.95
Male	38	52.05
Immigration Status		
Refugee	18	64.29
Age	M = 66.66 years	

*Refugee status collected in second year of study only (n = 28)

Method (Cont.)

Intervention

Lishi, an ancient form of Chinese movement system, was delivered as the cultural movement intervention in this pilot study. Similar to tai chi, Lishi is a form of mind-body exercise that focuses on the coordination of breathing and movements. It promotes breathing, balance, coordination, and alignment. Lishi was an ideal intervention for this population due to its cultural traditions and its slowly-performed movements. For this study, Lishi was implemented by a trained Lishi master.



Procedures

This mixed-methods pilot study utilized a waitlist control group design to examine the effects of this cultural movement intervention. Participants in the intervention received a 1-hour, weekly intervention for ten weeks and completed assessments on psychological health and physical health outcomes. Self-report measures were collected on stress, psychological distress (i.e., depression, anxiety), self-efficacy, self-esteem, disruption of functioning due to stress, and health. A behavioral measure of balance was also collected. These measures were assessed at baseline and post-test. Additionally, a focus group was conducted with participants following the 10-week intervention to assess for participant perceptions of the cultural intervention.

Results

Dependent Variable	df	dferror	F	Group Condition	Means	95% Confidence Interval	
						Lower Bound	Upper Bound
Psychological Distress	1	69	.83	Intervention	1.72	1.55	1.89
				Control	1.84	1.66	2.02
Stress	1	69	.57	Intervention	17.72	16.07	19.37
				Control	18.62	16.89	20.34
Disruption in Functioning	1	69	.51	Intervention	3.13	2.59	3.67
				Control	3.41	2.84	3.98
Self-Efficacy*	1	69	4.79	Intervention	3.19	3.03	3.34
				Control	2.95	2.79	3.10
Self-Esteem	1	69	.00	Intervention	17.41	16.44	18.38
				Control	17.38	16.37	18.40
Physical Functioning	1	69	.32	Intervention	47.24	40.02	54.46
				Control	50.19	42.64	57.74
Vitality (Energy)*	1	69	4.69	Intervention	62.89	56.88	68.91
				Control	53.57	47.14	59.73
Role Limitations due to Physical Problems	1	69	1.73	Intervention	55.26	42.40	68.13
				Control	43.01	29.56	56.46
Balance* ¹	1	18	5.87	Intervention	.13	-.15	.39
				Control	.67	.28	1.13

*p < .05
¹Higher scores indicate higher risk for falling

Results (Cont.)

Finding	Participant Quotes
Physical Health	"I feel healthier. On the first day...I couldn't stand on one leg while keeping the other leg lifted for long. After the program, I could do that easily for 5 seconds on each leg." "This exercise helps me feel better. While I am cooking, it takes longer for me to feel fatigue and I can stand longer. I feel healthier."
Psychological Health/Mindfulness	"But this is a great way to practice our brain. The second thing is the slow breathing because that would make you feel inner peace."
Age appropriate	"The slow movements also help with self-reflection, that's why it is good for the elderly."
Social interactions	"We are all elderly, and we really need social events like this to gather and meet one another to be happy."
Desire to practice	"This is just a basic, so we can use this to practice everyday. It will be a method to maintain our health."
Gratitude	"I'm very grateful to be here in the U.S., UCD, and all the staffs of this program for being concerned over our health."
Exceeded Expectations	"I was very surprised because I didn't expect a large university to have an exercise program for the elderly."

Discussion

Summary of Findings

Results from this pilot study suggest that this cultural movement intervention is effective at improving aspects of psychological and physical health outcomes. Treatment effects were found for elderly Asian immigrant adults. Compared to participants in the control condition at post-test, participants in the treatment group demonstrated:

- Higher levels of self-efficacy
- Higher levels of energy
- Better balance and a lower risk of falling

Furthermore, focus group results indicate similar results. As shown in Table 3, themes found from the focus group included improvements in psychological and physical health - participants reported feeling more "inner peace" and "self-reflection" as a result of the movement intervention, and many said they were able to "stand longer" and complete their daily activities with less effort. Additionally, participants felt the intervention was age appropriate. The majority of participants expressed their desire to continue the movement intervention on their own after the conclusion of the study. Finally, participants described the weekly intervention as a positive social interaction activity.

Conclusions

Findings show promise that this cultural movement intervention can positively impact psychological and physical health outcomes for elderly immigrant populations. Specifically, improvements in energy level and stamina suggest that this movement intervention has direct impact on the physical health of elderly immigrant adults. In addition, focus group findings indicate that the majority of participants appreciated the opportunity to engage with their peers on a regular basis; this may be a potential contributor to the increased levels of self-efficacy in this group compared to the control group.

An intervention that is not perceived as a mental health treatment, and includes cultural elements (i.e., breathing, slow movements) may be more acceptable for populations where stigma exists around mental health issues. Acceptability may lead to increased buy-in and engagement in interventions for these populations. These are crucial concerns in the development and implementation of culturally-salient or culturally-appropriate interventions. These findings show promise for a cultural movement intervention; larger scale studies are needed to determine its feasibility and generalizability.

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