

SUPPLEMENTARY MATERIALS

“Bilingual cancer genetic education modules for the Deaf community: Development and evaluation of the online video material

Supplementary Material

Table 1. Sample Characteristics for Focus group evaluation *N*=19

Characteristic	No. (%) Average (range)
Age, M (range), years	51.7 (24-77)
Female, No. (%)	10 (52.6)
College educated, No. (%)	15 (78.9)
Ethnicity/Race, No. (%)	
Non-Hispanic Caucasian	15 (78.9)
Hispanic	0 (0)
Asian	3 (15.8)
Black	1 (5.3)
Native American/American Indian	0 (0)
Other	0 (0)
Cultural affiliation, No. (%)	
Deaf community	14(73.7)
Deaf and Hearing communities	5 (26.3)
Hearing community	0
Neither community	0
Personal history of cancer ^a , No. (%)	1 (5.3)
Family history of cancer ^b , No. (%)	11 (57.9)
Prior genetic counseling or testing ^c , No. (%)	10 (52.6)

^a colon cancer

^b breast, ovarian, colon or unknown

^c includes participation in Deaf Genetics Project

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Supplementary Table 2

Table 2. Evaluation of the prototype and final CGEM product

	Focus Group Participants^a	Community participants^b	CGEM participants^c
Video viewed^d	Samples A & B	Sample A or B	Bilingual version-Full product
Message Comprehension -- % correct			
On Anna’s family tree, Anna’s mother’s side of the family was on the: RIGHT (middle, left)	55.5%	41.4%	--
Anna’s risk for breast/ovarian cancer is: HIGHER THAN MOST PEOPLE (same, lower)	22.2%	40.7%	--
Can a man develop breast cancer? YES (no, unsure)	77.8%	55.2%	86.6%
The male symbol on the family tree is shown as a: SQUARE (circle, diamond)	--	--	84.5%
According to Anna’s family tree, her risk for inheriting breast or ovarian cancer is the same as most people: FALSE (true)	--	--	56.7%
A person with a genetic predisposition for cancer has: A HIGHER RISK OF DEVELOPING CANCER THAN MOST PEOPLE (same, lower)	--	--	75.3%
Viewer Engagement & Motivation			
How interested are you in making your own family health history tree? VERY INTERESTED (somewhat; not at all)	62.5%	57%	--
How confident are you in developing your own family tree? VERY CONFIDENT (somewhat; not at all)	--	--	43.7% ^e
Would you tell your friends and family about this video? YES (maybe, no)	77.8%	57%	--
How likely would you recommend this Educational Module to your family or friends? DEFINITELY (very; somewhat; not at all)	--	--	55.3% ^e
Design Features			
Quizzes helped you understand the information presented in the video: YES (no)	88.9%	90%	--

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Annoying to answer quiz questions: NO (yes)	100%	71%	86.3% ^e
Video was too long to watch: NO (yes)	100%	86.2%	68.4% ^e
ASL speed was: GOOD (too fast; too slow)	100%	93%	95.7% ^e
The information in the video was clear and easy to understand: YES (no; it was okay but not great)	88.9%	79%	--
The Educational Module explains things in terms I understand. YES	--	--	91.6% ^e
Graphics in the video were distracting: NO (yes)	100%	48.3%	--
Pictures in the video HELPED ME UNDERSTAND THE INFORMATION (did not help; I did not pay attention to the pictures)	100%	82%	--
The English text/captions were easy to read while watching the video: YES (no; it does not matter I do not use English text)	78%	Sample A: 100% Sample B: 81%	--
Which group had better English text/captions for video?	Sample A: 33.3% Sample B: 44.4% Doesn't matter because I don't use English captions: 22.2%	n/a	--
Liked where English text was placed: YES (no; it was okay; it does not matter I do not use English text)	n/a	Sample A: 71% Sample B: 81%	--
Liked the format: YES (no; indifferent)	--	--	84.9% ^e

^a Focus group participants completed one survey after they evaluated Samples A and B – *N*=9

^b MATA participants were assigned to view only one video, and then they completed a survey about that video (Sample A, *n*=14; Sample B, *n*=16)

^c CGEM participants – *N*=100 randomized to the bilingual (ASL + English captioned) version

^d Sample A video: ASL + English text; Sample B video: ASL + English closed captioning

^e Results published in Palmer et al. (2016)

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Supplementary Table 3

Table 3 Sample Characteristics for CGEM evaluation $N=97^a$

Characteristic	No. (%) Average (SD)
Deaf or hard-of-hearing, No. (%)	
Deaf	92 (97.9)
Hard-of-hearing	4 (4.1)
Other ^b	1 (1.0)
Primary communication mode with deaf individuals, No. (%)	
ASL	93 (95.9)
PSE, SEE, SIM-COM	12 (12.4)
Orally	1 (1.0)
In writing	2 (2.1)
Age, M (SD), years	44.7 (14.6)
Female, No. (%)	60 (61.9)
High school diploma or less, No. (%)	30 (30.9)
Ethnicity/Race, No. (%)	
Non-Hispanic Caucasian	63 (66.3)
Hispanic	18 (18.9)
Asian	6 (6.3)
Black	4 (4.2)
Native American/American Indian	1 (1.0)
Other	3 (3.2)
Cultural affiliation, No. (%)	
Deaf community	59 (59.8)
Deaf and Hearing communities	39 (40.2)
Hearing community	0
Neither community	0
Personal/family history of cancer ^c , No. (%)	56 (57.7)
Prior genetic counseling or testing ^d , No. (%)	39 (40.2)
Pre-test knowledge score, M (SD)	18.4 (3.3)
TGJASL-R score ^e , M (SD)	0.75 (0.15)
Read English well ^f , M (SD)	8.0 (1.9)
Time spent viewing materials, M (SD), minutes	48.4 (18.7)
Pause, play, and seek event count, Median; M (SD)	17; 49.2 (84.0).

^a Adapted from Palmer et al. (2016)

^b Participant response was “oral deaf”

^c breast, ovarian, or colon cancer

^d includes participation in Deaf Genetics Project

^e TGJASL-R: ASL Grammar Judgement Task. >0.5-1 reflects increasing grammatical accuracy; 0.5 reflects random guessing; <0.5 reflects systematic bias

^f self-rated on scale of 0 (low) – 10 (high)