

Investigating the Willingness of Practicing Genetic Counselors to Participate in non-English Language Continuing Education Training

Darwin Argueta¹, Amy Malinowski², Sylvia Herrada³, and Gila Fridkis⁴

¹Master's in Genetic Counseling Program, University of Maryland School of Medicine; ²Department of Obstetrics, Gynecology and Reproductive Sciences, University of Maryland Medical System; ³Department of Pediatrics, University of Maryland Medical System; ⁴Department of Pediatrics, Metropolitan Hospital

INTRODUCTION:

- In the United States, approximately 60 million people (21% of the population) speak a language other than English at home, and approximately 25 million people speak English less than "Very Well".
- Patient-provider language discordance is a major issue that contributes to poorer health outcomes, lack of health education, and can create feelings of discomfort for patients that have limited English proficiency (LEP). Therefore, healthcare organizations should increase their efforts in providing language programs to their healthcare professionals to provide LEP patients with equitable healthcare services.
- Although interpreting services are available for LEP patients, the presence of cultural competency gaps and the use of interpreters can negatively affect the patient-provider relationship, leading to lower quality healthcare services.
- Despite the progress that a few genetic counseling programs have made, there is still a demand to promote language training in the genetic counseling field for current and future genetic counselors.
- This study aims to generate data that could serve as the framework for future implementation of non-English language education training in the genetic counseling field.

AIMS:

- Assess genetic counselors' interest in non-English language education as a continuing education opportunity.
- Describe genetic counselors' motivations for participation in non-English language training.
- Categorize the facilitators and barriers to implementing non-English language training in genetic counseling education.

METHODS:

Participants and Procedures

- Board-certified and board-eligible genetic counselor participants were recruited via the National Society of Genetic Counselors (NSGC) student research e-blast.
- Potential respondents were informed that participation was voluntary and anonymous.

Data Analysis

- Demographic, language data, and facilitators in implementing non-English language training were analyzed using descriptive statistics.
- Motivations and barriers for participating in non-English language training were quantified and prioritized using the Best-Worst Scaling (BWS) statistical method with BW scores ranging from +1 to -1. Scores closer to +1 are highly prioritized and scores closer to -1 are least prioritized. Intermediate scores may not be accurately discriminated.

$$BW = \frac{B - W}{N}$$

BW: Best-Minus-Worst Score, **B:** # of times attribute was chosen as best, **W:** # of times attribute was chosen as worst, and **N:** # of times attribute was available to be chosen

Figure 1. Interest in participating in non-English language training question design flowchart

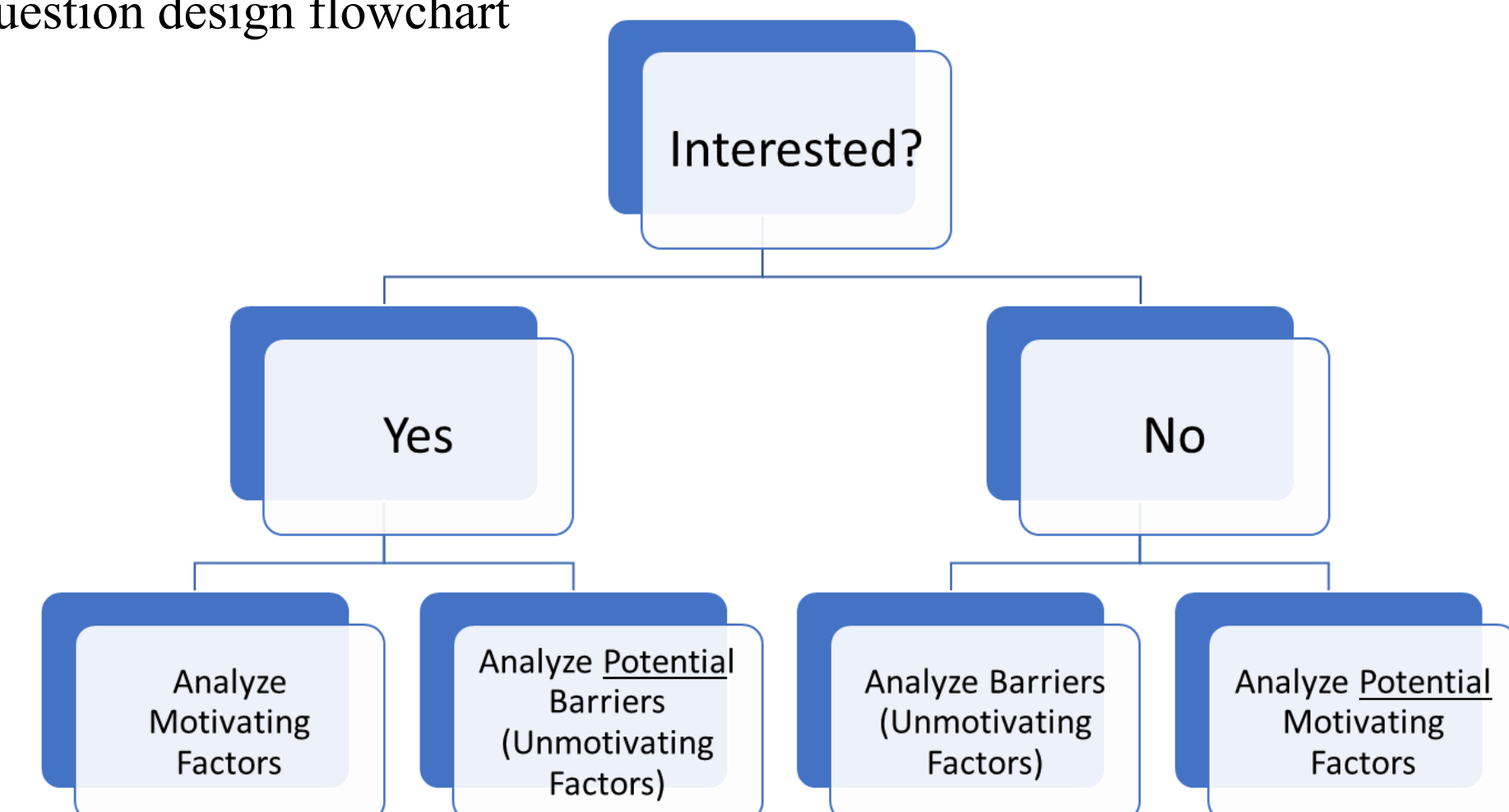


Table 1. Respondents' demographic characteristics

Variable	n	%	Variable	n	%
Ethnicity (n=94)			Pediatric	27	29%
Hispanic	4	4%	Adult	22	24%
Non-Hispanic	90	96%	Research	8	9%
Race (n=94)			Education	5	5%
White	86	91%	ART/Preconception	10	11%
Black/African American	1	1%	Other	8	9%
American Indian or Alaskan	2	2%	Average # of Patients Seen (n=94)		
Native			Per Week		
Asian	7	7%	I do not see patients	11	12%
Native Hawaiian/Pacific	1	1%	1-5	8	9%
Islander			5-10	27	29%
Other (Ashkenazi Jewish)	2	2%	10-15	38	40%
Primary Work Setting (n=94)			>15	10	11%
University Medical Center	38	40%	Average # of LEP Patients Seen Per Week (n=94)		
Public Hospital/ Medical Facility	22	23%	I do not see LEP Patients	13	14%
Private Hospital/Medical Facility	19	20%	1-3	44	47%
Diagnostic Laboratory-Commercial	12	13%	3-6	15	16%
Physician's Private Practice	2	2%	6-9	10	11%
Federal/State/County Office	0	0%	9-12	6	6%
University Non-Medical	2	2%	12-15	2	2%
Center			>15	4	4%
Other	5	5%	# of Years since Graduation (n=94)		
Primary Specialty Area (n=93)			0-3	38	40%
Cancer	35	38%	3-6	24	26%
Prenatal	29	31%	6-10	18	19%
			10-20	7	7%
			>20	7	7%

Figure 2. Respondents' Ages (n=91)

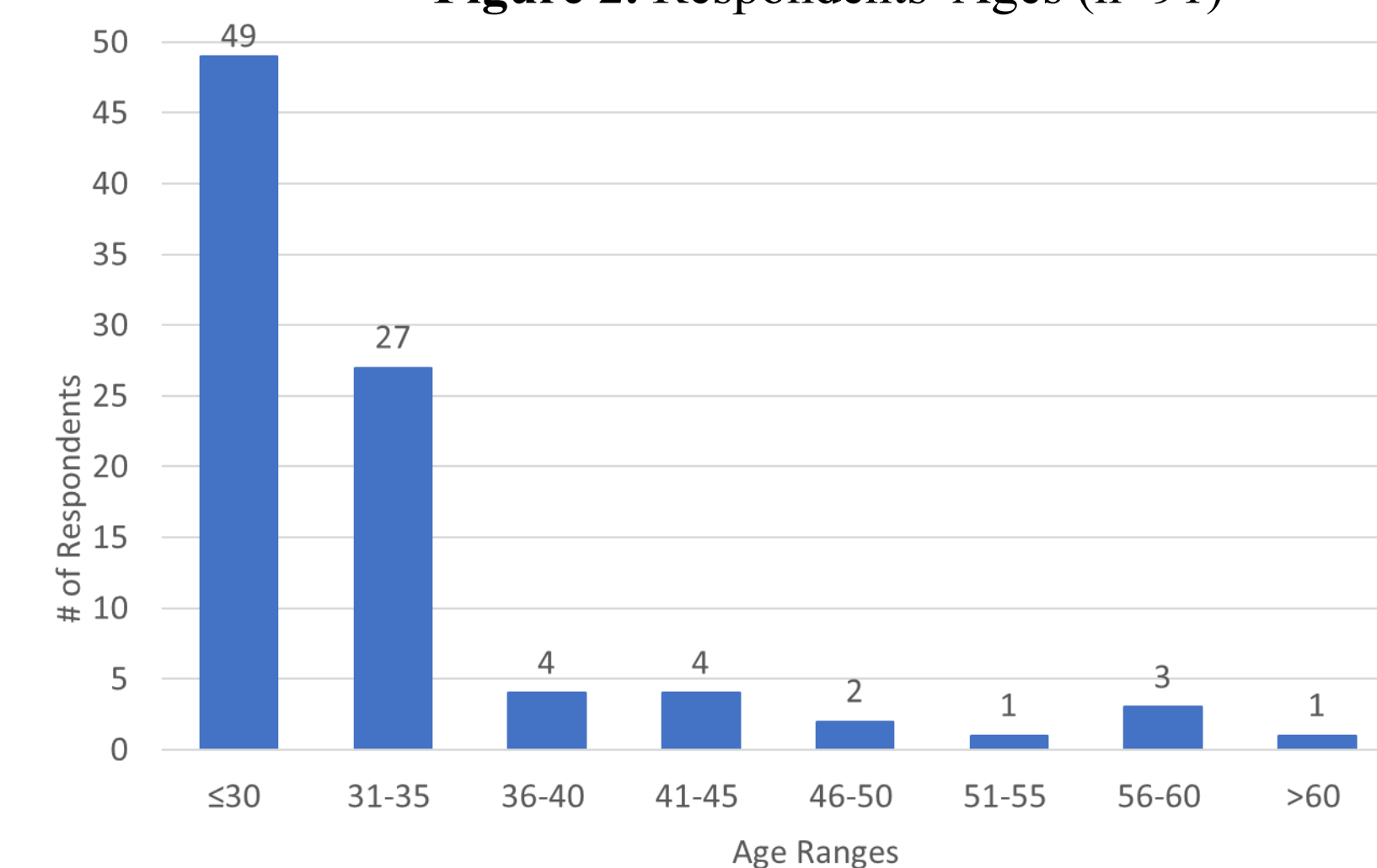


Table 2. Interpreter and non-English language provision and requirements

Inquiry	Respondents (n=94)			
	Yes		No	
	n	%	n	%
GC program PROVIDED you with resources and/or experiences with working with an interpreter as a graduate student?	88	94%	6	6%
GC program REQUIRED you to have non-English language training as a graduate student other than learning and working with an interpreter?	11	12%	83	88%
GC program PROVIDED you with non-English language training as a graduate student other than learning and working with an interpreter?	40	43%	54	57%

Table 3. Permission and requirements to counsel in a non-English language(s) at place of work

Inquiry	n	%
Permitted to Counsel Patients in Known Non-English Language(s) (n=31)		
Yes, in all languages mentioned	6	19%
No	20	65%
Yes, in at least one	1	3%
Unsure	4	13%
Institution required special training/process to counsel in non-English language(s) for those permitted to do so (n=6)		
Yes	0	0%
No	6	100%
Institution required special training/process to counsel in non-English language(s) for all participants (n=93)		
Proficiency test over the phone	0	0%
Language proficiency test (in-person or online)	24	26%
No training or process is required	14	15%
I do not know	53	57%
Other	2	2%

Figure 3. Non-English language proficiencies (n=31)

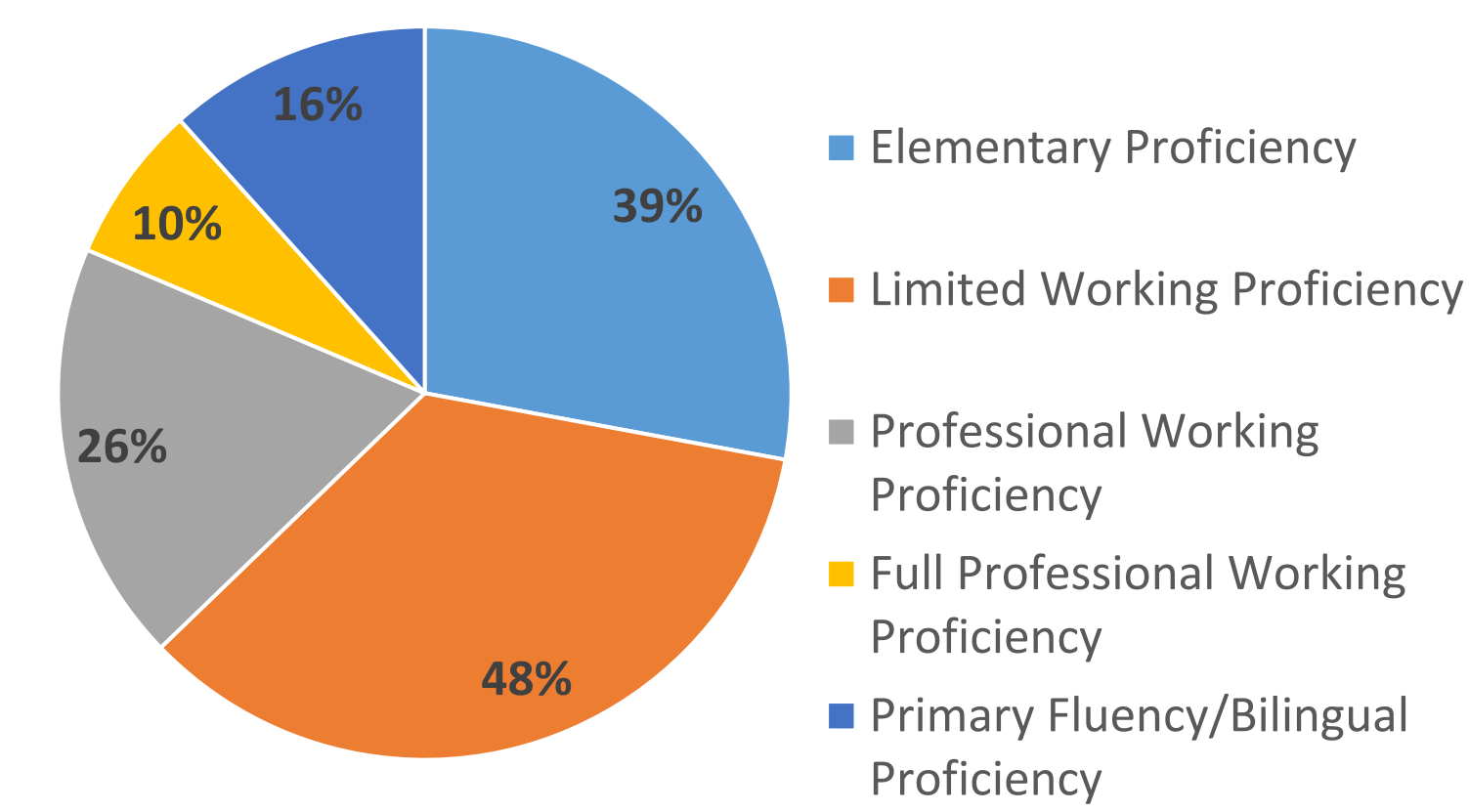


Figure 4. Respondents' interest in pursuing non-English language training (n=94)

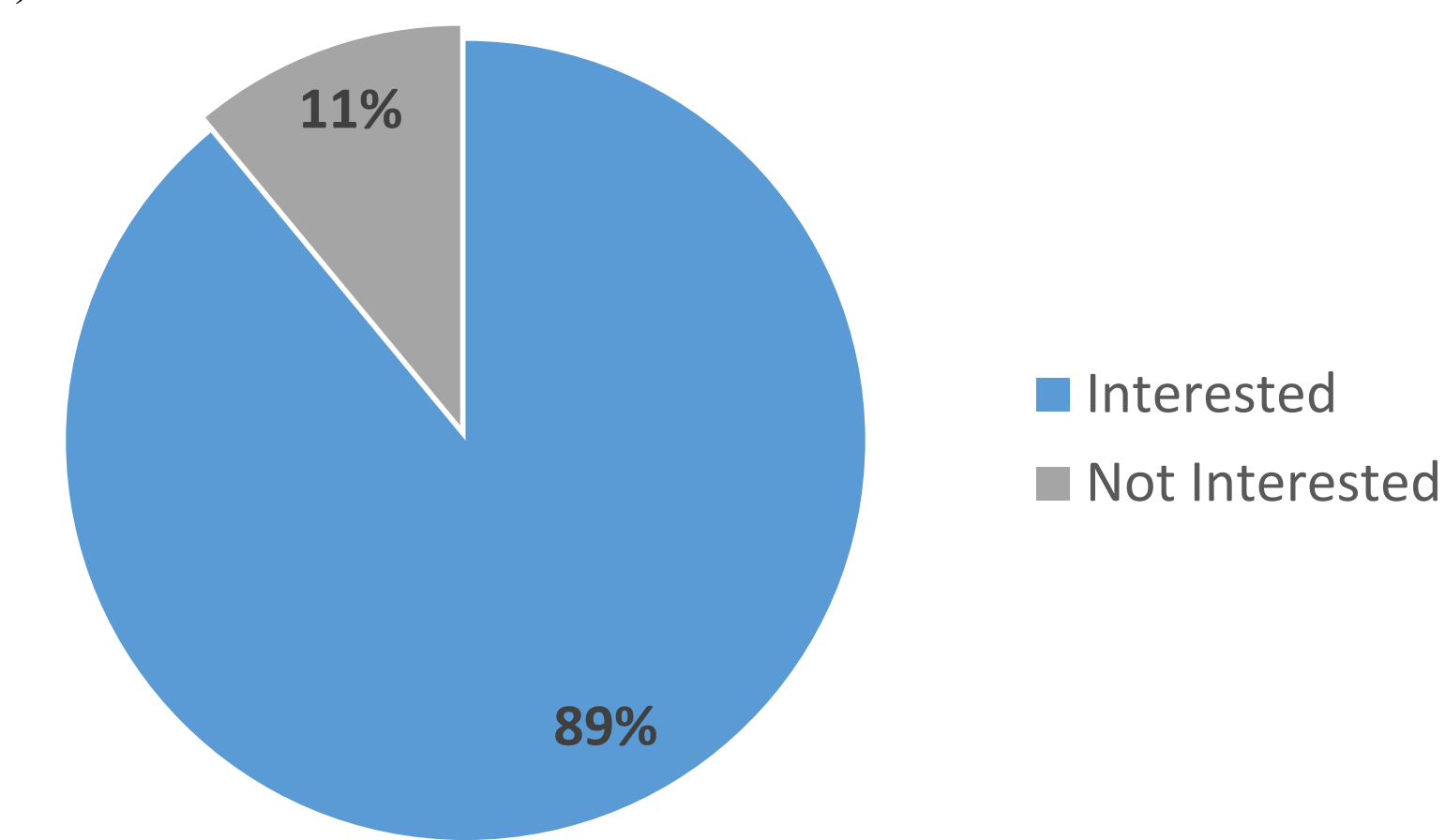


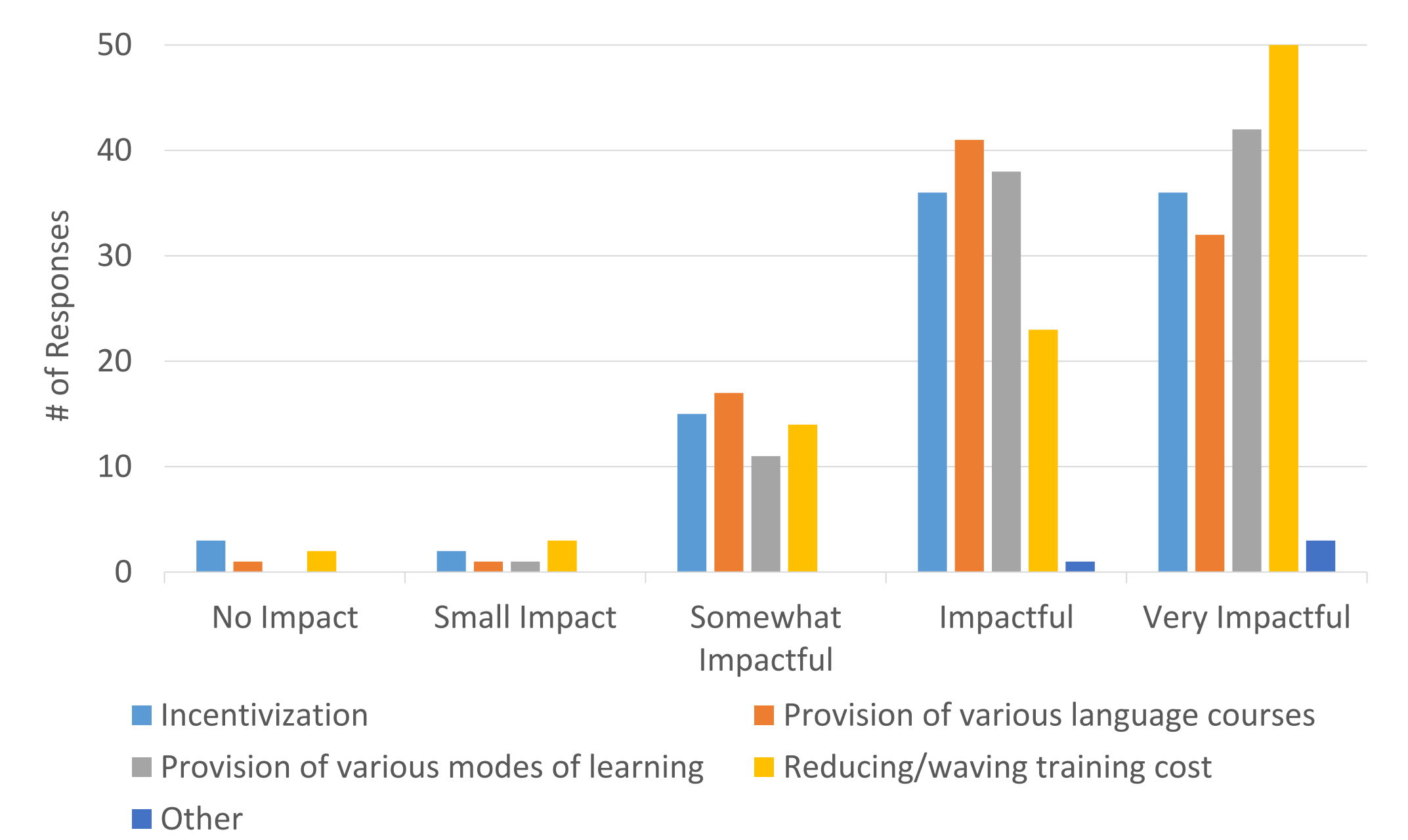
Table 4. Biggest motivational factors for pursuing non-English language education

Attribute	(n= 92)	(n=83)	(n=9)
	Combined	Interested	Not Interested
	Best-Worst Score	Best-Worst Score	Best-Worst Score
Improvement of cultural competency and understanding of individuals who speak non-English languages	0.293	0.301	0.222
I sometimes meet patients who speak a non-English language	0.185	0.169	0.333
Expression of inclusivity	0.120	0.120	0.111
I foresee interacting with patients who speak a non-English language	0.011	-0.012	0.222
I am already proficient or have some proficiency & would like to refine skills	-0.011	0.012	-0.222
Desire to learn a non-English language	-0.033	-0.036	0.000
Desire to use non-English language in personal life apart from career	-0.087	-0.084	-0.111
Family/Heritage influences	-0.478	-0.470	-0.556

Table 5. Biggest barriers for pursuing non-English language education

Attribute	(n= 91)	(n=82)	(n=9)
	Combined	Interested	Not Interested
	Best-Worst Score	Best-Worst Score	Best-Worst Score
Lack of time	0.637	0.659	0.444
Training logistics	0.132	0.159	-0.111
Cost	0.033	0.037	0.000
Prioritization between types of CEUs to participate in	-0.077	-0.098	0.111
Not permitted to counsel in known language(s)	-0.297	-0.305	-0.222
Lack of interest	-0.429	-0.451	-0.222

Figure 5. Facilitators impact on non-English language training implementation (n=92)



¹Incentivization including provision of CEUs and facilitating non-English Language counseling by accreditation & certification organizations including ABGC and NSGC

²Provision of several language level courses including introductory, intermediate, & advanced levels

³Provision of a variety of modes of learning including online, asynchronous, in-person platforms

RESULTS:

- About half of respondents were provided with non-English language training resources as a graduate student other than learning and working with an interpreter.
- Of 31 respondents able to communicate in a non-English language, most are not permitted to counsel patients at their place of work in those respective languages.
- The majority of respondents stated they were interested in pursuing future non-English language training.
- The biggest motivational factors for all respondents to pursue non-English language continuing education were "Improvement of cultural competency and understanding of individuals who speak non-English languages" and "I sometimes meet patients who speak a non-English language".
- The biggest barriers for all respondents to pursue non-English language continuing education were "Lack of time" and "Training logistics".
- All facilitators were stated to have some type of impact on non-English language training implementation.

CONCLUSIONS:

- GC programs could consider requiring the provision of non-English language resources/training in addition to working with an interpreter more aggressively, especially in institutions that are known to work with prevalent LEP patient populations.
- Since most study participants have elementary and limited working proficiencies, they should be encouraged to ascertain to what extent they can communicate with LEP patients to build more rapport.
- Respective motivations, barriers, and facilitators may be considered by the NSGC, ABGC, accredited GC programs, etc. when implementing non-English language training for the GC profession.
- With the increasing number of LEP patients in the US, it is imperative that GCs receive proper training to provide equitable services to all patients, regardless of language or cultural barriers.

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References are available upon request