

PROMIS-ASL Measurement Properties

Poorna Kushalnagar, Ph.D., PI, Gallaudet
University

David Cella, Ph.D., Subaward PI, Northwestern
University

Michael Kallen, Ph.D., M.P.H., Psychometrician,
Northwestern University

We need to thank the money people first...

► **Thanks to...**

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Quality of Life Measures for Deaf/HH

- Existing health-related QoL measures for adults have not included the important voices of adults of different age, sex, hearing levels, modes of communication and language preferences.
- Hearing-specific QoL measures emphasize the audiological functions rather than the psychological and health-related outcomes of being deaf or hard of hearing.

PROMIS

- Translated to many languages but...
- Not American Sign Language, thus excluding deaf people from research and clinical trials

PROMIS-ASL

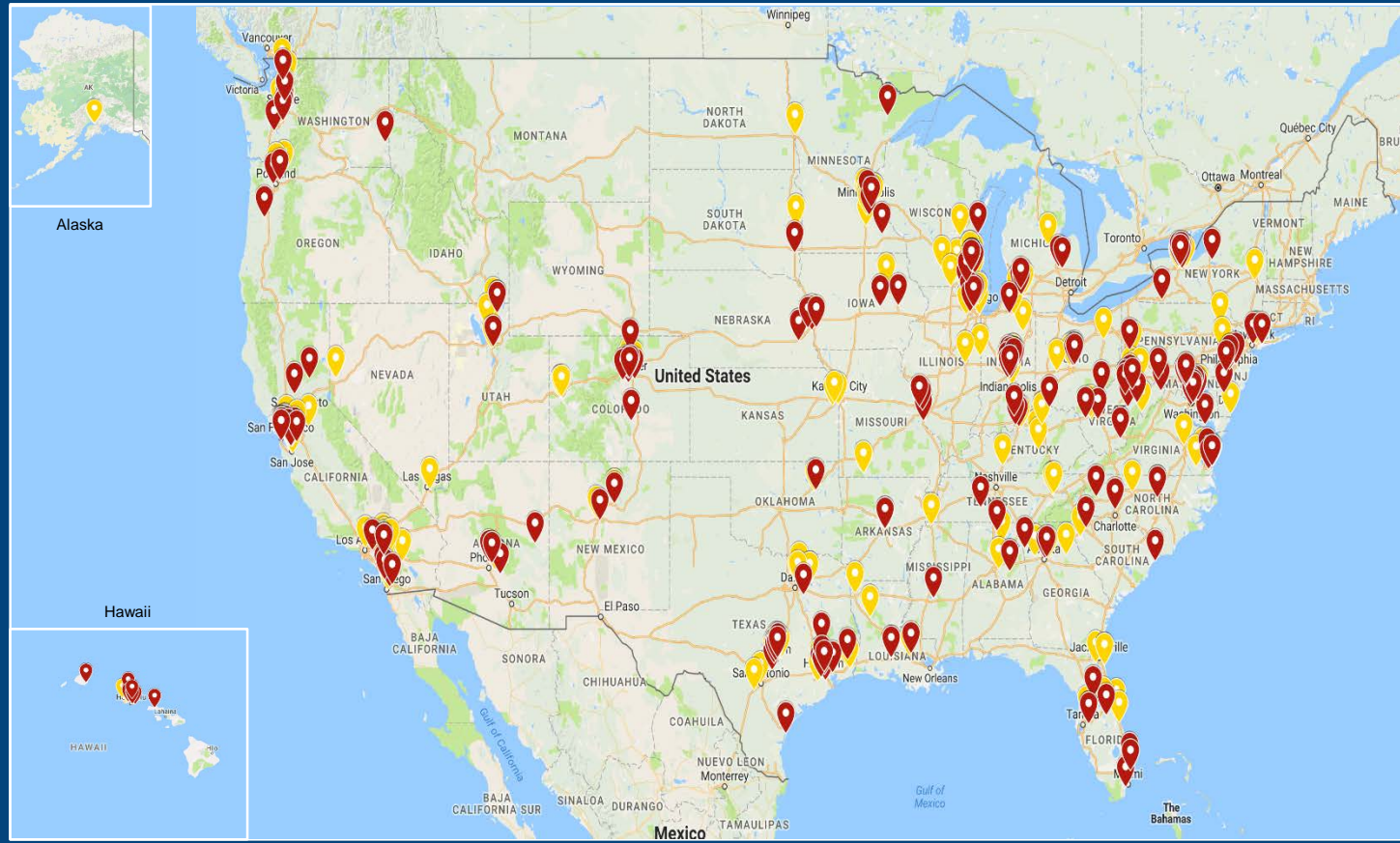
- Culturally adapted and translated existing domains to ASL
- Added new domain: Communication Health (not mentioned in today's talk)

PROMIS-ASL Screenshot (Only ASL video is visible. English text for question was hidden during nationwide standardization)

The screenshot displays the PROMIS-ASL interface. At the top left, the text "PROMIS ASL" is visible. A progress bar at the top right shows 31% completion. The main content area is split into two sections. On the left is a video player showing a man in a dark shirt signing. The video player has a play button, a volume icon, a progress bar, and a timestamp of -0:27. Below the video player are buttons for "Replay Question" and "Play", and a "Text size" control with plus and minus icons. On the right is a rating menu for user "Global01". The menu contains six radio button options: "Excellent", "Very good", "Good", "Fair", "Poor", and "Prefer not to answer". Each option is accompanied by a small profile picture icon. A blue "Next" button is located at the bottom right of the rating menu.

*Contractor: AllOut Marketing Inc.
Signer: David Rivera
ASL Coach: Raylene Paludneviene, Ph.D.*

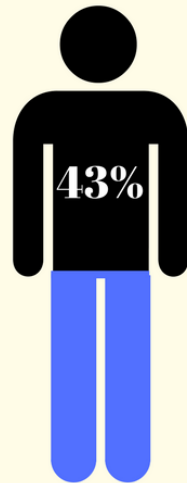
Validation Sample (N=618)



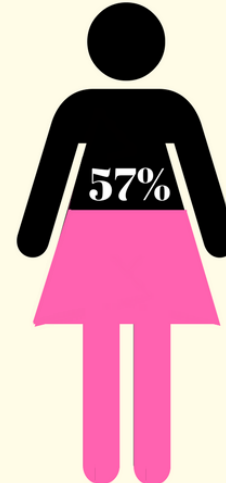
Healthy
(60.8%)
Clinical (39.2%)

Gender

Male



Female



PROMIS domains: generic

Fatigue

Depression

Anxiety

Anger

Social
Support

Social
Isolation

Sleep
Disturbance

Global
Health

Psychometric results supports their use in ASL

PROMIS domains: deaf-specific

Social Interaction and Acceptance	In general, I feel people accept me as a person who is D/HH.
Self Perceptions	I felt embarrassed because I am deaf or hard of hearing
Communication Quality and Satisfaction	I feel it is difficult to explain my needs to hearing people.

PSYCHOMETRICS FOR THIS DOMAIN IS
NOT INCLUDED IN TODAY'S TALK

Global03-Physical Health

Descriptives									
		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
Fatigue	1.00	118	28.3136	6.22059	0.57265	27.1795	29.4477	12.00	47.00
	2.00	134	17.5522	4.91058	0.42421	16.7132	18.3913	10.00	32.00
	Total	252	22.5913	7.73075	0.48699	21.6322	23.5504	10.00	47.00
Anxiety	1.00	123	9.9187	3.19475	0.28806	9.3485	10.4889	4.00	19.00
	2.00	136	6.1912	2.38984	0.20493	5.7859	6.5965	4.00	14.00
	Total	259	7.9614	3.36052	0.20881	7.5502	8.3726	4.00	19.00
Depression	1.00	126	10.1905	3.59046	0.31986	9.5574	10.8235	4.00	18.00
	2.00	134	5.9104	2.40445	0.20771	5.4996	6.3213	4.00	14.00
	Total	260	7.9846	3.71262	0.23025	7.5312	8.4380	4.00	18.00
Anger	1.00	129	4.2946	1.69744	0.14945	3.9989	4.5903	2.00	8.00
	2.00	135	3.1111	1.24389	0.10706	2.8994	3.3229	2.00	7.00
	Total	264	3.6894	1.59435	0.09813	3.4962	3.8826	2.00	8.00
SocSupport	1.00	129	20.3566	6.21716	0.54739	19.2735	21.4397	7.00	30.00
	2.00	134	23.8955	6.24472	0.53946	22.8285	24.9626	6.00	30.00
	Total	263	22.1597	6.46697	0.39877	21.3745	22.9449	6.00	30.00
SocIso_UCLA	1.00	127	5.8976	1.65632	0.14697	5.6068	6.1885	3.00	10.00
	2.00	135	4.4889	1.48055	0.12743	4.2369	4.7409	2.00	10.00
	Total	262	5.1718	1.71680	0.10606	4.9629	5.3806	2.00	10.00

High-score group had statistically significantly better domain status scores for all PROMIS-ASL domains measured.

Global04-Mental Health

Descriptives

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
Fatigue	1.00	120	27.8000	6.60863	0.60328	26.6054	28.9946	12.00	47.00
	2.00	151	18.1656	5.14125	0.41839	17.3389	18.9923	10.00	32.00
	Total	271	22.4317	7.54456	0.45830	21.5294	23.3340	10.00	47.00
Anxiety	1.00	127	10.3465	3.48096	0.30889	9.7352	10.9577	4.00	19.00
	2.00	157	5.9809	2.18817	0.17464	5.6359	6.3258	4.00	14.00
	Total	284	7.9331	3.57244	0.21199	7.5158	8.3504	4.00	19.00
Depression	1.00	129	10.8450	3.34582	0.29458	10.2621	11.4278	4.00	18.00
	2.00	155	5.8065	2.22762	0.17893	5.4530	6.1599	4.00	13.00
	Total	284	8.0951	3.75224	0.22265	7.6568	8.5333	4.00	18.00
Anger	1.00	132	4.5758	1.78681	0.15552	4.2681	4.8834	2.00	9.00
	2.00	157	2.9745	1.19802	0.09561	2.7857	3.1634	2.00	7.00
	Total	289	3.7059	1.69353	0.09962	3.5098	3.9020	2.00	9.00
SocSupport	1.00	132	19.2045	6.16657	0.53673	18.1428	20.2663	7.00	30.00
	2.00	153	23.4641	6.25134	0.50539	22.4656	24.4626	6.00	30.00
	Total	285	21.4912	6.55616	0.38835	20.7268	22.2556	6.00	30.00
SocIso_UCLA	1.00	130	6.2692	1.50857	0.13231	6.0075	6.5310	3.00	10.00
	2.00	153	4.2614	1.50338	0.12154	4.0213	4.5016	2.00	9.00
	Total	283	5.1837	1.80665	0.10739	4.9723	5.3951	2.00	10.00

High-score group had statistically significantly better domain status scores for all PROMIS-ASL domains measured.

DIF Analyses

[Age, gender, education]

From phase one of our DIF analyses, we did not identify any items exhibiting DIF, based on our proposed criterion (i.e., Nagelkerke pseudo-R² change ≥ 0.20) for flagging items.

Concurrent Validity

Social Support had a negligible correlation with both Global Health-Physical and Global Health-Mental, while Anger had a negligible correlation with Global Health-Physical.

Next Step

- DIF studies by language
 - ASL vs English

Contact

- michael.kallen@northwestern.edu