

Pandemic Related Communication Experiences and Communication Strategies

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Work Affiliation and Disclosures

Work Affiliation:

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Background

Covid-19 pandemic introduced lifestyle changes

1. CDC recommendation:
 - a. Distance of at least 6 ft between individuals
 - b. Use of face coverings to prevent the spread
2. Lifestyle changes:
 - a. Less in-person and more tele and video technology for communication

Background

1. Face masks
 - a. Limits the ability to use facial expressions and lipreading cues
 - b. Distorts speech signals

1. Decrease of intensity of the speech signal due to distancing and use of face masks

Survey Information

	Phase 1	Phase 2
	July 19, 2020 to August 20, 2020	September 26, 2020 to October 2, 2020
Target Age-Groups	Middle-aged Adults (40-64 yrs) and Older Adults (≥ 65 yrs)	Younger Adults (21-35 yrs)
Individuals Ad Reached	46,447	17,760
Individuals who clicked on Ad	1,341	790
Useable Surveys	1,168	535
TOTAL:	1,703	

- Online survey- Qualtrics
- Administered to adults residing in the U.S.
- Advertising strategy:
 - Hearing Tracker
 - Facebook Ads

Demographics

Category	Younger (%)	Middle-age (%)	Older (%)
Gender			
Male	9	29	54
Female	84	75	46
Nonbinary/other	7	1	0
Ethnicity/Race			
Asian	14	3	1
Black	4	4	1
Caucasian	70	89	97
Latinx	6	2	1
Native American	0	1	1
Pacific Islander	0	0	0
More than one	6	2	0

Demographics

Category	Younger (%)	Middle-age (%)	Older (%)
Self-rated Hearing			
Excellent	44	19	7
Good	56	34	20
Fair		22	36
Poor		26	37
Device Use (HA or CI)			
Yes		40	68
No		60	32

Methods

- Series of probes about 3 scenarios:
 - Running errands/appointments outside the home
 - Working outside the home
 - Socializing face-to-face
- Questions about hearing, speech understanding, and concentration during various conditions
 - Responded on a 5-point Likert scale
- Prompted 2 open-ended responses for qualitative research
- **57% (979)** surveys included responses to the open-ended question

“Are there any strategies that you find especially helpful when talking to someone who is wearing a face mask? If so, please list them below.”

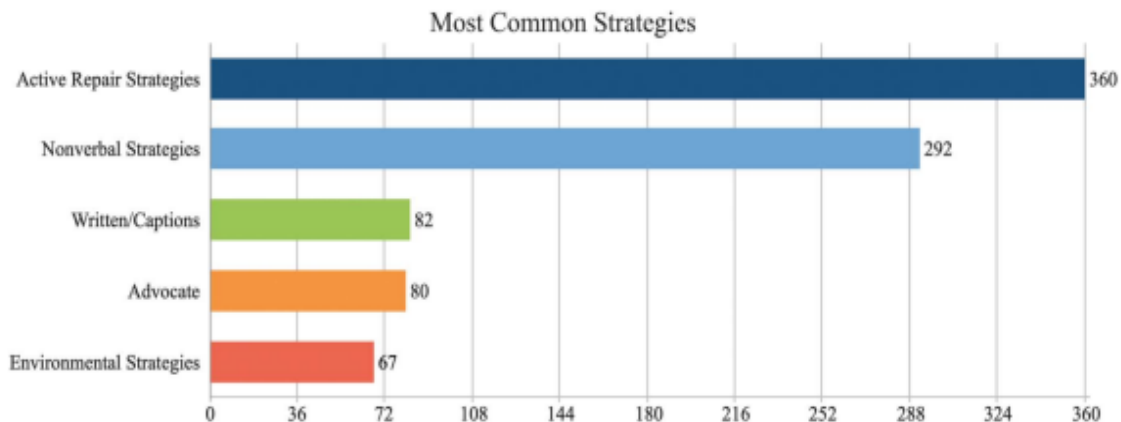
Survey Codebook - Mask Strategies

Category	Code	Definition	Example of what it is not	Exemplar Quote
<i>Technology</i>				
	CAPTIONING	Using a live transcribe app or some other technology device to transcribe speech	Asking someone to physically write down their message	Google Live Transcribe Otter App Speech to text apps

MAXQDA - A software used to sort open-ended responses by codes and demographics

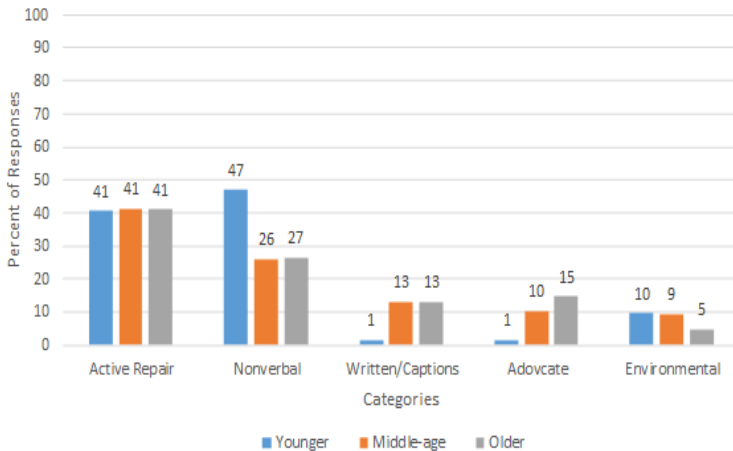
Five Major Categories

72.6% of all open-ended responses were coded into five major categories



Trends- Major Categories

Percentage of Responses per Major Category by Age Group



- All age groups equally likely to use active repair strategies
- Younger adults more likely to use non-verbal strategies vs. middle-aged and older adults
- Middle-aged and older adults more likely to use written/captions and advocate vs. younger adults

Trends - Minor Categories

- Of the 33 respondents who mentioned a specific app for transcribing, **97%** were hearing aid users
- Of the 57 respondents who requested mask removal, **94.7%** were from middle-age and older adults
- Respondents, across the ages, moved in closer to the talker

Expected Findings

- Older participants reported the most self-rated speech understanding difficulty and need for concentration
- Larger differences noted between age-groups when the talker wore a face mask or was in a noisy environment
- Device users more inclined to disclose their hearing loss

Unexpected Findings

- For the better hearing group, younger adults
 - Reported significantly poorer speech understanding
 - Greater need for concentration
- For the poorer hearing group, middle-aged adults
 - Reported more self-rated speech understanding difficulty compared to older adults

Conclusions

- Some individuals are willing to break CDC guidelines in order to help improve communication
- Healthcare professionals should counsel on effective communication strategies
 - Discourage using strategies that can put individuals at risk
- While younger adults may self-perceive they have good hearing, they are not immune to communication challenges that are brought about by *face masks* and *when listening in noise*

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Questions

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