

Supplemental Materials 5. IRT-graded response model parameters for the 59-item ACOM. Bifactor graded response model item parameters and standard errors. Where a category threshold is missing, it indicates that the adjacent categories separated by that threshold were collapsed due to infrequent usage.

Item Content	General Factor Discrimination	Category thresholds		
	<i>a</i>	<i>b₁</i>	<i>b₂</i>	<i>b₃</i>
fill out simple forms	2.73 (0.32)	−0.74 (0.12)	0.01 (0.10)	1.52 (0.16)
say the names of common objects (e.g., bed, lamp, pencil)	2.63 (0.36)	−2.05 (0.19)	−0.8 (0.11)	1.11 (0.13)
say the names of body parts	2.51 (0.23)	−1.53 (0.14)	−0.55 (0.10)	1.23 (0.12)
say the names of food items	2.47 (0.22)	−1.51 (0.14)	−0.39 (0.09)	1.42 (0.13)
write your phone number (2-3)	2.44 (0.32)	−0.84 (0.13)		0.94 (0.14)
write your address	2.36 (0.29)	−1.17 (0.16)		0.98 (0.15)
tell a story	2.23 (0.22)	−0.67 (0.11)	0.77 (0.11)	
say the names of clothing items	2.23 (0.20)	−1.93 (0.18)	−0.58 (0.10)	1.16 (0.13)
start a new topic in conversation	2.22 (0.25)	−1.05 (0.15)	0.46 (0.12)	
ask for information from store employees	2.20 (0.20)	−0.92 (0.11)	−0.01 (0.09)	1.7 (0.16)
have a conversation with strangers	2.19 (0.23)	−0.94 (0.12)	0.42 (0.10)	
talk about current/previous work	2.12 (0.19)	−1.03 (0.12)	−0.05 (0.09)	1.8 (0.16)
leave a message on an answering machine	2.11 (0.20)	−0.41 (0.10)		1.93 (0.18)
talk to your closest family member or friend	2.08 (0.20)		−1.11 (0.12)	1.45 (0.14)
write a simple "to do" list	2.03 (0.24)	−0.67 (0.14)	0.18 (0.12)	1.8 (0.22)
keep a conversation going	2.02 (0.20)	−1.04 (0.13)	0.40 (0.11)	2.32 (0.23)
say your name	2.00 (0.20)		−1.53 (0.15)	0.01 (0.09)
make yourself understood when you speak with strangers	1.95 (0.20)	−1.16 (0.14)	0.29 (0.10)	
talk about your future plans with family or friends	1.93 (0.17)	−1.96 (0.18)	−0.46 (0.10)	1.82 (0.17)
introduce yourself	1.91 (0.17)	−1.67 (0.16)	−0.74 (0.11)	1.23 (0.13)
tell a joke	1.91 (0.22)	−0.25 (0.11)	0.86 (0.13)	
find the words you want to say during conversation	1.90 (0.19)	−1.03 (0.13)	0.7 (0.11)	
talk about your day with family or friends	1.88 (0.16)	−1.75 (0.17)	−0.58 (0.11)	1.88 (0.18)
explain how to do something	1.83 (0.19)	−1.17 (0.15)	0.46 (0.11)	
read product labels	1.81 (0.22)	−2.13 (0.28)	−0.61 (0.15)	1.86 (0.25)
read signs in a store to find what you need	1.78 (0.20)	−2.26 (0.26)	−1.24 (0.17)	1.26 (0.17)

call family members by name	1.78 (0.16)	-2.00 (0.19)	-0.81 (0.12)	0.89 (0.12)
explain your health concerns to your doctor	1.74 (0.16)	-1.55 (0.16)	-0.51 (0.11)	1.88 (0.18)
talk with a group of people	1.73 (0.19)	-1.15 (0.15)	0.37 (0.11)	
talk about your health concerns with family members	1.71 (0.19)		-0.49 (0.11)	1.78 (0.19)
correct yourself when people do not understand you	1.71 (0.18)	-1.87 (0.20)	-0.19 (0.11)	
share opinions	1.70 (0.18)	-1.84 (0.21)	-0.11 (0.11)	
fill out complex forms	1.68 (0.22)	0.24 (0.12)	1.69 (0.21)	
follow conversation about familiar topics	1.64 (0.17)		-1.14 (0.14)	1.69 (0.18)
make yourself understood when you speak with family or friends	1.63 (0.14)	-2.21 (0.22)	-0.45 (0.11)	2.36 (0.23)
write a personal letter	1.62 (0.38)	0.62 (0.18)		
talk about movies that you have seen	1.59 (0.17)	-1.25 (0.16)	0.17 (0.11)	
write messages in greeting cards	1.59 (0.21)	-0.77 (0.16)		2.50 (0.32)
understand magazine/newspaper articles	1.56 (0.16)	-1.63 (0.21)	-0.17 (0.12)	2.20 (0.25)
understand your bank/credit card statements	1.53 (0.20)		-0.61 (0.15)	1.48 (0.21)
correct mistakes you make when you talk	1.5 (0.160)	-1.78 (0.21)	-0.10 (0.11)	
understand your closest family member or friend when they talk to you	1.49 (0.16)		-1.66 (0.19)	1.21 (0.15)
understand newspaper headlines	1.47 (0.16)	-2.47 (0.30)	-1.14 (0.17)	1.45 (0.20)
understand medicine labels	1.43 (0.18)		-0.68 (0.15)	1.56 (0.22)
tell people why you can't talk very well	1.34 (0.13)	-1.90 (0.21)	-0.49 (0.12)	2.11 (0.23)
make your wants and needs known	1.34 (0.14)		-1.13 (0.15)	1.87 (0.21)
read food labels	1.28 (0.16)	-2.57 (0.35)	-1.01 (0.19)	1.81 (0.26)
answer yes/no questions	1.26 (0.15)		-1.91 (0.23)	1.12 (0.17)
read traffic signs	1.26 (0.16)		-1.85 (0.27)	0.85 (0.17)
understand humor in pictures (e.g., comics, photographs)	1.19 (0.16)		-1.62 (0.24)	1.62 (0.24)
follow therapy instructions	1.13 (0.14)		-1.39 (0.21)	1.87 (0.26)

Note. IRT = item response theory; ACOM = Aphasia Communication Outcome Measure.