

This article was downloaded by:[Ryan, Ellen Bouchard]
[Ryan, Ellen Bouchard]

On: 26 March 2007

Access Details: [subscription number 770470290]

Publisher: Routledge

Informa Ltd Registered in England and Wales Registered Number: 1072954

Registered office: Mortimer House, 37-41 Mortimer Street, London W1T 3JH, UK



Communication Research Reports

Publication details, including instructions for authors and subscription information:

<http://www.informaworld.com/smpp/title-content=t714579429>

The Effects of Age, Hearing Loss, and Communication Difficulty on First Impressions

To cite this Article: , 'The Effects of Age, Hearing Loss, and Communication Difficulty on First Impressions', Communication Research Reports, 24:1, 13 - 19

xxxx:journal To link to this article: DOI: 10.1080/08824090601120874

URL: <http://dx.doi.org/10.1080/08824090601120874>

Full terms and conditions of use: <http://www.informaworld.com/terms-and-conditions-of-access.pdf>

This article maybe used for research, teaching and private study purposes. Any substantial or systematic reproduction, re-distribution, re-selling, loan or sub-licensing, systematic supply or distribution in any form to anyone is expressly forbidden.

The publisher does not give any warranty express or implied or make any representation that the contents will be complete or accurate or up to date. The accuracy of any instructions, formulae and drug doses should be independently verified with primary sources. The publisher shall not be liable for any loss, actions, claims, proceedings, demand or costs or damages whatsoever or howsoever caused arising directly or indirectly in connection with or arising out of the use of this material.

© Taylor and Francis 2007

The Effects of Age, Hearing Loss, and Communication Difficulty on First Impressions

Ellen Bouchard Ryan, Ann P. Anas, & Melissa Vuckovich

Within a person perception paradigm, young adults ($n = 171$) evaluated young and older targets with or without hearing loss or communication problems. On anticipated cognitive performance, older targets were rated lower on visual memory and visuospatial skill but higher on wisdom. Targets with normal hearing and communication difficulty were rated as least competent on the cognitive tasks and most socially distant. Furthermore, the lowest wisdom scores were anticipated for normally hearing young targets exhibiting communication problems. The findings showed that adults of any age were judged less severely for communication difficulties if known to use a hearing aid.

Keywords: Aging; Age-based stereotypes; Communication; Disability; Hearing loss; Person perception

According to the Communication Predicament Models of Aging and Disability, age biases and disability stereotypes can increase the likelihood that older adults and those with disabilities receive inappropriate communication from conversational partners, thereby constraining opportunities for satisfactory communication and the achievement of personal goals (Hummert, Garstka, Ryan, & Bonnesen, 2004; Ryan, Bajorek, Beaman, & Anas, 2005). Age and disability cues can be derived from information provided by others (e.g., age on patient lists), physical traits (e.g., wrinkles or stooped back), assistive devices (e.g., hearing aid or walker), behaviors (e.g.,

Ellen Bouchard Ryan (Ph.D., University of Michigan, 1970) is a professor, Ann P. Anas (B.Sc., University of Western Ontario, 1969) was a research coordinator, (retired), and Melissa Vuckovich (B.A., McMaster University, 2001) is a Honours graduate of the Gerontology B.A. Program at McMaster University, Hamilton, Canada. Correspondence to: Ellen B. Ryan, Professor, McMaster Centre for Gerontological Studies, KTH 236, McMaster University, 1280 Main St. West, Hamilton, Ontario, Canada L8S 4M4. Tel.: (905) 525 9140, ext. 24449; E-mail: ryaneb@mcmaster.ca

forgetting or not hearing), and settings (e.g., long-term care). These negative feedback loop models highlight the potential of such communication predicaments to lead eventually to a withdrawal from valued activities, loss of self-esteem, and decreased sense of control. These consequences underline the importance of understanding how age and disability information guides the formation of “disabling” first impressions.

Old age has typically been associated with lower competence, independence, health, and vitality, but more benevolence and wisdom (Harwood et al., 1996, 2001; Nelson, 2002, 2005). Person perception studies in which hypothetical target persons are evaluated on the basis of a small amount of descriptive information and communication performance have shown that older adults can be penalized both for their age and for receiving age-adapted speech from others (Hummert et al., 2004).

Age-based expectations also lead to differential interpretations of other attributes and behaviors, either leveling the impact of negative information in old age or creating double jeopardy (Palmore, 1999). In the communication domain, some evidence for double jeopardy has been found in person perception studies conducted with young respondents. Older speakers were not accorded the approval received by young speakers for faster, more effective performance (Ryan & Laurie, 1990; Stewart & Ryan, 1982). Ryan, Hummert, and Anas (1997) found that hearing impairment was expected of older speakers and also that older speakers with a known hearing impairment received particularly low anticipated visual memory scores.

The present study used a person perception paradigm to examine age-related disability biases about hearing impairment (Pichora-Fuller & Carson, 2001; Strawbridge, Wallhagen, Shema, & Kaplan, 2000). Young adults gave first impressions of four younger or older target persons, with or without hearing impairment, who did or did not exhibit communication difficulty in a conversation. Four predictions were made.

- H1: Target persons with either attributed hearing loss or observed communication difficulty would be evaluated less positively in terms of anticipated cognitive performance and in social distance.
- H2: Older targets would be assigned lower scores on pro-young cognitive tasks (visual memory, visuospatial skill, and auditory sentence repetition) but higher scores on the pro-old task (wisdom).
- H3: Older targets would be rated as more socially distant.
- H4: The evaluation pattern for older target persons with hearing loss and communication difficulty would be more negative than for young targets (double/triple jeopardy).

Method

Undergraduate psychology students ($n = 171$; 52% female; mean age = 19.4 years) participated in classroom size groups for course credit.

Respondents read vignettes about four hospital volunteer target persons, averaging in age either 35 years or 75 years. To control for cross-sex predictions, we had female participants rate female targets and male participants rate male targets. Across the

four hospital settings, a brief introduction either mentioned the volunteer's gradual loss of hearing and use of a hearing aid or not, and a brief conversational script incorporated a misunderstanding on the part of the volunteer or not (see the Appendix). Four versions of the questionnaire were formed using a modified Latin Square Design to counterbalance the manipulations of hearing and communication abilities across each of the vignettes.

For anticipated cognitive performance, participants estimated how many correct out of 20 items each target would achieve on the following tasks: repetition of sentences over headphones (a manipulation check for hearing), visual memory for objects and for printed names, jigsaw puzzle (visuo-spatial), written vocabulary, and wisdom. Visual memory and visuo-spatial skill were selected to assess negative age expectations and wisdom for positive age expectations. Adapted from Kidwell and Booth (1977) for the volunteer context, social distance was assessed with nine items on seven-point likelihood scales: three moderate (e.g., invite home), three casual (e.g., offer a ride) and three distant (e.g., say hello in passing). Ratings on all social distance items were averaged to form the social distance measure (Cronbach alpha > .85).

Results and Discussion

A MANOVA was conducted for the cognitive task performance measures. An ANOVA was carried out for the social distance dependent variable. Alpha level for significance was set at .05. Post-hoc comparisons were conducted using t-tests with Bonferroni-type corrections for experiment-wise error.

Respondents expected targets with hearing loss to perform more poorly on the repetition task, but significantly better on visual memory for objects and names and on wisdom, Wilks' $\Lambda = .58$, $F(6, 164) = 19.90$, $p < .001$. There was no main effect of hearing ability on social distance ratings. Target persons with communication difficulty were rated as performing worse on all anticipated performance tests, Wilks' $\Lambda = .55$, $F(6, 164) = 22.63$, $p < .001$, and as more socially distant $F(1, 168) = 68.30$, $p < .001$, $\eta^2 = .29$.

Target age influenced anticipated cognitive performance, Wilks' $\Lambda = .74$, $F(6, 164) = 9.58$, $p < .001$. Older target persons predictably received significantly lower scores than young targets on auditory sentence repetition ($M_{\text{young}} = 8.90$, $M_{\text{old}} = 7.48$), visual memory for objects ($M_{\text{young}} = 13.04$, $M_{\text{old}} = 11.45$) and names ($M_{\text{young}} = 12.18$, $M_{\text{old}} = 10.82$), and jigsaw solution ($M_{\text{young}} = 18.43$, $M_{\text{old}} = 17.10$), and significantly higher scores on wisdom ($M_{\text{young}} = 14.14$, $M_{\text{old}} = 15.87$). This pattern reflects the literature on negative and positive age stereotypes as well as age group differences typical in cognitive assessments (Cavanaugh & Blanchard-Fields, 2002). There was no target age main effect for social distance.

A complex pattern of interactions was obtained. Target persons with both hearing loss and communication difficulty were the lowest on auditory sentence repetition, the manipulation check, $F(1, 169) = 7.85$, $p < .01$, $\eta^2 = .04$. Surprisingly, participants expected that target persons with normal hearing who exhibited communication difficulty would perform most poorly for three objective tasks, visual

Table 1 Anticipated Cognitive Performance and Social Distance Ratings as a Function of Target Hearing and Communication Abilities*

Measure/item	Hearing			
	Normal		Impaired	
	Communication normal	Communication impaired	Communication normal	Communication impaired
Anticipated task performance				
Repetition of sentences	11.26 ^a (5.32)	7.92 ^b (5.29)	7.70 ^b (4.74)	5.86 ^c (4.87)
Memory for objects	13.12 ^a (4.20)	10.55 ^b (4.42)	12.96 ^a (4.08)	12.35 ^a (4.16)
Memory for names	12.21 ^a (4.35)	10.19 ^b (4.82)	11.83 ^a (4.00)	11.76 ^a (4.56)
Jigsaw puzzle completion	18.30 ^a (3.52)	17.30 ^a (4.49)	18.00 ^a (3.59)	17.44 ^a (4.13)
Written vocabulary test	16.68 ^a (3.33) ¹	14.26 ^b (4.98)	15.91 ^c (3.83) ¹	14.64 ^b (4.87)
Wisdom	15.53 ^a (3.72)	13.77 ^b (4.90)	15.47 ^a (3.71)	15.28 ^a (4.29)
Social distance	4.13 ^a (1.11)	3.48 ^b (1.11)	3.95 ^a (1.10)	3.79 ^a (1.10)

* Means with different superscripts on the same row are significantly different from each other ($p < .001$, except ¹ $p < .01$).

object memory, $F(1, 169) = 19.41, p < .001, \eta^2 = .10$, visual name memory, $F(1, 169) = 17.89, p < .001, \eta^2 = .10$, and written vocabulary, $F(1, 169) = 6.90, p < .01, \eta^2 = .04$ (see Table 1). As well, these targets were viewed as the most socially distant, $F(1, 168) = 22.85, p < .001, \eta^2 = .12$. Clearly, adults of any age are judged more severely for communication difficulties if hearing is assumed to be normal.

The only three-way interaction occurred for anticipated performance on the wisdom task (see Figure 1). The lowest score was for the young target with normal hearing who exhibited communication difficulties, $F(1, 169) = 12.06, p < .01, \eta^2 = .07$. On this one measure, the penalty for unexplained communication problems is only assigned to the young person. This leveling shows that young participants presume hearing and communication problems among the old (Nelson, 2002; Ryan, Jin, Anas, & Luh, 2004; Ryan, Kwong See, Meneer, & Trovato, 1992).

In this study with educated young participants about target persons who were volunteering in a hospital, target age did not impact the social distance measure or lead to any double jeopardy effects.

Beyond leveling or double jeopardy in old age, the key interactions here involve known hearing loss as protection from generalized downgrading for impaired communication behavior. From the perceiver's point of view, impaired communication is part of the social schema for a person with hearing impairment, while this behavior provides added (negative) information for the other target (see Fiske & Taylor, 1991). While people with age-related hearing loss typically wait years before acknowledging hearing problems or actually using a hearing aid (Pichora-Fuller & Carson, 2001), this finding shows how the inevitable communication problems can undermine the very self-presentation they are trying to protect. This evaluative pattern highlights the potential benefits adults might experience from disclosing a hearing impairment. The single leveling effect suggests that younger people with a disability might benefit more from disclosure.

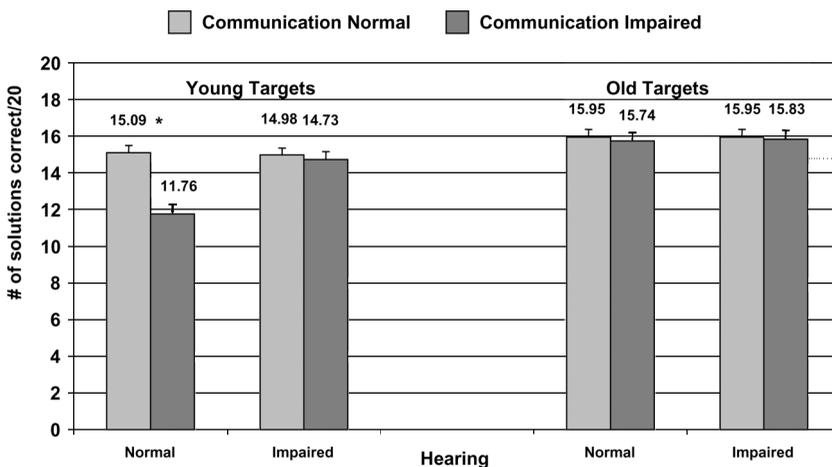


Figure 1 Anticipated Performance on a Test of Wisdom as a Function of Target Age and Communication and Hearing Abilities.

These results raise communication issues for individuals (young and old) with an invisible disability such as hearing loss concerning when and how to disclose impairments that might impede performance on tasks and in social interactions. Future research could productively examine these potential communication predicaments in terms of the self-handicapping, excuse, and assertiveness literature (Higgins, Snyder, & Berglas, 1990; Hummert et al., 2004; Ryan, Anas & Friedman, 2006; Ryan et al., 2005; Snyder & Higgins, 1988). One would expect, for example, that confident, explicit excuses specific to the immediate task would be protective if performance was deficient. The domain-specificity of the effects for anticipated cognitive performance illustrates the potential of these measures for examining complex interactions between target attributes and conversational behaviors (Biernat, 2003).

References

- Biernat, M. (2003). Toward a broader view of social stereotyping. *American Psychologist*, 58, 1019–1027.
- Cavanaugh, J. C. & Blanchard-Fields, F. (2002). *Adult development and aging* (4th ed.). Belmont, CA: Wadsworth.
- Fiske, S. T. & Taylor, S. E. (1991). *Social cognition* (2nd ed.). New York: McGraw-Hill.
- Harwood, J., Giles, H., McCann, R. M., Cai, D., Somera, L., Ng, S.-H., Gallois, C., & Noels, K. A. (2001). Older adults' trait ratings of three age groups around the Pacific Rim. *Journal of Cross-Cultural Gerontology*, 16, 157–171.
- Harwood, J., Giles, H., Ota, H., Pierson, H. D., Gallois, C., Ng, S. H., Lim, T. -S., & Somera, L. (1996). College students' trait ratings of three age groups around the Pacific Rim. *Journal of Cross-Cultural Gerontology*, 11, 307–317.
- Higgins, R. L., Snyder, C. R., & Berglas, S. (Eds.), (1990). *Self-handicapping: The paradox that isn't*. New York: Plenum Press.
- Hummert, M. L., Garstka, T. A., Ryan, E. B., & Bonnesen, J. L. (2004). The role of age stereotypes in interpersonal communication. In J. F. Nussbaum & J. Harwood (Eds.), *The handbook of communication and aging* (2nd ed., pp. 91–114). Mahwah, NJ: Erlbaum.
- Kidwell, I. J. & Booth, A. (1977). Social distance and intergenerational relations. *Gerontologist*, 17, 412–420.
- Nelson, T. D. (Ed.), (2002). *Ageism: Stereotyping and prejudice against older persons*. Cambridge, MA: MIT Press.
- Nelson, T. D. (Ed.), (2005). Ageism (special issue). *Journal of Social Issues*, 61(2), 207–221.
- Palmore, E. B. (1999). *Ageism: Negative and positive* (2nd ed). New York: Springer.
- Pichora-Fuller, K. & Carson, A. (2001). Hearing health and the listening experiences of older communicators. In M. L. Hummert & J. F. Nussbaum (Eds.), *Aging, communication and health: Linking research and practice for successful aging* (pp. 43–74). Mahwah, NJ: Erlbaum.
- Ryan, E. B., Anas, A. P., & Friedman, D. (2006). Evaluations of older adult assertiveness in problematic clinical encounters. *Journal of Language and Social Psychology*, 26(2), 129–145.
- Ryan, E. B., Bajorek, S., Beaman, A., & Anas, A. P. (2005). "I just want you to know that 'them' is me": Intergroup perspectives on communication and disability. In J. Harwood & H. Giles (Eds.), *Intergroup communication: Multiple perspectives* (pp. 117–137). New York: Peter Lang Publishing Group.
- Ryan, E. B., Hummert, M. L., & Anas, A. P. (1997). The impact of old age and hearing impairment on first impressions. Paper presented at the annual meeting of the Gerontological Society of America, Cincinnati.

- Ryan, E. B., Jin, Y. S., Anas, A. P., & Luh, J. (2004). Communication beliefs about youth and old age in Asia and Canada. *Journal of Cross-Cultural Gerontology, 19*, 343–360.
- Ryan, E. B., Kwong See, S., Meneer, W. B., & Trovato, D. (1992). Age-based perceptions of language performance among young and older adults. *Communication Research, 19*, 423–443.
- Ryan, E. B. & Laurie, S. (1990). Evaluations of older and younger adult speakers: Influence of communication effectiveness and noise. *Psychology and Aging, 5*, 514–519.
- Snyder, C. R. & Higgins, R. L. (1988). Excuses: Their effective role in the negotiation of reality. *Psychological Bulletin, 104*, 23–35.
- Stewart, M. A. & Ryan, E. B. (1982). Attitudes towards young and older speakers: Effects of varying speech rates. *Journal of Language and Social Psychology, 1*, 91–110.
- Strawbridge, W. J., Wallhagen, M. I., Shema, S. J., & Kaplan, G. A. (2000). Negative consequences of hearing impairment in old age: A longitudinal analysis. *The Gerontologist, 40*, 320–326.

Appendix

Introduction to Bonnie Smith/Bobby Smith

Bonnie Smith, age 34/73 years, lives in Hamilton in her own home. She is well-known in the community and enjoys social functions. (Her hearing ability has declined over the past few years so she now wears a hearing aid.) She has recently learned about gourmet cooking and baking. She enjoys reading popular food magazines for new recipes and special ingredients. Every Sunday morning, she volunteers in the gift shop.

She is speaking with a fellow volunteer:

- Volunteer: Has the new issue of “People” magazine arrived yet?
 Bonnie: Did you want something?
 Volunteer: Where is the new “People” magazine?
 Bonnie: **Communication Impaired:** Some people want a magazine?
Communication Normal: I think they are in the back room.