1. The questionnaire for participants in the recording experiment was revised in order to collect important information related with speech. Questions on speakers’ demographic information, smoking and drinking habits, physical activity levels, and general health conditions were added because it has been reported that these factors can affect speech and voice characteristics.

   There are two minor changes in the procedure for the recording experiment.

   1. Speech will be recorded directly to a computer hard disk, not to a digital audio tape.

   2. The number of recording sessions was changed from two to one.

The consent form is revised to match with these changes.

2. There will be no changes in risk and benefit for subjects.
Response to the HSC (November 12, 2004)

Thank you very much for responding to my request for the HSC approval for the new questionnaire for Study# 03-8460.

I understand your concern for the new questionnaire. Below, I explain the reasons that I added questions, and try to provide the references as much as possible. I hope you understand the necessities of these questions.

Following your advices, I revised the consent forms.

Section A
Speech characteristics vary among different social groups. Social factors I added are race, ethnicity, education, and residential environment.
- Question (2), (3), and (13): These questions are added because there are many differences in speech characteristics depending of speaker’s demographic background.
- Question (12): This question is added because social interactions with speakers of different generations could affect speech.

Section B
Physical activity levels of daily living are used for an indirect measure of physiological conditions of each speaker.
- It has been reported that speaker’s general status of physiological conditions affects voice characteristics (Ramig, 1983a, 1983b, 1986; Ramig & Ringel, 1983; Ringel & Chodzko-Zajko, 1987). In general, if speakers are in a poor physiological condition, their voices tend to sound more breathy, shaky, or coarse than the voiced produced by speakers in a good physiological condition. Speech rate and intonation can be different.
- Questions are created based on the Index of Activities of Daily Living Scale (Katz, Ford, Moskowitz, Jackson, and Jaffe, 1963), Ainsworth, Jacobs, and Leon (1993), and the guideline provided by the National Center for Disease Control and Prevention.
  - Questions (1) to (3) are speakers’ subjective judgments on physical activity levels.
  - Questions (4) to (10) will provide me less subjective data because it has numeric scale for certain activities. These data might not be matched with each other. For example, one might answer ‘Much more active’ for question (2), but s/he is not considered as more active person based on data collected from question (4) to (10).
  - The activities listed in Question (7) (bathing, dressing, walking, eating, and toilet use) are common categories used for checking basic functional skills that are automatic, overlearned, and required for self-maintenance (Loewenstein and Mogosky, 1999). I prefer to keep all the five categories, but if the committee considers these five categories are not relevant to my research, I’m willing to change the list to only two categories (walking and eating). I would like to keep these two categories for the following reasons.
  - Speaker’s walking ability and respiration function are strongly related with each other. Reduced respiration function could change intensity levels of speech, speech rate, and frequency of pauses during the utterances (Hoit and Hixon, 1987).
For eating ability, if speaker has a difficulty in eating, there are a number of reasons to cause the eating problem. My major concern is that eating problem might be related with reduced amount of saliva. When speakers have reduced function of salivary secretion, their speech tends to sound breathy or hoarse and to shorten each breath group with many pauses. Speakers with dysarthria or other neurological speech disorders tend to have swallowing problem.

Section C
Tobacco and alcohol and/or beverage containing caffeine affect characteristics of speech. Smokers tend to have more breathy and hoarse voice quality than non-smokers (Brawn and Rietveld, 1995).

Excessive amount of consumptions of alcohol beverage and of beverage containing caffeine have a dehydration effect, which will make the mouth dry. Voice tends to sound more breathy and hoarse.
Questions are added for the said reasons.

Section D
- Question (3), (4), (7) and (14) are added because some speakers have never been diagnosed or people are sometimes unaware of their speech and/or language problems.
- Question (5) and (6) are added because excessive use of voice could damage their vocal folds and make their voice sound hoarse.
- Questions (9) through (13) are added because some speakers have never been diagnosed or unaware of their hearing problems.
- Question (15) through (18) about speaker’s teeth condition are revised to collect more appropriate information for current study.
- Question (20) and (21) are added because the listed diseases or health conditions can change speech characteristics. People who have coronary heart disease, heart arrhythmia, or high blood pressure are considered as speakers in poor physiological state. People who had stroke or neurological disease could have cognitive/language/speech problems. People who have/had chronic bronchitis, asthma, or chronic rhinitis, or people who have any laryngeal surgery or injury could have differences in their voice quality and speech rate from people who don’t have any of these diseases. People who have chronic ear diseases might have mild to severe hearing loss, which make them talk loud. People who have depression tend to speak in monotone.
- Question (22) The listed medicines in (22) may create either a drying effect or a reduction in glandular secretions (Xue et al., 2001). Following your advice, I added brand names as examples.
- Question (23) Menopause or hormonal changes could cause a change in voice characteristics and average pitch level.

References


----- Original Message -----
From: "IUB_HSC" <iub_hsc@indiana.edu>
To: "Nagao, Kyoko" <knagao@indiana.edu>
Cc: "De Jong, Kenneth J." <kdejong@indiana.edu>
Sent: Friday, November 12, 2004 8:47 AM
Subject: Study amendment - study #03-8460

Hello Kyoko,

Your request for an amendment to your research project "Cross-Language Study of Speech Perception of Indexical Properties" was reviewed Wednesday afternoon.

We have major concerns about the new questionnaire you want to use. Are all the questions really relevant to your research question? You state you added the questions because "it has been reported that these factors can affect speech and voice characteristics." We would like to know where this was reported and by whom. Some of the questions don't seem relevant at all to us, for example: problems dressing, eating. And couldn't you get information about physical activity from one or two questions rather than all the finely detailed questions?
Question #22 asks about specific medications. Are subjects going to know these medications by these names? Are there "brand" names subjects would be more familiar with that could be used?

You must add to the consent form that you are going to be asking these questions. We should have asked you to include a statement before now about subjects having to fill out a background questionnaire. We insist on it now. And the description of the kinds of questions must be thorough in the consent form. The Confidentiality section still says refers to "tape" recordings. Shouldn't that be changed?

Please provide the requested information in reply e-mail. Send the revised questionnaire and consent form as attachments. The Committee Chair will review your response at the next weekly meeting after it is received. If you have any questions, let me know.

Thank you,
Cybil

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Do not assume that 'no new is good news'. If you haven't heard from us within 2 weeks of when you submitted your materials, then contact us to check on your paperwork.

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Cybil Cole
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Study of Amendment (Cont.)

1. There will be two changes that I would like to make for my study.

1. I would like to include a hearing test in the experiment. A hearing test will be conducted to assess the quantity of participant’s hearing. Each participant will take a hearing test. This test is for finding out the faintest tones a person can hear at selected pitches (frequencies) from low to high. During the test, each sound will be presented at levels from 0 to 120 dB (from too-weak-to-hear to the loudness of a waterfall). The participants will be instructed to raise a hand to indicate that the sound was heard.

2. I would like to change the amount of monetary compensation for a participant in the recording experiment. In the United States, each participant in the production experiment will be received $8.00 for the first one hour of participation with $4.00 for every additional 30 minutes. In Japan, each participant in the production experiment will be received ¥1000 for the first one hour of participation with ¥500 for every additional 30 minutes.

In addition to the revised consent forms, the flyers to be used for recruiting participants for the production experiment are revised to reflect the changes mentioned above.

2. There will be no changes in risk and benefit for this change.