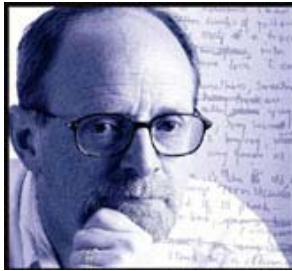


## Hot Topic in Health Psychology



*This new section will offer intriguing new topics for discussion and reflection – through the EHPS newsletter and the website.*

*In this issue Dr. James Pennebaker, one of our keynote speakers for Galway 2005, offers us a “hot” issue. The Hot Topic will also be available on our web site [www.ehps.net](http://www.ehps.net)*

### Pronouns are Hot

Everyone is talking about them; everyone is using them. Pronouns are this year's social support, positive psychology, meditation, and forgiveness rolled up into one. For the last few years, my collaborators and I have been exploring how the use of different pronouns in natural speech can reflect people's mood, hormone levels, social relationships, and personalities. Preliminary findings have been quite encouraging. For example, the use of first person singular pronouns (I, me, my) is reliably correlated with elevated depression, low self-esteem, and neuroticism. The effect sizes are small ( $d=.10$  to  $.20$  range), but consistent with large samples. By the same token, I-words are linked to honesty (as opposed to deception), lower status in dyadic relations, and perceptions of likeability. Counter to our initial hypotheses, the use of I-words drops during periods of shared upheavals -- such as September 11. Healthy people naturally reduce their self-focus in the face of adverse events.

Use of other pronouns including 1st person plural (we), second person (you), and third person (she, he, they) is generally positively correlated with markers of adjustment. That is, the awareness of and interest in other people is linked to better health. Even hormone levels may influence pronoun use. In the analysis of writings of two people taking testosterone (a male and a female), we found that the higher their testosterone levels, the less they referenced other people. Testosterone, then, may serve to screen out thoughts of other people in order to get tasks accomplished.

Interestingly, first person singular (we, us, our) is emerging as a far more complex pronoun. The stereotype is that references to “we” connote togetherness, group identity, and cohesiveness. Indeed, this is true on some occasions. On others, however, the use of we-words signals an emotional detachment or diffusion of personal responsibility. “We need to analyze the data” often means “You need to analyze the data.”

Finally, we (and I mean that in a warm way suggesting tremendous cohesiveness in my lab) have been exploring how pronoun use is related to expressive writing. For several years, several researchers have found the writing about emotional upheavals is associated with markers of improved physical health. Using a method developed in the artificial intelligence world called latent semantic analysis (or LSA), my students and I have discovered that people who switch in their pronoun use from one writing sample to the next are most likely to show health improvements. More specifically, switching from 1<sup>st</sup> person singular to other pronouns – or vice versa – signals a change in perspective, which also predicts subsequent drops in physician visits.

Health psychologists like other social scientists have been relying on self-reports too much for too long. The analysis of natural language is an alternative way to tap into the psychological processes of the people we are studying. Who would have known that pronouns could say so much?

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