



Essay

Why Bowlers Smile

by Robert Kraut

In March 1980, Senator William Proxmire (D-Wisc) awarded the National Institute for Mental Health a Golden Fleece Award for funding research on why bowlers, hockey fans, and pedestrians smile. According to the press release accompanying the announcement, the Senator wasn't bowled over by the research, puckish though it might have been.

Robert E. Johnston and I conducted this research (Kraut & Johnston, 1979). It was a serious study of the evolution of human facial expressions, inspired by a course on human ethology that we had taught in 1977, and was one of the first published experiments in what would eventually become evolutionary psychology. Just as non-human primates use bared-teeth displays in the presence of members of their species to signal appeasement and affiliation (Van Hooff, 1972), humans are much more likely to smile when they are engaged in a social interaction with another person than they are when they are solitarily experiencing a pleasant emotion. This article has been cited frequently and replicated several times. Even though the research was no laughing matter, I believed that its designation for a Golden Fleece Award was.

Although my work was not nearly as sexy as the research on class relationships in Peruvian brothels, conducted by an earlier Golden Fleece Award winner (van den Berghe & Primov, 1979), it did get media attention. This may have been the first time that non-specialists, except for my wife and mother, had ever read one of my papers, and I gloried in the brief media attention. I announced the award on my academic resume and even designed and printed a Golden Fleece t-shirt, which I, members of the social psychology group at Cornell, my two-year-old son and a member of Proxmire's staff proudly wore.

Can we learn anything from Proxmire's legacy of railing against government waste, from luxurious jets for top government officials to scientific research that he didn't consider in the public interest? Federal funding for research depends on politics and PR as much as it does on good science. If psychologists do not want to have their research misconstrued by the general public and grandstanding politicians, they can guard against this fate by using one of two approaches. The first is to make their work incomprehensibly scientific and fool the public through this camouflage. Bob Johnston, my co-author on the smiling research and an animal behaviorist studying pheromone communication, occasionally uses this ploy. You would never know from the titles of some of his papers that he spends his federal research funding watching small furry animals sniff each others' genitals (c.g. Reasner et al., 1993.).

The other approach is to frame the work in such a way that the public cares about it. This communicative goal is one I have had in much of my writing and I am gratified when the popular press – whether it is *The New York Times* or the *National Enquirer* – reports on my work.

Can I credit the Golden Fleece Award for my sensitivity to the audience in my writing? Probably not. The award coincided with my leaving academia for a spell to work in industry. I suspect that having bosses who were electrical engineers See **KRAUT** on Page 20

Why Robert Kraut Smiles

by Ed Diener



In his CV under "Honors and National Committees," Robert Kraut proudly includes the following entry: "March, 1980, Golden Fleece Award."

Kraut, the Herbert A. Simon Professor of Human-Computer Interaction at Carnegie Mellon University, received Senator Proxmire's dubious distinction for his research showing that people smile primarily in social situations, rather than merely because they are happy. Kraut went outside the laboratory to obtain ecologically valid data on smiling – observing bowlers, hockey fans, and pedestrians. What Kraut found in his research, which was funded by the National Institute of Mental Health and published in the *Journal of Personality and Social Psychology*, is that people usually do not smile much just because they feel happy; they smile because they want to communicate feelings to others.

The late Senator Proxmire did not realize when he presented the Golden Fleece Award to Kraut that this research provided a fundamental insight into one of the cross-cultural universals in human behavior, and that, in the process, it was among the first precursors to the field today known as Evolutionary Psychology. The senator was looking for research that to voters might appear silly with the right description, rather than being concerned with whether the research provided an understanding of important human behavior.

Although Kraut's studies were conducted with bowlers and hockey fans, they uncovered a phenomenon that applies to interactions between mothers and their babies, therapists and their clients, workers and their See **DIENER** on Page 32



Performance
Fleece: Julie
Kraut sports a
Golden Fleece
T-shirt while
running the
Philadelphia
marathon.
Robert Kraut,
her uncle, had
the shirts made
after receiving
his award.

KRAUT from Page 15

and skeptical about the value of social psychological research mattered much more than the 15 minutes of notoriety given to me by Senator Proxmire. ♦

Robert Kraut is the Herbert A. Simon Professor of Human-Computer Interaction at Carnegie Mellon University's Tepper School of Business.

References

- Kraut, R. E., & Johnston, R. E. (1979). Social and emotional messages of smiling: An ethological approach. *Journal of Personality and Social Psychology*, 37, 1539-1553.
- Reasner, D. S., Johnston, R. E., & DeVogd, T. (1993). Alteration of the bed nucleus of the stria terminalis (bnst) in young female djungarian hamsters (*phodopus campbelli*) exposed to adult males. *Behavioral and Neural Biology*, 60, 251-258.
- Van Den Berghe, P. L., & Primov, G. P. (1979). *Inequality in the Peruvian Andes: Class and ethnicity in Cuzco*. Columbia, MO: University of Missouri Press.
- Van Hooff, J. A. R. A. M. (1972). A comparative approach to the phylogeny of laughter and smiling. In R. A. Hinde (Ed.), *Non-verbal communication*. (pp. 209-224). Cambridge: Cambridge University Press.

DIENER from Page 15

bosses – in other words, smiling in social situations. The smile is a facial response that is recognized around the globe and helps bind people together. We are indeed a “social animal,” and the smile is a central way we communicate. I once did a study that blew up in my face because I asked a group of participants not to smile for three days – and they absolutely could not do it. I had a rebellion on my hands because the smile is so crucial to effective social interactions. Kraut’s studies yielded an important insight into the true genesis of smiling, and provided a foundation for later research, both in the laboratory and the field, that provided increased understanding of how people communicate through facial expressions. ♦

Ed Diener is Alumni Distinguished Professor of Psychology at the University of Illinois at Urbana-Champaign, where he has been since 1974. Diener is the founding editor of the APS journal *Perspectives on Psychological Science*.

Kraut, R.E., & Johnston, Robert E. (1979). Social and emotional messages of smiling: An ethological approach. *Journal of Personality and Social Psychology*, 37, 1539-1553.