Sticks and Stones: A New Study on Social and Physical Pain

August 27, 2008

We all know the famous saying: "Sticks and stones may break my bones, but words will never hurt me," but is this proverb actually true?

According to some researchers, words may pack a harder punch that we realize. Psychologists Zhansheng Chen and Kipling D. Williams of Purdue University, Julie Fitness of Macquarie University, and Nicola C. Newton of the University of New South Wales found that the pain of physical events may fade with time, while the pain of social occurrences can be re-instantiated through memory retrievals.

The researchers set up four experiments to demonstrate this finding. In the first two experiments, participants reported the amount of pain they felt while trying to relive a physically or a socially painful experience. After writing detailed accounts of each experience, the participants reported how they felt.

The last two experiments were similar to the first two, except participants were asked to work on some cognitive tasks with different levels of difficulty after reliving a socially or physically painful event.

The results, published in the August issue of *Psychological Science*, a journal of the Association for Psychological Science, are clear. Participants who had to recall a socially painful experience reported stronger feelings of pain and relived the experience more intensely than those who had to recall a physically painful event. Furthermore, participants who only had to recall a physically painful event performed better on the difficult mental tasks in comparison to those who had to relive a socially painful event.

A possible explanation for these results could be the evolution of the human brain, specifically in an area called the cerebral cortex, which is responsible for complex thinking, perception and language processing.

"The evolution of the cerebral cortex certainly improved the ability of human beings to create and adapt; to function in and with groups, communities, and culture; and to respond to pain associated with social interactions," the authors wrote. "However, the cerebral cortex may also have had an unintended effect of allowing humans to relive, re-experience, and suffer from social pain."