New Research From Psychological Science

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Read about the latest research published in *Psychological Science*:

[Linguistic Synchrony Predicts the Immediate and Lasting Impact of Text-Based Emotional Support]
Bruce P. Dore? and Robert R. Morris

Emotional support is critical to well-being, but the factors that influence the effectiveness of such support are not completely understood. Doré and Morris analyzed data from more than 1 million online stressor posts and supportive responses to determine their: (a) surface-level textual similarity, (b) synchrony in linguistic style, or language-style matching, (c) synchrony in the texts' emotional content, and (d) similarity in latent semantic content, or matching of topics, regardless of differences in phrases and words used. Support recipients evaluated each response they received and provided data reflecting their emotional change. Responses that had moderately similar text, language style, and emotional content to the original post were associated with the most beneficial outcomes. The more similar the topics in posts and responses were, the greater the immediate and lasting benefits of emotional support were. Emotional support seems to be most efficient when (a) there is a high overlap of meaning between the message of the person who seeks help and the supportive response and (b) the language used in the supportive response is not oversynchronized with the language of the person who seeks help. These features might result in lasting emotional change.

[Genetic Contribution to Variation in Risk Taking: A Functional MRI Twin Study of the Balloon Analogue Risk Task]
Li-Lin Rao, Yuan Zhou, Dang Zheng, Liu-Qing Yang, and Shu Li

Excessive risk taking has been associated with a propensity for substance abuse and psychopathological gambling, and previous research has suggested that this may be a hereditary intermediate phenotype. Rao and colleagues conducted a study with twins to estimate the heritability of risk taking and the genetic influence on the brain areas activated during risk-related behaviors. They tested 244 pairs of young adult twins by asking them to perform a Balloon Analogue Risk Task (BART) in which they sequentially inflated a virtual balloon that could either grow larger or explode. All participants also completed a sensation-seeking measure, and a subsample of participants also performed the BART in a functional MRI machine. The results indicated a moderate heritability of risk taking during the BART (41%): Monozygotic twins performed more similarly than did dizygotic twins. Moreover, risk taking correlated with sensation seeking, and 86.7% of this correlation could be explained by genetic factors. The authors also identified a moderate genetic influence on some of the brain areas activated when participants had to make an active choice regarding risk, including the anterior cingulate cortex/medial prefrontal cortex and bilateral striatum. These results support a genetic correlation between risk-taking behavior and risk-related brain activation.

[Heading Through a Crowd]

Hugh Riddell and Markus Lappe

Needless to say, the ability to move accurately through a crowd without causing collisions is essential in daily life. Vision provides information about one's own movement (optic flow) and others' motion via the patterns of movement of their major joints (biological motion). Riddell and Lappe examined how optic flow and biological motion are processed when they are present at the same time, such as when people have to move through a crowd. In several experiments, they projected images of point-light walkers (the movements of which were derived from motion-tracking data of a walking person), in which the point lights represented the major joints. They then asked observers to move a probe line to indicate the direction in which they would move through a crowd of point-light walkers. The results showed that when point-light displays indicated limb motion as walkers moved through the crowd, visual-heading estimation was facilitated, but when point-light displays indicated limb motion as walkers were standing, visual-heading estimation was negatively affected. Thus, biological motion might be processed as noise that disrupts optic flow when it is not integrated with actual movement, but it might facilitate optic flow when it is integrated with actual movement. This pattern of results occurred for both stable and unstable environments, suggesting that visually guided navigation can benefit from the information provided by biological motion.