

Symposium S-G2

Regulating the Need to Belong: Biological Substrates of the Self-Esteem and Attachment Systems

Saturday, February 15, 2014, 2:00 PM - 3:15 PM, Room 19

Chair: Danu Stinson, University of Victoria

Co-Chair:

Forming and maintaining close relationships is a fundamental human need. To support this drive, psychobiological regulatory systems evolved to guide the initiation and maintenance of social bonds, and exert aversive consequences when social bonds are threatened. Two such regulatory systems, self-esteem and attachment, are the focus of the present symposium.

The Tell-Tale Heart: Self-Esteem Regulates Optimal Physiological Arousal during Relationship Initiation

Danu Anthony Stinson, Eric T. Huang, Lisa B. Reddoch

University of Victoria

The present research proposes and tests a model of optimal physiological arousal during relationship initiation that explains why situational risk dynamically interacts with self-esteem to produce initiation motivation and behavior. Studies 1a and 1b manipulate social risk during relationship initiation and then measure heart-rate reactivity. Study 2 uses exercise to manipulate arousal directly and then measures initiation motivations and behaviors. Results suggest that high risk is optimally arousing for higher self-esteem individuals, creating the social demand necessary to provoke energetic initiation efforts. Yet reduce risk, and higher self-esteem individuals become passive and disengaged. In contrast, high risk is enervating for lower self-esteem individuals, a threat that undermines their initiation motivations and behaviors. Instead, low risk is optimally arousing for lower self-esteem individuals. These results reveal both lower and higher self-esteem individuals' capacities for warm, inviting, and uninhibited initiation efforts when they are motivated to put their hearts into the process.

Probing the Biological Constituents of the Sociometer and Need to Belong

Jennifer A. Bartz

McGill University

According to sociometer theory, self-esteem indicates one's social inclusion status, with low self-esteem signaling that social connection is lacking and that one should rectify the situation. Given the evolutionary value of belonging, this regulatory process is likely rooted in biological mechanisms that have evolved to support the initiation and maintenance of social bonds. One candidate is the opioid system: By regulating pleasure and pain, endogenous opioids reinforce social connection by making social contact pleasurable, and discourage social disconnection by making such experiences painful and thus prompting socially motivated behavior to restore well-being. We administered naltrexone (a mu-opioid receptor antagonist that blocks the pleasurable effects of endogenous opioids), and placebo (within-subject), to 26 participants, and measured self-esteem and attentional bias to faces. Naltrexone significantly decreased self-esteem, highlighting the importance of physiological pleasure for self-esteem. Moreover, supporting the opioid theory of social motivation, naltrexone increased bias to accepting (but not rejecting) faces.

An Attachment Perspective on Biological and Psychological Regulation During the Transition to Parenthood

Robin S. Edelstein, Britney M. Wardecker, William J. Chopik, Amy C. Moors
University of Michigan

The transition to parenthood can be a significant relationship stressor, especially for couples who struggle with belongingness and connection. Psychologists have documented postpartum declines in relationship satisfaction among insecurely attached individuals; neuroscientists have also shed light on biological changes in new parents. Yet, thus far, these two literatures have operated largely independently, making it difficult to understand how individual and contextual factors influence biological process (and vice versa) during the transition to parenthood. In a longitudinal sample of expectant parents, we examined: (a) how individual differences in adult attachment influence changes in hormones and relationship satisfaction, and (b) how prenatal changes influence postpartum outcomes. Women's attachment avoidance predicted prenatal changes in hormones associated with stress (cortisol) and nurturance (testosterone). Women's relationship satisfaction was also associated with men's avoidance and men's declines in testosterone. Our findings demonstrate how orientations toward belongingness regulate biological and psychological changes during a real-life relationship stressor.

The Immunological Consequences of Threats to Belonging

Lisa Jaremka, Ronald Glaser, Janice K. Kiecolt-Glaser
Ohio State University; OSU College of Medicine

The desire for close and caring relationships is a basic human need. Accordingly, threatening a person's sense of belonging can be highly aversive. In this talk, I present an overview of my research about attachment anxiety, loneliness, and marital distress and argue that these different experiences reflect the same underlying construct, threats to belonging, and thus should have similar physiological consequences. Specifically, I will discuss multiple studies demonstrating that loneliness, attachment anxiety, and marital distress dysregulate immune function, particularly cellular immunity. Taken together, these studies suggest that loneliness, attachment anxiety, and marital distress conceptually index the same basic process, threats to belonging. The current studies also support the utility of applying a psychoneuroimmunological approach to the study of close relationships and the need to belong.