Abstract:
Repeated interactions between infant and caregiver result in either secure or insecure relationship attachment patterns, and insecure attachment may affect individual emotion-regulation and health. Given that oxytocin enhances social approach behavior in animals and humans, we hypothesized that oxytocin might also promote the subjective experience of attachment security in humans. Within a 3-week interval, 26 healthy male students classified with an insecure attachment pattern were invited twice to an experimental session. At the beginning of each experiment, a single dose of oxytocin or placebo was administered intranasally, using a double-blind, placebo-controlled within-subject design. In both conditions, subjects completed an attachment task based on the Adult Attachment Projective Picture System (AAP). Thirty-two AAP picture system presentations depicted attachment-related events (e.g. illness, solitude, separation, and loss), and were each accompanied by four prototypical phrases representing one secure and three insecure attachment categories. In the oxytocin condition, a significant proportion of these insecure subjects (N=18; 69%) increased in their rankings of the AAP prototypical "secure attachment" phrases and decreased in overall ranking of the "insecure attachment" phrases. In particular, there was a significant decrease in the number of subjects ranking the pictures with
"insecure-preoccupied" phrases from the placebo to the oxytocin condition. We find that a single dose of intranasally administered oxytocin is sufficient to induce a significant increase in the experience of attachment security in insecurely attached adults.