

An Examination of Changes in Oxytocin Levels in Men and Women Before and After Interaction with a Bonded Dog

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Abstract:

Oxytocin (OT) is a neuropeptide increasingly recognized for its role in bonding, socialization, and stress relief. Previous research has demonstrated participants' OT levels increased after interacting with or petting a dog, suggesting OT is at least partially responsible for the calm, relaxing feeling that participants experienced during this intervention. The purpose of our study was to more closely examine changes in oxytocin levels in men and women in response to interaction with their own dog after being separated from the dog while at work all day. This condition was compared with a reading control condition, without the presence of the dog. Because the workplace is a common stressor, participants were examined after work to evaluate how interacting with a pet may help decrease stress, as evidenced by increases in serum oxytocin levels. Ten men and ten women participated in the study. Serum oxytocin levels were obtained before the participants had contact with their dogs and then again after 25 minutes of interaction with their dog. The same protocol was followed for the reading condition except that instead of interacting with their dog, participants read nonfiction materials selected by the researchers. Serum oxytocin levels increased statistically more for women who interacted with their dog when compared with women in the reading condition ($p = 0.003$). There was no significant increase in oxytocin level in men after interaction with the bonded dog compared with the reading condition; in fact, male oxytocin levels decreased after both the dog and reading conditions. These results suggest that men and women may have different hormonal responses to interaction with their dogs. It is unclear to what degree OT reactivity was affected by hormones, personality traits, or interpersonal relationships; factors which warrant further research.

Keywords: [BONDED DOG](#); [OXYTOCIN](#); [WORKPLACE STRESS](#)

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