

Sexual incentive motivation test

Objectives:

Within the context of preclinical models of sexual behaviour, it has been suggested that the human concept of sexual desire is equivalent to the concept of sexual motivation in experimental animal models (Agmo et al, 2004). Most tests measuring sexual motivation in animals are based on learned or operant responses which do not necessarily reflect the intensity of sexual motivation. However, a simple test has been developed to measure sexual incentive motivation in both male and female rats (Spiteri and Agmo, 2006; Agmo, 2003). This test has the advantage of being rather insensitive to variations in motor activity or general arousal, and does not require learning. It is very useful to identify pharmaceutical agents improving sexual motivation in both males and females.

Summarized methodology:

This test measures sexual motivation in female or male rats placed in an open-field where they can choose to interact (without direct physical contact) with a sexual incentive versus a social non sexual incentive. If the experimental subject is a male rat, the sexual incentive is a sexually receptive female and the social incentive is another male. When the subject is a female, the test choice is performed between a sexually active intact male versus a castrated male. The incentive animal cages are removable and can easily be exchanged within experimental sessions. Their fronts are made of wire mesh (mesh size 12x12 mm), and are attached to openings in the 45-cm-high arena wall. Outside these cages, a virtual zone, called incentive zone, is defined.

Endpoints:

- Time spent in an area adjacent to an inaccessible sexual incentive.
- Time spent in an area adjacent to a social non sexual incentive.
- Preference score representing the proportion of the total time spent in the incentive zones.
- Number of visits of each incentive zone.

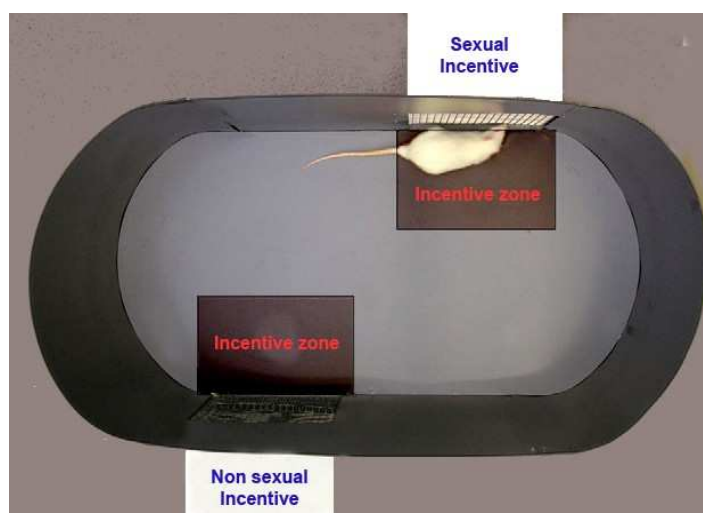


Figure1: Sexual incentive motivation test arena (from Spiteri and Agmo, 2006)

Related Pelvipharm bibliography:

Clément, P. et al. **J Sex Med** (2009) : 6 : 126-134

Links to applicable therapeutic areas / targeted disorders:

- Sexual pharmacology

* ED (Erectile Dysfunction)

* FSD (Female Sexual Dysfunction)