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**SOCIEDAD ARGENTINA DE
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Effect of open field exploration on frustration's memory: Implications of the adrenergic system

Mariana Psyrdellis^{1°}, Ricardo Pautassi^{2°}, Alba Mustaca^{1°}, Nadia Justel^{1°}

1° Laboratorio de Psicología Experimental y Aplicada-Instituto de Investigaciones Médicas A.Lanari

2° Instituto de Investigaciones Médicas Mercedes y Martín Ferreyra (INIMEC – CONICET - UNC)

marianapsyrdellis@hotmail.com

When the subjects are exposed to a novel situation pre training or pre testing in a specific learning situation, its retrieval is modulated (Izquierdo & McGaugh, 1985, 1987). This phenomenon involves a complex series of neurobiological and psychological mechanisms (Thiel, Huston & Schwarting, 1998). On the other hand, animals' behavior depends on their previous experience with different reward values. One way to study this phenomenon is with the incentive downshift paradigm through the consummatory Successive Negative Contrast. Thus, the aim of this work is to evaluate if the presentation of an open field exposure disturbs the incentive downshift and the role of the noradrenergic system in this phenomenon. For that purpose we submitted male rats to a 32% sucrose solution and then it was changed to a 4% one. Previously to the first or second contact with the downshifted sucrose solution the animals explored an open field. The exposition to the field interfered with the aversive memory of the event. Through the propranolol's administration (an antagonist of the β -adrenergic system) or a vehicle substance to the animals, given in trials 1 or 2 of the devaluation phase, it was founded that this drug blocked the effect of open field. In a theoretical level we want to understand the neurobiological processes involved in emotional memory. The implications for the applied science are to provide research to achieve better interventions for subjects who are vulnerable to loss situations or deceptions.