

# 3<sup>rd</sup> Global Summit on **BRAIN DISORDERS AND THERAPEUTICS**

February 15-16, 2023 | Webinar

## **Analyzing the reinforcement levels on fear acquisition and generalization**

**Manish Kumar Asthana***Department of Humanities & Social Sciences, Indian Institute of Technology Roorkee, India*

Ample evidences support the direct effect of reinforcement level on fear acquisition and generalization. Reinforcement helps an organism to learn and remember event for longer duration. Some evidences show that the high reinforcement level is the root cause of anxiety and related disorder. However, the analysis of reinforcement levels in fear acquisition and generalization is less explored. Hence, the current study aimed to understand the relationship between reinforcement levels and the fear acquisition and generalization. Pavlovian fear conditioning paradigm was implemented using the four different reinforcement levels, i.e., 0%, 37.5%, 62.5% and 100%. The main measures were the mean expectancy and contingency ratings. The results demonstrates the role of reinforcement on conditioned fear acquisition and fear generalization. The higher the level of reinforcement the smoother the generalization gradient across the trials. The results highlights that individuals tend to overgeneralize fear when the threat is unpredictable. Moreover, the individuals suffering from clinical anxiety symptoms may tend to overgeneralize threats.

### **Biography**

Dr Asthana is a cognitive psychologist, and his ongoing research aims to understand the role of psychological, physiological, affective and cognitive aspects in ergonomics (i.e., human factor design). His current research focuses on understanding the role of human cognitive abilities in product usage. He is also interested in investigating human cognitive limitations in problem-solving strategies and decision-making concerning design research methods. He uses a wide range of methodologies, i.e., behavioural, physiological, cognitive, affective, and virtual reality, for his empirical work.