

**BIOBEAMS: A MULTIMEDIA SYSTEM FOR ASSESSMENT
OF ATTACHMENT ORGANIZATIONS AND ECG DURING THE
STRANGE SITUATION**

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Abstract

In this paper, we present a multimedia system named BioBeAMS (Bio-signal Behavior Attachment Multimedia System) for assessment of attachment organizations and heart rate in Strange Situation experimental procedure for mother to child attachment study. Attachment patterns assessed through this procedure have been conceived as different strategies to regulate the access to relevant attachment information and to process distress-related information. The psycho-physiological activation led by emotional processing of attachment experiences during the Strange Situation procedure may be a critical factor for understanding the subject's psychological attachment strategies. BioBeAMS is a multimedia system, which integrates the bio-signal, video/audio of the psychological experimental procedure and the rater's coding together, running in the MS Windows environment on a PC. With this system, we can synchronous collect full color video and audio information and ECG signals during the Strange Situation procedure. It also enables the raters to subsequently analyze and evaluate psychological and physiological events during review to study possible relations.

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