

## Audience Development: Techniques for Measuring Cognitive and Emotional Response to Live Performance

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This paper describes recent developments in our investigation into psychological reactions of audience members as they watch live performance, specifically contemporary dance. The first method, developed by Glass (2005, 2006; Stevens & Glass, 2005), is a new psychometric instrument – the Audience Response Tool (ART) – that records emotional and cognitive responses as qualitative open-ended descriptions and quantitative ratings to dance performance. The ART has been developed and validated on seven different audiences in excess of 400 participants in three states of Australia (Tasmania, Victoria and New South Wales). The second method - the portable Audience Response Facility (ARF) - is a programmable, hand-held PDA that samples one- or two-dimensional data continuously as a performance unfolds. Continuous response data obtained from 20 audience members in the Playhouse Theatre in Canberra watching Albert David's "Silent Heartbeat" will be discussed. Judged emotional expression in the 30 minute work is captured in two orthogonal dimensions, valence and arousal (Schubert, 2001). We report the consistency of rsponse across the audience sample and compare peaks in audience response with a structural description of the choreography and soundscape. Future work will compare motion capture data recorded from a dancer with continuous audience reaction data. The ART and the portable ARF have wide application across the performing arts, film, and digital media.

