

Simulating and stimulating performance: Designing and validating simulated music performance settings

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Musicians typically rehearse far away from their audiences and in practice rooms that differ significantly from the concert venues in which they aspire to perform. Due to high costs and the inaccessibility of such venues, much current international music training lacks repeated exposure to realistic performance situations, with students learning all too late (or not at all) how to manage the challenges of performing and the demands of their audiences. Simulation has been shown to be an effective tool for training students in the fields of medicine, clinical therapy, and sport, offering practitioners access to real-life performance scenarios but with much lower risk of negative outcomes and evaluation. Only few attempts have been made to apply simulation training to music. The aim of this project was to design simulated performance environments in which the conditions of “real” performance could be recreated as authentically as possible. Advanced violin students (N=12) were recruited to perform in two distinct simulations: (1) a solo recital with 24 virtual audience members and (2) an audition situation with three “expert” virtual judges. Each simulation contained back-stage and on-stage areas (complete with CCTV footage of the audience/audition panel, spot-lights, and stage curtains), life-sized virtual audiences who were interactive (controlled from back-stage), and pre- and post-performance protocols designed to match those found at leading international performance venues (e.g. entrance to a “green room” for warm-up, stage calls at regular intervals, and procedures for entering, bowing, and exiting the stage). Participants were then asked to complete a questionnaire on their experiences of using the simulations and take part in a semi-structured interview. The results show that both simulated environments offered sufficiently realistic experience of performance contexts to enable musicians to practice their performing. The musicians reported numerous training and educational applica-

tions of the technology, from preparing for important recitals and auditions to delivering higher quality performances.

Keywords: simulation; music education; professional training; performance anxiety; performance quality

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