

Title: Injuries across a tertiary dance training program: a 3 year retrospective cohort study

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**Background and purpose:** Training loads in pre-professional dance are high when compared to traditional sports. Injuries have been observed to be higher in certain year levels of training across different dance contexts. Wyon (2010) suggests implementing periodisation into pre-professional dance training to avoid injury, however the division of the academic year into semesters presents a challenge to continuity in tertiary training. This paper aims to consider injury patterns across a three-year tertiary dance training program, to guide future load management prevention strategies.

**Methods:** A three-year retrospective analysis was conducted on the records of consenting final-year tertiary dance students. Injury was defined as those presenting to an onsite physiotherapy clinic, regardless of time loss. Data was extracted from physiotherapy notes, timetables, academic history, and audition application material. Incidence per 1000 hours, risk and rate ratios relative to the first semester of training, and proportions of the location of the injury and the injured tissue were calculated.

**Results:** All participants (n=17) were injured across the duration of the program. Injury incidence per 1000 hours of dance training was 2.71 (95% confidence intervals: 2.22, 3.20). The ankle was the most common injury location (17.65%), muscle the most commonly injured tissue (23.53%). A trend was seen of increasing injury incidence across the program.

**Conclusions:** Injuries were shown to occur early in the training program, and a trend of increasing injury incidence across the program was observed.

**Clinical implications:** We suggest that training intensities and duration's be graded over the initial weeks of a tertiary dance training program, with attention paid to a gradual increase in repetition and introducing unaccustomed conditioning modalities.