**IADMS 28th Annual Conference Abstracts**

**Training load and injury occurrence in undergraduate dance students**

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**Introduction:** Concerns are often raised in dance training regarding the high volume of training undertaken and the limited rest time. Recent research has suggested that the distribution of training load, as represented by the acute: chronic workload ratio (ACWR), may be a crucial factor in the incidence of training-related injuries1 . Existing dance specific literature has provided brief, descriptive data on training load; however, no previous research has specifically examined the distribution of load throughout a period of dance training.

**Purpose:** This study aims to quantify the training duration and type, training load, ACWR, and injury incidence amongst student dancers.

**Methods:** Participants were 16 female Undergraduate student contemporary dancers. Ethical approval was granted by the Institution's Research Ethics Committee and all participants gave written informed consent. Data were collected over a 10-week period during which participants self-reported duration (mins per day) and intensity (session RPE (sRPE)) of all training undertaken daily, and details of any existing or occurring injuries. Data analysis included calculation of training duration and type, training load, ACWR, and injury incidence, with comparisons drawn between year groups using a Kruskal-Wallis test with Tamhane’s T2 posthoc analysis.

**Results:** Forty-four students consented to participate, however only 16 returned completed log books (64% drop out rate). Mean weekly total training load was 5186.87 AU (±1272.59), with no significant difference between year groups (p > 0.05). The ACWR fell within the optimal range of 0.8-1.3 for all weeks except weeks 9 and 10, which fell within an assessment period (range 1.33-1.51). There were significant differences between groups for time spent in rehearsal, performance, and undertaking supplementary fitness training (p < 0.05). Eleven students reported injuries, with a mean incidence of 1.8 injuries per injured student, 25% of which resulted in time loss.

**Conclusions:** This study represents an initial exploration into training load distribution in a contemporary dance degree programme. High dropout rates with this mode of data collection need to be considered for future research. However, despite the small final sample size, strong trends were identified in training load patterns, which may help to inform future research and training programme/ curricular design.

**References:**

1. Gabbett TJ. The training-injury prevention paradox: should athletes be training smarter and harder? Br J Sports Med. 2016; 50(5):273-280.