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Exhibit Hall Poster Area 1 (Convention Center)

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Background/Purpose Interactive gaming (IG) is being integrated in fitness and exercise environments as a means of promoting physical activity. IG capitalizes on the interest in computer and video interaction by integrating exercise with technology. Little research has assessed the effects of IG on physical activity participation. The purpose of this study was to determine pedometer step count in an IG environment compared to a traditional physical activity and to evaluate students' preference for future engagement.

Method Twenty-two students (11 females and 11 males; mean age, 21.4 years) enrolled in a college tennis course were randomly selected. Data were collected over four days and participants completed both conditions (Wii© Sports tennis; traditional singles tennis) twice. In pairs matched by tennis ability, participants viewed a 15-minute IG orientation session, engaged in 45 minutes of game play during each condition, and completed a brief questionnaire. Order of the conditions was counterbalanced and steps were measured with the Bodymedia Pro3 armband.

Analysis/Results Paired t-tests examined differences in accumulated step counts. The results showed a significant difference ($t = 12.86$, $df = 21$, $p < .001$) in the number of steps between the Wii© tennis game ($M = 687.56 \pm 505$) and traditional tennis ($M = 3252.39 \pm 683.87$). Students preferred traditional tennis (93.7%) to Wii© tennis (6.3%).

Conclusions Although most students preferred traditional tennis, the 6.3% who preferred Wii© tennis demonstrated the lowest tennis ability. Future studies should focus on the benefits of interactive gaming on enhancing skill level of novice players.