

Exergame versus Traditional Cycling: A Comparison of Psychological Factors

MCKAY BLOXHAM and CASI HELBIG

Keiffer Kinesiology Laboratory; Department of Kinesiology; Texas Lutheran University; Seguin, TX

Category: Undergraduate

Advisor / Mentor: Helbig, Casi (chelbig@tlu.edu)

ABSTRACT

Previous research has noted that increased enjoyment levels endorsed the involvement in long-term exercise persistence. **PURPOSE:** The purpose of the study was to compare enjoyment levels and perceived time of the Spinner NXT, a stationary bike commonly found in cycling classes, and the TACX trainer, a stationary bike which allows users to immerse themselves in any location in the world and participate in competitions if desired. **METHODS:** Sample size consisted of 30 Texas Lutheran University students. Each participant was assigned a number to protect their identity and was randomly assigned to either begin with the Spinner NXT or the TACX. Participant was told they would be riding a bike for a predetermined amount of time which differed from trial to trial. Participants rode the bike for 15 minutes. When the 15 minutes was up, participants filled out the Enjoyment Questionnaire. They were then given time to connect their headphones to the experimenter's phone to access the playlist. Once they were ready, they rode the bike for 15 minutes. Once the time was up, participants filled out another copy of the Enjoyment Questionnaire and an Overall Enjoyment Questionnaire. Once the forms were filled out the experimenter debriefed each participant. **RESULTS:** For data analysis three t-Tests: Two-Sample Assuming Equal Variances were run. Data suggested that the TACX Neo 2.0 was significantly more challenging and less comfortable than the Spinner NXT. An additional analysis was in overall percentages. 56.6% of participants preferred the TACX while 43.3% of participants preferred the Spinner NXT. Average perceived time on the Spinner was 15.08 minutes while average perceived time on the TACX was 12.84 minutes. **CONCLUSION:** Average perceived time suggested that there is roughly a 2-minute difference in perception of this short bike ride. If this were expanded to a long-distance ride, greater differences in these results would be expected. Level of challenge could be perceived in different ways and depending on what an individual prefers this could sway someone to pursue either method. The "Most Comfortable" analysis, is where the main limitation was found. Each of the bikes had two different seats, and this had a larger influence on responses than expected. In future studies bike seats, posture, and cycling method should all be taken into consideration in experiment design. This study will give future researchers a baseline when considering what method of stationary cycling to use in their studies and to hopefully give the public insight into the importance of personal enjoyment when considering what method of cycling to utilize.