## Exploring a Digital Audience's Influence on Performance, Rating of Perceived Exertion, and Social Physique Anxiety during a Bench Press Test

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## **ABSTRACT**

The presence of a physical audience can influence exercise performance, rating of perceived exertion (RPE), and social physique anxiety (SPA). Previous research has shown high SPA can contribute to exercise avoidance behaviors, which can result in negative outcomes for physical and mental health. The expansion of social media usage now provides exercisers with an opportunity to interact with a digital audience. Previous studies have primarily focused on the impact of a physically present audience on exercise performance, RPE, or SPA, with little to no attention given to the influence of a digital audience (i.e., social media). PURPOSE: To explore the effect of a digital audience on the total number of repetitions performed, RPE, and SPA in physically active males and females (N = 26; male = 15, female = 11) underwent a repeated measures design with two conditions, recorded and non-recorded. Participants completed the YMCA bench press test, the Borg RPE Scale, and the SPA 9-Item Scale in both conditions. In the recorded condition, we deceived participants by telling them their bench press performance was being recorded and the recording would be posted to the department's social media accounts as an example. **RESULTS:** Three paired samples *t*-tests were calculated to examine any differences in total repetitions, RPE, and SPA between the conditions. Social physique anxiety was significantly higher (t(25)= 2.27, p = .016, d = 0.45) in the recorded condition (24.65  $\pm$  8.83) compared to the non-recorded condition  $(23.50 \pm 8.32)$ . However, no statistically significant differences were found in the total repetitions (p = 0.31or RPE (p = 0.20) between the recorded and non-recorded conditions. **CONCLUSION**: Our findings indicate that the presence of a digital audience may not impact total repetitions performed or RPE. This differs from previous studies which have found improved exercise performance and lower RPE when exercise is performed in the presence of a physical audience. However, research has found performance and RPE differences only when participants could see the physical audience present, suggesting that a digital audience may not impact performance or RPE because participants cannot see the digital audience. Our results suggest that the presence of a digital audience may increase SPA. This is congruent with current literature investigating the effects of a physically present audience and SPA. Thus, it appears a digital audience may not impact bench press performance or RPE, but can increase SPA in physically active young adults. Given the concerns about being judged for one's body can lead to avoidance behaviors (e.g., exercise) in those with higher SPA, future research should continue to explore the relationship exercise has with social media to prevent any such decline in physical and mental health.