Examining outcome expectations of wearable performance device users: A case study of recreational athletes. *by Tomas Medina | Thomas Cieslak*

The information era has given birth to a new breed of sport management, which uses new technologies (e.g., performance apparel, wearable devices, data analytics) to improve athletic performance. Previous studies have established an individual adopts new technologies in 4 phases: *Anticipation, Orientation, Incorporation* and *Identification*. Additionally, these studies stated the most critical stages are *Anticipation* and *Orientation*, which are characterized by outcome expectations and user experience, respectively. However, there is minimal information available to sport managers describing or quantifying athletes' expectations and experiences with wearable performance devices (WPD). The objectives of our project were to examine the relationships between WPD use and influence on 1) self-reported TTM (Transtheoretical Model) physical activity stage; 2) outcome expectations (OE) motives; and 3) user experience (UX) factors. A PreTest-PostTest protocol established TTM stage and examined expectations while a 9-week Time-Series design recorded UX of 14 recreational athletes with updated versions of the TTM and OEE instruments and an adopted UX questionnaire, respectively. Pre-Test data indicate that participants were evenly distributed across the six TTM stages while Post-Test data illustrate a change in physical activity (Action (n=8) and Maintenance (n=6)). Results indicate that participants had 'high' outcome expectations for Physical Performance (OE-PP), Psychological Impact (OE-PI), and Coach-Athlete Relationship (OE-CAR) during the *Anticipation phase*. However, only Social Status (OE-SS) expectations were fulfilled during the *Incorporation phase*. Thus, there was only a positive significance difference (p<.05) for OE-SS (3.49+/-0.34) while there was a negative significance difference (p<.05) for OE-PP (2.42+/-1.02), OE-PI (2.86+/-1.05) and OE-CAR (1.75+/-1.01). In conclusion, the UX data provided evidence to a 4-6 week 'learning curve' for WPD users, which may explain the negative OE results.