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## **Integrating Attitudes, Capability, Self-Regulation, and Habit to Identify Behavioral Profiles in Prostate Cancer Survivors: A Latent Profile Analysis**

*Thursday 23 July 2026 11:45 (20 minutes)*

**Background:** Prostate cancer survivors (PCS) often experience challenges engaging in physical activity (PA) and reducing sedentary time (SED) after treatment. The Multi-Process Action Control framework (M-PAC) posits that attitudes, self-regulation, and habit predict behavior. This study identified M-PAC-based profiles and examined how they relate to SED and quality of life (QoL).

**Methods:** A cross-sectional analysis was conducted using baseline data from a randomized controlled trial of sedentary PCS. Eligible participants were aged  $\geq 18$  years and reported  $\geq 8$  h/day of SED. Six M-PAC indicators (affective attitudes, instrumental attitudes, perceived capability, perceived opportunity, behavioral regulation, and habit) were assessed using self-report. SED (Longitudinal Aging Study Amsterdam SED Questionnaire), PA (Godin Leisure-Time Exercise Questionnaire), QoL (FACT-G), Health & Disability (WHO Disability Assessment Schedule) and Fitbit-derived daily steps were also collected. Latent profile analysis identified psychosocial classes, followed by multinomial regression.

**Results:** Participants ( $N=115$ ,  $\text{Mage}=69.4\pm 9.9$  years) had localized disease (80.9%) and treated with surgery (65.2%), radiation (40.9%), and/or androgen deprivation therapy (ADT) (29.6%). A 3-class model showed optimal interpretability. Class 1 (37.96%) demonstrated strong attitudes but weak regulation and habit. Class 2 (19.22%) showed low attitudes, capability opportunity, with modest regulation. Class 3 (42.81%) reflected highest capability, regulation, and habit. Class 3 also reported the highest PA, QoL, and lowest disability scores while Class 2 had the highest SED and lowest QoL. Compared with Class 3, PCS with higher PA were less likely in Class 1 (RRR = 0.97, CI: 0.95–0.99,  $p = .036$ ), higher QoL was associated with lower odds of Class 2 (RRR = 0.94, CI: 0.90–0.98,  $p = .003$ ), and ADT exposure observed in Class 1 ( $p = .08$ ).

**Conclusion:** Distinct psychosocial profiles exist and show meaningful behavioral and QoL differences. Supportive care interventions that enhance capability, self-regulation, and habit may help PCS adopt and sustain healthier movement patterns.

### **Keywords**

Prostate cancer; Survivorship; Sedentary behavior; Latent profile analysis

### **Conflict of Interest & Ethical Approval**

yes

### **Abstract submitters declaration**

yes

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