Relationship of Health-Related Quality of Life to Functional Fitness in Rural Cancer Survivors
Jared R. Heitzenrater, Nicole M. Svendsen, Kristofer S. Wisniewski, Saint Francis University, Loretto, Pennsylvania

Health-related quality of life (HRQoL) is of high interest in exercise oncology due to decreases in HRQoL during and following cancer treatments. Functional fitness assessments (FFA) are also commonly assessed in this population due to the treatment-related side effects that may impact the patient's ability to perform activities of daily living (ADLs). However, the relationship between these variables has not been previously explored. **Purpose:** To examine the relationship between HRQoL and FFA in a group of rural cancer survivors. **Methods:** Fifteen (Females, n=8; Males, n=7) subjects with a previous diagnosis of cancer aged 62.0 ± 8.5 years and BMI of 21.8 ± 7.9 kg/m\(^2\) were assessed in several areas of FFA including waist circumference, body fat percentage, fat free mass (FFM), timed up and go (TUG), and 30 second chair stand (30CS). They were also given the Functional Assessment of Chronic Illness-Fatigue (FACIT-F) with subscales in physical well-being (PWB), social/family well-being (SWB), emotional well-being (EWB), functional well-being (FWB), and fatigue. The types of cancer and staging were diverse. Treatment types included chemotherapy, radiation, and surgery. FFA were completed and the FACIT-F completed at home and returned at the following session. **Results:** Pearson Correlations were significant between SWB and TUG (r = -0.844, p = 0.000), SWB and 30CS (r = 0.715, p = 0.003), and between fatigue and FFM (r = 0.668, p = 0.006). A correlation trending toward significance was seen between FWB and TUG (r = -0.504, p = 0.055). No other significant correlations were found. **Conclusion:** Moderate-to-strong relationships were observed between SWB, TUG time, and 30CS. This shows cancer survivors who are more mobile may have a greater ability to engage in social tasks and ADLs. In addition, higher amounts of FFM were moderately correlated with having less fatigue meaning cancer survivors with more FFM may have less fatigue.