## **Comparison of physical activity participation, age group differences and fitness tracking technology among MU Extension physical activity participants over a three-year period.** Maggie Hillmann

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Consistent participation in exercise helps maintain functional abilities and contributes to healthy aging. Americans can stay healthy by aiming to meet the physical guidelines for Americans, 150+ minutes of aerobic exercise and 2+ days of strength training per week. MU Extension offers physical activity programs to community members to encourage consistent physical activity, however this factor has not been studied among program participants. **PURPOSE:** The first aim of this study was to determine the change in cardiovascular and strength training activities over a three-year period, among current and previous physical activity program participants. The second aim was to determine if fitness tracking technology impacted overall physical

activity levels among participants. **METHODS**: Data was collected through an electronic survey sent to all previous (within the last 5 years) and current participants of Stay Strong, Stay Healthy (SSSH), Walk with Ease (WWE), Matter of Balance (MOB), and Tai Chi (TC) in Missouri. Repeated measures ANOVA were conducted to compare physical activity participation rates from year to year. Participants were grouped separately if they met physical activity guidelines for Americans. **RESULTS**: Cardiovascular exercise averages (running, biking, swimming, and walking) more consistently met the physical activity guideline suggestions over the three-year period (2019=between 60-150 min, 2020=less than 60 min, 2021=between 60-150 min), when compared to strength training averages (2019 -

2021 = less than one day per week) We found that strength training engagement decreased during 2020, 2021 has shown an increase thus far. 46.3% of respondents currently utilize a fitness tracker and it will be determined the amount of those

respondents that either maintained or increased their physical activity

levels. **CONCLUSION:** Data from this study suggests a connection between age

group, physical activity program delivery, and use of fitness tracking technology. It is important to continue exercise through aging regardless of the barriers presented. By evaluating the trends between these factors, MU Extension can adapt to provide participants with the most effective tools to remain healthy and active through aging.