

## Research Space

Journal article

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Do people with long-term pain swim? Understanding participation using the active lives survey

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**Purpose:** Physical activity and exercise are recommended for the management of long-term pain. Swimming is often encouraged despite little supporting evidence. To date, there is a lack of information on the profiles of people with long term pain who choose to swim. The Sport England Active Lives survey measures rates and modes of physical activity, exercise, and sport across England. The objective of this project was to review the Active Lives dataset to understand the profile of people with long-term pain who swim. Specifically, what are the differences between people with long-term pain who choose to swim and those who don't and what are the differences between swimmers with and without long-term pain?

**Methods:** The publicly available Active Lives Survey dataset (2017/18) involving 199,886 people was filtered for the following groups; people with long-term pain who swim, swimmers without long-term pain and people with longterm pain who do not swim. Demographic data extracted included age, gender, work status, and ethnic origin; health data included chronic health, impaired mobility, and mental health conditions and body mass index (BMI); participation data included session length and frequency. The data was analysed in SPSS (version 24) using descriptive and inferential statistics.

**Results:** 19,507 (9.78%) people reported experiencing long-term pain (11,913 females; 6,886 males). Only 273 people with long term pain (1.40%) had swum in the last 12 months; age range 17 to 87 years (M = 53, SD = 13.23). People with long-term pain who swam were more likely ( $p < .05$ ) to be female, employed, have a higher BMI and have a mental health condition when compared to those who did not swim. There were no differences in the incidence of chronic health conditions, mobility impairments or age between these groups. Compared to swimmers without longterm pain, those with long-term pain swam less frequently ( $p < .05$ ) and were more likely to have a chronic health condition, a mental health condition, a mobility impairment and be overweight ( $p < .05$ ). Most swimmers were White (95%); there were no people of Black or Chinese ethnicity with long-term pain who swam. The length of sessions varied from 30–60 min for swimmers with long-term pain but up to 180 min for swimmers without pain.

**Conclusion(s):** The Active Lives dataset suggests very few people with long-term pain swim. Age and weight do not appear to be barriers to swimming but men, people who are unemployed and minority ethnic groups may require additional support. Swimmers with long-term pain are more likely to have comorbidities and this may explain why they swim less frequently and for less time. Further work is required to understand the barriers to swimming for people with longterm pain, to establish whether it is beneficial, and if so, ascertain optimal duration and frequency. **Impact:** The findings will guide a research project which aims to develop a specific swimming class for people with persistent low back pain. Identifying barriers and facilitators to exercise and sport for people with long-term pain should remain a priority in physiotherapy research; with the aim to reduce health inequalities.

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