

PARTICIPANT INFORMATION SHEET

Study title

Youth orienteering training and wellbeing study: camp participants versus matched club peers, measuring resting heart-rate variability, morning salivary cortisol, and mood over 28 days.

Invitation and summary.

You are invited to consider taking part in a university study that looks at how a four-week orienteering training camp affects heart rhythm, stress hormones, sleep, mood, and overall wellbeing in teenagers, compared with usual club training. Your normal training continues as usual; the study does not add medicines or medical procedures.

Why is this study being done?

Orienteering mixes endurance and real-time navigation and can be physically and mentally demanding. We want to learn whether a structured camp helps the body and mind adapt over 28 days and how these changes relate to daily training load.

Who can take part?

Healthy adolescents aged 15–18 years with at least two years of official orienteering competition experience and medical clearance for training. If you are under 18, a parent or legal guardian must provide consent and you will give assent.

What does taking part involve?

Participation lasts four weeks. If you attend the national preparation camp, you will follow the camp's normal programme; if you remain with your club, you will continue your usual training. In both cases you will have brief assessments on Day 1, Day 14, and Day 28. Each assessment includes a five-minute, seated morning heart-rate recording while rested and fasted; a small saliva sample collected on waking to measure cortisol; and short questionnaires about perceived stress and mood (PSS-10 and PANAS-C). Sleep quality (PSQI) and emotional skills (EISA-24) are completed at the start and at Day 28. You will also provide a simple weekly rating of how hard your training felt. All procedures are non-invasive and each assessment visit takes about 20–30 minutes.

Benefits and risks.

There may be no direct benefit to you, though some athletes find that regular check-ins help them understand training and recovery. Risks are minimal and relate mainly to normal training, brief discomfort from wearing a chest strap, and the time needed to complete saliva collection and questionnaires. You may skip any question you prefer not to answer.

Confidentiality.

Your information will be kept confidential. Your name and other direct identifiers will be stored separately from study data. Only authorised study staff and regulators (if required by law) may access identifiable information. Results will be reported in a way that does not identify you. De-identified data may be shared with qualified researchers after publication under a data-use agreement, in line with ethics approvals and your consent.

Voluntary participation and withdrawal.

Taking part is your choice. You may decline or withdraw at any time without giving a reason, and this will not affect your relationship with your school, club, or the university. If you withdraw, we will stop collecting new information; you can choose whether we may keep and use data already collected.

Ethics approval.

Shanxi University Ethics Research Committee (IRB reference AD2024-197); approval date 15/06/2024.

Contacts

Study contact: Haiyan Li, School of Physical Education, Shanxi University, Email: aepigenetic@gmail.com. Ethics Committee: School of Physical Education, Shanxi University, No. 92 Wucheng Road, Taiyuan, Shanxi 030006, China; Tel +86-351-7010255; Email xiaoban@sxu.edu.cn.