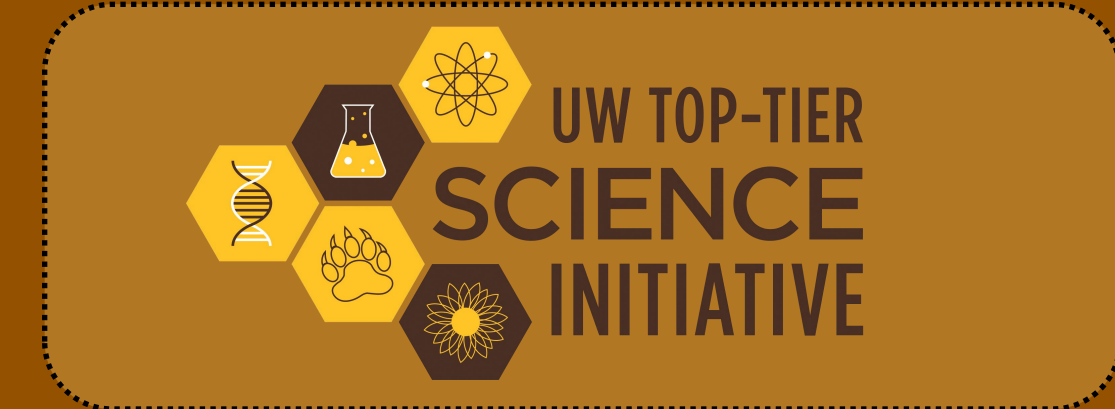




The Impacts of Regular Yoga Training on Cross Country Skiers' Physical and Mental Health

Ruixi Jin, Rachel Waston
UW Nordic Ski Team



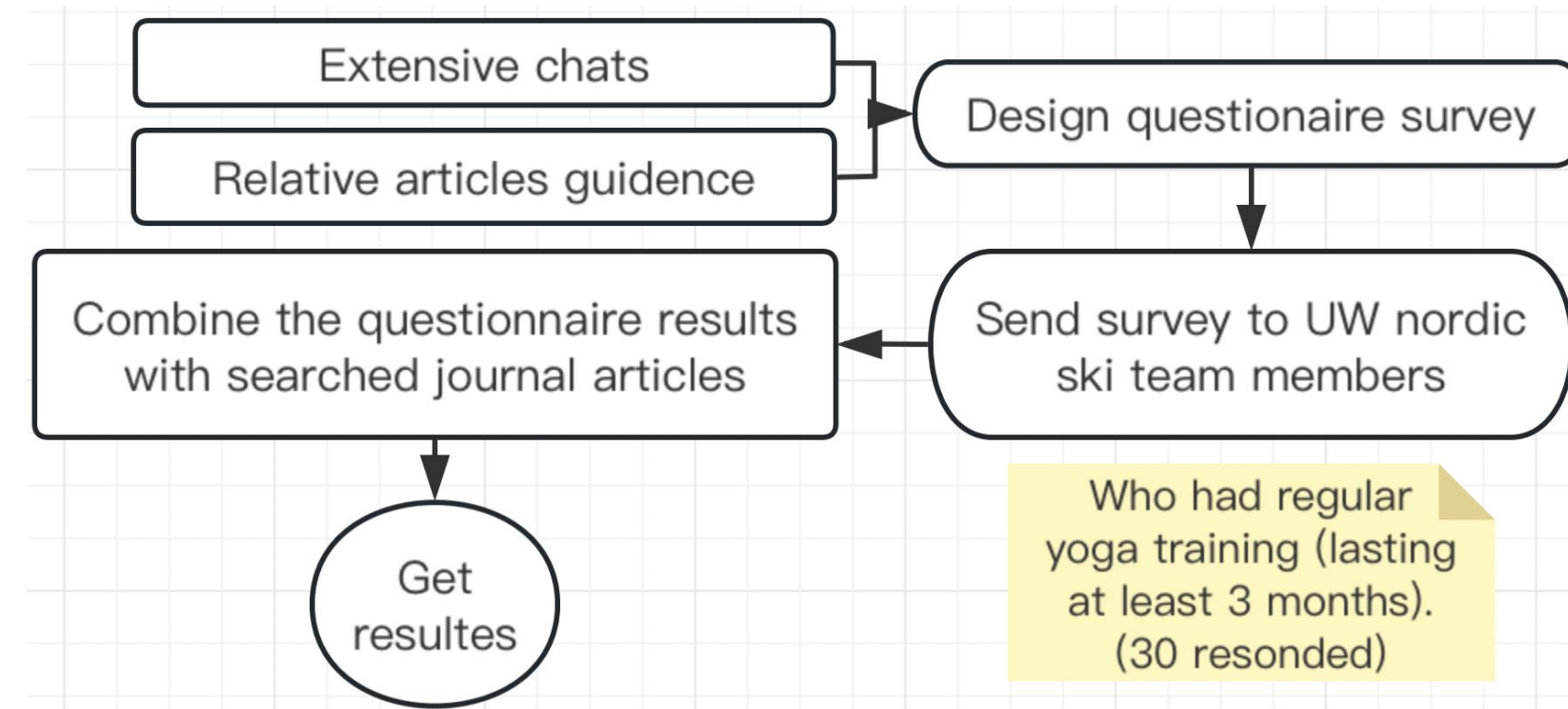
Introduction

UW Nordic Ski Team is one of the top cross country ski teams in the world, and the team has yoga training twice a week. This study investigated the team members through questionnaires and Internet searches to determine what effect regular yoga has on the cross country skiers' physical and mental health. The study also detailed the roles of the three components of yoga (asanas, meditation and breathe) to determine which part of the team was most in demand and more expected.

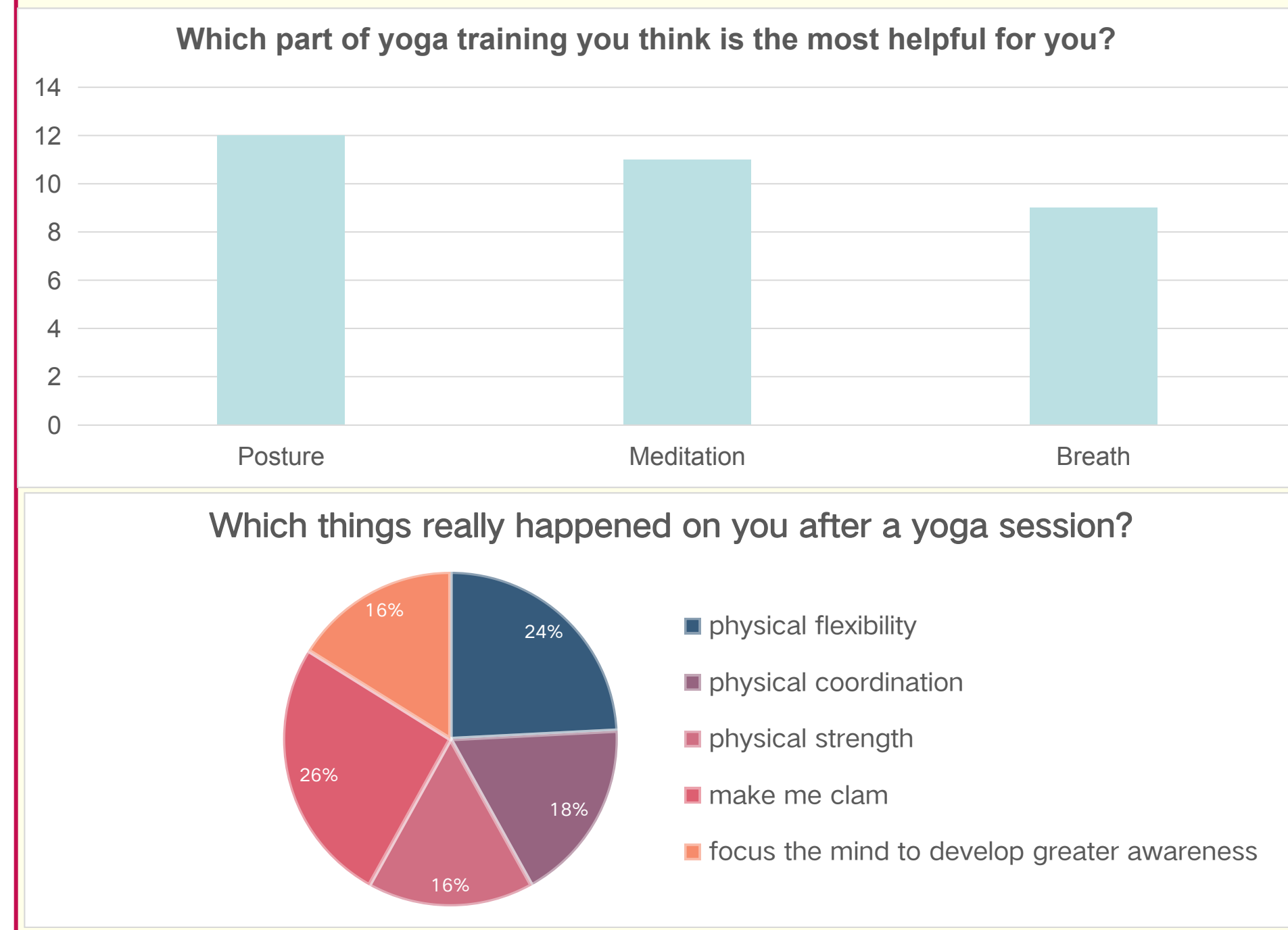
Research Question/s (Hypotheses)

1. Every member of the team can feel the physical and mental health promotion effects of yoga.
 - Physical aspects: promotes flexibility, coordination and strength.
 - Psychological aspects: improve resilience and mood, pay more attention to yourself, and actively intervene in mental health.
 2. Everyone feels differently about a yoga training, and everyone expects different parts of the yoga routine.
- Overall, boys pay more attention to the strength increase of posture training, and girls pay more attention to the relaxation effect of meditation.

Methods



Data analysis



Results/Findings

Almost all the skiers reflected yoga training did help them some physical and mental health. It turns out that skiers can feel physical promotions include physical flexibility, coordination and strength by asanas (posture), while the breathing practices and meditation can make a progress in helping them calm and focus the mind to develop greater awareness and diminish anxiety, and thus result in higher quality of life.

Here are some thought-provoking reply in the questionnaire

1. Which part of yoga you think is the most helpful for you, and why?
 - Meditation. Give me writing ideas and relaxes me.
 - Breathe. I think controlling your breath is really important in skiing, racing, but not something that we always think about.
 - Posture. I think it is helpful to my muscle recovery.
 - Posture. Help me to reduce my back pain.
2. Have you ever had a life perspective changing moment while meditation?
 - I am more willing to training. Do extra training every day.
 - I do find that yoga helps me to feel centered, grounded, makes me feel less stressed about small things in my life. And I think yoga is one of the most important parts of training.
 - I frequently have creative break thoughts, frequently feel inspired to create things.
 - I'd like to add one more morning yoga in my life, which makes me feel refreshed when I wake up in the morning.

Discussion

When yoga's posture, meditation and breath are combined, it can make cross country skiers pay more attention to themselves, subconsciously more willing to continue to learn actively and think positively and take the initiative to intervene in their own mental health. The results of the questionnaire are consistent with those described in relevant papers^{[1][2]}. Because of the unity of mind and body, these positive psychological effects can affect improvements in sleep, diet, body weight, and BMI, so that avoid more perceived stress, sleep disorder, pain, and anxiety.

Limitations & Future Directions

All the questionnaires were based on a 30-minute discussion of two sessions a week, but some articles have suggested that a one-hour yoga session is more effective, so the positive effects of yoga may be more pronounced if the questionnaire is conducted on a one-hour trainer.

In the future study, we'd better use various training duration and find out how many time is the best effective.

References

1. Woodyard C. (2011). Exploring the therapeutic effects of yoga and its ability to increase quality of life. International journal of yoga, 4(2), 49–54.
2. Büssing, A., Michalsen, A., Khalsa, S. B., Telles, S., & Sherman, K. J. (2012). Effects of yoga on mental and physical health: a short summary of reviews. Evidence-based complementary and alternative medicine
3. Thuany, M., Viljoen, C., Gomes, T.N. et al. Mental Health in Ultra-Endurance Runners: A Systematic Review. Sports Med 53, 1891–1904 (2023).