

# Health Benefits of Menstrual Cycle Phase-Based

## Approaches to Fitness

Melissa M. Brillhart & Sarah E. Hill  
Texas Christian University



### Introduction

- Interest in cycle syncing has increased in recent years, but evidence supporting engagement in cycle syncing is limited
- Changes in exercise capacity and energy needs throughout the cycle (e.g., Kissow et al., 2022; McNeil & Doucet, 2012), suggest possible benefits of cycle syncing

### Method

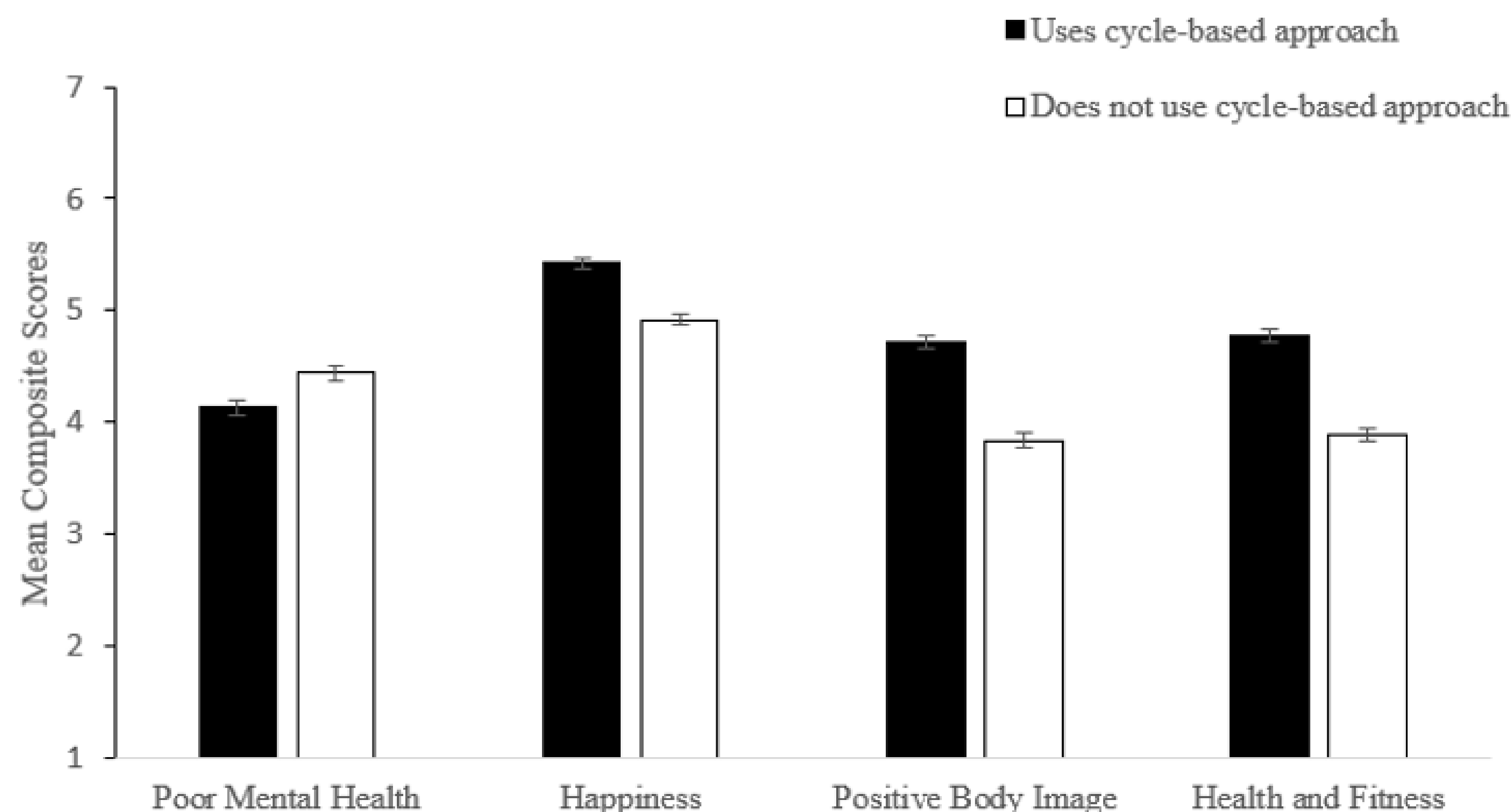
- 1091 naturally cycling women (507 who exercised with their cycle and 584 who did not) reported cycle syncing status, exercise regularity, and diet quality
- Participants also completed measures asking about mental health, happiness, body image, and health and fitness

### Hypotheses

- Women who exercised in sync with their cycle would report better mental and physical health outcomes than women who did not
- This hypothesized pattern would hold even when restricting for diet quality and exercise frequency

### Results

- A confirmatory factor analysis revealed good model fit for four latent factors: poor mental health, happiness, positive body image, and health and fitness
- Individuals who did not exercise in sync with their cycles over the last three months had poorer mental health ( $b = .31, SE = .09, p < .01$ ), lower levels of happiness ( $b = -.50, SE = .07, p < .01$ ), lower positive body image ( $b = -.97, SE = .10, p < .01$ ), and lower levels of health and fitness ( $b = -.88, SE = .08, p < .01$ ) than those who had not exercised in sync with their cycles over the last three months
- Results were largely replicated when restricting for both diet and exercise,  $ps < .01$
- However, restricting for both diet and exercise revealed no difference in mental health between the groups,  $p = .28$



### Conclusion

- Women who synchronized their exercise routines to their menstrual phases reported significantly better outcomes
- These improvements largely held when restricting for both diet and exercise

### Limitations

- Data are cross-sectional
- Cycle syncing exercises were not standardized across participants
- Exercise alignment with one's cycle was measured categorically, so engagement in cycle syncing may have varied between participants

### References

- Kissow, J., Jacobsen, K. J., Gunnarsson, T. P., Jessen, S., & Hostrup, M. (2022). Effects of follicular and luteal phase-based menstrual cycle resistance training on muscle strength and mass. *Sports Medicine*, 52(12), 2813-2819
- McNeil, J., & Doucet, É. (2012). Possible factors for altered energy balance across the menstrual cycle: A closer look at energy expenditure and intake. *European Journal of Obstetrics & Gynecology and Reproductive Biology*, 163(1), 5-10