

Introduction

Existing research highlights a concerning trend, where female adolescents frequently disengage from physical activity (PA) and sports during adolescence (Canadian Women & Sport, 2020). The obstacles to sustained PA participation during this phase are often linked to systemic and environmental barriers. While body image is a primary factor impeding continued involvement in sports, the intricate relationship between body image and other barriers to sustained PA participation remains inadequately explored (Foley Davelaar, 2021).

Objective: This preliminary analysis study aims to explore if there is a relationship between an individual's body image and their perception of their physical skill competence; both of which have been found to be barriers to sustained PA participation in female adolescents.

Methods & Materials

Participants: Cross-sectional analysis was conducted on female adolescents ($n = 9$) recruited from the Adolescent Daily Lives study sample. Participants were recruited on a volunteer basis from various middle and high schools in the Victoria area from Jan-Mar 2024.

Protocols:

- **Body Image** was quantified using the Resisting Objectification subset questions from the Experiences of Embodiment Survey completed at the beginning of the testing session, Likert scale (Piran et al., 2020).
- **Perceived Physical Competence** was quantified using a series of 3 Self-Reflective Questions following completion of two foundational movement skills (squat and one-hand catch) from the Baseline Movement Protocols, Likert scale.

Statistical Procedures:

- Mean values quantified each participant's RO and Perception of Physical Skill Competence ratings
- Pearson correlation was used to identify associations between RO and Perceived Physical Competence ratings, controlling for age, using IBM SPSS Statistics

Results

Figure 1

Association Between Body Image and Overall Perceived Physical Skill Competence of Female Adolescents

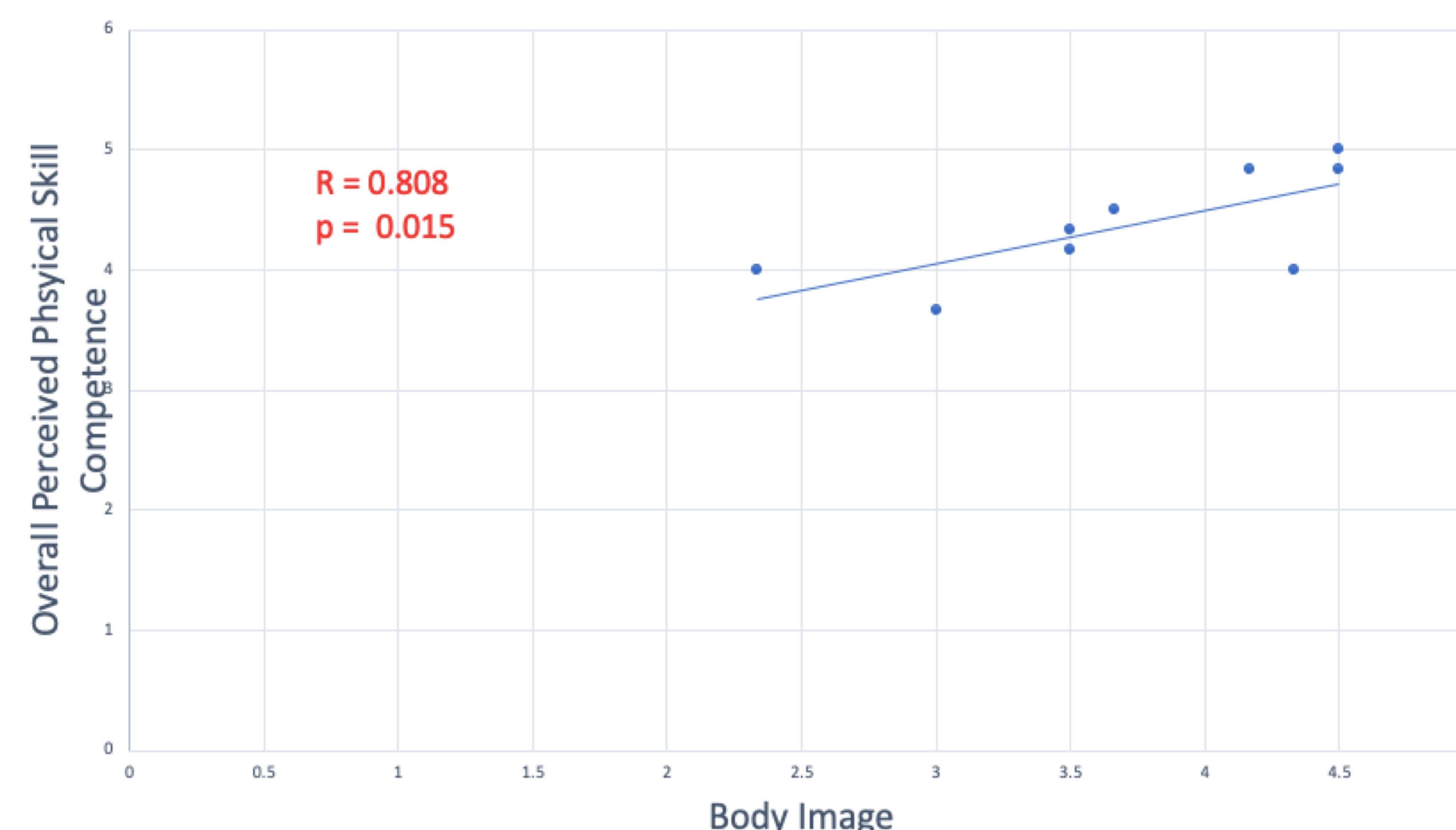


Table 1

Mean and Standard Deviations of Participants' Body Image and Perceived Physical Skill Competence Ratings

	Mean	Std. Deviation
Age	14.333	0.866
Resisting Objectification	3.722	0.736
Perceived Physical Skill Competence – Squat	4.407	0.703
Perceived Physical Skill Competence - OHC	4.333	0.471
Overall Perceived Physical Skill Competence	4.370	0.455

Note. OHC = one-hand catch

Key Findings

Fig 1. shows a strong positive correlation between Body Image and Perceived Physical Skill Competence ($r = 0.808$, $p = 0.015$).

Conclusions

There exists a strong relationship between female adolescents' body image and their perceptions of their physical skill competence. This suggests that negative body image may relate to lower perceived physical skill competence, while positive body image may be linked to higher perceived physical skill competence.

What's To Come

- Correlations between Body Image, Perceived and Measured Physical Skill Competence, and daily MVPA minutes
- Usage of all 7 movements in the Physical Competence test for Perceived Physical Skill Competence and Measured Physical Competence ratings
- Based on previous research, we predict fewer daily MVPA minutes in participants with lower body image scores and lower engagement in daily MVPA for those with lower Measured or Perceived Physical Skill Competency scores

Goal: Explore potential links between body image and perceived as well as measured physical skill competency in relation to PA behaviors. This investigation aims to guide the future development of targeted interventions tailored to the unique concerns of female adolescents, addressing persistent body dissatisfaction and supporting confidence within sports and PA environments. The ultimate goal is to mitigate the severity of PA and sports attrition among female adolescents.

References

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- Foley Davelaar C. M. (2021). Body Image and its Role in Physical Activity: A Systematic Review. *Cureus*, 13(2), e13379. <https://doi.org/10.7759/cureus.13379>

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