

Self-Efficacy Expectations, BMI and Physical Activity in Appalachian Adolescents

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Introduction

- * Adolescents are not participating in recommended levels of physical activity (PA)
- * Rural Appalachia
 - * Heightened risk for obesity
 - * Increased risk for related morbidities

Literature Review

- * Benefits of PA in adolescents
 - * Obesity
 - * CVD
 - * BP
 - * Asthma
 - * Fitness
 - * Mental Health

Literature Review

- * **Dependent Variables**
 - * Moderate Physical Activity (MPA)
 - * Low
 - * Vigorous Physical activity (VPA)
 - * Extremely low

Literature Review

- * **Independent variables**
 - * Self-efficacy expectations (SEE)
 - * Positive determinant of PA
 - * Body Mass Index (BMI)
 - * Negative determinant of PA

Gap in the Research

- * Well documented health concerns in the adult population
- * Little research has been conducted with rural Appalachian adolescents

Research Questions

- * In rural Appalachian adolescents:
 - * Is there a relationship between SEE to overcome barriers and MPA?
 - * Is there a relationship between BMI and MPA?
 - * Is there a relationship between SEE and days of VPA?
 - * Is there a relationship between BMI and VPA?

Participants

- * 422 twelfth grade students
- * 198 males
- * 224 females
- * 11 high schools
- * Midwestern, rural Appalachian region

Methods & Analysis

- * Self-report questionnaire
 - * SEE
 - * BMI
 - * 7-Day Recall of MPA and VPA
- * Two regression analyses were conducted to determine the relationship among SEE, BMI, and days of MPA and VPA.

Results

- * Results of a linear regression analysis for MPA indicated the model predicted 11.5% of the variance in days of MPA, ($p < .001$).
- * Self-efficacy expectations were positively related to days engaging in MPA, ($p < .001$).
- * BMI was not a significant predictor of days engaging in MPA.

Results

- * Results of the second regression analysis for VPA indicated the model predicted 6.8% of the variance in days of VPA, ($p < .001$).
- * Self-efficacy expectations were positively related to days engaging in VPA, ($p < .001$).
- * BMI was not a significant predictor of days engaging in VPA.

Conclusions

- * SEE to overcome barriers to PA were positively related to MPA and VPA.
- * BMI was not a significant predictor of MPA or VPA.
- * Policies and positive health messages supporting increased levels of involvement in PA for adolescents in the rural Appalachian areas may assist in efforts to increase activity levels for these youth.
- * Future research assessing the impact of messages to improve SEE for PA on changes in PA and adolescents' attitudes toward engaging in PA will advance knowledge in the field.

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