

Putting Research to Work for Military Families



Focus:
Civilian

Associations Between Family Income and Children's Physical Fitness and Obesity in California, 2010–2012

Jin, Y., & Jones-Smith, J. C. (2015). Associations between family income and children's physical fitness and obesity in California, 2010–2012. *Preventing Chronic Disease*, 12(E17), 1-9. doi:10.5888/pcd12.140392

SUMMARY: Children's physical health is potentially associated with their socioeconomic status. This study examined the associations between family income and 1,617,400 fifth-, seventh-, and ninth-graders' physical fitness level, BMI (body mass index), and obesity. Results indicated that children's possibility of having a high physical fitness level and low BMI were positively associated with their family income.

KEY FINDINGS:

- Family income was positively associated with physical fitness across all race/ethnicity groups and in both genders.
- Both boys and girls from high income families were more likely to have lower BMI scores than children from low income families among all race/ethnicity groups.
- The prevalence of obesity was higher among children from low income families than those from high income families, and this was especially true for White boys and girls.

IMPLICATIONS FOR MILITARY PROFESSIONALS:

Military professionals could:

- Collaborate with youth program professionals to create an active and healthy activities for children and adolescents from low-income military families
- Attend training about the influence of socioeconomic status on child development to enhance their ability to provide support to military families with low income

IMPLICATIONS FOR PROGRAMS:

Programs could:

- Offer free or low-price physical activities and dietary instructions for low-income military families
- Provide outreach services that increase awareness of available support for military families with low income

IMPLICATIONS FOR POLICIES:

Policies could:

- Recommend professional development for professionals working with military families to better understand the negative associations between family income and children's BMI
- Promote the development of programs that offer affordable physical activities for children from low-income military families

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METHODS

- Students were recruited from public and charter schools in California between 2010 and 2012.
- Measures included students' physical fitness assessment scores, BMI (body mass index) and obesity, and family income (free or reduced-price meal eligibility).
- Data were analyzed to examine the relationship between family income and children's physical fitness and obesity.

PARTICIPANTS

- Participants were 1,617,400 students who were in fifth, seventh, and ninth grades; the average age of the students was 13.00 years (SD = 1.70).
- Approximately half of the students in the sample (51%) were male.
- Most students were Latino (53%), followed by White (26%), Asian Americans (8%), Black (6%), Multiracial (3%), Native Americans (1%), and others (3%).

LIMITATIONS

- All participants were recruited in California, so caution must be taken to generalize the findings to other states.
- Family income was indicated by children's eligibility for free or reduced-price meals and the result was either eligible or ineligible; therefore, it was not able to distinguish families on the highest and lowest ends of the spectrum.
- The cross-sectional design of the study made it impossible to determine the potential causal relationship between family income and children's physical fitness and obesity.

AVENUES FOR FUTURE RESEARCH

Future research could:

- Recruit participants from various age groups and different geographical locations so that the findings can be better generalized
- Examine the associations between family income and children's mental health
- Conduct longitudinal studies to examine the causal relationship between children's family income and their physical fitness level

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