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Role Models and Social Supports Related to Adolescent Physical Activity and Overweight/Obesity

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“Having a positive role model is associated with better academic achievement, positive development, and healthy behaviors.”

SUMMARY: Positive role models, social and community activities, and school support are protective social factors that promote youth health and well-being. Latino, African-American, Asian, multi-racial, and low-income adolescents are less likely to experience these protective social factors compared to other groups, which may contribute to health disparities. Adolescents who identify a role

model, volunteer, participate in organizations outside of school, or experience high levels of teacher or other adult support at school engage in greater physical activity and are more likely to have a healthy weight. Strategies to increase these protective social factors among adolescents could help promote healthy weight and healthy behaviors.

Childhood obesity is a major public health issue in the United States. Obesity during childhood and adolescence has been associated with an increased risk of obesity in adulthood.^{1,2} Additionally, obesity is a risk factor for many chronic diseases, including heart disease and type 2 diabetes.^{3,4} Physical inactivity contributes to obesity among youth.⁵ Regular physical activity offers many positive benefits for adolescents in addition to obesity prevention. Evidence shows it improves musculoskeletal development and cardiovascular fitness and promotes mental health.^{5,6}

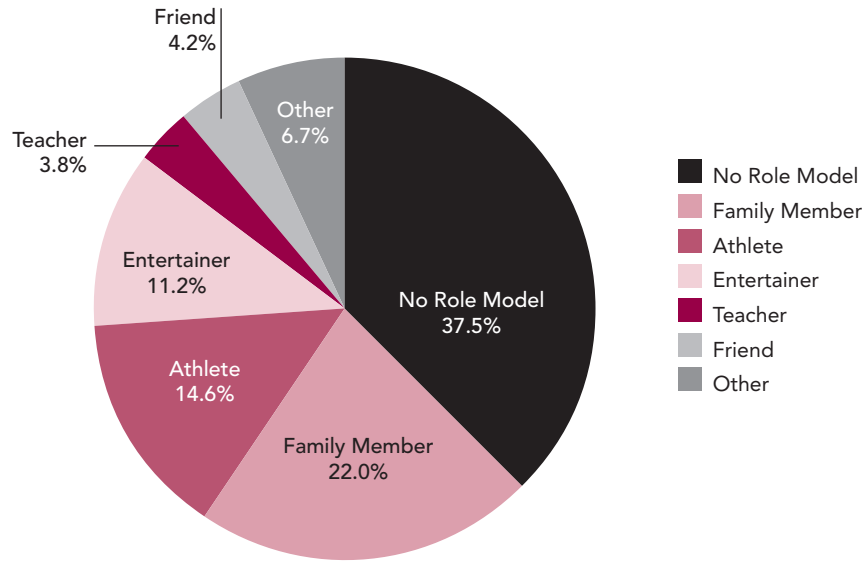
Positive role models, participating in social and community activities, and feeling supported at school are protective social factors that can help promote adolescent health and well-being. They provide opportunities for social interaction, influence intentions to engage in positive health behaviors, contribute to a sense of self-

efficacy, and provide access to resources and services.^{7,8} Previous studies suggest that having a positive role model is associated with better academic achievement, positive development, and healthy behaviors.^{9,10} Similarly, research suggests that greater social engagement, specifically the extent to which people participate in formal and informal groups or organizations, is associated with academic achievement and reduced risk of alcohol and drug use among youth.¹¹ Finally, there is evidence that feeling supported at school is associated with academic achievement as well as healthy behaviors.^{9,12}

This policy brief uses data from the 2011-12 California Health Interview Survey (CHIS) to describe the prevalence of three types of protective social factors among California adolescents ages 12 to 17: having a role model, participating in activities outside of school, and having adult support at school. It examines variations in these protective

Exhibit 1

Distribution of Role Model Types, Adolescents Ages 12-17, California 2011-12



Source: 2011-12 California Health Interview Survey

social factors as a function of family income and race or ethnicity. It also assesses the association of these social factors with levels of physical activity and overweight or obesity.

In California, 63 percent of adolescents reported having a role model, defined as someone they admire or would want to emulate (Exhibit 1). Family members, athletes, and entertainers were the most common types of role models reported.

In addition, adolescents reported their involvement in two types of activities outside of school: working as a volunteer and

participating in clubs or organizations other than sports. Fifty-seven percent of adolescents reported they participated in volunteer work and 31 percent reported participating in clubs or organizations outside of school, other than sports, in the past year.

Adolescents were asked about the extent to which they had adult support at school — someone who cares and listens, notices if they're not there, and expects them to do their best. Fifty-nine percent of adolescents reported receiving high levels of adult support at school.



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This publication contains data from the California Health Interview Survey (CHIS), the nation's largest state health survey. Conducted by the UCLA Center for Health Policy Research, CHIS data give a detailed picture of the health and health care needs of California's large and diverse population. Learn more at: www.chis.ucla.edu

Role Model, Social Participation, and Support at School by Income (as Percent of FPL) and Race/Ethnicity, Adolescents Ages 12-17, California, 2011-12

Exhibit 2

	% With Role Model	% Volunteered in Past Year	% Participating in Clubs Outside School	% With High Level of Support at School
Income				
0-99% FPL	49.1%**	42.5%**	19.1%**	42.4%**
100-199% FPL	56.0%**	46.0%**	30.8%**	59.1%**
200-299% FPL	68.2%	61.6%	23.7%**	60.0%
300% FPL and Above	71.3%	69.0%	40.0%	66.7%
Race/Ethnicity				
Latino	52.6%**	43.9%**	22.8%**	51.9%**
Asian	61.1%*	68.1%	37.0%	44.5%**
African-American	69.3%	55.1%*	39.2%	55.9%**
White	71.2%	68.1%	37.5%	73.5%
Multi-race/Other	62.3%**	49.8%**	27.8%**	52.7%**
All Adolescents	62.5%	56.9%	31.2%	58.8%

Source: 2011-12 California Health Interview Survey

* Significantly different from 300% FPL or White, $p < 0.10$

** Significantly different from 300% FPL or White, $p < 0.05$

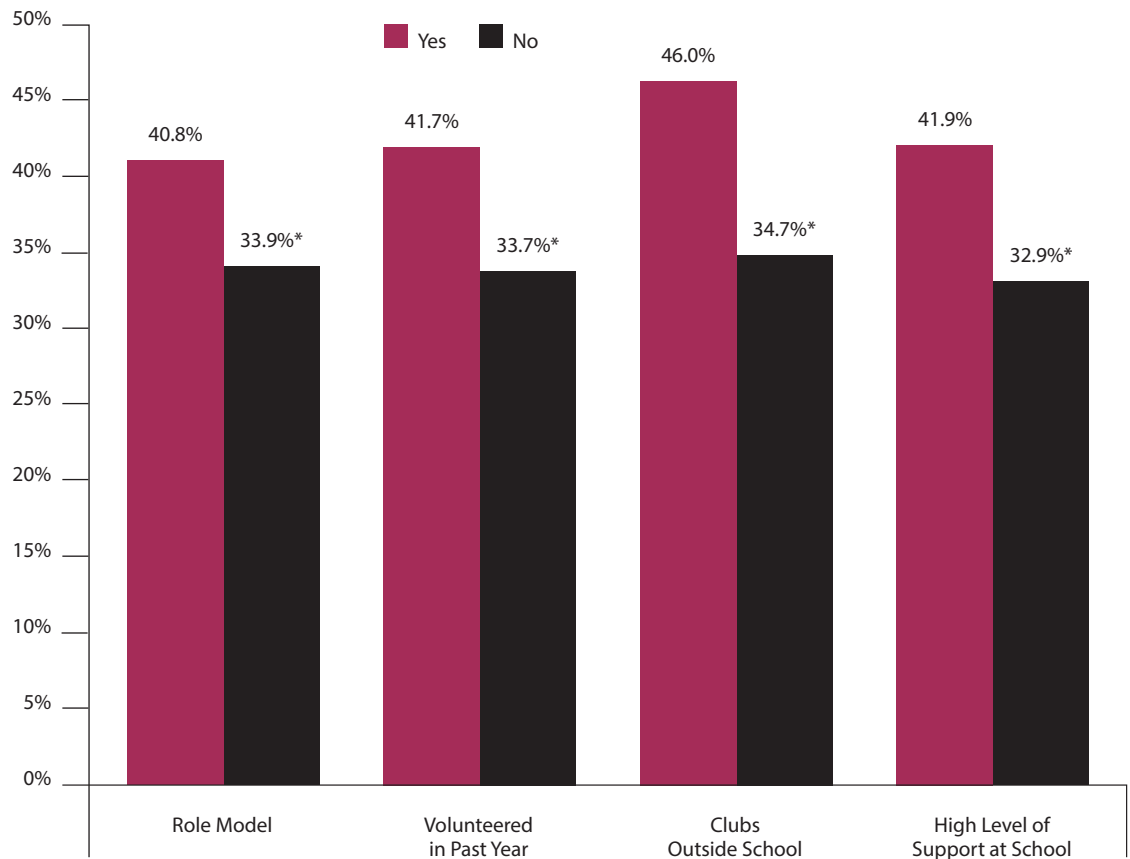
Low-income Adolescents and Those of Color Less Likely to Report Having Protective Social Factors

Protective social factors – having a role model, social participation, and support at school – vary with income. Less than half of adolescents with family incomes below the Federal Poverty Level (FPL) reported having a role model (49 percent) compared to 71 percent of more affluent adolescents (Exhibit 2). Low-income adolescents were also less likely to have volunteered in the past year or to have participated in clubs outside of school. Only 43 percent of adolescents from families with incomes below the FPL volunteered in the past year compared to 69 percent of those from families with higher incomes. The percent of adolescents participating in clubs outside of school was more than twice as high among higher-income adolescents (40 percent) than among those living below the FPL (19 percent). The percent of adolescents with family incomes below the FPL who reported high levels of teacher or other adult support at school (42 percent) was considerably lower than it was for adolescents from higher-income families (67 percent).

These social factors also vary as a function of race or ethnicity. Latino adolescents were less likely than white adolescents to report having a role model (53 percent versus 71 percent), volunteering in the past year (44 percent versus 68 percent), participating in clubs outside school (23 percent versus 38 percent) or to report having high levels of support from teachers or other adults at school (52 percent versus 74 percent). African-American adolescents were also less likely than white adolescents to have volunteered in the past year (55 percent versus 68 percent) and to have experienced high levels of support at school (56 percent versus 74 percent). Asian adolescents had the lowest percent reporting strong adult support at school (45 percent), significantly lower than white adolescents (74 percent). These social factors can help promote adolescent health and well-being, but low-income adolescents and those of color were less likely to experience these protective social factors. Since these factors vary by race or ethnicity and income, they can also contribute to health disparities.

“Low-income youth are less likely to have a role model, volunteer, or have high levels of adult support.”

Exhibit 3

Percent with at Least 60 Minutes of Physical Activity Five or More Days per Week by Protective Social Factors, Adolescents Ages 12-17, California, 2011-12


Source: 2011-12 California Health Interview Survey

* Significantly different from Yes, $p < 0.05$

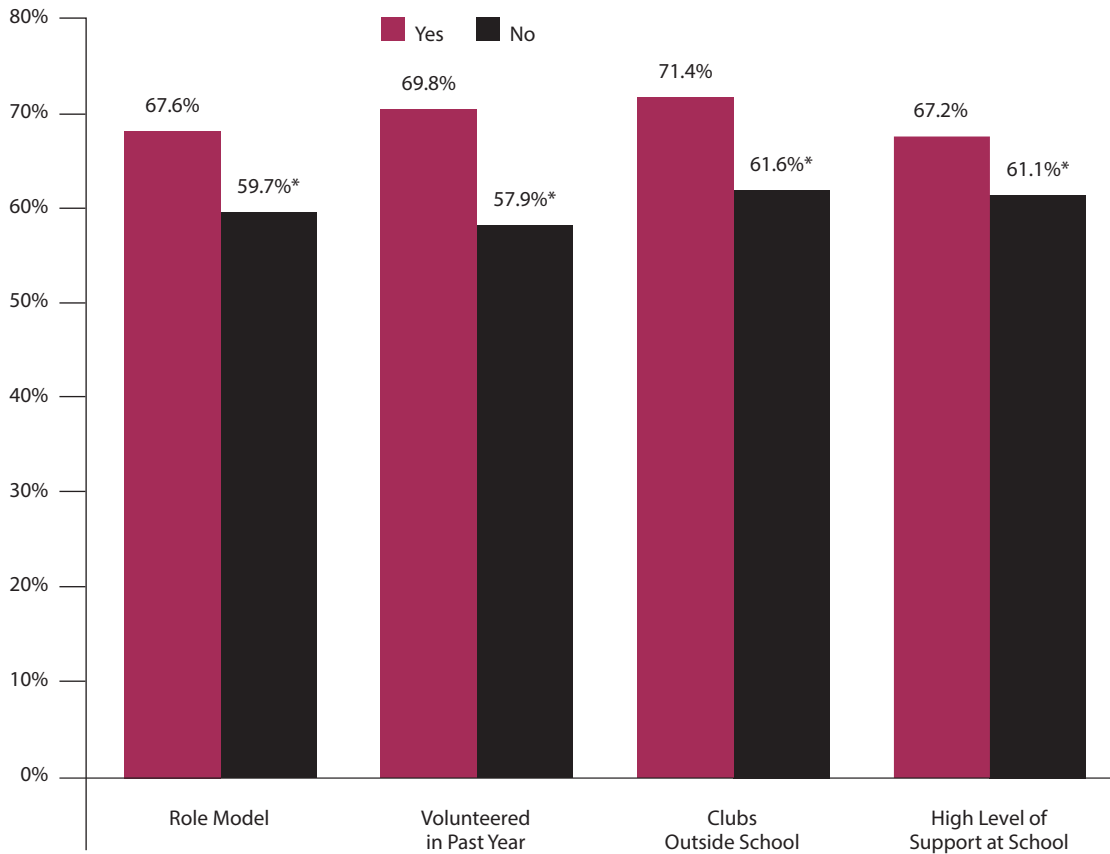
Role Models, Social Participation, and Adult Support at School Linked to Physical Activity and Obesity

Role models, activities outside of school, and the support of teachers or other adults at school are related to health outcomes among adolescents. Adolescents who reported having a role model, volunteering in the past year, participating in clubs outside of school, or having high levels of support at school had a higher prevalence of regular physical activity

(Exhibit 3). The percent of adolescents who engaged in at least 60 minutes of physical activity on five or more days per week was significantly higher when those adolescents reported having a role model (41 percent versus 34 percent), volunteering in the past year (42 percent versus 34 percent), participating in clubs outside of school (46 percent versus 35 percent), or experiencing high levels of support from adults at school (42 percent versus 33 percent).

Prevalence of Healthy Weight by Protective Social Factors, Adolescents Ages 12-17, California, 2011-12

Exhibit 4



Source: 2011-12 California Health Interview Survey

* Significantly different from Yes, $p < 0.05$

Adolescents who experienced these protective social factors were also more likely to have a Body Mass Index (BMI) in the healthy range (Exhibit 4). Nearly 70 percent of adolescents who reported having a role model, volunteering in the past year, participating in clubs outside of school, or having high levels of support at school had a BMI in the healthy range compared to approximately 60 percent of those who did not have these protective social factors. Likewise, the

prevalence of overweight or obesity was higher among adolescents who did not have a role model, volunteer or participate in clubs, or experience high levels of school support (data not shown).

“Role models and other protective social factors are linked to higher levels of physical activity and lower levels of obesity and overweight.”

“Many youth face barriers that limit their participation in after-school programs.”

Conclusions and Recommendations

Social participation, feeling supported by teachers or other adults at school, and having a role model are associated with adolescent physical activity as well as healthy weight. Previous research suggests these influences can serve as protective social factors that provide a number of benefits to youth. These social factors can also help youth avoid behaviors that put them at risk for adverse health outcomes.⁹⁻¹² However, 41 percent of California adolescents did not report feeling high levels of support from adults at school, nearly 70 percent did not participate in clubs or organizations outside school, 43 percent did not volunteer in the past year, and 37 percent did not identify a role model in their lives. Strategies to increase these protective social factors among adolescents may help to promote healthy behaviors as well as prevent risky behaviors.

These protective social factors vary by income and race or ethnicity. Adolescents from low-income families were less likely to have a role model, participate in activities outside of school, and experience high levels of adult support at school. Latinos, African-Americans, Asians, and multi-racial adolescents were less likely to report feeling high levels of support from adults at school with Asian adolescents reporting the lowest levels. In addition, Latinos and multi-racial adolescents were less likely to participate in activities outside of school or to report having a role model. As a result, these social factors may contribute to health disparities among young people. Targeting efforts to increase these protective social factors toward adolescents who lack them may be an effective strategy to reduce disparities in obesity and physical activity.

Strategies to increase these protective social factors among youth could help to promote healthy behaviors and healthy weight. These strategies could include:

- ***Strengthening feelings of adult support at school, especially among low-income youth and youth of color.*** Increasing feelings of support from teachers or other adults at school may help promote physical activity and healthy weight. Policies encouraging schools to incorporate strategies for increasing the extent to which students feel supported by adults at school may promote the development and implementation of such strategies and lead to increases in this protective social factor. The Centers for Disease Control and Prevention offer strategies for increasing feelings of school connectedness, which include feelings of support from teachers or other adults at school.¹³ Schools can help students feel more supported by (1) developing decision-making processes that facilitate engagement by students, families, staff, and the community; (2) providing opportunities for family involvement in school life; and (3) providing support and professional development for teachers and staff. For example, school administrators can solicit feedback from teachers and staff to inform their efforts to improve school climate. They can also engage staff, parents, students, and community members in the development of school policies and the planning of school activities.
- ***Increasing opportunities for social participation outside of school.*** After-school programs can provide opportunities for young people to participate in clubs or organizations. However, many youth face barriers that limit their participation due to cost or lack of availability. Lowering costs, subsidizing low-income participants, or introducing programs in under-served

areas can reduce barriers to participation. In addition, raising awareness of volunteer opportunities could increase student participation. For example, schools and community organizations can provide volunteer information and promote opportunities at schools. Promoting volunteer opportunities that may lead to part-time or temporary student employment may help increase volunteer participation among low-income youth.

- **Promoting the development of positive role models.** Parents, family members, teachers, school staff, leaders of youth organizations, athletes, and media figures can all serve as potential role models for young people. Research suggests that positive role models are important for promoting healthy behaviors and reducing risky behaviors.⁹ Mentoring programs offer positive role models that promote health and development. However, these programs may not have sufficient reach and accessibility to serve all youth who could benefit. Increasing exposure to positive examples, especially for low-income youth and youth of color, may help promote the adoption of positive role models.

Data Source and Methods

All statements in this report that compare rates for one group with another group reflect statistically significant differences ($p < 0.05$) unless otherwise noted. The findings in this brief are based on data from the 2011-12 California Health Interview Survey (CHIS). CHIS 2011-12 completed interviews with over 40,000 households, including 2,799 adolescents, drawn from every county in the state. Interviews were conducted in English, Spanish, Chinese (both Mandarin and Cantonese), Vietnamese, and Korean. Adolescents were asked if there is someone they admire and would want to be like. Those who responded “yes” were considered to have a role model and asked to report whether that person is a family member, an athlete, an entertainer, a teacher, a friend their own age, or someone else. Adolescents also reported whether they completed any volunteer work in the past year, and whether they participated in any clubs or organizations outside of school, other than sports.

Support at school was measured by responses to a series of six questions. Adolescents were asked, “How true is it that there is a teacher or other adult at school who cares about them, notices if they’re not there, listens to them, tells them when they are doing a good job, expects them to do their best, and notices if they are in a bad mood?” Responses to these questions ranged from 1 – not at all true to 4 – very much true. These responses were summed to create a variable with values ranging from six to 24, where higher values indicate higher levels of support at school. A validated self-report question was used to assess the number of days adolescents were physically active for 60 minutes or more. Overweight and obesity are based on age- and sex-specific BMI percentiles, and those with a BMI at or above the 95th percentile are considered obese. Those with a BMI at or above the 85th percentile, but below the 95th percentile, are considered overweight. BMI was calculated from self-reported height and weight as kg/m^2 . The California Health Interview Survey is a collaboration of the UCLA Center for Health Policy Research, the California Department of Public Health, the California Department of Health Care Services, and the Public Health Institute. For funders and other information on CHIS, visit www.chis.ucla.edu.

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“Mentoring programs offer positive role models that promote health and development.”



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Endnotes

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