



Utah Girls, Young Women, and Physical Activity

Setting the Stage

The benefits of physical activity are well documented and improve all aspects of health and overall wellbeing.¹ Globally, on average, 37.1% of women are insufficiently physically active while only 23.4% of men are²; this trend is also found in Utah, where 19.4% of women are insufficiently physically active while only 17.6% of men are.³ While women often live longer than men, they are frequently in worse health.⁴ Physical inactivity contributes to the development and severity of chronic diseases including cardiovascular disease, diabetes, and hypertension.⁵ In addition to affecting physical health, physical inactivity is also associated with poor mental health. Physical activity can contribute to positive self-image and improved confidence, which is critical for meaningful community participation as well as developing interpersonal relationships.

The Utah Women & Leadership Project (UWLP) seeks to better understand the status, experiences, and challenges of Utah women in order to strengthen the impact of women and girls.⁶ This snapshot summarizes research regarding physical activity levels, access, and barriers for girls (ages 7–11) and young women (ages 12–17) to help decision makers understand that instilling physically active habits early can improve the health and wellbeing of Utah women for the rest of their lives. This research snapshot reviews three key areas:

- 1) Gender physical activity levels and the importance of physical activity;
- 2) Gender physical activity factors; and
- 3) Recommendations to increase physical activity of Utah girls and young women.

Guidelines & Comparison

National Recommendations: The majority of Americans do not meet the physical activity guidelines recommended for their age. It is advised that children and adolescents, ages 6 to 17, get 60 minutes or more of moderate-to-vigorous physical activity each day. For adults, at least 150–300 minutes of moderate intensity or 75 minutes of vigorous

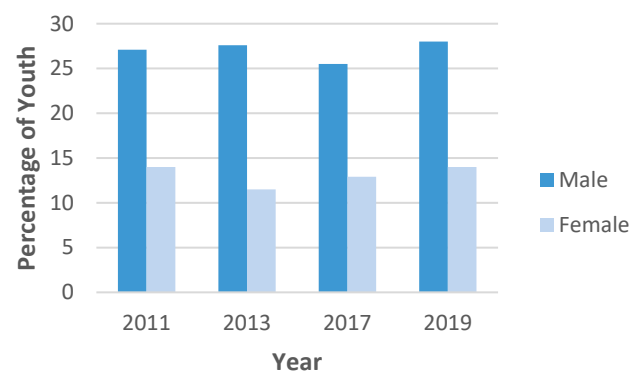
intensity aerobic physical activity per week, or a combination of both, is recommended.⁷ In terms of steps, the daily recommended average for adolescents and adults is 10,000, and for girls it is 11,500.⁸ However, due to a number of barriers (see “Specific Gender Barriers” section), women and girls are not meeting the guidelines at disproportionately high rates compared to men and boys.

In Utah, 28% of boys meet the recommended physical activity levels set by the state, compared to only 14% of girls.

Utah Comparison: In Utah, 28% of boys meet the recommended physical activity levels set by the state, compared to only 14% of girls (see Figure 1).⁹ These numbers have been consistent over the past ten years, meaning half as many girls and young women are regularly getting recommended physical activity as compared to boys and young men. An analysis of the

American College Health Association’s National College Health Assessment III data found that female college students were significantly less likely to meet physical activity guidelines compared to male college students.¹⁰ Research has found that women of various ages report facing more barriers to physical activity than men.¹¹

Figure 1: Recommended Physical Activity by Sex, Utah Youth Grades 9–12, 2011, 2013, 2017, and 2019¹²



Specific Gender Barriers

Lack of Options: A major barrier for girls and young women mentioned in the literature in terms of participating in fitness activities is the lack of options for physical activity that they prefer.¹³ Most physical education classes consist primarily of

competitive sports, which young women identified as their least favored activity. Women, young and old, show preferences for yoga, walking, biking, and dancing. The scarcity of what they see as viable options, in combination with the lack of discussions with girls and young women on their preferred choice for physical activity, leads to lower rates of participation. When girls and young women are offered different options for physical activity, studies show there are increased levels of autonomy, self-determination, and participation.¹⁴ Studies also suggest that accounting for preferences when developing physical education curricula and after-school physical activity programs can increase participation among young women.¹⁵

Men prefer different types of physical activity than women. Unsurprisingly, men prefer strength training, and women tend to prefer moderate intensity cardiovascular activities.¹⁶ One study found that when given a list of common exercises to perform, male teens and young adults chose strength training exercises and females chose low-impact cardiovascular activities.¹⁷ Interestingly, the benefits of physical activity differ for men and women depending on what types of exercise they participate in. One research team found that women who participate in regular, low-impact activities report higher levels of self-esteem and quality of life compared to women who participate in regular, high-intensity activities.¹⁸ These researchers found that the opposite is true for males, which suggests the need for a gender-tailored approach to engaging young adults in physical activity.

Gender Roles and Perceptions: Societal gender roles are strongly associated with young women's lack of participation in physical activity. Children, youth, and young adults have differing views on the functionality of their bodies based on their biological sex.¹⁹ Notably, young women experience negative social feedback after participating in a school physical education class if they are not able to shower or change clothes because of how they appear to others, especially to boys.²⁰ Teen women prioritize conforming to socially accepted ideals of beauty, which include being small, slight, and soft. This may come from the perceived lack of social capital for women participating in physical activity beyond maintaining feminine attractiveness.²¹

Positive body image is correlated with increased levels of physical activity,²² yet Utah women have low rates of body acceptance, which may be a factor in correlated low rates of physical activity. A 2017 UWLP report²³ revealed the high rates of cosmetic surgery per capita in Salt Lake City in past years, which trumped that of Los Angeles and was second only to Miami. This report documented the problem that follows from society assessing a woman's success based on her attractiveness, which reduces a woman's identity and potential to the shape of her body and increases sexual objectification.

Another study found that the benefits of physical activity, including reduced levels of stress, were lost if the motivating factor to exercise was weight loss or body toning.²⁴ More specifically, it found that motivating reasons to exercise predicted quality of life outcomes for women over actual exercise. This is concerning as research has found that conforming to societal ideas of attractiveness, including thinness, is, again, young women's main motivator to participate in physical activity. Encouraging girls and women of all ages to participate for reasons beyond maintaining or achieving attractiveness has been shown to increase their motivation to be physically active.

Lack of Social Support: Social support from friends was noted as a key factor to girls and young women engaging in physical activity, yet many noted that social support from friends, parents, and teachers to participate was lacking. Girls and young women report less enjoyment in physical activity and less confidence in their abilities as they get older, which may stem from consistent lack of societal encouragement to be physically active, as well as societal pressure to not be competitive or strong.²⁵ The lack of social support also appears in the inadequate facilities and gym attire provided for young women.²⁶ Young women report inadequate changing and showering facilities, a lack of time for showering, and inappropriate gym attire (such as short skirts) as reasons they do not participate in physical education.²⁷ Feeling self-conscious about their physical appearance while wearing exercise or fitness clothing is another barrier to participation in physical activity that teen women face.²⁸

Additional Barriers for Women of Color: Several research studies have reported a variety of additional barriers related to physical activity for girls and women of color.²⁹ For example, one Utah study found that, culturally, Pacific Islanders felt it was unacceptable for women to be in the sun and sweat, which could reduce women's physical activity. In addition, research by the Women's Sports Foundation found that the drop-out rate for urban girls of color doubles that of suburban white girls, largely due to increased poverty resulting in a lack of resources.³⁰ Several studies identified hair health among young African American women as a barrier to physical activity.³¹ One team of qualitative researchers found that perspiration on hair and hair style maintenance, image, and social comparisons, along with the lack of solutions to overcome hair-related issues, were all barriers to physical activity for the women of color interviewed.³² Participants of the study also mentioned how the monetary and time burdens of fixing and maintaining hair styles further contributed to the issue.

Moving Forward

Since the passage of Title IX in 1972 mandated that federally funded educational institutions must provide women equal opportunity in sports, the number of women partici-

pating in sports went from one in 27 girls to today's two in five girls participating.³³ While large strides have been made in women's sports, gaps still exist. According to The National Federation of State High School Associations, in 2018–2019, boys across the nation had 1.13 million more sports opportunities than girls.³⁴ In Utah alone, close to 39,000 boys participate in sports compared to just over 28,000 girls. A nearly 1:1 male-to-female population ratio in Utah leaves almost 11,000 more opportunities for boys to participate in sports than girls.³⁵ About 87% of the National Collegiate Athletic Association (NCAA) schools still provide disproportionately more opportunities to men.³⁶

While there are many programs in Utah and the nation that promote physical activity, few have the specific goal of increasing physical activity levels of girls and young women. Although the problem is recognized, solutions have been slow to be adopted. Research has suggested the following recommendations to address and resolve these problems:

First, parents and guardians should encourage physical activity for girls and young women. Fewer things have greater impact on a girl's long-term physical activity levels than her parent's own physical activity and their enthusiastic encouragement. Findings from the LOOK Longitudinal Study revealed that lower participation in physical activity among girls was associated with weaker influences at the school and family levels.³⁷ These findings suggest that a girl's lack of involvement in physical activity has roots in sociocultural norms and can be changed with education. Another study reviewed 180 nine-year-old girls and their parents to examine parenting strategies that led to long-term increases in their daughter's physical activity levels.³⁸ It was found that logistic support (e.g., registering their daughters for sports teams and facilitating transportation to sports events) and explicit modeling (such as the parents themselves participating in physical activity) led to increases in physical activity among the girls studied. The study also reported that having just one physically active parent can have a positive impact on a girl's long-term participation in physical activity and overall health.

Second, the most basic way to ensure that girls and young women have physical activity options that are favorable to them is by asking what they enjoy doing and then tailoring physical activity options accordingly as preferences may vary by age group, particularly in school physical education

classes. Studies³⁹ have reported that girls and women are more likely to be physically active when they enjoy what they are doing and have opportunities to participate with friends and peers as well.

Third, promote gender inclusivity in all types of sports. Researchers⁴⁰ have found that gendered trends in sports limit teens' potential by pressuring young men to participate in competitive sports while discouraging girls and young women from doing the same. Encouraging children to explore sports and physical activities that interest them, rather than the ones that girls typically play, can lead to increased interest and engagement.

Finally, improving the visibility of women's athletics can improve girls' and young women's interest in sports, and it can increase societal interest as well. Ensuring that women athletes have access to adequate and equitable facilities, preventative care, media coverage,⁴¹ sponsorship, and funding can increase the credibility of women's sports. In turn, the fanbase and social support will increase, resulting in expanded opportunities. An important byproduct will be the encouragement young women show for each other as they pursue athletics and, in the long term, a physically active life.

Conclusion

The benefits of physical activity are clear, yet thousands of Utah girls and women are participating at significantly lower levels than boys and men. With only 28% of boys and 14% of girls meeting the recommended physical activity levels set by the state, change is needed for all.⁴² Exploring the barriers associated with the lower levels of participation, specifically for females, has laid the groundwork for the recommendations for change offered in this snapshot. The way forward requires parental involvement and role-modeling, asking girls and women what they want to do and then providing support for those activities (even if the choices are historically associated with the male gender), and making women's athletic pursuits and events equally visible for everyone. Finding ways to increase the physical activity of girls and women will improve their overall health and wellbeing, which, in turn, will impact the health and wellbeing of Utah families, communities, and the state as a whole.

¹ World Health Organization. (2020). *Physical activity and women: Global strategy on diet, physical activity and health*.

https://www.who.int/dietphysicalactivity/factsheet_women/en/

² The Lancet Public Health. (2019, August 1). Time to tackle the physical activity gender gap. *The Lancet*, 4(8), E360. [https://doi.org/10.1016/S2468-2667\(19\)30135-5](https://doi.org/10.1016/S2468-2667(19)30135-5)

³ United Health Foundation. (2021). *America's health rankings annual report*. <https://www.americashealthrankings.org/explore/annual/measure/Sedentary/state/UT>

⁴ World Health Organization. (2020).

⁵ United Health Foundation. (2021).

⁶ Utah Women & Leadership Project. (n.d.). Mission & History. <https://www.usu.edu/uwlp/about/mission-history>

⁷ U.S. Department of Health and Human Services. (2018). *Physical activity guidelines for Americans, 2nd edition*. https://health.gov/sites/default/files/2019-09/Physical_Activity_Guidelines_2nd_edition.pdf

- ⁸ CDC. (n.d.). *Lifestyle coach facilitation guide: Post-core*. https://www.cdc.gov/diabetes/prevention/pdf/postcurriculum_session8.pdf; Adams, M. A., Johnson, W. D., & Tudor-Locke, C. (2013). Steps/day translation of the moderate-to-vigorous physical activity guideline for children and adolescents. *International Journal of Behavioral Nutrition and Physical Activity*, *10*(1), 733–733. <https://doi.org/10.1186/1479-5868-10-49>
- ⁹ Utah Department of Health. (2021, January 5). *Health indicator report of physical activity among adolescents*. Public Health Indicator Based Information System (IBIS). <https://ibis.health.utah.gov/ibisph-view/indicator/view/PhysActAdol.html>
- ¹⁰ American College Health Association. (2021). American College Health Association: National college health assessment III: Utah State University executive summary spring 2021. American College Health Association.
- ¹¹ Rees, R., Kavanagh, J., Harden, A., Shepherd, J., Brunton, G., Oliver, S., & Oakley, A. (2006). Young people and physical activity: A systematic review matching their views to effective interventions. *Health Education Research*, *21*(6), 806–825. <https://doi.org/10.1093/her/cyl120>
- ¹² Utah Department of Health. (2021, January 5).
- ¹³ Larson, J. N., Hannon, J. C., & Brusseau, T. A. (2015). Physical activity interventions in middle school and high school girls a review. *Sport Science Review*, *24*(1–2), 41–70. <https://doi.org/10.1515/ssr-2015-0008>
- ¹⁴ Larson, J. N., Hannon, J. C., & Brusseau, T. A. (2015); Rees, R. et al. (2006).
- ¹⁵ Larson, J. N., Hannon, J. C., & Brusseau, T. A. (2015).
- ¹⁶ Reading, J. M., & Gokee LaRose, J. (2020). Exercise preferences among young adults: Do men and women want different things? *Journal of American College Health*. <https://doi.org/10.1080/07448481.2020.1803878>
- ¹⁷ Oyibo, K., & Vassileva, J. (2020). Gender preference and difference in behavior modeling in fitness applications: A mixed-method approach. *Multimodal Technologies and Interaction*, *4*(21), 21. <https://doi.org/10.3390/mti4020021>
- ¹⁸ Lustyk, M. K. B., Widman, L., Paschane, A. A. E., & Olson, K. C. (2004). Physical activity and quality of life: Assessing the influence of activity frequency, intensity, volume, and motives. *Behavioral Medicine*, *30*(3), 124–131. <https://doi.org/10.3200/BMED.30.3.124-132>
- ¹⁹ Metcalfe, S. N., & Lindsey, I. (2020, May 1). Gendered trends in young people's participation in active lifestyles: The need for a gender-neutral narrative. *European Physical Education Review*, *26*(2), 535–551. <https://doi.org/10.1177/1356336X19874095>
- ²⁰ Yungblut, H. E., Schinke, R. J., & McGannon, K. R. (2012). Views of adolescent female youth on physical activity during adolescence. *Journal of Sports Science and Medicine*, *11*(1), 39–50. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3737842/>
- ²¹ Metcalfe, S. N., & Lindsey, I. (2020, May 1).
- ²² Kantanista, A., Osiński, W., Borowiec, J., Tomczak, M., & Król-Zielińska, M. (2015). Body image, BMI, and physical activity in girls and boys aged 14–16 years. *Body Image*, *15*, 40–43. <https://doi.org/10.1016/j.bodyim.2015.05.001>
- ²³ Madsen, S. R., Dillon, J., & Scribner, R. T. (2017, April 10). *Cosmetic surgery and body image among Utah women*. Utah Women & Leadership Project. <https://www.usu.edu/uwlp/files/snapshot/20.pdf>
- ²⁴ Craft, B. B., Carroll, H. A., & Lustyk, M. K. B. (2014). Gender differences in exercise habits and quality of life reports: Assessing the moderating effects of reasons for exercise. *International Journal of Liberal Arts and Social Sciences*, *2*(5), 65–76. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5033515/>
- ²⁵ Cavallo, D. N., Brown, J. D., Tate, D. F., DeVellis, R. F., Zimmer, C., & Ammerman, A. S. (2014). The role of companionship, esteem, and informational support in explaining physical activity among young women in an online social network intervention. *Journal of Behavioral Medicine*, *37*, 955–966. <https://doi.org/10.1007/s10865-013-9534-5>
- ²⁶ Larson, J. N., Hannon, J. C., & Brusseau, T. A. (2015).
- ²⁷ Rees, R., et al. (2006).
- ²⁸ Lambert, C., Beck, B. R., Watson, S. L., Harding, A. T., & Weeks, B. K. (2020). Enjoyment and acceptability of different exercise modalities to improve bone health in young adult women. *Health Promotion Journal of Australia*, *31*(3), 369–380. <https://doi.org/10.1002/hpja.321>
- ²⁹ Simonsen, S. E., Digre, K. B., Ralls, B., Mukundente, V., Davis, F. A., Rickard, S., Tavake-Pasi, F., Napia, E., Aiono, H., Chirpich, M., Stark, L. A., Sunada, G., Keen, K., Johnston, L., Frost, C. J., Varner, M. W., & Alder, S. C. (2015). A gender-based approach to developing a healthy lifestyle and healthy weight intervention for diverse Utah women. *Evaluation and Program Planning*, *51*, 8–16. <https://doi.org/10.1016/j.evalprogplan.2014.12.003>
- ³⁰ Staurowsky, E. J., Watanabe, N., Cooper, J., Cooky, C., Lough, N., Paule-Koba, A., Pharr, J., Williams, S., Cummings, S., Issokson-Silver, K., & Snyder, M. (2020). *Chasing equity: The triumphs, challenges, and opportunities in sports for girls and women*. Women's Sports Foundation. <https://www.womenssportsfoundation.org/wp-content/uploads/2020/01/Chasing-Equity-Executive-Summary.pdf>
- ³¹ O'Brien-Richardson, P. (2019). The case for hair health in health education: Exploring hair and physical activity among urban African American girls. *American Journal of Health Education*, *50*(2), 135–145. <https://doi.org/10.1080/19325037.2019.1571959>
- ³² Joseph, R. P., Coe, K., Ainsworth, B. E., Hooker, S. P., Mathis, L., & Keller, C. (2018). Hair as a barrier to physical activity among African American women: A qualitative exploration. *Frontiers in Public Health*, *5*(367), 1–8. <https://doi.org/10.3389/fpubh.2017.00367>
- ³³ Women's Sports Foundation. (2016, September 2). *Title IX and the rise of female athletes in America*. Women's Sports Foundation. <https://www.womenssportsfoundation.org/education/title-ix-and-the-rise-of-female-athletes-in-america/>
- ³⁴ The National Federation of State High School Associations. (2019). 2018–19 High school athletics participation survey. https://www.nfhs.org/media/1020412/2018-19_participation_survey.pdf
- ³⁵ The National Federation of State High School Associations. (2019).
- ³⁶ Staurowsky, E. J. et al. (2020).
- ³⁷ Telford R. M., Telford, R. D., Olive, L. S., Cochrane, T., Davey, R. (2016, March 9). Why are girls less physically active than boys? Findings from the LOOK longitudinal study. *PLOS ONE*, *11*(3). <https://doi.org/10.1371/journal.pone.0150041>
- ³⁸ Krahnstoever Davison, K., Cutting, T. M., & Birch, L. L. (2003). Parents' activity-related parenting practices predict girls' physical activity. *Medicine and Science in Sports & Exercise*, *35*(9), 1589–1595. <https://doi.org/10.1249/01.MSS.0000084524.19408.0C>
- ³⁹ Larson, J. N., Hannon, J. C., & Brusseau, T. A. (2015, May 9).
- ⁴⁰ Metcalfe, S. N., & Lindsey, I. (2020, May 1).
- ⁴¹ Seltzer, R. (2021, March 26). *NCAA hires law firm to review inequities amid basketball tournament blowback*. Inside Higher Ed. <https://www.insidehighered.com/quicktakes/2021/03/26/ncaa-hires-law-firm-review-inequities-amid-basketball-tournament-blowback>
- ⁴² Utah Department of Health. (2021, January 5).

Acknowledgement: Special thanks to Angie Kleven for her research support and to our expert reviewers for their feedback: Lori Andersen Spruance (Brigham Young University), Robyn Bretzing (Alpine School District), Tim Brusseau (University of Utah), Ryan Burns (University of Utah), Liz Darger (Brigham Young University), Brett McIff (EPICC), Maya Miyairi (Utah State University), Brenda Ralls (EPICC), and Jason Slack (Utah Valley University).

Copyright © 2021 Utah Women & Leadership Project