



Characteristics of Soccer Players in the US in 2011-2017 and Injury-Risk and Health Equity Implications

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Benefits & Risks of LTPA Soccer

- Regular leisure-time physical activity (LTPA) is important to maintain health and reduce chronic disease and obesity.¹
- Recreational team sports, like soccer, provide not only health benefits but also social benefits, which encourage sustained LTPA over time.²
- However, sport participation has injury-risks. Among all soccer-related injuries presenting in emergency rooms from 2000-2012, 25.5% were in adults age 20-49.³
- Sports injuries have significant impacts, including medical costs, income losses, and reduced quality of life, which can diminish the benefits of LTPA.⁴

Objective

- To describe the characteristics of US adults who participate in soccer as their LTPA to explore the health benefit and injury-risk implications.

Methods

- Study Design:** Cross-sectional analysis of a combined & weighted 2011, 2013, 2015, & 2017 national Behavioral Risk Factor Surveillance Survey dataset.
- Sample:** Respondents who participated in a LTPA and identified a primary type of LTPA.
- Soccer players** are defined as those indicating soccer as their primary or secondary type of LTPA.
- Statistical Analysis:** Stata SE v15. Descriptive frequencies distributions, logistic regression, and sub-group analysis using chi-square test.

Discussion

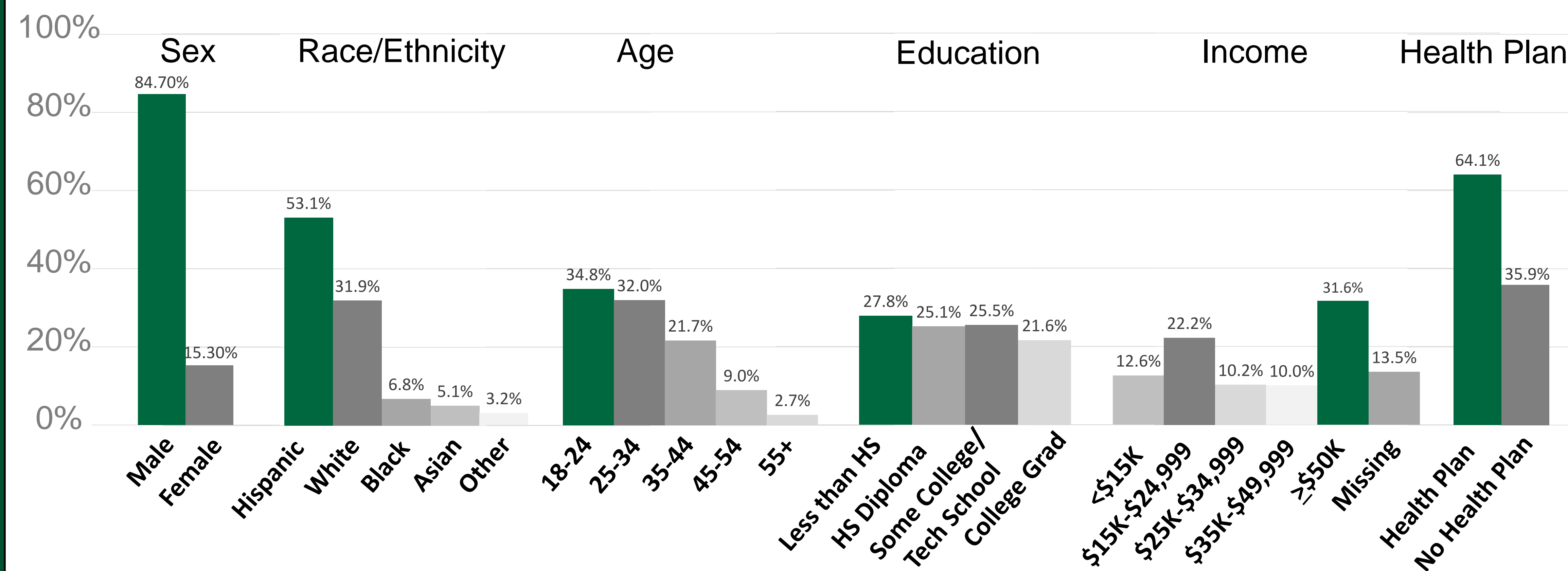
- Despite soccer's important, health, social, and cultural benefits, it is a contact sport with injury risks.
- Hispanic males are most likely to play soccer but only 43% have health insurance, which may put them at higher risk for financial impacts related to injury.
- Limitations:** We did not explore intensity or time of participation, which contributes to injury-risk. Data is self-reported. It is also a cross-sectional dataset and is not representative of the entire US population.

References

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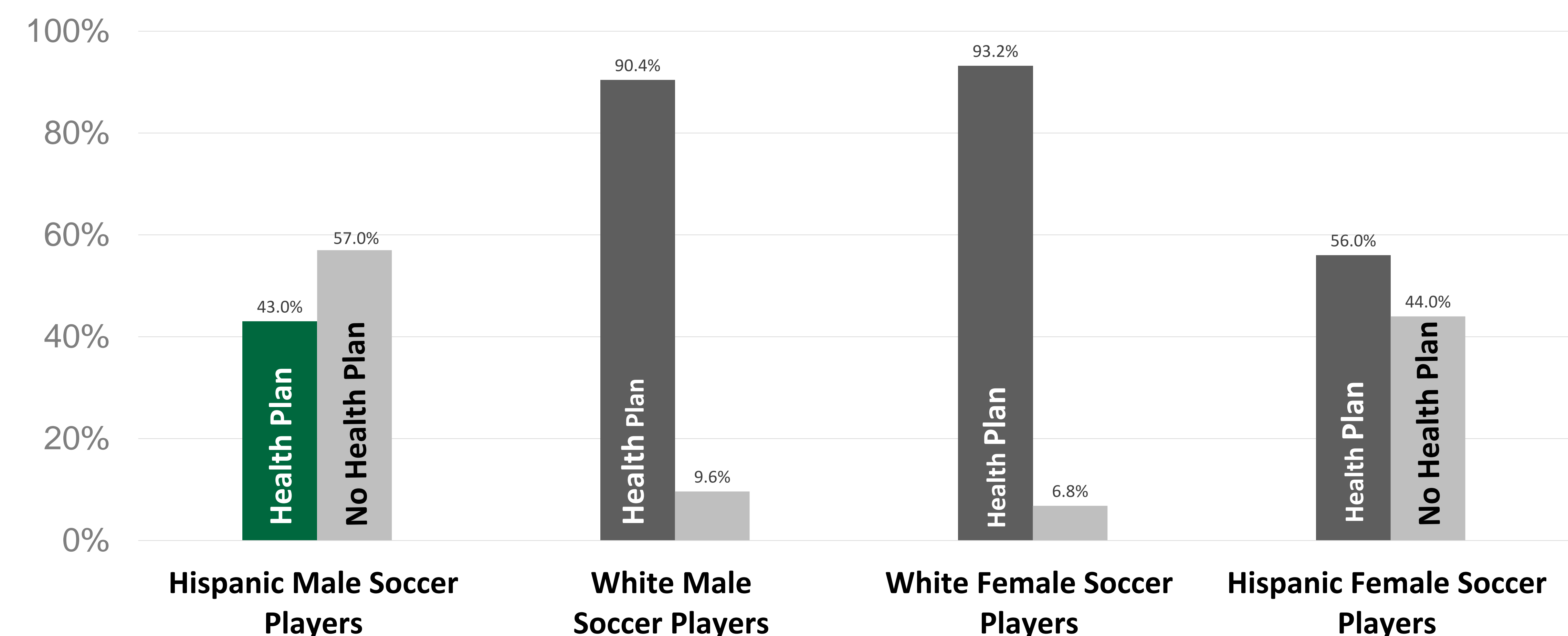
Injury-risks of participation in LTPA soccer may disproportionately affect Hispanic males, who are most likely to play soccer but tend to have less health insurance.

Characteristics of adult soccer players (unweighted n=6,969, weighted n=2,131,166)
Soccer players were predominantly male, Hispanic or White, 18-34, earned \$15K-\$29,999 or ≥\$50K. Education levels varied. The majority of soccer players had health insurance.



Only 43% of Hispanic male and 56% of Hispanic female soccer players have a health plan compared to over 90% for white male and female soccer players.*

(unweighted n=5878, weighted n=1,790,065)



*Data in this figure are from a sub-analysis of White and Hispanic soccer players, who make up 85% of adults indicating soccer as their LTPA. Hispanic males alone make up the largest proportion of adult soccer players (46.8%). Differences in health insurance were statistically significant at $p < 0.01$

Predictors of playing soccer as a primary or secondary LTPA (*p<0.05)

Variables	Odds Ratios (95% CI)
Sex	
Male	1 [Reference]
Female	0.18 (0.16-0.20)*
Age	
18-24	1 [Reference]
25-34	0.59 (0.53-0.66)*
35-44	0.42 (0.37-0.47)*
45-54	0.19 (0.17-0.22)*
55-64	0.05 (0.04-0.07)*
65+	0.02 (0.01-0.02)*
Race/Ethnicity	
White	1 [Reference]
Black	1.18 (0.99-1.39)
American Indian/Alaska Native	0.58 (0.34-0.99)*
Asian	1.54 (1.26-1.88)*
Native Hawaiian/Other Pacific Islander	1.13 (0.40-3.22)
Other	1.98 (1.39-2.82)*
Multiracial	1.13 (0.80-1.59)
Hispanic	3.39 (3.00-3.82)*
Don't Know/Refused	1.38 (1.01-1.88)*
Education	
Did not graduate High School	1.49 (1.29-1.72)*
High School Diploma	1.01 (0.89-1.13)
Some College/Tech School	1 [Reference]
College/Tech School graduate	1.31 (1.17-1.47)*
Income	
<\$15,000	0.87 (0.73-1.04)
\$15,000 - \$24,999	1.06 (0.92-1.22)
\$25,000 - \$34,999	0.96 (0.82-1.13)
\$35,000 - \$49,999	0.89 (0.77-1.04)
≥\$50000	1 [Reference]
Don't know/Not sure/Missing	0.88 (0.76-1.02)
Survey Language	
English	1 [Reference]
Spanish	2.94 (2.54-3.40)*
Year	
2011	1 [Reference]
2013	0.95 (0.84-1.08)
2015	0.94 (0.83-1.05)
2017	0.87 (0.77-0.99)*

Hispanics are 3.4 times more likely than Whites to report playing soccer as their LTPA

Conclusion

- Gaps in health insurance continue to be a public health challenge & health equity concern in the US.
- Lack of insurance is an important consideration in efforts to encourage LTPA, as injuries can have health and financial consequences, especially for those without health coverage.