



Adolescent health brief

U.S. Adolescent Street Racing and Other Risky Driving Behaviors



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ABSTRACT

Purpose: We examined demographic characteristics and risky driving behaviors associated with street racing among adolescents in the NEXT Generation Health Study (N = 2,395).

Method: Binomial logistic regression tested associations between demographics and driving in a street race (DSR) or being a passenger in a street race (PSR). Sequential logistic regression tested the robustness of the association between DSR and crashes.

Results: Hispanic/Latino, non-Hispanic Black/African-American, and mixed-race participants were more likely to engage in DSR. Males were more likely and teens with moderate socioeconomic status were less likely to engage in DSR and PSR. DSR was associated with other risky driving behaviors in bivariate models but was not independently associated with crashes after sequential modeling.

Conclusions: Among adolescents, those who are male, racial/ethnic minorities, or low socioeconomic status may be at higher risk of DSR. However, overall driving risk might explain the association between DSR engagement and higher crash risk.

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IMPLICATIONS AND CONTRIBUTION

About 13% of a sample of U.S. adolescents reported driving in a street race, which was more likely among males, certain racial/ethnic minorities, and those from families with lower socioeconomic status. Street racers were more likely to engage in other risky driving behaviors.

Street racing is portrayed as an iconic American pastime, at least in movies, but is a serious international road safety concern. It is mostly considered a planned event in locations with little traffic or where the road is blocked off, often with spectators. It

can also occur spontaneously when two drivers pull up beside each other and decide to race [1].

Despite cross-sectional and retrospective associations with crashes [2–4], traffic violations [4], driving while intoxicated [3], and risk appraisal [5], street racing has been a largely neglected topic of research [3,6]. Notably, there is a paucity of research on prevalence, predictors, and its covariation with other risky driving behaviors among young, inexperienced drivers.

In this exploratory study, we assessed demographic characteristics associated with teens driving in a street race (DSR) or being a passenger in a street race (PSR) since not much is known about who is at risk of either activity. We examined cross-sectional associations between street racing and other risky driving measures. We also tested the robustness of the cross-sectional association between DSR and crashes.

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Table 1
Participant demographics, prevalence of DSR and PSR, and prevalence of other risky driving behaviors

		Sample statistics			Bivariate regression estimates				Multivariate regression estimates			
		n	%	95% CI (%)	DSR (Ref = no DSR)	PSR (Ref = no PSR)	DSR (Ref = no DSR) ^a	PSR (Ref = no PSR)	AOR	95% CI	AOR	95% CI
Characteristics	Category				OR	95% CI	OR	95% CI	AOR	95% CI	AOR	95% CI
Age	<18 years old	933	33.64	(27.73, 39.64)	(Ref)	(Ref)	(Ref)	(Ref)	—	—	—	—
	≥18 years old	1,462	66.36	(60.44, 72.29)	.94	(.53, 1.67)	.92	(.62, 1.35)	—	—	—	—
Gender	Female	1,330	55.26	(51.91, 58.61)	(Ref)	(Ref)	(Ref)	(Ref)	(Ref)	(Ref)	(Ref)	(Ref)
	Male	1,065	44.74	(41.39, 48.09)	3.03***	(1.92, 4.77)	1.82**	(1.17, 2.83)	3.39***	(2.27, 5.08)	1.85**	(1.20, 2.85)
Race/ethnicity	Non-Hispanic White	976	58.62	(46.12, 71.12)	(Ref)	(Ref)	(Ref)	(Ref)	(Ref)	(Ref)	—	—
	Hispanic/Latino	697	19.85	(11.79, 27.90)	2.94***	(1.69, 5.11)	.66	(.33, 1.33)	1.97*	(1.07, 3.64)	—	—
	Non-Hispanic Black/African-American	538	14.98	(6.80, 23.16)	1.77*	(1.07, 2.93)	1.58	(.91, 2.75)	2.07*	(1.09, 3.93)	—	—
	Non-Hispanic mixed race	88	4.37	(2.51, 6.23)	3.19*	(.91, 11.21)	.75	(.19, 2.93)	3.62*	(1.05, 12.47)	—	—
	Other non-Hispanic minorities	89	2.18	(.94, 3.42)	2.93*	(.89, 9.66)	.70	(.19, 2.61)	2.27	(.73, 7.04)	—	—
Socioeconomic Status	Low affluence	764	23.11	(16.75, 29.47)	(Ref)	(Ref)	(Ref)	(Ref)	(Ref)	(Ref)	(Ref)	(Ref)
	Moderate affluence	1,125	49.00	(45.95, 52.05)	.46**	(.28, .77)	.49***	(.33, .74)	.60*	(.38, .95)	.48***	(.32, .71)
	High affluence	505	27.89	(22.08, 33.70)	.51	(.20, 1.26)	.57	(.29, 1.13)	.78	(.33, 1.87)	.59	(.30, 1.16)
Highest parental education level	High school diploma/GED or less	816	31.04	(24.78, 37.29)	(Ref)	(Ref)	(Ref)	(Ref)	(Ref)	(Ref)	—	—
	Some college education or associate's degree	819	40.57	(36.44, 44.71)	.52*	(.28, .97)	.93	(.53, 1.64)	.64#	(.37, 1.09)	—	—
	Bachelor's degree or more	560	28.39	(21.96, 34.81)	.47*	(.22, .98)	.68	(.33, 1.41)	.52#	(.27, 1.00)	—	—
Driving licensure status	Not independently licensed	1,159	33.69	(25.42, 41.96)	(Ref)	(Ref)	(Ref)	(Ref)	—	—	—	—
	Independently licensed	1,223	66.31	(58.04, 74.58)	1.17	(.56, 2.45)	.99	(.62, 1.58)	—	—	—	—
Crash involvement	No crashes	2,089	85.59	(82.00, 89.18)	(Ref)	(Ref)	(Ref)	(Ref)	—	—	—	—
	Any crashes	295	14.41	(10.82, 18.00)	1.79*	(1.05, 3.05)	2.46***	(1.66, 3.63)	—	—	—	—
DWI	No DWI	1,374	86.95	(54.17, 65.57)	(Ref)	(Ref)	(Ref)	(Ref)	—	—	—	—
	Any DWI	159	13.05	(34.43, 45.83)	3.81***	(2.66, 5.44)	4.82***	(3.01, 7.70)	—	—	—	—
C-RDS ^b	Lower risk driver	1,623	57.06	(50.74, 63.37)	(Ref)	(Ref)	(Ref)	(Ref)	—	—	—	—
	Higher risk driver	764	42.94	(36.63, 49.26)	2.25***	(1.50, 3.39)	2.03**	(1.29, 3.17)	—	—	—	—
Texting/calling while driving ^c	Less frequently	1,623	57.18	(51.27, 63.09)	(Ref)	(Ref)	(Ref)	(Ref)	—	—	—	—
	More frequently	762	42.82	(36.91, 48.73)	1.62*	(1.01, 2.59)	2.11**	(1.27, 3.50)	—	—	—	—
DSR	No DSR	1,350	86.66	(84.20, 89.11)	—	—	(Ref)	(Ref)	—	—	—	—
	Any DSR	194	13.34	(10.89, 15.80)	—	—	13.47***	(7.41, 24.49)	—	—	—	—
PSR	No PSR	2,196	91.65	(89.83, 93.47)	(Ref)	(Ref)	—	—	—	—	—	—
	Any PSR	190	8.35	(6.53, 10.17)	13.47***	(7.41, 24.49)	—	—	—	—	—	—

Values in bold indicate $p < .10$.

Binomial logistic regression models testing association of demographics on street racing variables. Descriptive statistics and regression models accounted for complex survey design.

Multivariate regression models only included demographic variables that had at least one group significantly ($p < .05$) associated with DSR/PSR in a bivariate model.

AOR = adjusted odds ratio; CI = confidence interval; C-RDS = Checkpoints Risky Driving Scale; DSR = driving in a street race in the past 12 months; DWI = driving while intoxicated; GED = general equivalency diploma;

OR = odds ratio; PSR = being a passenger in a street race in the past 12 months.

^a Also controlled for frequency of driving in past 30 days.

^b Standardized Cronbach's $\alpha = .92$.

^c Standardized Cronbach's $\alpha = .93$.

$p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$.

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