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# Gender differences in the prevalence and patterns of alcohol use among 9th-12th graders in a St. Louis suburban high school

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# Gender Differences in the Prevalence and Patterns of Alcohol Use Among 9<sup>th</sup>-12<sup>th</sup> Graders in a St. Louis Suburban High School

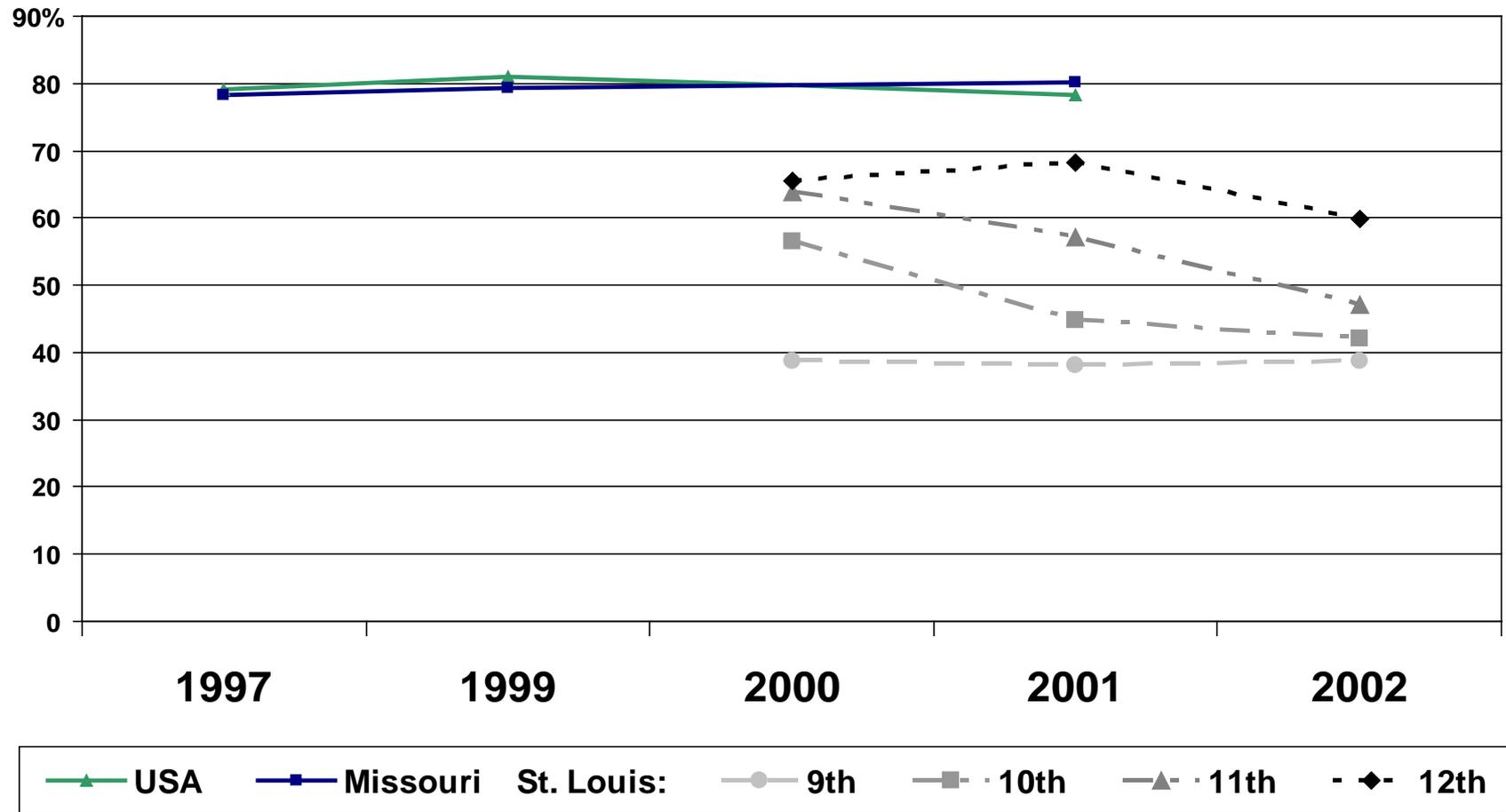
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# Percent of High School Students Reporting Lifetime Use of Alcoholic Beverages in the USA<sup>†</sup>, Missouri<sup>†</sup>, and a Local St. Louis County High School (by Grade)

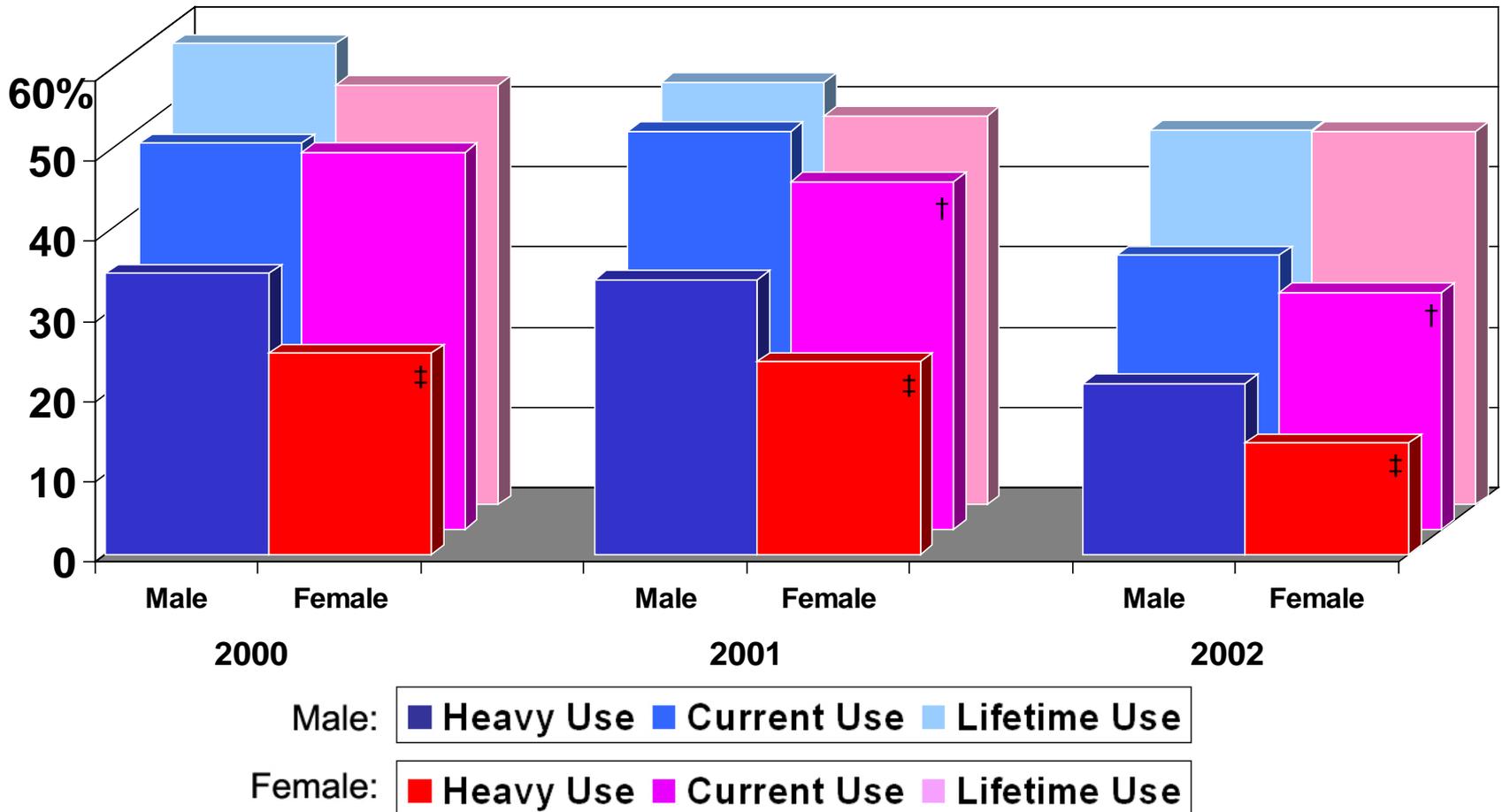


<sup>†</sup> Source: Youth Risk Behavior Surveillance System - The Center for Disease Control & Prevention – USA: 1991 – 2001.

# Characteristics of the High School Sample Participants Over the Entire Survey Period, 2000-2002

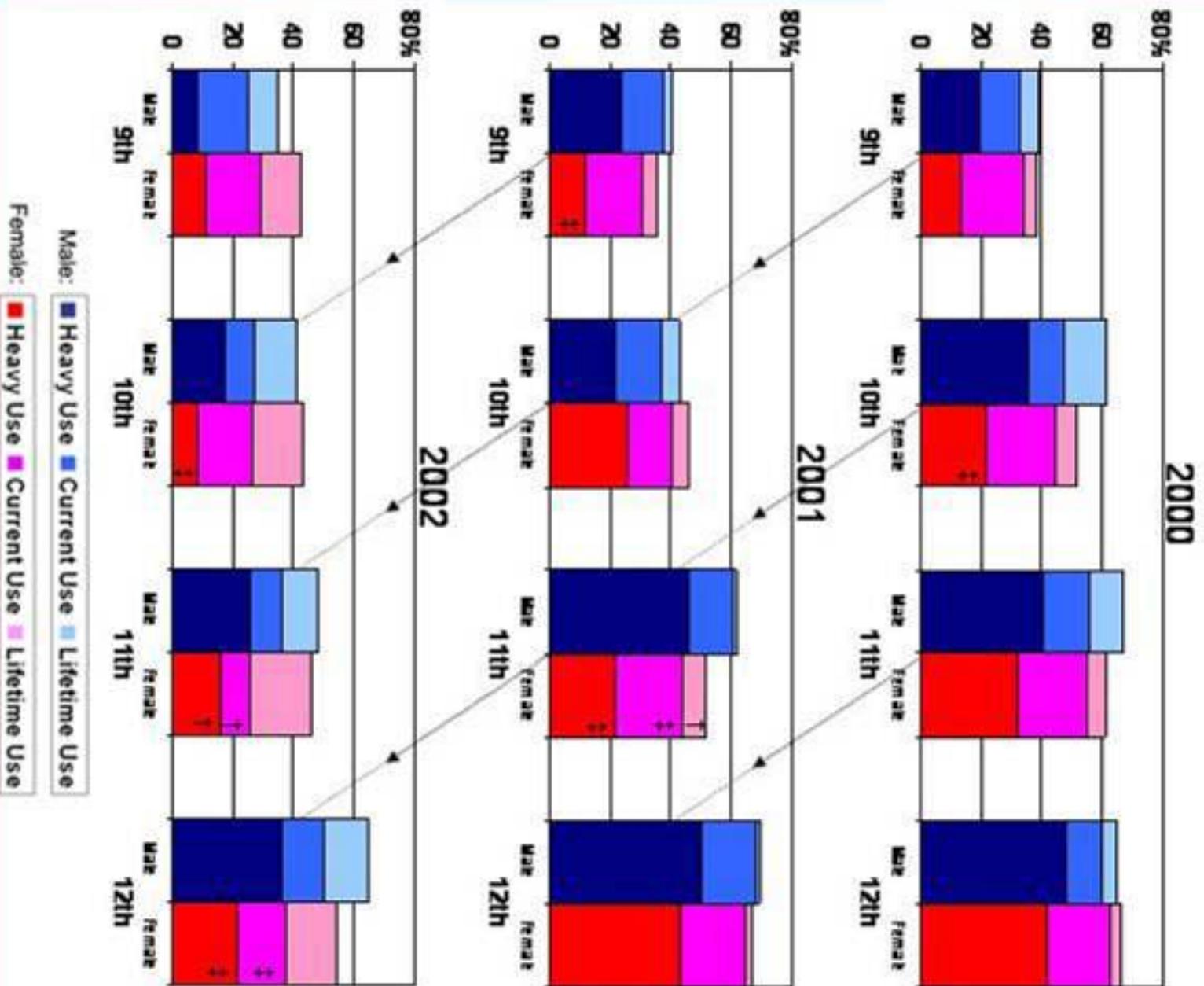
	<b>Mean</b>	<b>%</b>
<b>Total School Population</b>	1671	
<b>Response Rate</b>		80.0%
<b>Rejection Rate</b> (for Incompletion/Unusable)		4.0%
<b>Gender</b>		
Male		48.9%
<b>Race</b>		
White		75.1%
Black		23.8%
Other		1.2%
<b>Grade</b>		
9 <sup>th</sup>		27.0%
10 <sup>th</sup>		28.0%
11 <sup>th</sup>		24.0%
12 <sup>th</sup>		21.0%

# Patterns of Alcohol Use Among 9<sup>th</sup> through 12<sup>th</sup> Graders in a St. Louis County High School by Gender, 2000-2002



<sup>†</sup>Statistically significant at  $p < 0.05$     <sup>‡</sup>Statistically significant at  $p < 0.01$

Patterns of Alcohol Use Among 9<sup>th</sup> Through 12<sup>th</sup> Graders  
 in a St. Louis County High School by Year, Grade, and Gender, 2000-2002



†Statistically significant at  $p < 0.05$  ‡Statistically significant at  $p < 0.01$

Mean Number of Alcoholic Beverages Consumed 7 Days Prior to the Survey Among 9<sup>th</sup> Through 12<sup>th</sup> Graders Current Drinkers in a St. Louis County High School by Year, Grade, and Gender

	2000			2001			2002		
	N	Mean	Diff.	N	Mean	Diff.	N	Mean	Diff.
<b>9<sup>th</sup> Grade</b>									
Male	51	15.5		75	15.0		39	5.9	
Female	66	7.2	8.3*	58	10.8	4.2	46	5.5	0.4
<b>10<sup>th</sup> Grade</b>									
Male	85	17.6		59	16.6		54	10.2	
Female	80	10.7	6.9*	80	9.9	6.8*	51	5.7	4.5*
<b>11<sup>th</sup> Grade</b>									
Male	78	16.8		106	20.5		51	17.4	
Female	78	14.9	1.9	76	11.7	8.8*	46	9.4	8.0*
<b>12<sup>th</sup> Grade</b>									
Male	75	21.4		90	20.9		78	14.8	
Female	71	18.1	3.3	84	17.7	3.2	57	8.6	6.2*

\*Statistically significant at  $p < 0.05$

# Summary of ANOVAs\* for the Mean Number of Alcohol Beverages Consumed by 9<sup>th</sup> Through 12<sup>th</sup> Graders in a St. Louis County High School, 2000-2002

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Source	df	Sum of Squares	Mean Squares	F Value	R <sup>2</sup>
<b>Main Effects</b>					
Gender	1	8056.2	8056.2	50.4 <sup>‡</sup>	0.012
Grade Level	3	22702.0	7567.3	47.3 <sup>‡</sup>	0.034
Survey Year	2	16584.3	8292.1	51.9 <sup>‡</sup>	0.025
<b>Interaction w/ Year</b>					
Gender*Survey Year	2	410.7	205.3	1.28	0.000
Grade*Survey Year	2	2832.3	472.1	2.95 <sup>‡</sup>	0.004
<b>Within Groups</b>	3890	621832.9	159.9		
<b>Total</b>	3904	672418.3			

‡ Statistically significant at  $p < 0.01$

\* Because we were unable to block by subject due to anonymity, these results are conservative.

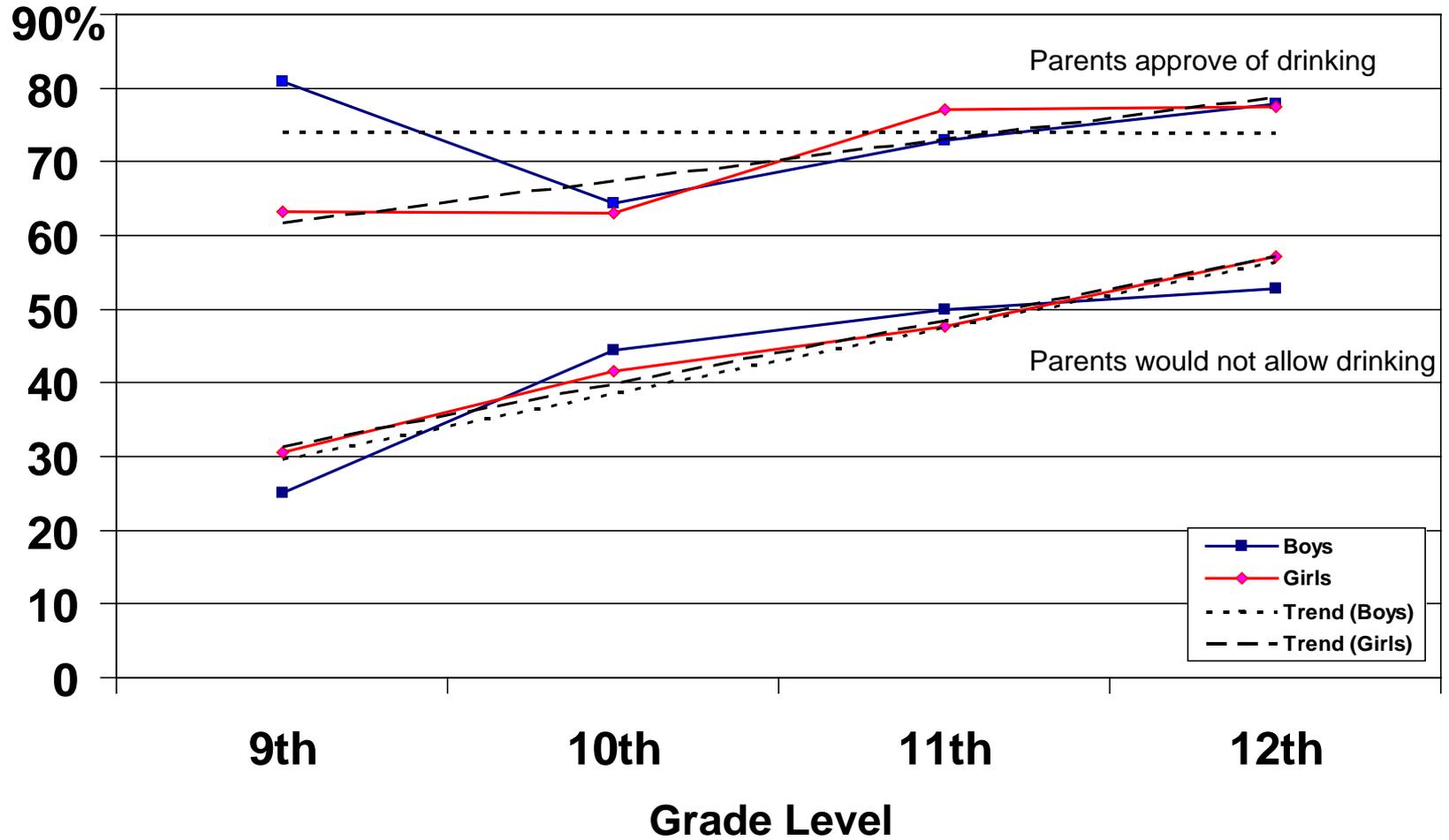
Negative Binomial Regression Model of the Number of  
Drinks Past 7 Days Among 9<sup>th</sup> Through 12<sup>th</sup>  
Grade Cohorts in a St. Louis County High School,  
2000 - 2002

Parameter	Grade Cohorts							
	9 <sup>th</sup>		10 <sup>th</sup>		11 <sup>th</sup>		12 <sup>th</sup>	
	Estimate	T-Value	Estimate	T-Value	Estimate	T-Value	Estimate	T-Value
<b>Intercept</b>	1.63	5.50	2.27	9.66	2.42	10.56	2.98	13.88
<b>Male</b>	0.48	2.60	0.50	3.12	0.72	4.62	0.38	2.68
<b>Year</b>	-0.37	-2.79	-0.56	-5.45	-0.44	-4.20	-0.46	-4.83
<b>Grade</b>								
<b>Alpha</b>	8.51	14.86	6.84	16.21	5.44	16.79	3.89	16.83
<b>log Likelihood</b>	-1713		-2137		-2268		-2314	
<b>N</b>	1049		1106		944		806	

Note: all estimates were statistically significant at  $p < 0.05$

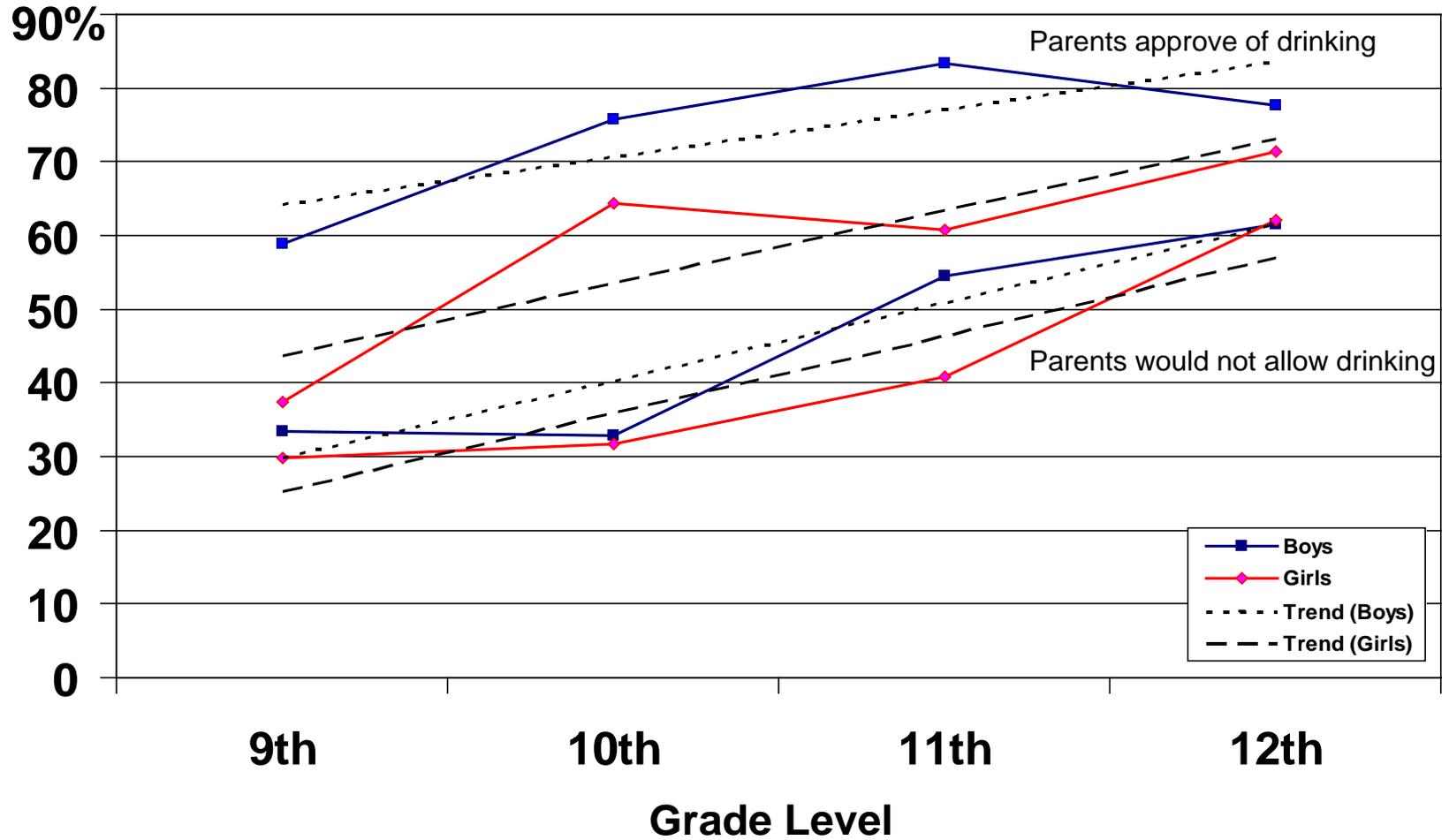
# Proportion Who Drink by Parental Leniency Status

2000



# Proportion Who Drink by Parental Leniency Status

2001



# Proportion Who Drink by Parental Leniency Status

2002

