



Comparison of Gambling among  
Minnesota Public School  
Students from 1992 to 1998

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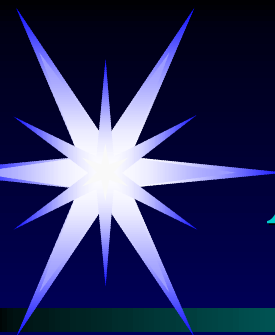
# David Letterman's Signs your Kid is Addicted to Gambling

- He knows the Vegas odds on where Waldo might be
- There's a bookie sleeping in his treehouse
- He's changed his middle name to "The Greek"
- He's 9 and he's dating a showgirl



# Rapid Expansion of Gambling; Gambling is now a Common Activity

- **Gambling is now legal in all but two states in the U.S. (Utah and Hawaii);**
- **About 80% of the U.S. population gambles (Lesieur, 1989; Volberg, 1994).**
- **Gambling is also a very common activity among youth. Most studies estimate that about 80% of youth have gambled in their life and about 60% have gambled in the past year.**



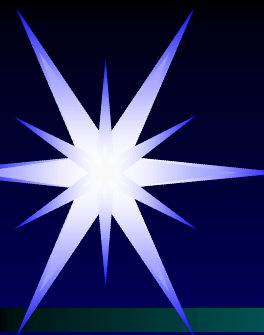
# Ambiguity about Gambling

- **The public seems to be divided about whether gambling is a good or a bad thing. For example, in Minnesota, the state lottery passed by a slim margin of 1,214,032 (59%) to 843,307 (41%).**
- **Gambling has been referred to as the only “vice” that is endorsed and promoted by both the church and state.**



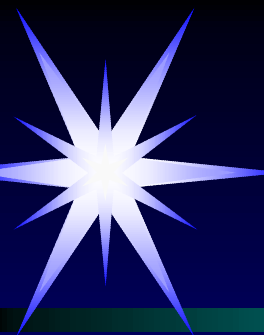
# Recent History of Gambling in Minnesota

- 1981 Pull-tabs became legal
- 1982 Tribal gaming became legal
- 1985 First horse race at Canterbury
- 1988 State Lottery passed into law
- 1990 State Lottery begins operation
- 1990 Compacts with tribal govts
- 1992 18 tribal casinos in operation
- 1999 Card room at Canterbury



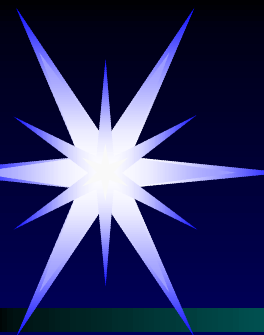
# Social Context of Youth Gambling

- Not long ago gambling was considered a vice and was illegal
- Dramatic shift in our culture and public sentiment about gambling
- Gambling has moved out of isolation and is now part of mainstream society



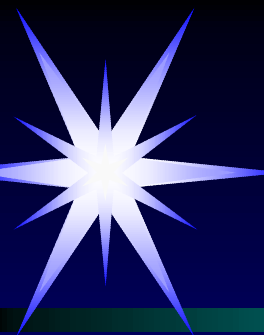
# Gambling Advertising

- Youth are now exposed on a daily basis to gambling and its promotion
- Radio ads
- Televised drawings of lottery numbers and lottery shows
- Newspaper ads
- Billboards along roadways
- Advertising at sporting events



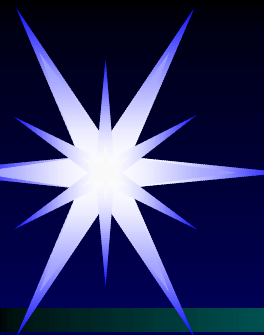
# Youth Gambling a Concern

- With the rapid expansion of gambling have also come concerns about youth gambling and youth problem gambling.
- Underage gambling is a particular concern since it is illegal and may be a sign of problem gambling
- Concerns about time, money, risk of addiction



# First Generation of Youth

- This is the first generation of youth to be exposed to ready access to a variety of gambling venues and widespread gambling advertising
- The 2001 graduating class was in the 1st grade when the state lottery and casino gambling were legalized, so they have been exposed to gambling most of their formative years



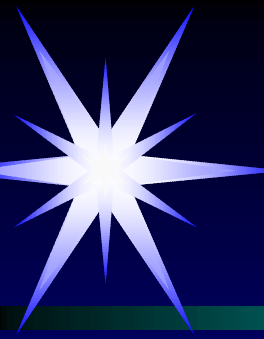
# Background

- Public health officials, policy makers, teachers, and parents want to know the extent of youth gambling and problem gambling and what can be done to prevent it
- The first statewide youth gambling survey was conducted in 1990



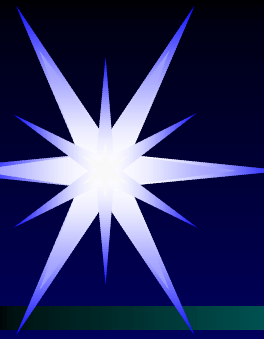
# First gambling surveys of MN youth conducted in 1990 and 1991

- State lottery introduced in 1990
- Concern about the effect of legalized gambling on youth
- First MN youth gambling survey conducted prior to the introduction of the MN State Lottery and a follow-up survey conducted one year later
- Youth gambling was fairly stable with some shifts from informal to legalized games



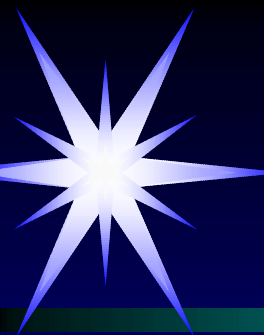
# Research Questions

- How often do youth gamble?
- Is youth gambling increasing?
- Are there differences between boys and girls and between grades?
- What variables are associated with youth gambling?



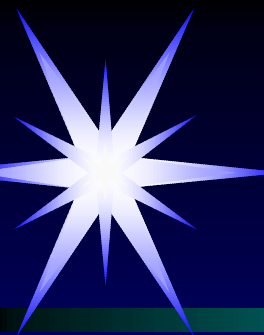
# Research Questions

- How do gambling rates of Minnesota youth compare to Minnesota adult gambling?
- How do gambling rates of Minnesota youth compare to those of a national sample



# Minnesota Student Survey

- The Minnesota Department of Children, Families and Learning administers an alcohol and drug use risk survey, the Minnesota Student Survey, to all 6th, 9th, and 12th grade public school students every three years starting in 1989.
- In 1992, seven gambling items were added to the survey



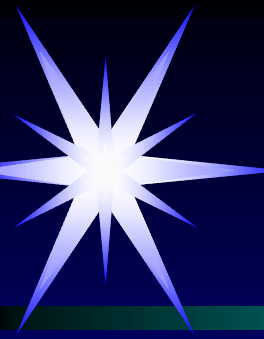
# Minnesota Student Survey

- The Minnesota Student Survey is the world's largest database of youth gambling information in existence, with sample sizes of 122,000 6th, 9th, and 12th grade public school students in 1992, 75,000 9th and 12th grade students in 1995, and 78,000 9th and 12th graders in 1998.



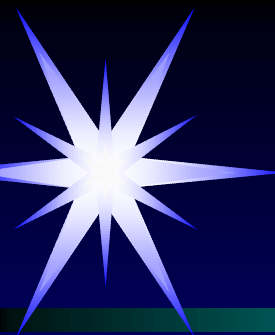
# Demographics of 1992, 1995, and 1998 Samples

		1992	1995	1998
Gender	Female	61,311	37,593	38,569
	Male	61,389	38,307	40,013
Grade	6th	45,628	NA	NA
	9th	44,150	45,375	47,278
	12th	32,922	30,525	31,304



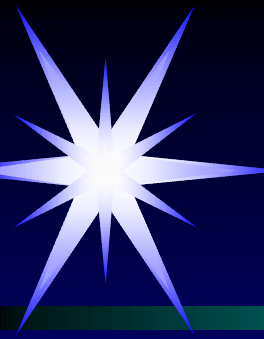
# Minnesota Student Survey

- The survey includes five gambling frequency items and two gambling problem items.
- These items were not included in the 6th grade Minnesota Student Survey in 1995 and 1998



# 1998 MSS Gambling Items

- During the last 12 months, how often have you done these activities?
- Played cards for money
- Bet money on games of personal skill like pool, golf, or bowling
- Bet money on sports teams
- Bought lottery tickets or scratch offs
- Gambled in a casino



# Five-point Response Options

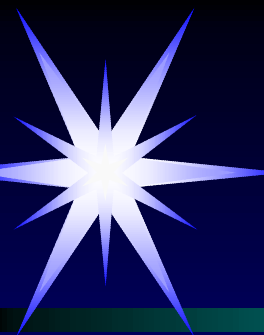
- Not at all
- Less than once a month
- About once a month
- About once a week
- Daily



# 1998 Minnesota Student Survey

## Gambling Items

- During the last 12 months, have you ever felt bad about the amount you bet, or about what happens when you bet money? Yes/No/I don't bet for money
- During the last 12 months, have you ever felt that you would like to stop betting money but didn't think you could? Yes/No/I don't bet for money



# Presentation of Data

- Gambling frequency in 1998, including comparisons of gender and grade.
- Follow the class of 1998 from 6th grade in 1992 to 9th grade in 1995 and 12th grade in 1998
- Comparison of gambling frequency from 1992, 1995, and 1998
- Variables correlated with gambling

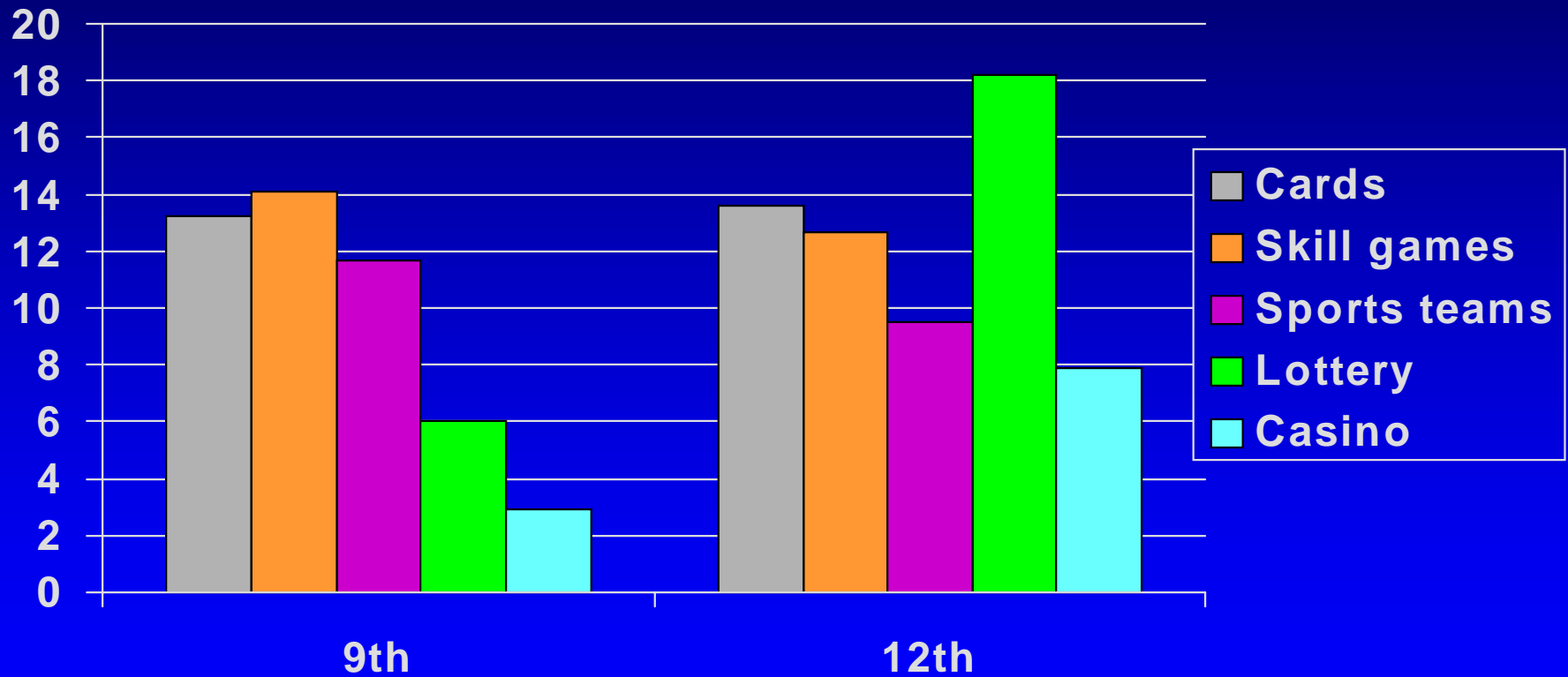


# 1998 Gambling Frequency in Past Year by Grade & Gender

	Never	< monthly	monthly	weekly	daily
Sample	%	%	%	%	%
9th Girls	63	25	8	3	1
12th Girls	41	36	15	7	1
9th Boys	30	27	20	15	8
12th Boys	17	27	26	22	8

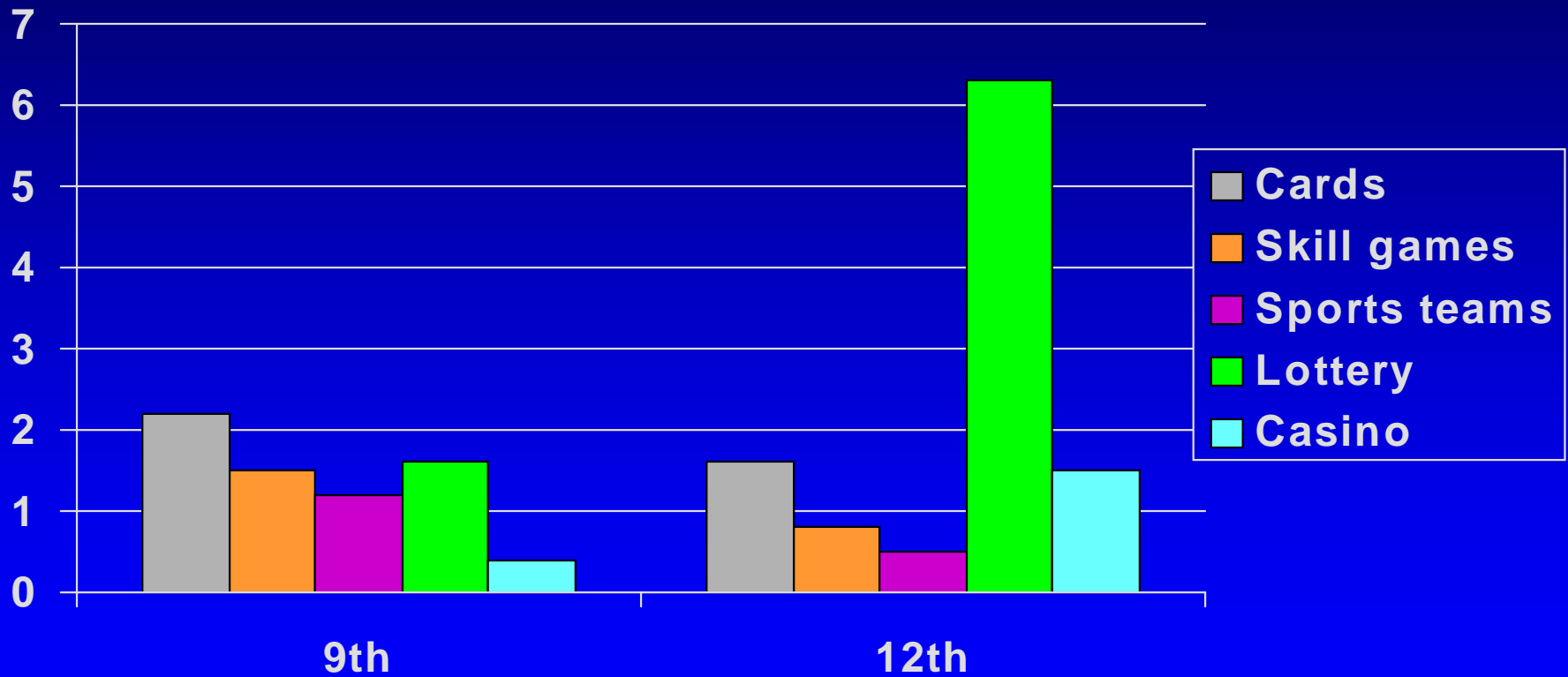


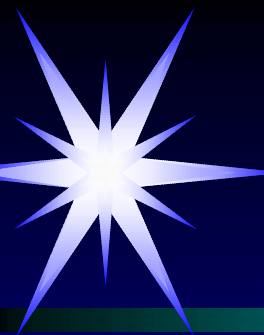
# 1998 9th & 12th Grade Boys' Weekly/Daily Play by Games





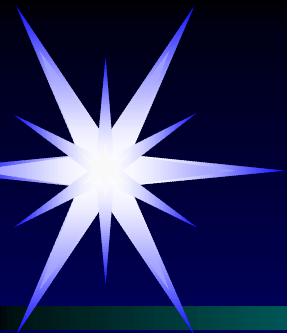
# 1998 9th & 12th Grade Girls' Weekly/Daily Play by Games





# 1998 Youth Gambling Frequency

- More boys gamble than girls; and boys gamble more frequently than girls
- More older youth gamble than younger youth; and older youth gamble more often than younger youth
- Both boys and girls shift from informal games to legalized games as they age from 9th grade to 12th grade

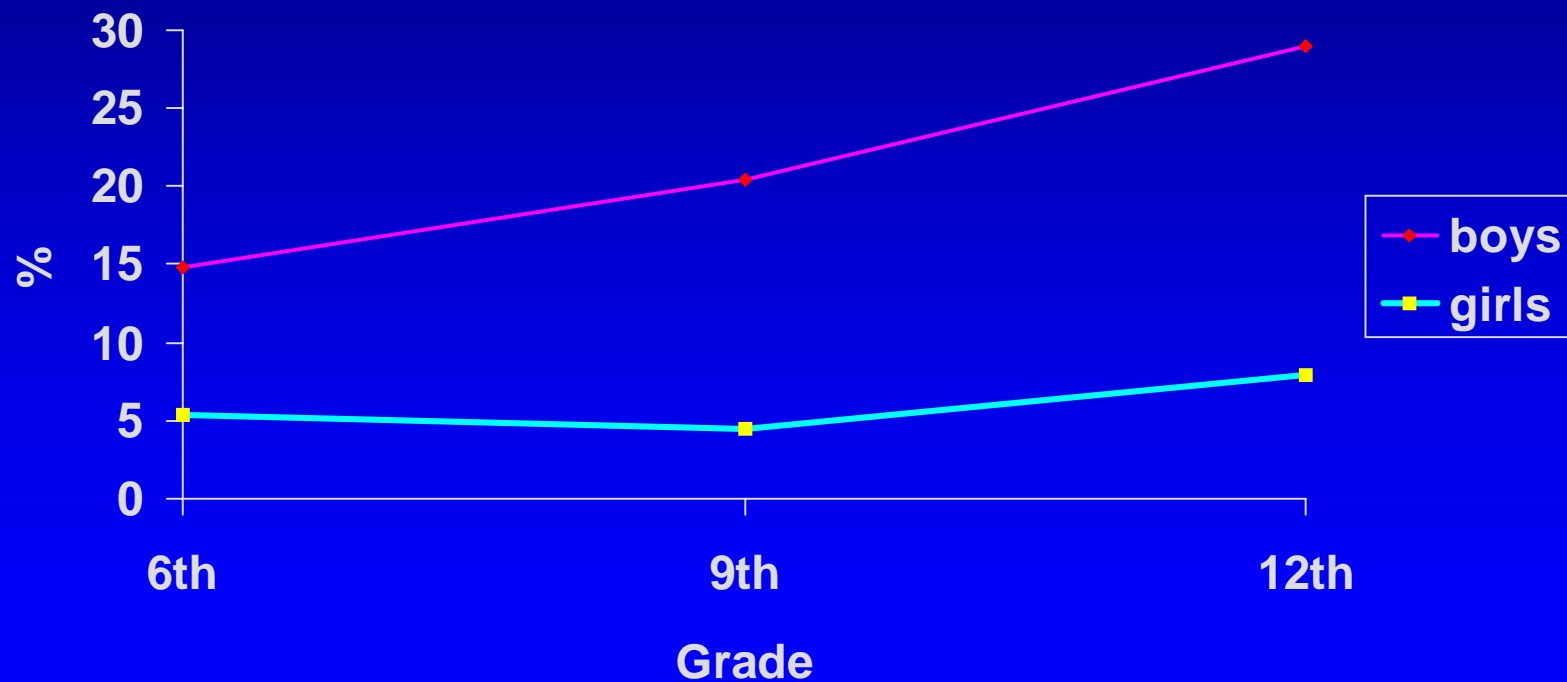


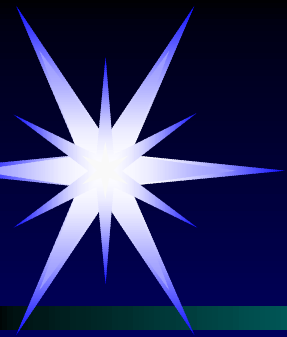
## Class of '98

- Because the survey is given every three years to the 6th, 9th, and 12th grades it is possible to follow a class from 6th to the 12th grade.
- The 6th grade class in 1992 became the 9th grade class in 1995 and became the 12th grade class in 1998

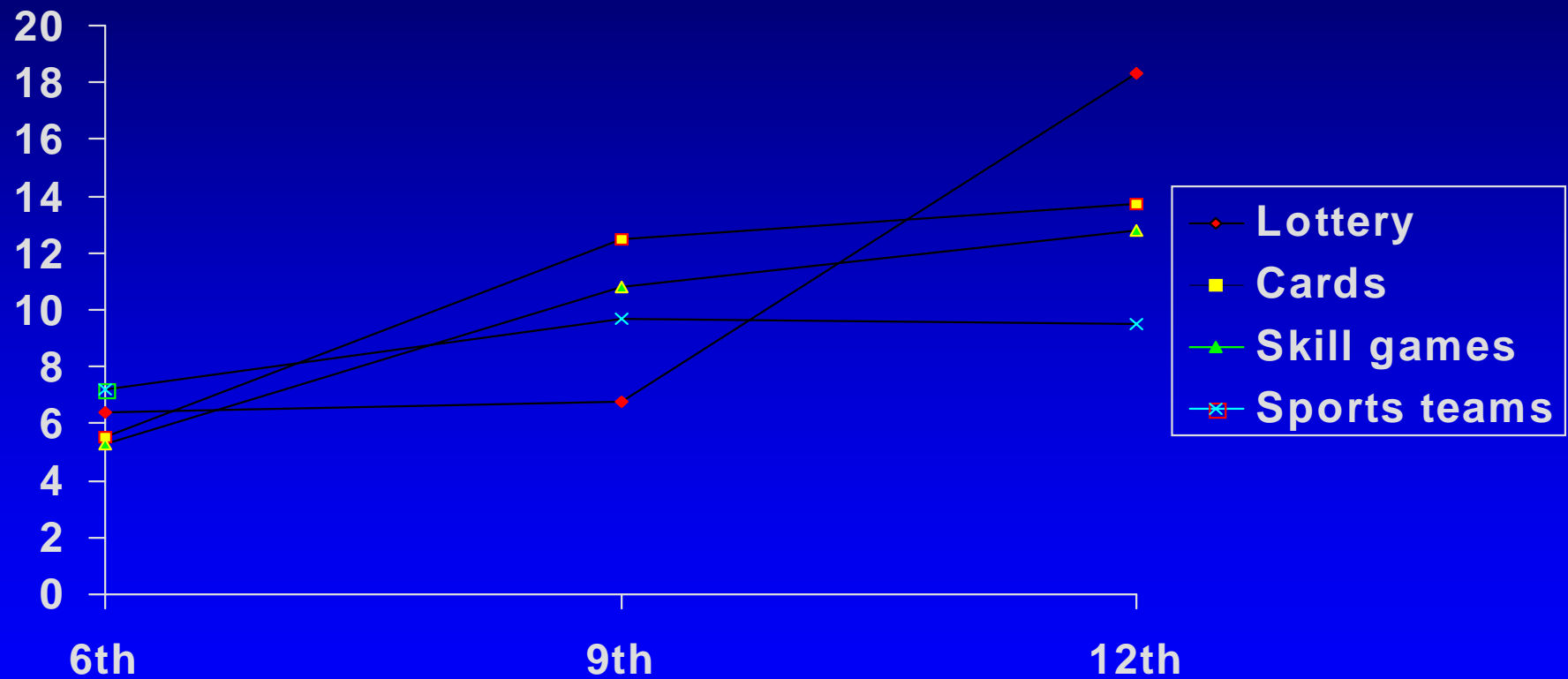


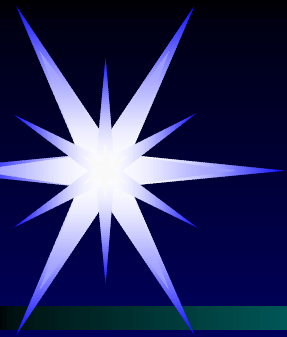
# Weekly/daily gambling by youth as they age from 6th to 12th grade



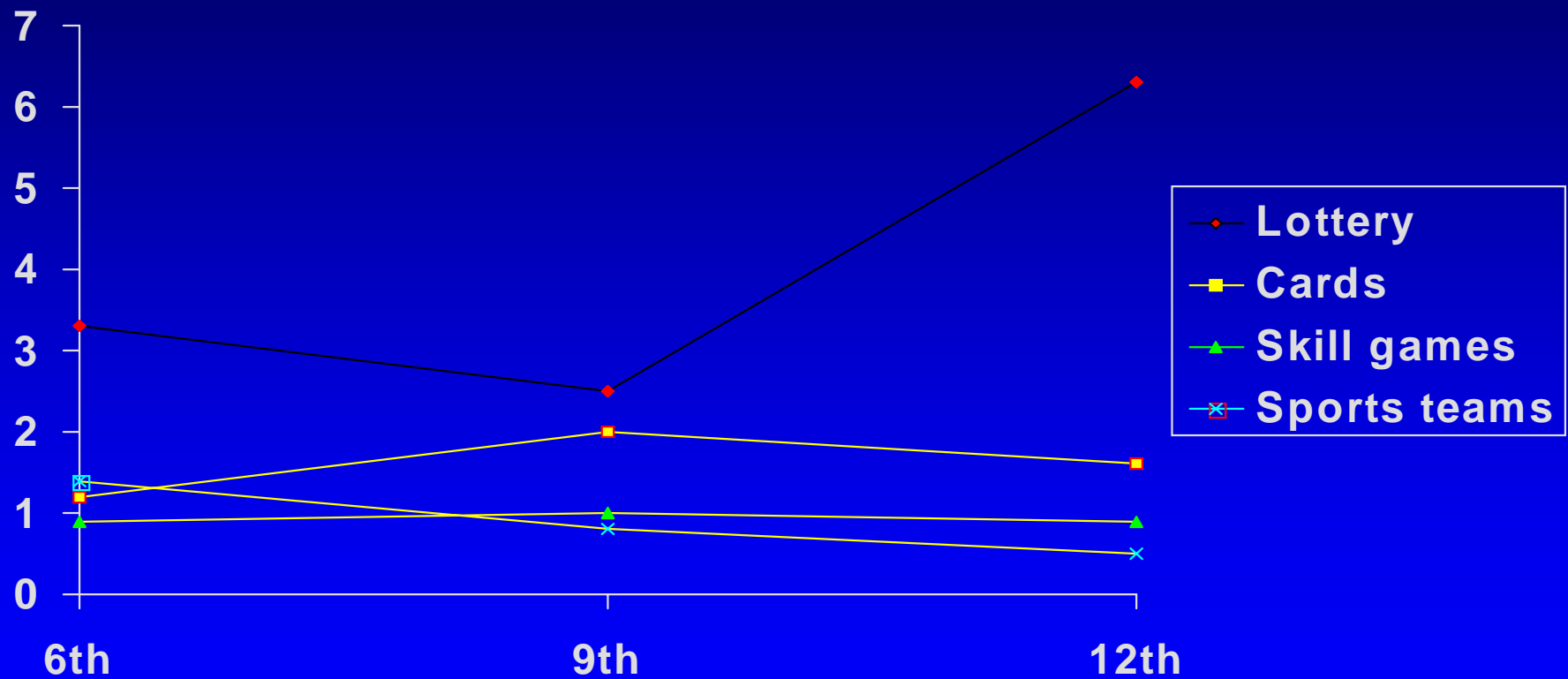


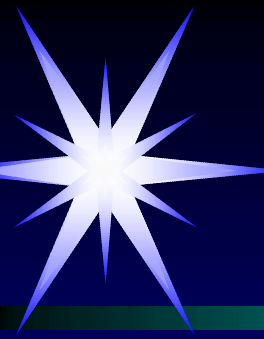
# Weekly/Daily Gambling Boys as they age from 6th to 12th Grade





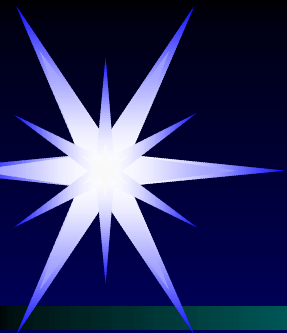
# Weekly/Daily Gambling Girls as they age from 6th to 12th Grade



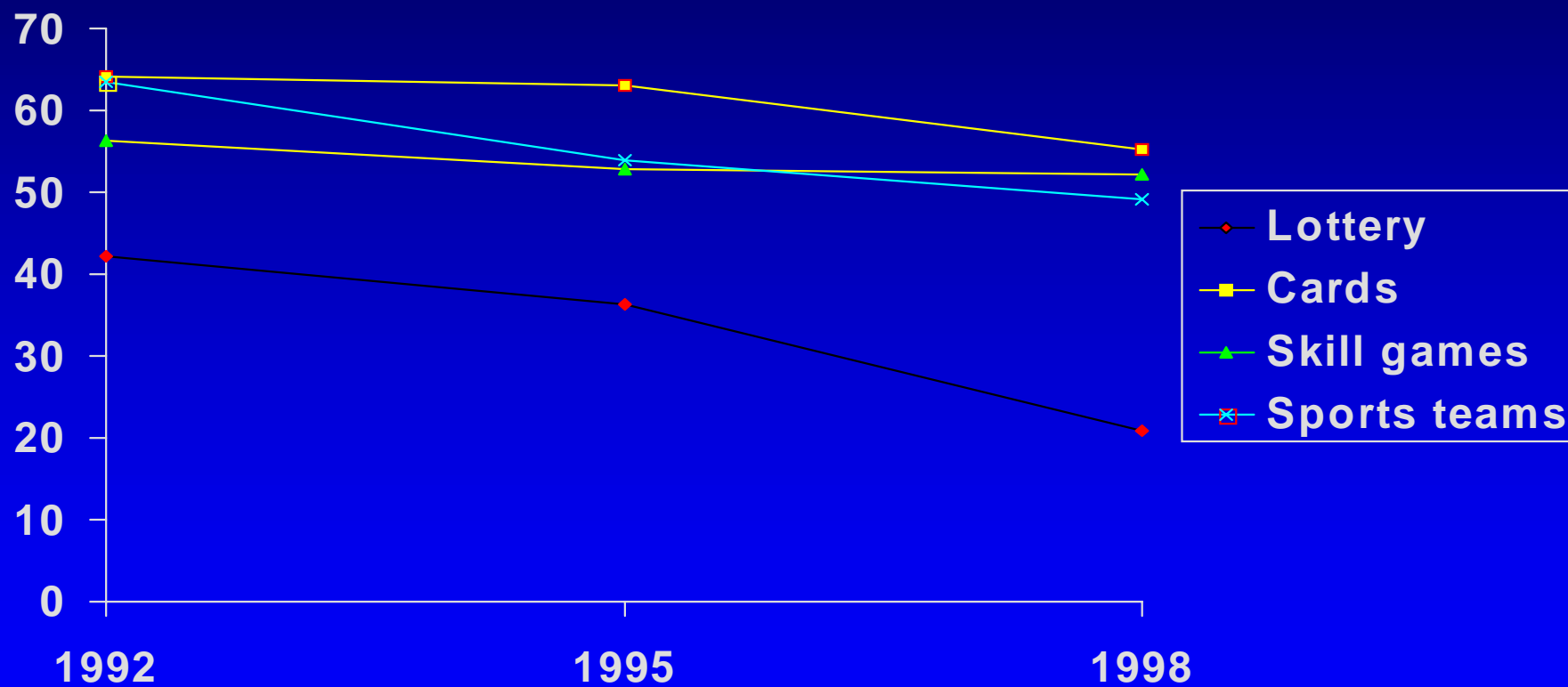


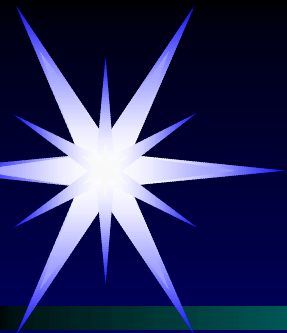
# Is youth gambling increasing?

- Comparison of gambling at all, i.e., any gambling, from 1992 to 1998
- Comparison of frequent gambling, i.e., weekly or daily gambling, from 1992 to 1998

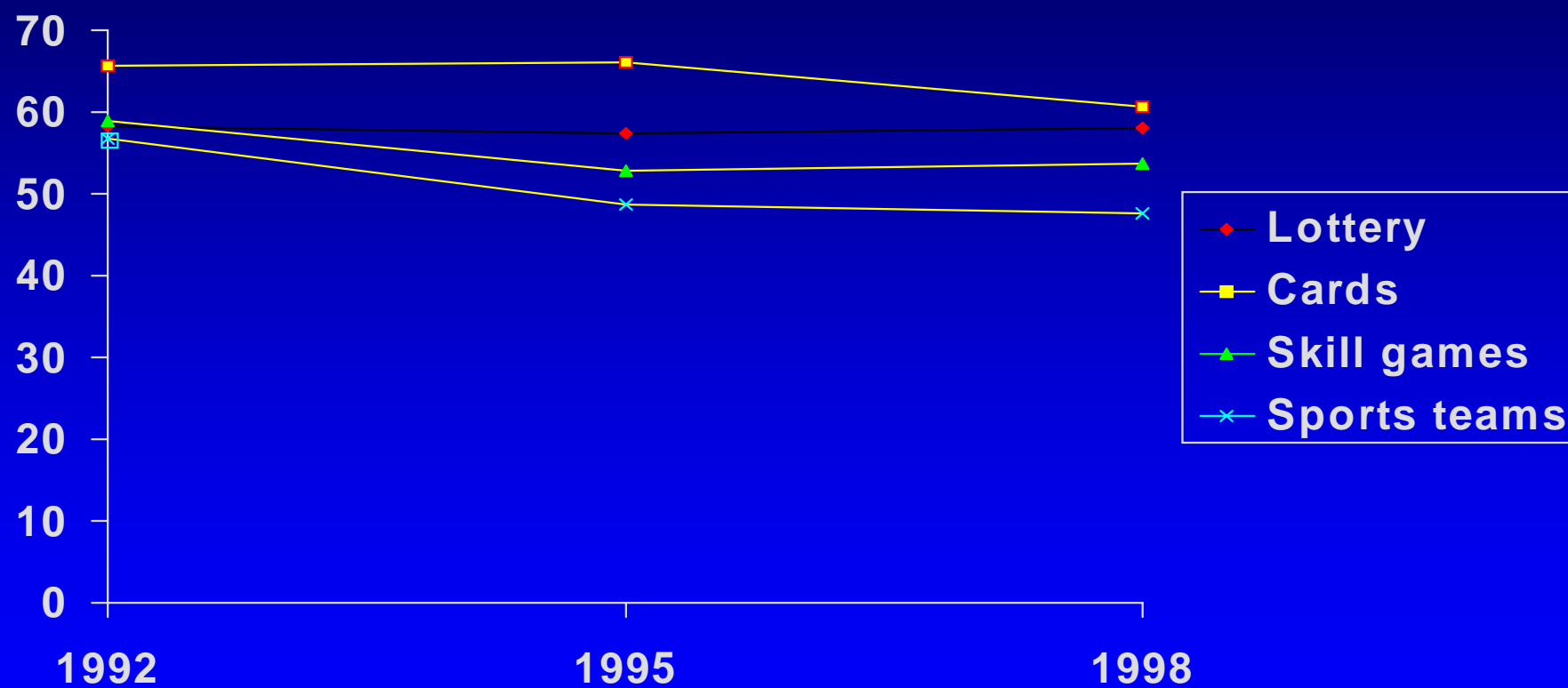


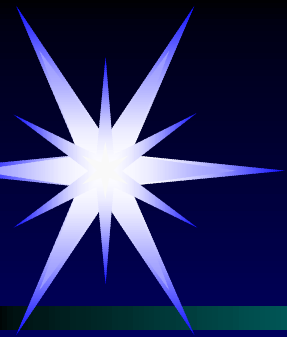
# Gambling at all 9th Grade Boys



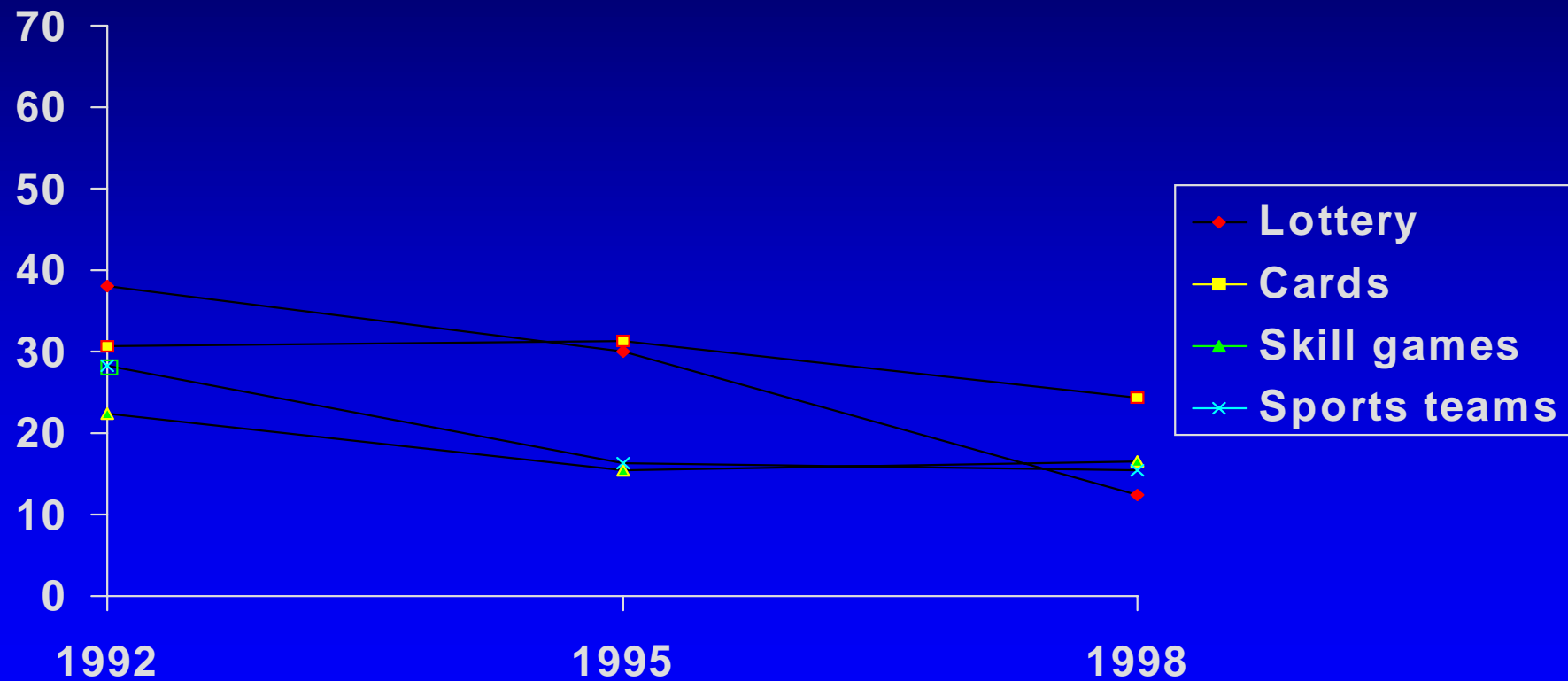


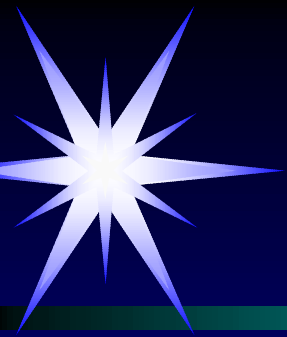
# Gambling at all 12th Grade Boys



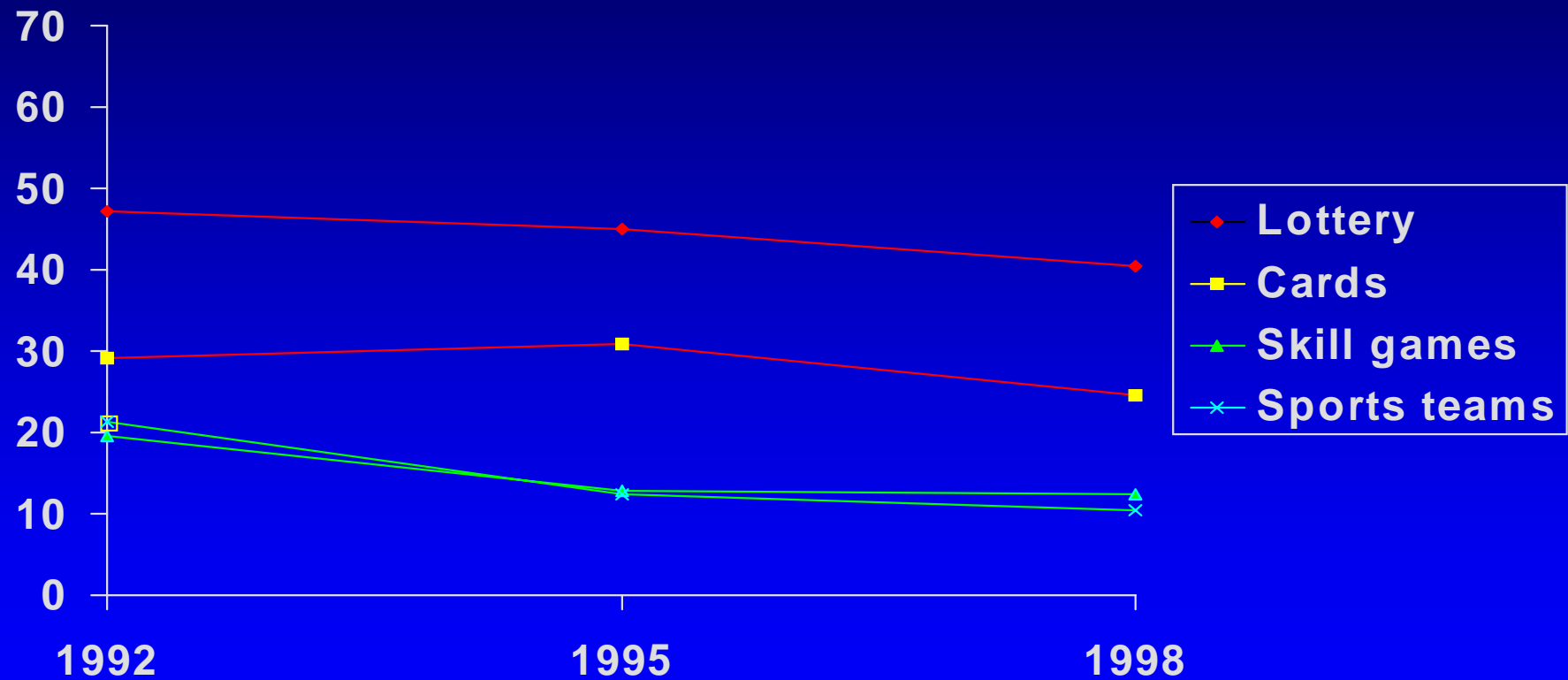


# Gambling at all 9th Grade Girls



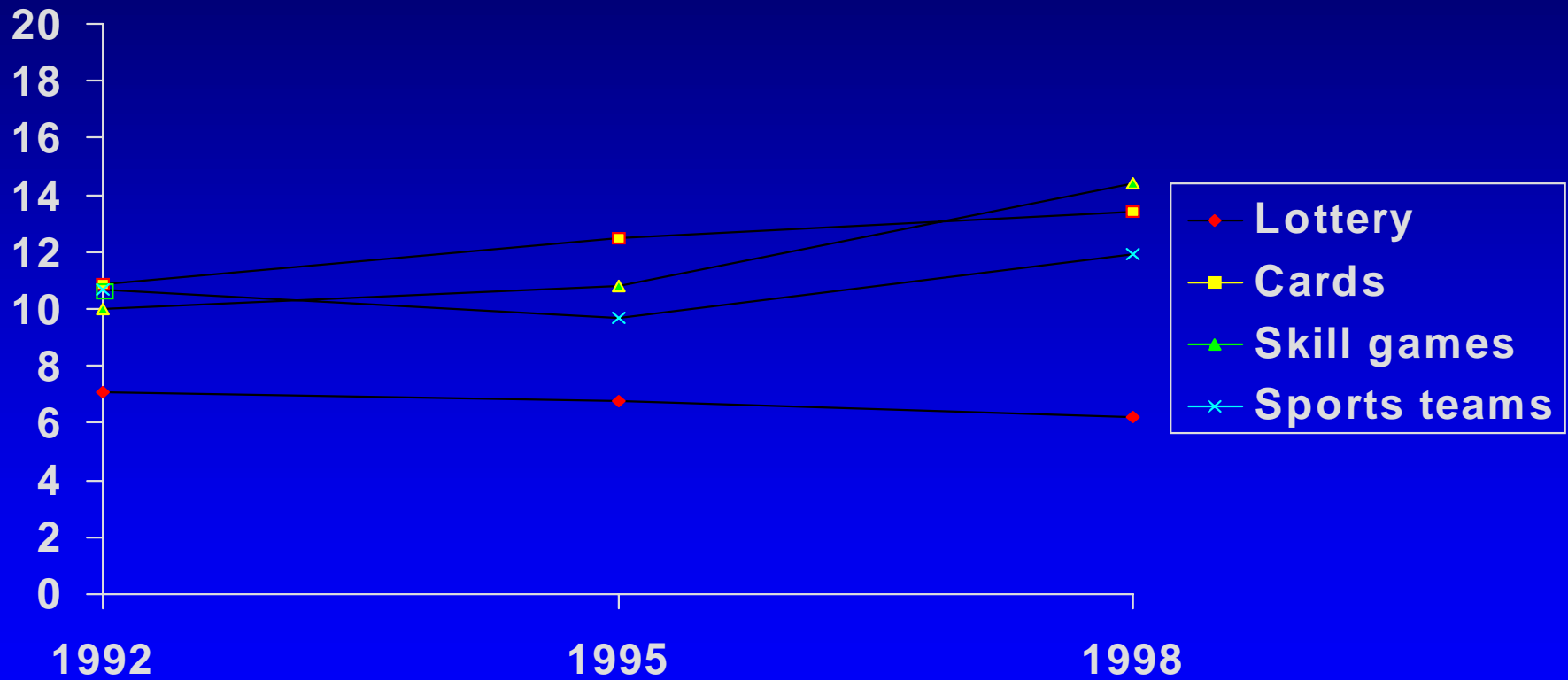


# Gambling at all 12th Grade Girls



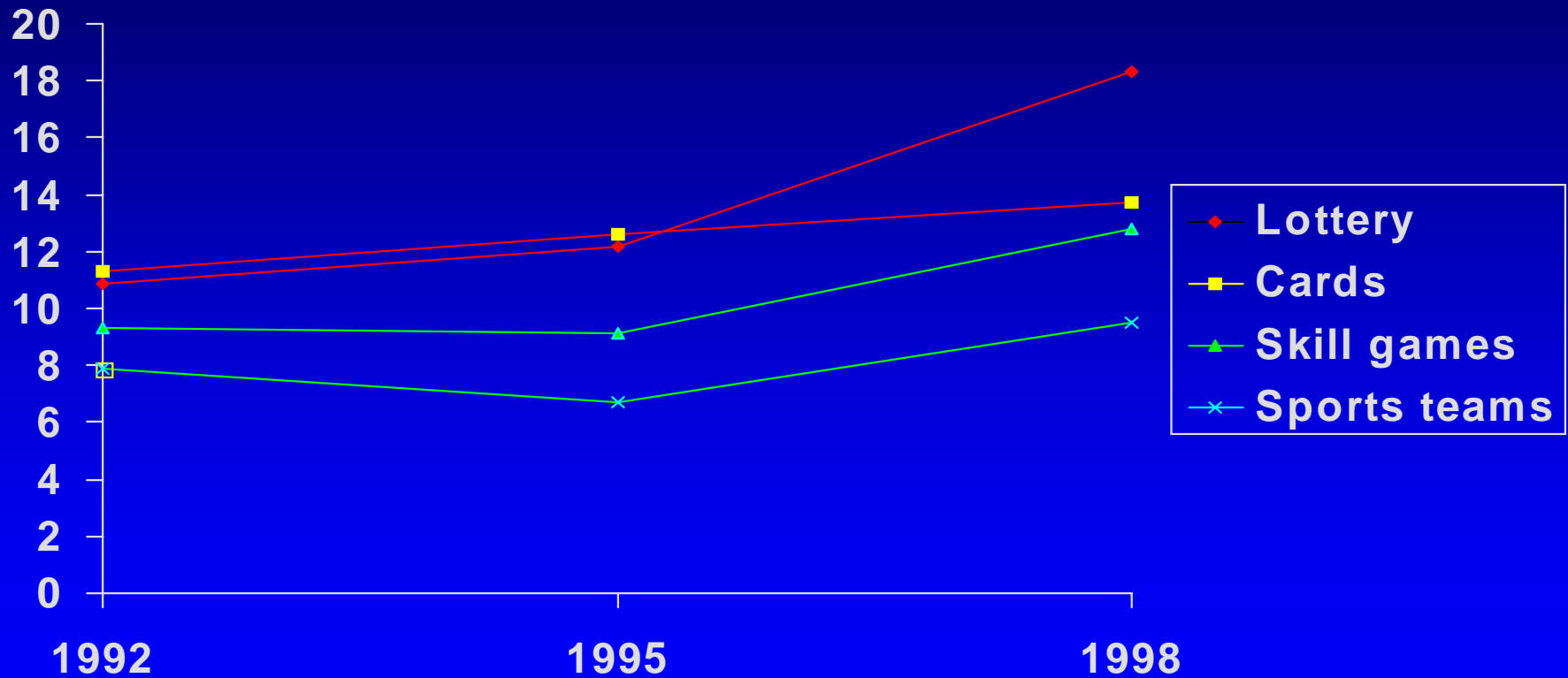


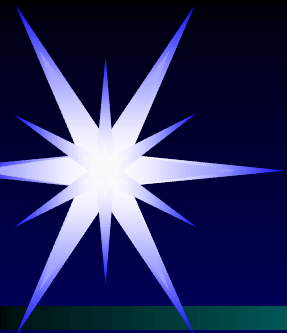
# Weekly/Daily Play 9th Grade Boys



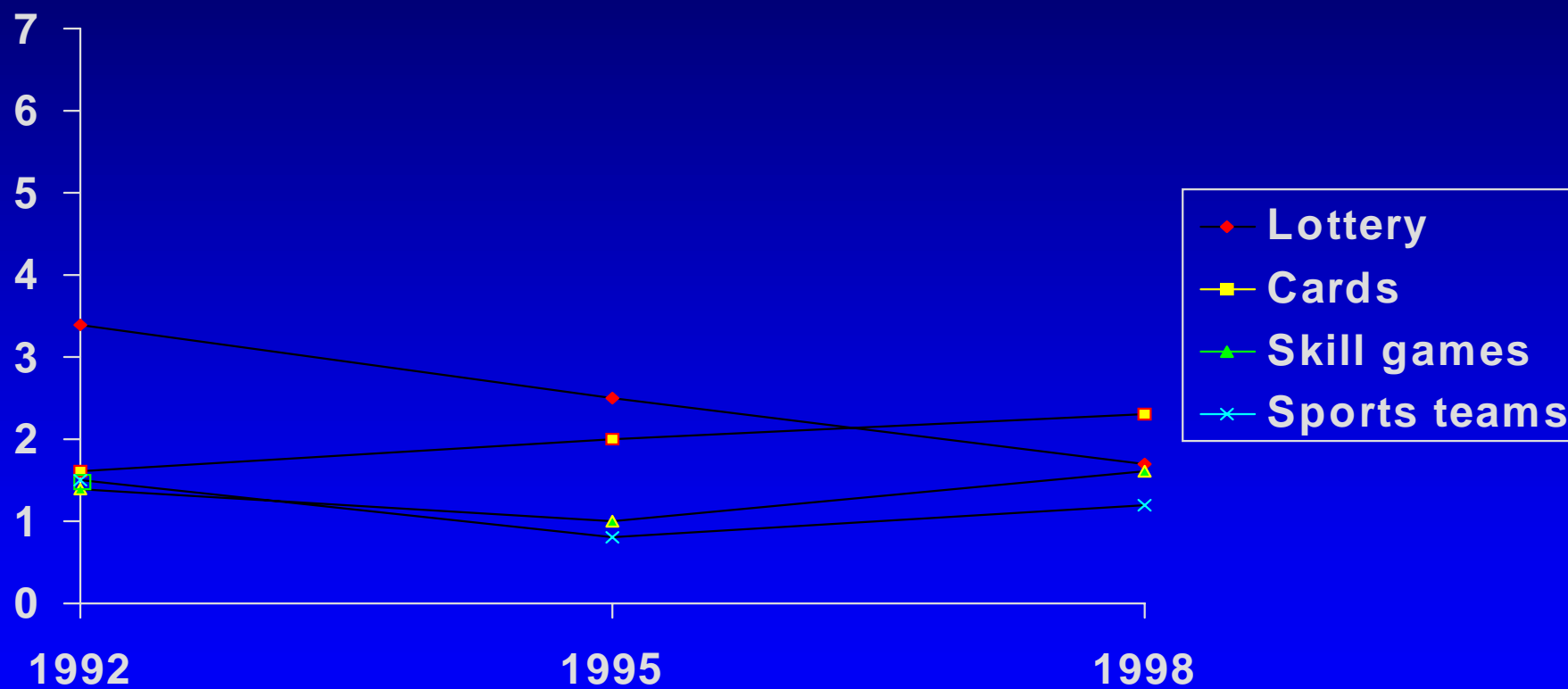


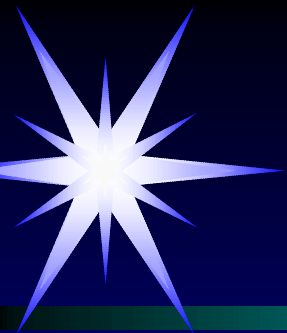
# Weekly/Daily Play 12th Grade Boys



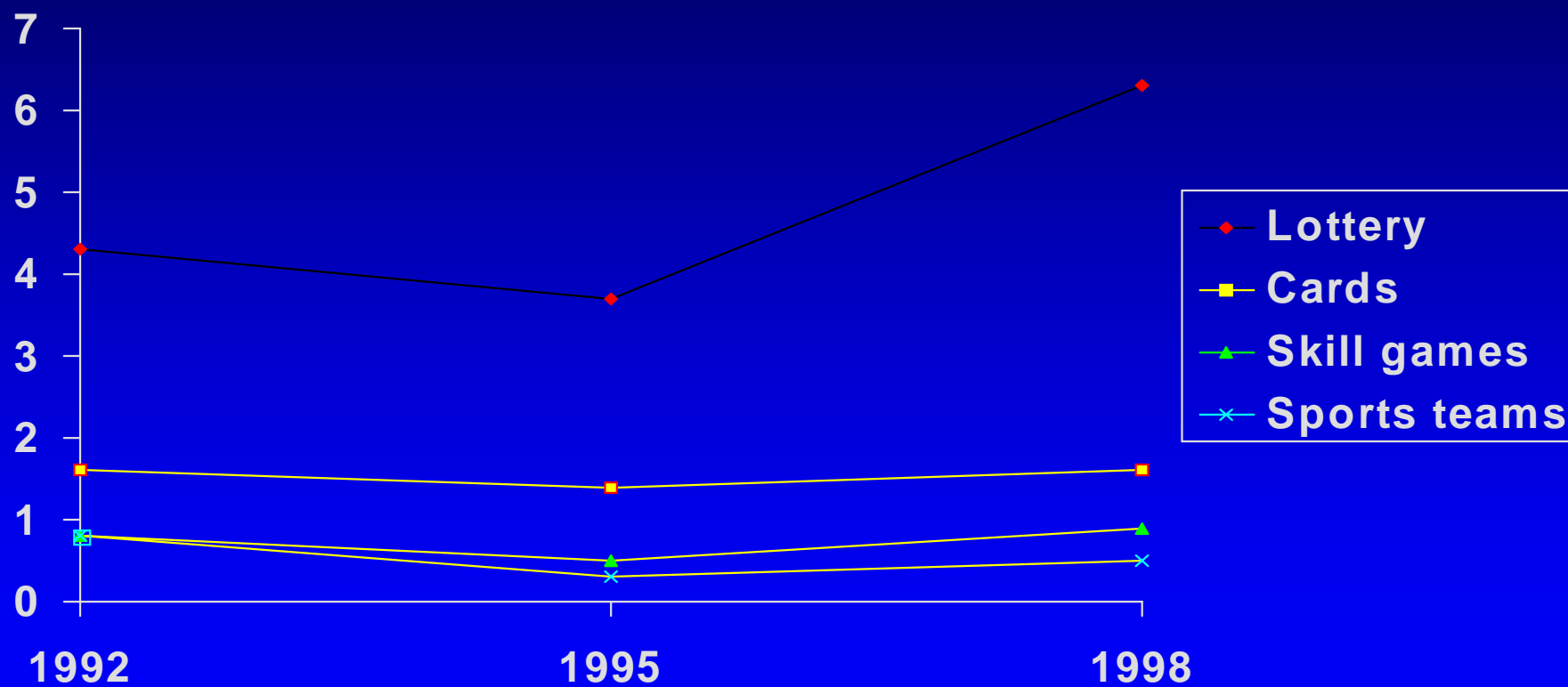


# Weekly/Daily Play 9th Grade Girls



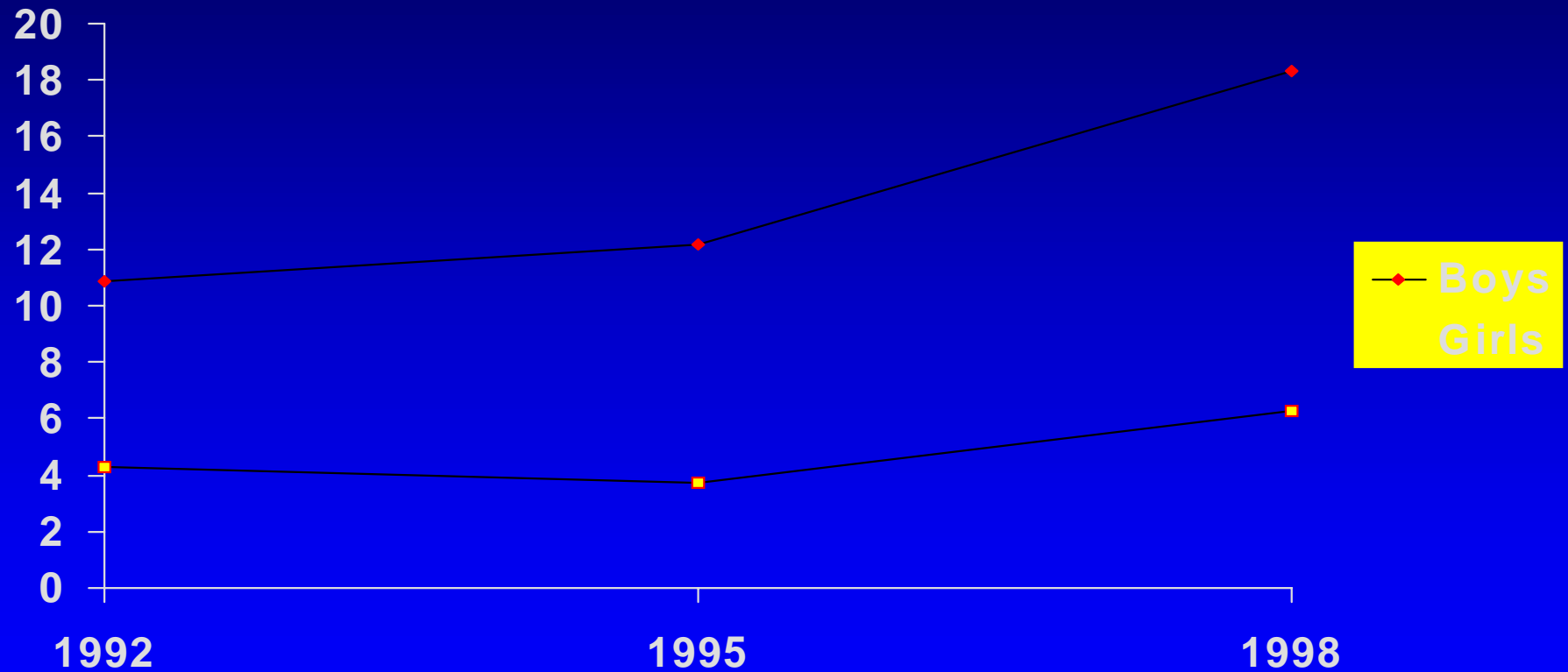


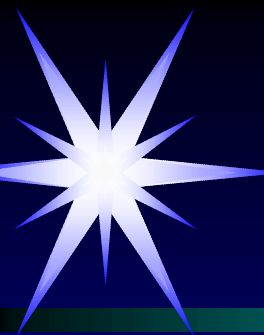
# Weekly/Daily Play 12th Grade Girls





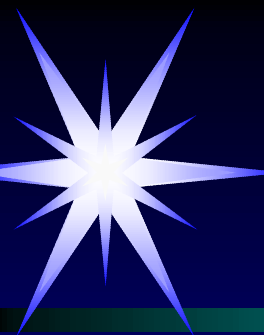
# Weekly/Daily Lottery Play 12th Grade Boys and Girls





## Changes from 1992 to 1998

- The percent of 12th grade boys playing the lottery at a weekly/daily rate increased from 10.9% in 1992 to 18.3% in 1998.
- The percent of 12th grade girls playing the lottery at a weekly/daily rate increased from 4.3% in 1992 to 6.3% in 1998.



## Changes from 1992 to 1998

- Lottery gambling by 9th grade boys declined markedly from 42% in 1992 to 21% in 1998
- Lottery gambling by 9th grade girls declined markedly from 38% in 1992 to 12% in 1998
- Frequent gambling by 12th grade girls increased, particularly for the lottery



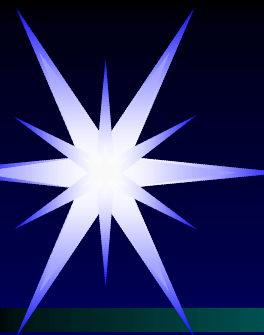
# Underage lottery play among 9th grade students has markedly declined

- The lottery showed the largest decline , of any game, in the number of 9th grade students who played.
- 50% decline among 9th grade boys and a 68% decline among 9th grade girls
- There were also declines in frequent lottery play for 9th grade girls (50% decline) and boys (10% decline)



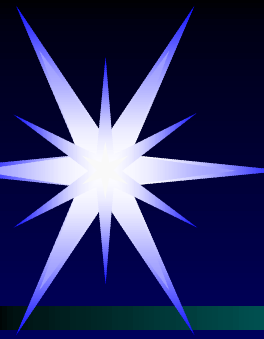
# Frequent lottery play by 12th grade students has shown a marked increase

- 50% increase in frequent lottery play among 12th grade boys from 1995 to 1998 (12.2% to 18.3%)
- 70% increase in frequent lottery play among 12th grade girls from 1995 to 1998 (3.7% to 6.3%)



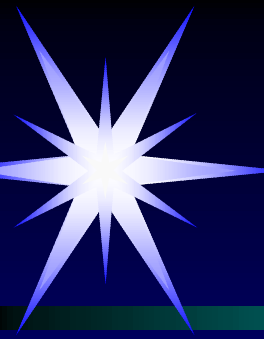
## Two opposite trends

- ❑ This study showed two opposite trends:
- ❑ On the one hand, there was a gradual and consistent decline in the number of students gambling across all three surveys and this decline was most evident for 9th grade students;
- ❑ On the other hand, there was a small but growing number of 12th grade students who gambled frequently.



## Two opposite trends

- These two findings can be used to support either contention that youth gambling is declining or that youth gambling is increasing
- When discussing either increases or decreases in youth gambling, it is important to distinguish whether the topic is gambling at all or frequent gambling



# Why are fewer youth gambling?

- Novelty of gambling may have worn off
- Could be due to public backlash to growth of gambling industry; anti-gambling public sentiment among conservative and religious groups
- Prevention efforts have been effective
- ?



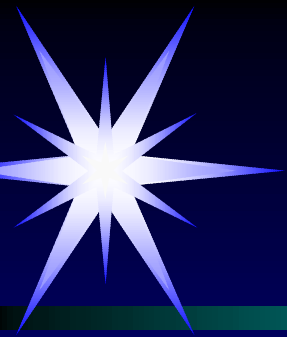
# Why are more youth gambling frequently?

- Legalized gambling may be a new “rite of passage”
- Gambling advertising? Gambling advertisements only show smiling winners being handed giant checks for lavish amounts of money and some youth (and adults?) may naively assume that they will be a winner if they gamble

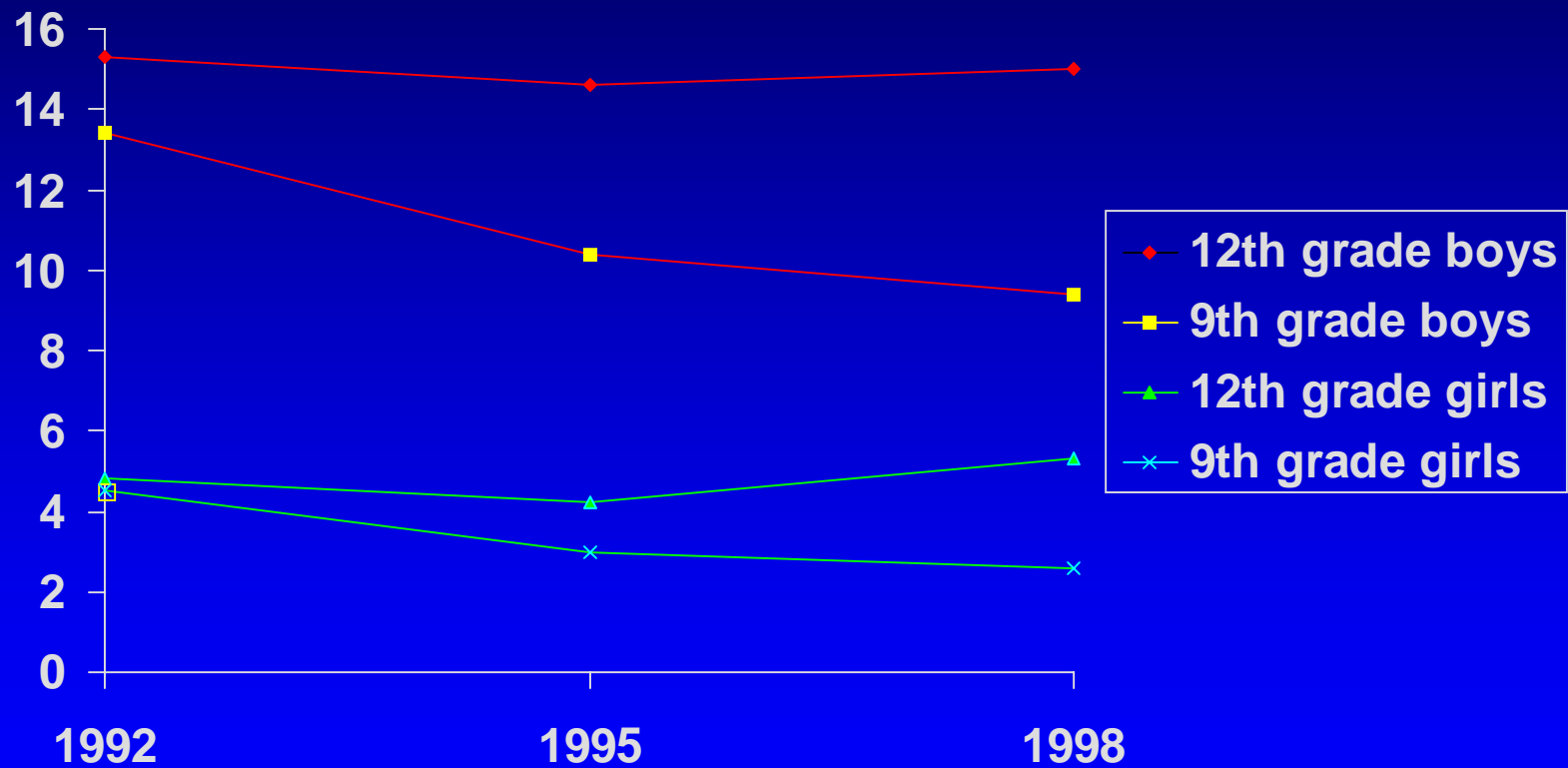


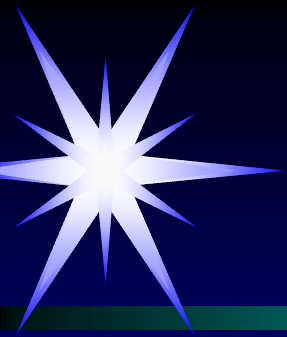
# Why are more youth gambling frequently?

- Behavioral modeling of gambling participation by parents, family members, and friends, and as portrayed in advertising, has now taken effect on youth who have come of age during the past decade of gambling expansion

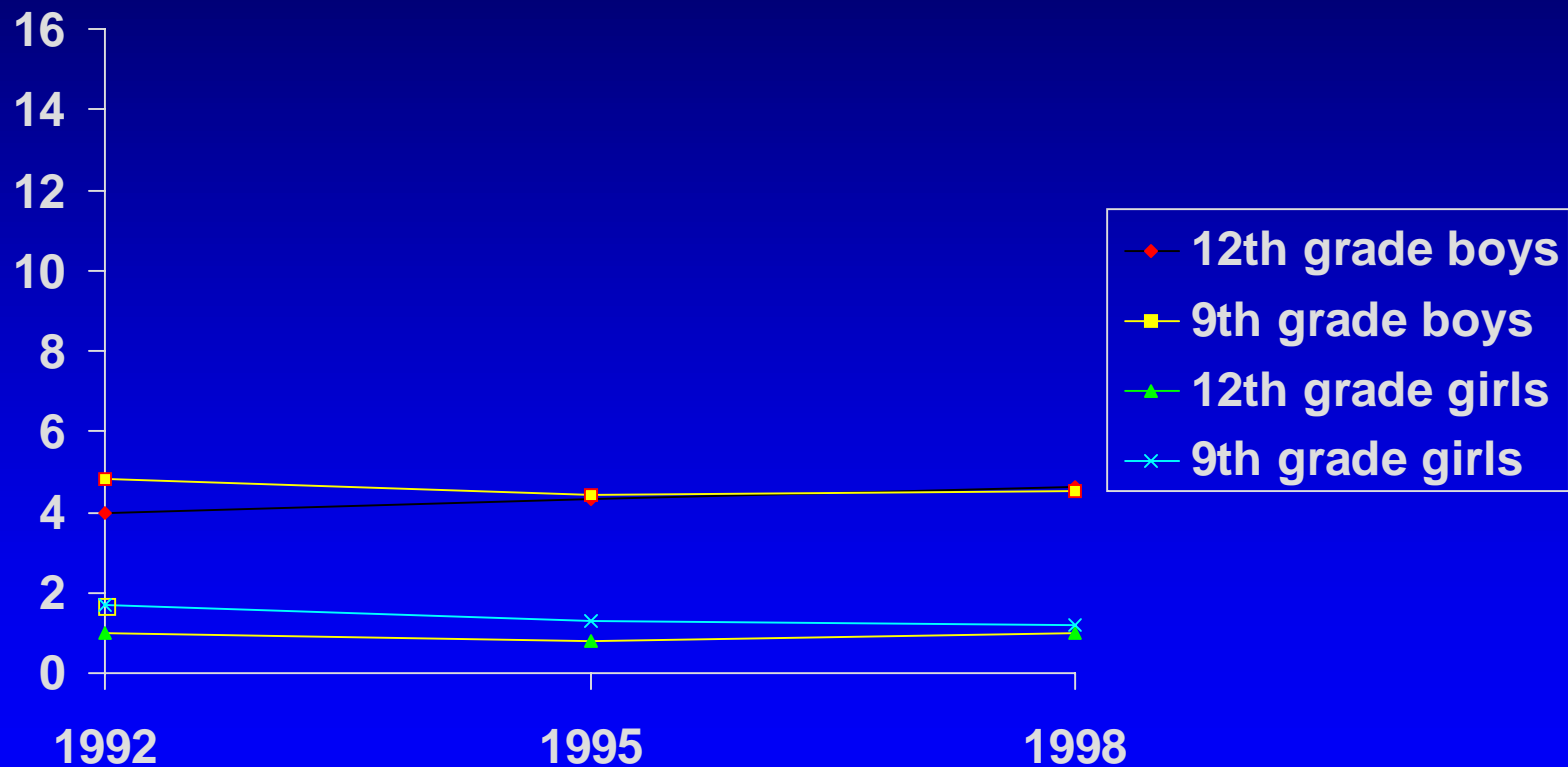


# Felt bad about their gambling





# Would like to stop gambling but didn't think they could





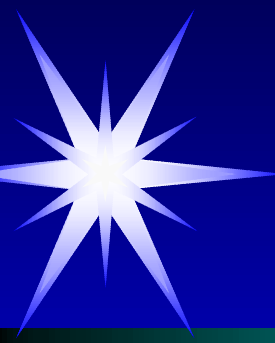
# How do Minnesota youth compare to Minnesota adults?

- In comparing these results to gambling rates of Minnesota adults, fewer youth gamble than adults and young people gamble less frequently than adults (Emerson & Laundergan, 1996; Minnesota State Lottery, 1997).



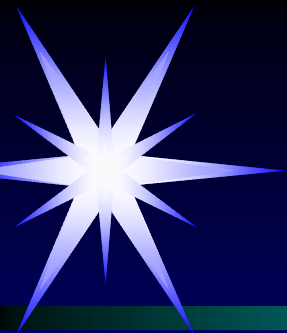
# How do Minnesota youth compare to a recent national youth sample?

- A recent national survey of youth gambling included 534 youth aged 16-17
- Minnesota students had a similar rate of gambling as the national sample (67%)
- More Minnesota students (60% of 12th grade boys and 45% of 12th grade girls) played the lottery than in the national survey (13%)



How do rates of frequent gambling  
compare with other risky behaviors in  
the MSS 1998 survey?

cigarettes  
alcohol and  
marijuana use



Gambling weekly/daily;  
1/2 pack cigarettes or more/day in past 30 days;  
5 or more drinks of alcohol;  
any marijuana use in past 12 months

gambling cigarettes alcohol marijuana

9th 13.7 8.1 14.0 30.3

12th 19.1 15.6 31.0 24.1



# Variables Associated with Gambling Frequency

Step	Variable	Beta In	Mult r	r2
1	ASB	.46	.46	.21
2	Male	.30	.54	.29
3	Felt bad	.22	.58	.34
4	Alcohol	.22	.61	.38
5	Tobacco	.13	.62	.39
6	Age	.11	.63	.40
7	Stop	.10	.64	.41
8	Sex	.11	.65	.42



# Variables Associated with Gambling Frequency

- About 38% of the variance in gambling frequency can be explained by the following four variables:
- Antisocial Behavior
- Being a Male
- Felt Bad About Gambling
- Alcohol Use



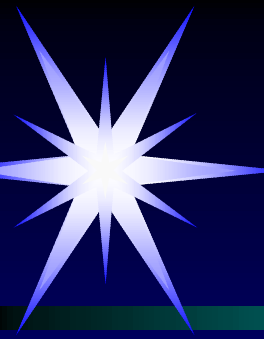
# What are the Gaps in Our Knowledge about Youth Gambling?

- Will youth gambling increase over time?
- Why do youth gamble?
- Will girls “catch up” to boys
- What effect does gambling advertising have on youth?
- Will youth gamble on the internet and will this create new problem gamblers?



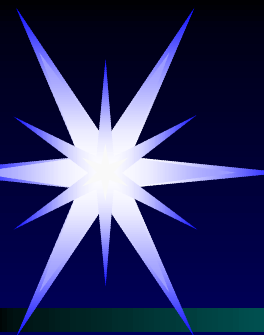
# What are the Gaps in Our Knowledge about Youth Gambling?

- What are the effects of parental gambling on youth, such as neglect, abuse, modeling?
- What prevention message is most appropriate and effective for which youth?
- Should youth be taught to gamble responsibly or taught to avoid gambling?



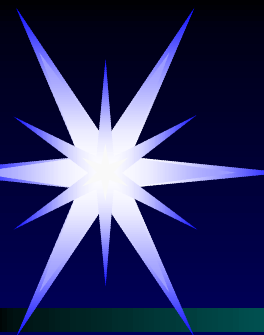
# What we know about youth gambling

- youth gambling occurs on a continuum
- most youth have gambled, but do so infrequently and do not have problems
- boys are more involved in gambling than girls
- youth start gambling at an early age
- older youth gamble more often than younger youth



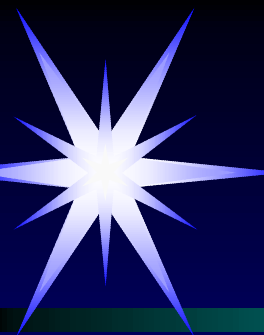
# What we know about youth gambling

- Although many youth gamble, most do so infrequently and do not suffer any adverse consequences.
- There is a small percentage of youth who appear to be over-involved in gambling and show signs of pathological gambling.



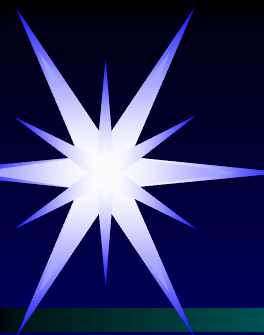
# Recommendations

- Monitor youth gambling behavior for changes in gambling frequency, age of onset, game preferences, gender and age effects, gambling problems, and underage gambling.
- Determine which youth are more likely to become over-involved in gambling and what variables serve as risk and protective factors.



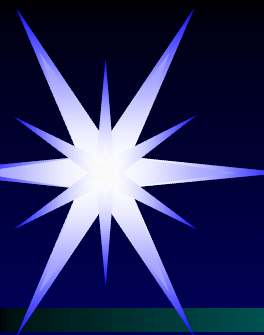
# Recommendations

- Explore underlying causes of the onset of gambling and changes in gambling behavior.
- Little is known about how youth problem gambling begins, what factors maintain problem gambling, particularly how and why youth move from social/recreational gambling to problem gambling



# Recommendations

- Underage gambling needs to be investigated to determine how youth access legalized gambling
- A published study of compliance in Illinois found 49 out of 50 retailers sold a lottery ticket to a 16 year old girl.
- Strategies need to be developed and implemented to prevent youth from accessing legalized gambling



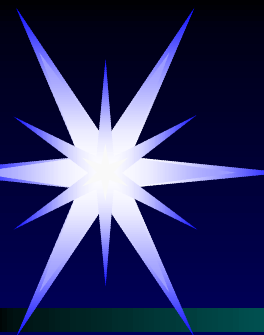
# Recommendations

- Develop and evaluate prevention programs
- Some youth may only need information to assist them in making informed and healthy decisions about gambling
- Some youth who already over-involved in gambling will require more intensive prevention and intervention efforts



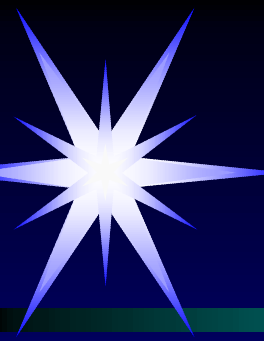
We need more messages like this





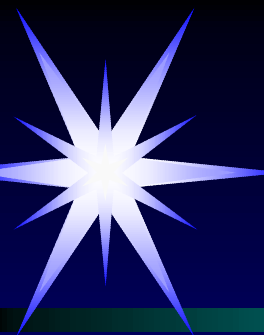
# Recommendations

- Services need to be made available for those youth who have already developed a gambling problem
- These could be adjunct services with existing adult services, including the telephone helpline, assessment, referral and treatment.
- Train school counselors to screen for gambling problems in school setting



# Summary

- This is the first generation of youth to be exposed to such widespread and easy access to a variety of gambling venues, gambling advertising, and a general social approval for an inherently risky activity that was prohibited not long ago.



# Summary

- The goal is that within the context of a growing presence of legalized gambling, youth will have information and resources to assist them in making healthy and informed decisions about their own gambling behavior