



Disordered Girls: Characteristics of Female Youth Problem Gamblers and Substance Abuse



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Disordered Girls: What we know

- Little is known about the gambling habits of female youth problem gamblers:
 - Low prevalence
 - 3:1 or 5:1 ratio boys to girls (Jacobs, 2005)
- In general, they initiate gambling later than males and gambling has a telescoping effect.
- Disordered females more likely to report:
 - Less educated mother, delinquent peers, low SES (Barnes & Welte, 2005)
 - Higher levels of impulsivity (Nower, Derevensky, & Gupta, 2003)

Introduction

This presentation will:

- Investigate the differences between male and female disordered gamblers in nine studies.
- Explore characteristics of female disordered gamblers.
- Discuss the implications of gender differences for identification and treatment.

Reasons For Youth Gambling

- For enjoyment
- To win money
- For excitement
- To be with or make new friends
- To relax
- To escape
- To cope with depression
- To cope with loneliness

Identifying Youth Gamblers

Warning Signs

- Parallels many signs of substance abuse:
 - Skipping school
 - Preoccupation with video arcades, computer internet gambling sites, day trading activities
 - Missing money without adequate explanation

Warning Signs

- Borrowing or stealing money from friends and family
- Preoccupation with sports scores, stock market
- Large, unexplained amounts of cash
- Fake ID, casino entry card, race track receipts etc. among belongings; internet trail

Research on Risk & Resiliency

Impulsivity, Substance Abuse & Stress Coping

Quebec Study

- **Participants:**
1339 participants between 17 and 21 years (637 males, 702 females)
- **Sites:**
Five CEGEPs in Montreal (grades 12, 13, junior college)

Measures

- **Gambling Severity:**
DSM-IV-J (Fisher, 1992)
- **Impulsivity:**
Eysenck Impulsivity Scale, impulsiveness subscale (Eysenck & Eysenck, 1977)
- **Stress Coping:**
COPE (Carver, Scheier, & Weintraub, 1989)
CISS (Endler & Parker, 1990)
- **Substance Abuse:**
PESQ (Winters, 1992)

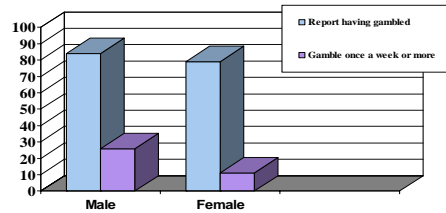
Gambling Categories

Male (637) Female (702)

- | | | |
|-------------------|-----|-----|
| • Non-gambler: | 101 | 150 |
| • Low-risk (0-2): | 462 | 523 |
| • At-risk (3): | 31 | 17 |
| • PPG (4+): | 43 | 12 |

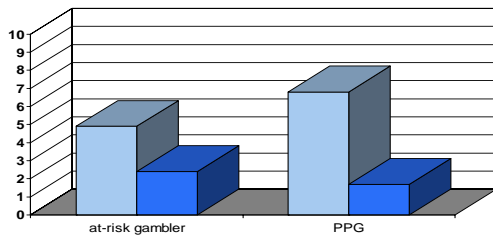
Participation in Gambling

Percentage of youth reporting gambling (N=1339)



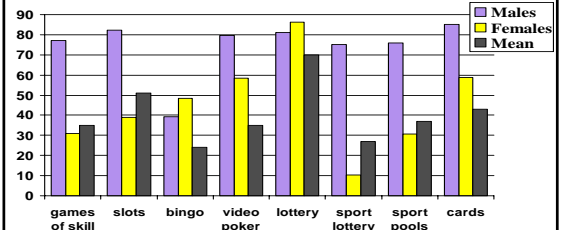
(N=1088)

Disordered Males and Females Ages 17 to 21 (N=105)



(N= 103)

Percentage of disordered youth engaging in gambling activities (N=105)



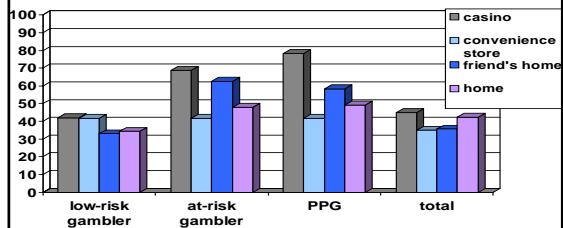
- Alarming trend in the preference of youth for slot and video poker machines, featuring a highly addictive behavioral reinforcement schedule.
- More than 76% of pathological gamblers and 70.8% of at-risk gamblers played video poker -- 52.7% and 20.8% at least weekly.
- 89.1% of pathological gamblers and 72.9% of at-risk gamblers played slots, 54.5% and 27.15 at least weekly.

Five most frequently endorsed DSM-IV items by disordered males/females

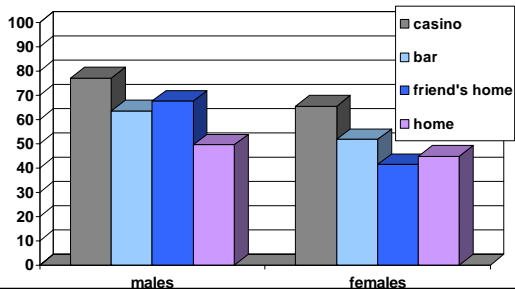
	<u>Ranking</u>	
	Males	Females
Chasing	1	1
Preoccupation	2	2
Tolerance	3	3
Misspending	4	4 (tie)
Lying	5	6
Escape	7	4(tie)

Where Youth Are Gambling

Percentage of youth who report gambling at various locations (N=1088)

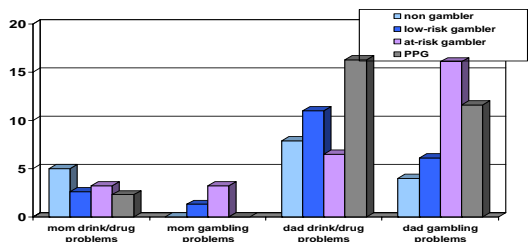


Disordered Youth Gambling at Various Locations (N=105)

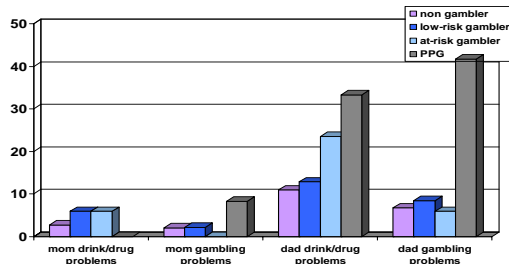


Parental Influences

Parental Influences: Males (N=637)



Parental Influences: Females (N=702)



Parental Influences

- A male who believe his father gambled too much was **3 times** as likely to become a disordered gambler.
- A female who believed her father abused substances was **2 1/2 times** as likely to become a disordered gambler.

Disordered Youth: Parental Influences

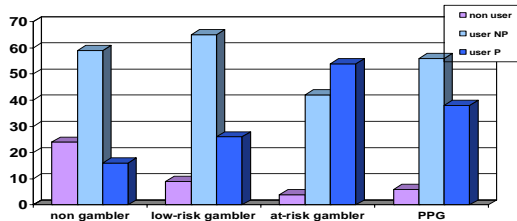
- No differences between male and female disordered gamblers regarding parental addictive history.

Substance Use

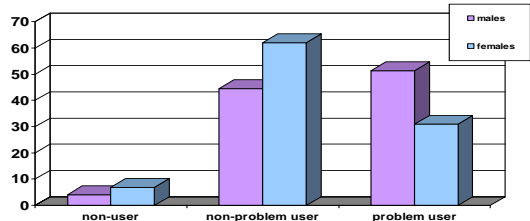
Substance Use

	Total use			Weekly use		
	Male	Female	Total	Male	Female	Total
Alcohol	92.2	93.2	92.7	31.6	21.1	26.1
Marijuana	44.4	45.8	42.3	11.5	6.7	9.0
Hard Drugs	14.1	11.4	12.7	0.6	0.7	0.7
Gambling	84.1	78.6	81.0	25.7	10.8	17.9

Substance Use By Levels of Gambling Involvement (N=1339)

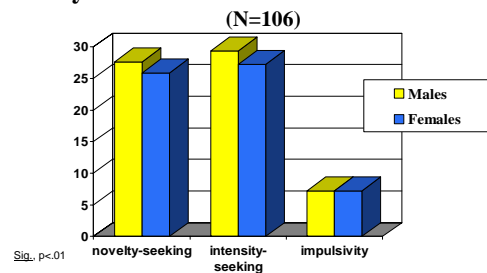


Substance Use Among Disordered Males and Females (N=105)



Impulsivity, Sensation Seeking & Stress Coping

Sensation-Seeking and Impulsivity by Gender in Disordered Gamblers



Disordered Youth: Differences by Gender and Substance Use

- **Problem User vs Non-Problem User:**
Females higher in emotion-focused coping strategies
Males higher in sensation-seeking – both novelty seeking and intensity seeking.

Sig:
P<.001

Predictor Variables

Logistic Regression for Disordered Males and Females

Sig. Predictor Variables

<u>for Females</u>	<u>Odds Ratio</u>
Impulsivity	1.6
Growth	3.6
Behavioral disengagement	2.1
Emotion-focused coping	2.6

Implications

- Identify highly impulsive and intensity-seeking youth.
- Assess preferred coping styles and teach problem-focused coping.
- Address systemic issues: Parents who gamble with their children and model addictive behaviors are likely to foster disorder in their children.
- Identify and address issues of comorbidity.

Five Studies: Gender-Related Screening Differences And Other Factors

Five Studies

- **Participants:**
5313 participants between 12 and 18 years (2750 males, 2563 females)
- **Study Dates:**
Five studies, between 2002 and 2005.
- **Sites:**
Two in Ontario (16 schools)
Three in Quebec (11 schools)

Measures

- **Gambling Severity:**
DSM-IV-MR-J (Fisher, 2000) 12 items, 9 categories
- **Depression:**
Reynolds Adolescent Depression Scale (RADS) Reynolds, 1987) 30 items

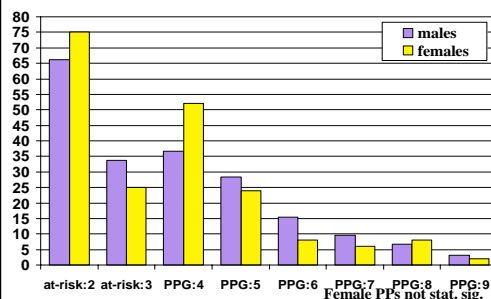
Results: Gambling Severity

- **At-Risk:**
601 (412 males, 189 females)
- **At-Risk Rate:**
7.7% (11.4% males, 4.5% females)
- **PPG:**
289 (226 males, 63 females)
- **PPG Rate:**
3.7% (6.3% males, 1.5% females)

Results: Item Endorsement

- **Male at-risk gamblers endorsed significantly more items than females.**
- **Male PPGs endorsed more items than female PPGs but was non-significant.**
- **Males endorsed more overall items than females.**

DSM-IV-MR-J Items Endorsed by Disordered Males and Females (N=889)



Most Frequently Endorsed Items by At-risk and PPGs by Gender

	Ranking			
	At-Risk		PPG	
	Males	Females	Males	Females
Chasing	5	4	4 (tie)	
Preoccupation			4 (tie)	5
Progression	4	5	3	4
Lying	2	2		3
Stealing	3	3	2	1
Disruptions (arguing)	1	1	1	2

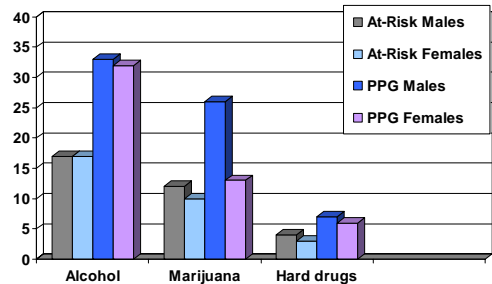
Results: Item Endorsement

- **Disordered males** were more likely to report preoccupation, progression and chasing losses.
- **Disordered females** were more likely to steal, report gambling-related disruptions like arguing with friends and family and missing school.
- **Disordered females** were more likely to gamble for escape.

Results: Substance Abuse

- **At-Risk:**
Females more likely than males to report weekly use of alcohol, less likely to use marijuana or hard drugs.
- **PPGs:**
Females more likely than males to report weekly use of hard drugs, less likely to use alcohol or marijuana
- **Both At-Risk and PPGs:**
Females more likely to be clinically depressed, less likely to have grade point average below 60%.

Percentage of Disordered Males/Females Reporting Substance Use by Gambling



Three Studies: Depression and Suicidality

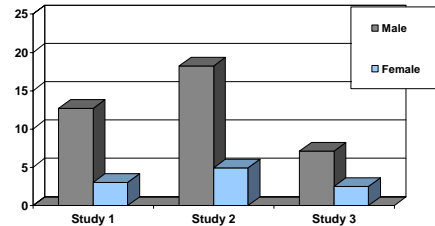
Participants

	Total	Male	Female	Grades	Age	Location
Study 1	817	417	400	7,9,11	12-17	Quebec 1996
Study 2	982	435	547	7-11	10-17	Quebec 2000
Study 3	2,142	1,085	1,057	7-11	11-20	Ontario 2001
Total	3,941	1,937	2,004			

Measures

- **Gambling Severity:**
DSM-IV-J (Fisher, 1992) – Studies 1, 2
DSM-IV-MR-J (Fisher, 2000) – Study 3
Both 9 scored categories
- **Depression:**
Reynolds Adolescent Depression Scale (RADS) Reynolds, 1987) 30 items
- **Suicidal Ideation/Attempts:**
Have you ever thought about attempting suicide?
Have you ever attempted suicide?

Percentage of At-Risk or PPGs by Gender (n= 274)

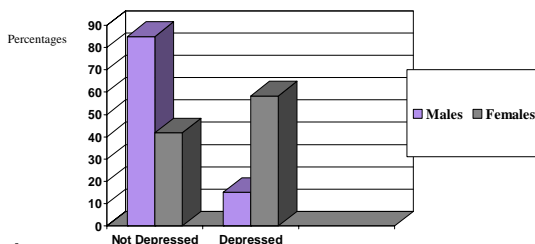


Study 1

Depression

- 13.3% (n=109) met clinical criteria for depression.
- Females (19.0%) were 2 ½ times more likely than males (7.9%) to report clinical depression.
- Older adolescents (grades 9, 11) had significantly higher rates than younger adolescents (grade 7).

Disordered Youth: Depression by Gender (n=65)

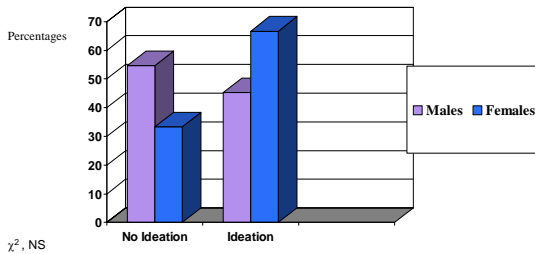


$\chi^2, p < .001$
ANCOVA, gender, depr., grade

Suicidal Ideation

- 29.6% (n=242) reported having considered suicide.
- Females (36.5%) had higher rates of ideation than males (23.0%).
- Older adolescents (grade 11) were more likely than younger adolescents (grade 7) to report ideation.

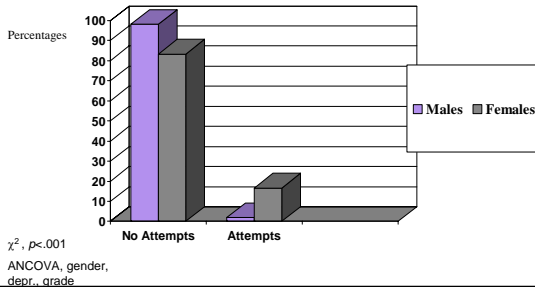
Disordered Youth: Ideation by Gender (n=65)



Suicide Attempts

- 5.4% ($n=44$) had attempted suicide.
- Females (7.8%) were more likely than males (3.1%) to attempt.
- Attempters were more likely to be depressed than non-attempters.
- No significant developmental differences were reported.

Disordered Youth: Attempts by Gender (n=65)

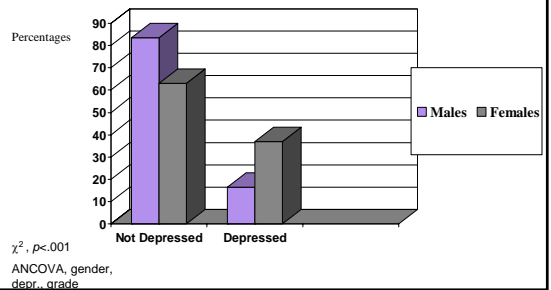


Study 2

Depression

- 17.2% ($n=169$) met clinical criteria for depression.
- Rates of depression among females (22.5%) were more than 2 times the rate among males (10.6%).
- No significant developmental differences were reported.

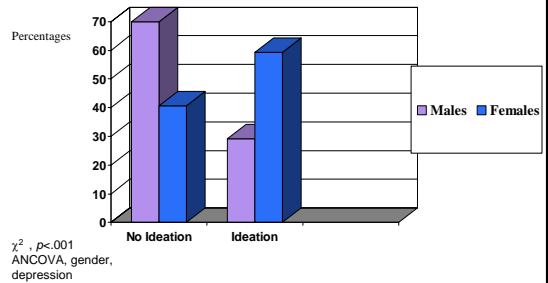
Disordered Youth: Depression by Gender (n=106)



Suicidal Ideation

- 27.5% ($n=270$) reported having considered suicide.
- Females (34.4%) reported nearly twice the ideation of males (18.9%).
- No significant developmental differences were reported.

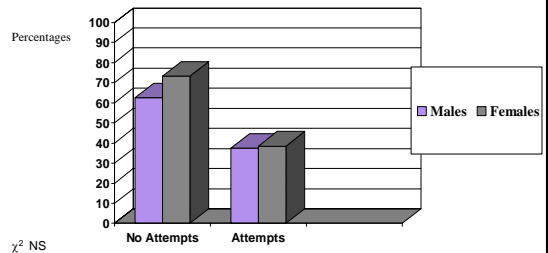
Disordered Youth: Ideation by Gender ($n=106$)



Suicide Attempts

- Only 268 of 982 students responded to the question.
- This variable was excluded for this study.

Disordered Girls: Attempts by Gender ($n=106$)

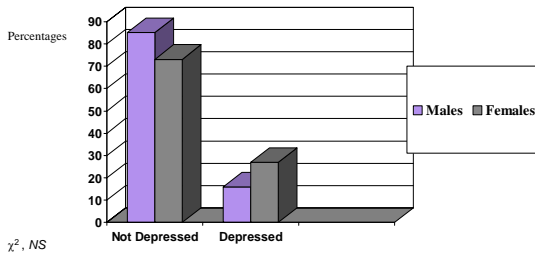


Study 3

Depression

- 15.0% ($n=248$) met clinical criteria for depression.
- Rates of depression among females (19.0%) were 2 ½ times the rates among males (7.9%).
- Older adolescents (grades 9, 11) reported significantly more depression than younger adolescents (grade 7).

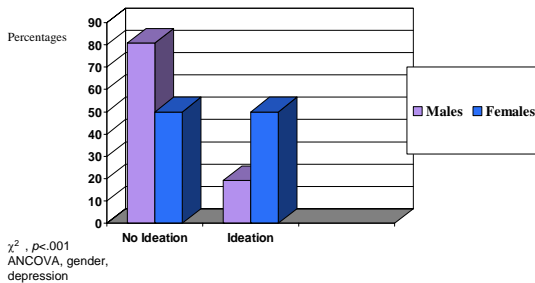
Disordered Youth: Depression by Gender (n=101)



Suicidal Ideation

- 16.3% ($n=350$) reported having considered suicide.
- Females (14.4%) had higher rates than males (11.0%).
- Younger adolescents (grades 7, 8) were more likely than older adolescents to report ideation.

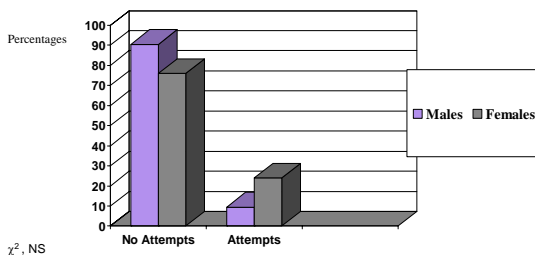
Disordered Youth: Ideation by Gender (n=101)



Suicide Attempts

- 3.2% ($n=69$) reported making a suicide attempt.
- Females (4.1%) were more likely than males (2.4%) to attempt suicide.
- Attempters were more likely to be depressed than non-attempters.
- No significant differences by grade.

Disordered Youth: Attempts by Gender (n=101)



Combined Results

- When studies were combined, suicidal ideation emerged as the major predictor.
- Female disordered gamblers were 3.2 times as likely as males to report suicidal ideation.

Summary

Disordered Girls:

- Report higher levels of depression, impulsivity, and suicidal ideation.
- Are more likely to steal, gamble for escape, report family disruption.
- Have parents with addictive disorders and abuse substances.
- Cope with growth, behavioral dis., emotion.

Prevention and Treatment



Identifying Disordered Girls

- Screen for depression, anxiety, personality factors, substance abuse (e.g. impulsivity, depression, suicidality, substance use/abuse, biological deficits).
- Perform psychosocial assessment. Identify grief, loss issues, parental pathology, abuse or neglect, criminality.
- Assess social support and stress-coping strategies (e.g. behavioral disengagement, emotionality, psychosocial stressors, lack of social support, peer influence).

Treating Disordered Girls

- Cognitive-behavioral therapy.
- Confront denial.
- Address issues of comorbidity (addiction, mental health), impulsivity.
- Use supportive therapy to heal losses and address family issues.
- Address peer support, adverse influences.
- Teach adaptive stress-coping styles and problem-solving strategies.
- Refer for psych eval if appropriate.
- Conduct lethality assessment.

