

The impact of childhood maltreatment on youth gambling problems

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Background

- Adolescent gambling and problem gambling rates have been well established
- Considerable knowledge has been gained concerning the correlates associated with youth problem gambling
- There has been a growing interest in identifying predisposing factors for risk of adolescent problem gambling

Etiology of Problem Gambling

- Blaszczynski and Nower (2002) identified three distinct subgroups of pathological gamblers:
 - Behaviourally conditioned problem gambler
 - Emotionally vulnerable problem gambler
 - Antisocial impulsivist problem gambler
- Emotionally vulnerable problem gambler:
 - Anxiety
 - Depression
 - Poor coping and problem solving
 - Experience negative life experiences
 - Use gambling to modulate affective states

Jacob's General Theory

- Jacob's (1986) General Theory of Addiction

Importance of childhood maltreatment

Maltreatment

- Increased chronic stress
- Maladaptive psychological adjustment
- Increased social adjustment difficulties
- Mental health problems
- Increased risk for addictive problems
(substance abuse disorders)

Childhood Maltreatment

- Physical abuse
- Emotional abuse
- Sexual abuse
- Emotional neglect
- Physical neglect

Current Research

- To determine whether childhood maltreatment is a risk factor in the development of gambling problems
- Investigated role of life experiences (stress, psychiatric symptomatology and resilience) as contributing factors for youth with gambling problems

Participants

- 566 males Mean age = 18.72
- 757 females Mean age = 18.61
- Total 1327 Mean age = 18.66

Instruments

- **DSM-IV Criteria for Pathological Gambling - (APA, 2000)**
- **Gambling Activities Questionnaire (GAQ) - (Gupta & Derevensky, 1996)**
- **The Adolescent Diagnostic Interview - Light (ADI-L) - (Winters & Henly, 1993; Winters, Stinchfield, Fulkerson, & Henly, 1993)**
- **Childhood Trauma Questionnaire (CTQ) - (Bernstein & Fink, 1998)**
- **Perceived Stress Scale (PSS) - (Cohen, Kamarck, & Mermelstein, 1983)**
- **Brief Symptom Inventory (BSI) - (Derogatis, 1993)**
- **The Personal Style Inventory (PSI) - (Sheridan, 2003)**

Table 1 *Gambling Severity by Gender*

Sample	Gambling Group						
				Non-gambler (n=285)	Social-gambler ¹ (n=955)	At-Risk gambler ² (n=55)	Pathological gambler ³ (n=28)
	N	Mean age	SD	%	%	%	%
Gender							
Male	566	18.72	1.49	18.4	70.5	7.1	4.1
Female	757	18.61	1.53	23.9	73.4	2.0	0.7
TOTAL	1327	18.66	1.51	21.5	72.2	4.2	2.1

¹ DSM-IV score (0-2). ² DSM-IV score (3-4). ³ DSM score (≥ 5). 4 participants did not complete the GAQ or DSM-IV.

**Table 2 *Involvement in Gambling Activities:
Gender Differences***

Activities	Gambling Involvement ^a				
	Occasional ¹		Regular ²		
	Male	Female	Male	Female	
Cards**	37.7	28.7	7.7	2.9	
Scratch tickets*	41.7	46.9	1.9	3.0	
Lottery draws	30.3	31.2	3.7	2.0	
Sports lottery**	19.5	3.3	4.3	0	
Sports pools**	28.1	7.0	3.7	0.1	
Bingo**	9.9	18.9	0.5	0.8	
Casino	32.6	25.5	2.5	0.1	
VLT machines**	27.5	18.7	2.5	0.3	
Internet*	2.8	2.6	0.9	0	
Stock Market**	10.4	3.2	2.3	0.3	
Racetrack**	4.0	1.1	0.9	0.1	
Other	11.3	2.1	2.3	0.4	

^a Percentage. ¹ Refers to gambling less than once a week. ² Refers to gambling once a week or more
* $p < .05$. ** $p < .001$.

Table 3a Severity of Childhood Maltreatment by Gender^a

CTQ Subscales ¹	Degree of Maltreatment (MT) ²				
	None or minimal	Low-moderate	Moderate-severe	Severe-extreme	Total MT Endorsement
<i>Emotional Abuse</i> *					
Male	68.6	20.7	5.6	5.1	31.4
Female	61.0	25.0	7.5	6.5	39.0
Total	64.3	23.1	6.7	5.9	35.7
<i>Physical Abuse</i>					
Male	79.0	10.8	4.9	5.3	21.0
Female	82.2	7.9	4.5	5.4	17.8
Total	80.8	9.1	4.7	5.4	19.2
<i>Sexual Abuse</i>					
Male	89.4	4.9	4.2	1.4	10.5
Female	85.4	4.6	5.8	4.1	14.5
Total	87.2	4.8	5.1	2.9	12.8

^a Percentage. ¹ CTQ = Childhood Trauma Questionnaire. ² Severity of maltreatment based on standardized cut scores. * $p < .05$.

Table 3b Severity of Childhood Maltreatment by Gender^a

CTQ Subscales ¹	Degree of Maltreatment (MT) ²				
	None or minimal	Low-moderate	Moderate-severe	Severe-extreme	Total MT Endorsement
<i>Emotional Neglect*</i>					
Male	56.3	29.4	8.7	5.6	43.7
Female	64.5	26.0	5.4	4.1	35.5
Total	61.0	27.4	6.8	4.8	39.0
<i>Physical Neglect</i>					
Male	66.1	19.8	9.2	4.9	33.9
Female	75.7	14.1	6.5	3.7	24.3
Total	71.6	16.6	7.6	4.2	28.4

^a Percentage. ¹ CTQ = Childhood Trauma Questionnaire. ² Severity of maltreatment based on standardized cut scores. * $p < .05$.

Table 4a Severity of Childhood Maltreatment by Gambling Severity^a

CTQ subscale ¹	Degree of Maltreatment ²				
	None or minimal	Low-moderate	Moderate-severe	Severe-extreme	Total MT Endorsement
<i>Emotional Abuse</i> **					
Non gambler	62.5	21.2	8.1	8.1	37.4
Social gambler	66.8	22.6	5.9	4.7	33.2
At-risk gambler	38.2	36.4	14.5	10.9	61.8
Pathological gambler	53.6	25.0	7.1	14.3	46.4 N = 1320
<i>Physical Abuse</i> **					
Non gambler	84.8	6.0	3.9	5.3	15.2
Social gambler	81.9	8.7	4.8	4.6	18.1
At-risk gambler	50.9	29.1	7.3	12.7	49.1
Pathological gambler	67.9	10.7	3.6	17.9	32.2 N = 1320
<i>Sexual Abuse</i> **					
Non gambler	84.8	4.2	6.4	4.6	15.2
Social gambler	89.0	4.7	4.1	2.2	11.0
At-risk gambler	72.7	7.3	14.5	5.5	27.3
Pathological gambler	75.0	7.1	10.7	7.1	24.9 N = 1319

^a Percentage ¹ CTQ = Childhood Trauma Questionnaire. ² Severity of maltreatment based on standardized cut scores. **p* < .05. ***p* < .001.

Table 4b Severity of Childhood Maltreatment by Gambling Severity^a

CTQ subscale ¹	Degree of Maltreatment ²				
	None or minimal	Low-moderate	Moderate-severe	Severe-extreme	Total MT Endorsement
<i>Emotional Neglect**</i>					
Non gambler	61.5	24.4	8.5	5.7	38.6
Social gambler	62.6	27.7	5.8	3.9	37.4
At-risk gambler	43.6	34.5	9.1	12.7	56.3
Pathological gambler	32.1	35.7	21.4	10.7	67.8 N = 1316
<i>Physical Neglect**</i>					
Non gambler	74.9	14.1	6.4	4.6	25.1
Social gambler	72.0	16.8	7.7	3.6	28.1
At-risk gambler	63.6	18.2	12.7	5.5	36.4
Pathological gambler	33.3	33.3	11.1	22.2	66.6 N = 1325

^a Percentage ¹ CTQ = Childhood Trauma Questionnaire. ² Severity of maltreatment based on standardized cut scores. **p* < .05. ***p* < .001.

Figure 1: Moderate to extreme maltreatment by gambling severity

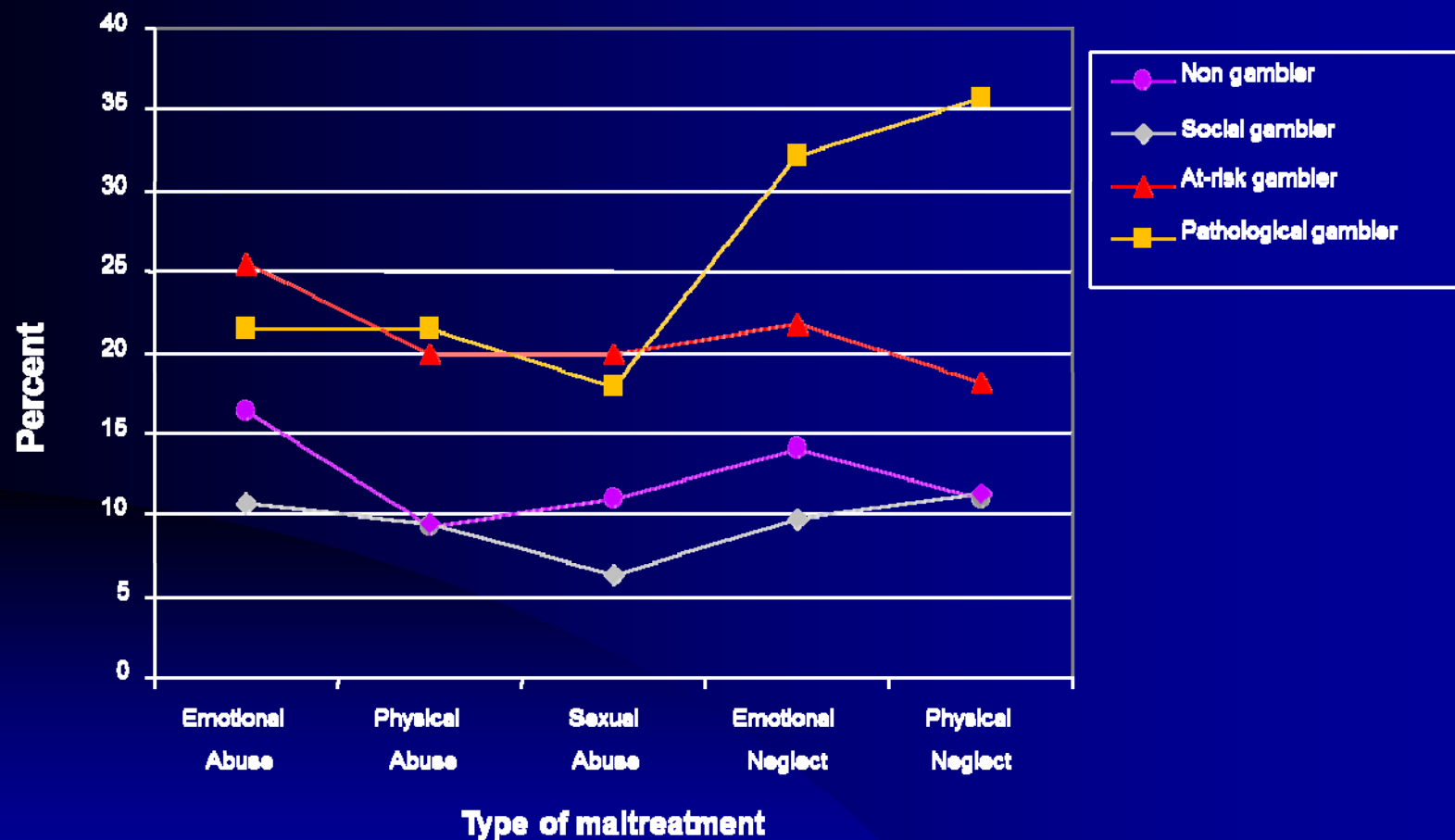


Table 5a Childhood Maltreatment by Gender and Gambling Severity

CTQ subscales ^a	Gambling Group						
		Non Gambler		Social Gambler ¹		Problem Gambler ²	
	N	M	SD	M	SD	M	SD
<i>Emotional Abuse**</i>							
Male	564	8.24	3.77	7.66	3.12	9.89	4.98
Female	753	8.75	4.24	8.37	3.74	10.10	3.11
Total	1317	8.57	4.08	8.07	3.51	9.94	4.59
<i>Physical Abuse**</i>							
Male	565	6.33	2.14	6.45	2.63	7.95	4.38
Female	754	6.54	3.36	6.31	2.63	9.00	4.61
Total	1318	6.47	2.97	6.37	2.63	8.20	4.43
<i>Sexual Abuse*</i>							
Male	565	5.35	1.52	5.27	1.16	6.54	3.88
Female	753	6.31	3.65	5.73	2.66	6.30	2.58
Total	1317	5.96	3.08	5.54	2.18	6.48	3.59

^a CTQ = Childhood Trauma Questionnaire. ¹ DSM-IV score (0-2). ² Combined at-risk and probable pathological gambling group (DSM-IV score ≥ 3). * $p < .05$. ** $p < .001$.

Table 5b Childhood Maltreatment by Gender and Gambling Severity

CTQ subscales ^a	Gambling Group						
		Non Gambler		Social Gambler ¹		Problem Gambler ²	
	N	M	SD	M	SD	M	SD
<i>Emotional Neglect**</i>							
Male	565	9.88	4.04	9.49	4.09	11.51	5.33
Female	753	8.93	4.46	8.73	3.94	11.00	4.38
Total	1317	9.27	4.33	9.05	4.02	11.39	5.10
<i>Physical Neglect**</i>							
Male	565	6.95	2.41	6.83	2.40	8.51	4.06
Female	755	6.43	2.45	6.53	2.35	7.55	2.37
Total	1329	6.62	2.45	6.65	2.38	8.28	3.74

^a CTQ = Childhood Trauma Questionnaire. ¹ DSM-IV score (0-2). ² Combined at-risk and probable pathological gambling group (DSM-IV score ≥ 3). * $p < .05$. ** $p < .001$.

Table 6a Severity of Childhood Maltreatment by Substance Group^a

CTQ subscale ¹	Degree of Maltreatment ²				
	None/ minimal	Low- moderate	Moderate- severe	Severe- extreme	Total MT Endorsement
<i>Emotional Abuse*</i>					
No substance problems	68.2	20.9	6.2	4.7	31.8
Substance abuse	61.9	23.4	6.5	8.3	38.2
Substance dependence	55.2	28.8	9.2	6.8	44.8 N = 1308
<i>Physical Abuse*</i>					
No substance problems	84.7	7.4	3.6	4.2	15.2
Substance abuse	76.6	12.2	5.0	6.1	23.3
Substance dependence	74.4	10.8	6.8	8.0	25.6 N = 1308
<i>Sexual Abuse</i>					
No substance problems	89.0	4.6	4.5	1.9	11.0
Substance abuse	86.3	4.0	6.1	3.6	13.7
Substance dependence	83.6	6.0	5.6	4.8	16.4 N = 1304

^a Percentage. ¹ CTQ = Childhood Trauma Questionnaire. ²Severity of maltreatment based on standardized cut scores. * $p < .05$. ** $p < .001$.

Table 6b Severity of Childhood Maltreatment by Substance Group^a

CTQ subscale ¹	Degree of Maltreatment ²				
	None/ minimal	Low- moderate	Moderate- severe	Severe- extreme	Total MT Endorsement
<i>Emotional Neglect</i> **					
No substance problems	66.3	24.2	5.5	4.0	33.7
Substance abuse	55.8	30.2	7.9	6.1	44.2
Substance dependence	51.8	33.3	9.6	5.2	48.1 N = 1304
<i>Physical Neglect</i> *					
No substance problems	74.7	15.9	5.9	3.5	25.3
Substance abuse	69.8	14.7	9.4	6.1	30.2
Substance dependence	64.4	21.1	10.0	4.4	35.5 N = 1308

^a Percentage. ¹ CTQ = Childhood Trauma Questionnaire. ²Severity of maltreatment based on standardized cut scores. * $p < .05$. ** $p < .001$.

Table 7a Childhood Maltreatment by Gender and Substance Group

CTQ subscales ¹	Substance Groups						
		No Substance Use Problems		Substance Abuse		Substance Dependence	
	N	M	SD	M	SD	M	SD
<i>Emotional Abuse**</i>							
Male	559	7.65	3.18	8.23	4.14	8.55	3.60
Female	746	8.07	3.68	9.08	4.11	9.80	3.93
Total	1305	7.92	3.52	8.65	4.14	9.07	3.78
<i>Physical Abuse**</i>							
Male	560	6.21	2.15	6.66	2.89	7.28	3.69
Female	747	6.21	2.65	6.83	3.19	6.78	3.24
Total	1307	6.21	2.49	6.74	3.04	7.08	3.52
<i>Sexual Abuse*</i>							
Male	560	5.34	1.43	5.32	1.35	5.69	2.58
Female	747	5.60	2.30	6.34	3.66	6.39	3.79
Total	1307	5.51	2.04	5.83	2.79	5.98	3.14

¹ CTQ = Childhood Trauma Questionnaire. **p* < .05. ***p* < .001.

Table 7b Childhood Maltreatment by Gender and Substance Group

CTQ subscales ¹	Substance Groups						
		No Substance Use Problems		Substance Abuse		Substance Dependence	
	N	M	SD	M	SD	M	SD
<i>Emotional Neglect**</i>							
Male	560	9.49	4.23	9.80	4.41	10.30	4.24
Female	746	8.44	3.92	9.41	4.22	9.82	4.37
Total	1306	8.81	4.07	9.61	4.31	10.10	4.29
<i>Physical Neglect*</i>							
Male	560	6.80	2.32	6.90	2.79	7.57	3.09
Female	748	6.36	2.24	6.97	2.72	6.59	2.27
Total	1308	6.51	2.28	6.93	2.75	7.16	2.82

¹ CTQ = Childhood Trauma Questionnaire. * $p < .05$. ** $p < .001$.

Figure 2: Moderate to extreme maltreatment by substance group

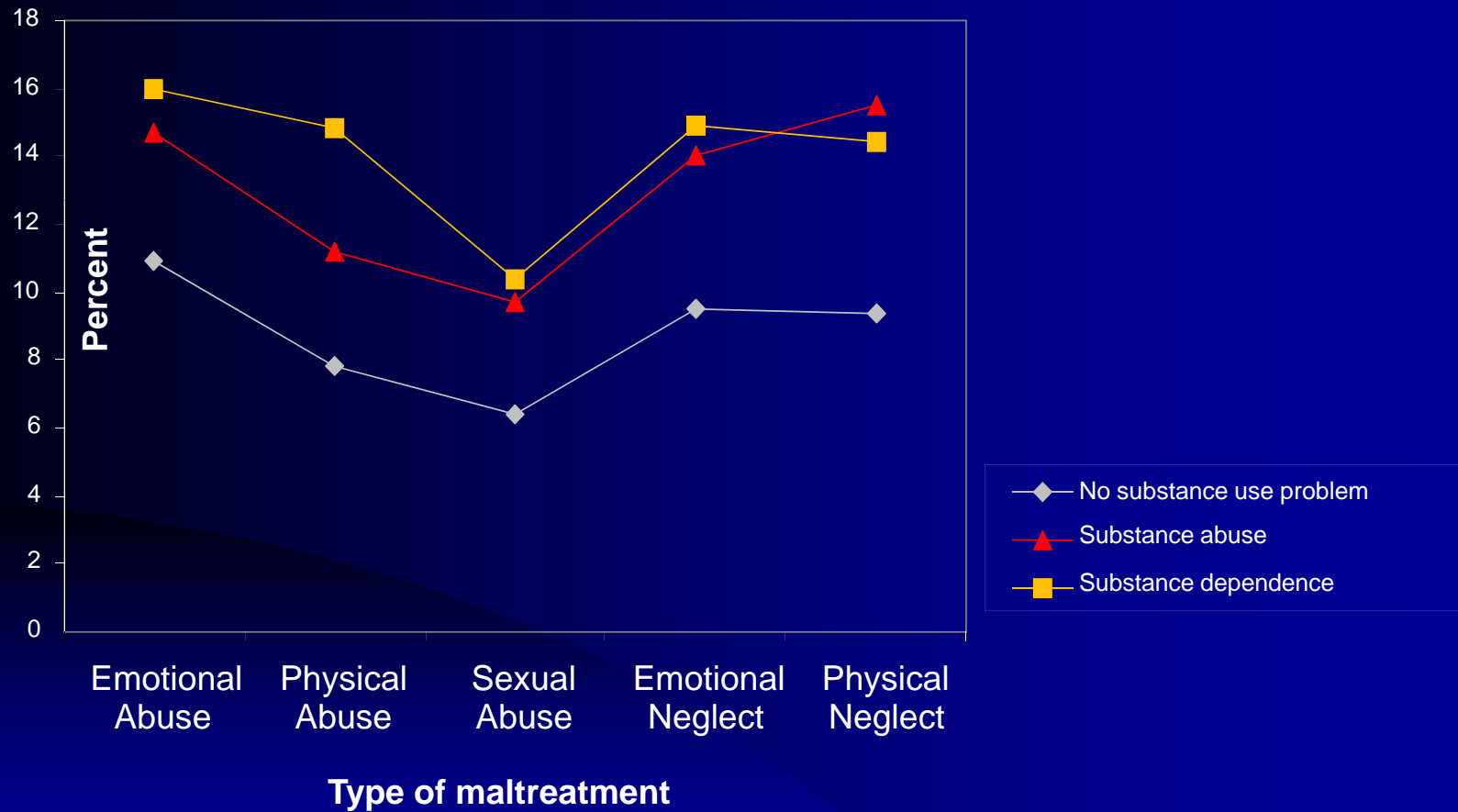


Table 8 Psychological Symptoms by Gender and Gambling Group

BSI ^a	Gambling Groups						
		Non Gambler		Social Gambler ¹		Problem Gambler ²	
	N	M	SD	M	SD	M	SD
<i>Global Severity Index**</i>							
Male	544	.54	.55	.51	.52	.74	.80
Female	742	.65	.69	.67	.64	1.08	.89
Total	1286	.62	.65	.61	.61	.83	.83
<i>Positive Symptom Total*</i>							
Male	553	17.11	14.15	16.26	12.96	19.85	16.29
Female	744	18.61	13.67	20.14	14.06	28.20	14.87
Total	1297	18.05	13.84	18.53	13.74	21.94	16.27
<i>Positive Symptom Distress*</i>							
Male	552	1.39	.68	1.43	.60	1.56	.79
Female	742	1.55	.75	1.51	.63	1.89	.77
Total	1294	1.49	.72	1.49	.62	1.64	.79

^a BSI = Brief Symptom Inventory. ¹ DSM-IV score (0 - 2). ² Combined at-risk and probable pathological gambling group (DSM-IV score \geq 3). * $p < .05$. ** $p < .001$.

Conclusions

- General gambling prevalence rates:
 - 78% of young adults reported gambling in past year (81% males; 76% females)
 - 20% are gambling at least weekly
 - 2.1% severe gambling problems (pathological gambling) (4.1% M; 0.7% F)
 - 4.2% considered at-risk gamblers (7.1% M; 2.0% F)

Maltreatment

- Strong linear trend for each form of maltreatment (emotional abuse, physical abuse, sexual abuse, emotional neglect, physical neglect) related to gambling problems
- Fewest problems occurring for non-gamblers and most for pathological gamblers
- Among adolescents and young adults who reported maltreatment, 10.9% of at-risk gamblers and 14.8% of pathological gamblers report their maltreatment impacted their daily life

- At-risk gamblers more likely to report emotional abuse and neglect
- Pathological gamblers more likely to report emotional and physical neglect
- Sexual abuse least form of reported abuse. However, twice as many at-risk and pathological gamblers reported some form of sexual abuse compared to non-gamblers and social gamblers.

- No significant gender findings (possibly due to small number of female problem gamblers)
- Female problem gamblers reported elevated mean scores on emotional and physical abuse subscales
- Male problem gamblers reported higher scores on sexual abuse subscale
- Across all psychological system subscales of the Brief Symptom Inventory, at-risk and pathological gamblers reported more problems

- Similar trends were for substance abuse
- Evidence appears to support both Jacobs' (1986) and Blaszczynski and Nower's (2002) theories
- Finally, McCormick, Delfabbro & Denson (2011) in Australia recently reported similar findings

Implications

Clinicians need to directly assess for maltreatment and address unresolved issues