Racial Differences in Gambling-Related Risk Factors and Consequences Among Black Youth and White Youth

Manik Ahuja, PhD, PA
Assistant Professor
East Tennessee State University
College of Public Health
April 16, 2025



Presentation Outline

Background: Gambling among Black youth, as an emerging problem

Study #1) Gambling and Suicide among Black youth

Study #2) Gambling and substance use initiation among Black youth

Future Directions

Black children are twice as likely to die by suicide, Nationwide Children's study finds



'Predatory gambling' has helped the lottery reach sky-high jackpot, critics say





Black youth (24%) are significantly more likely than white youth (15%) to engage in heavy gambling

Black people have twice the rate of disordered gambling compared to Whites.



Greater Acceptability and legalization of gambling in the U.S.

- Gambling continues to evolve as a socially acceptable, highly profitable industry.
- In the U.S. over the last three decades, gambling continues to work towards legalization.
- Number of states with casino gambling
 - 1990 3 states
 - 1999 8 states
 - 2011 14 states
 - 2025 **44 states!**

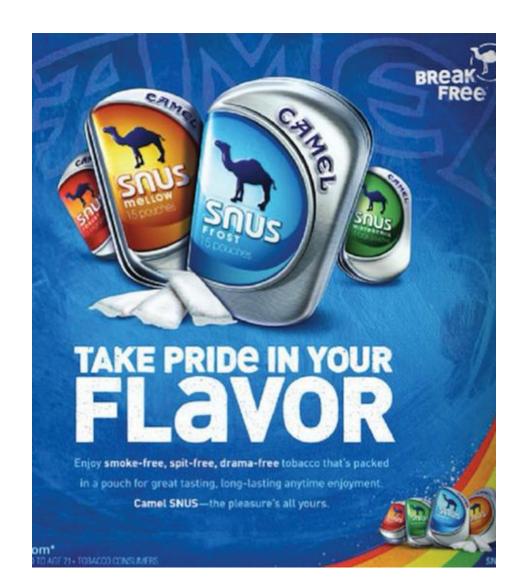




Neighborhood and Addictive Behaviors







Lotto outlets in low-income neighborhoods











Targeted Marketing

- Scratch tickets/lotteries are often clustered in low-income areas.
- Through marketing and advertising, state-run lotteries have no regulation to their "predatory practices" that affect low-income communities and people of color.





History of racism in gambling

- In the 1930s, casinos restricted Black employment to "back of the house" positions, and Black people were not allowed to stay in the hotels.
- If an African American went into a casino, they were often escorted out.
- Famous Black entertainers performing on the casinos' main stages were forced to use back entrances and were not allowed to remain in the casino and play.





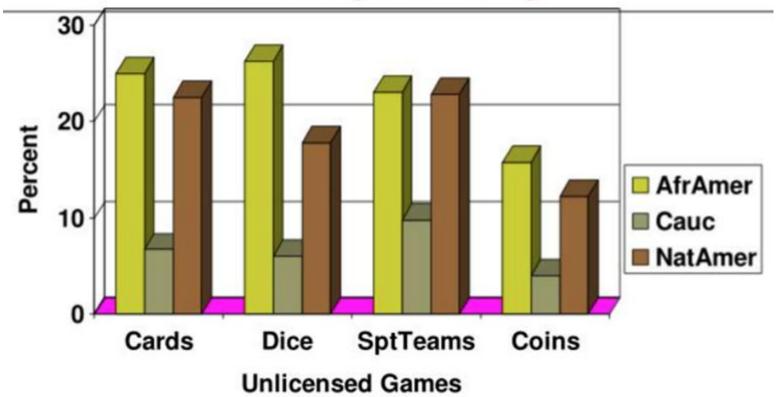
Gambling and Black youth

- Black youth initiate gambling earlier than White youth
- While overall rates across race may be comparable, **gambling** related consequences are more severe among Black youth.
- While it is well established that casinos are in growth mode, Black youth often engage in street gambling in the form of
 - Craps
 - Dice
 - Sports gambling
 - Other street games
 - Coins





Comparison of Frequency at Unlicensed Games by Ethnicity



***All differences significant to .001

KEY RISK FACTORS to gambling



Familial Risk
Factors
(e.g. child
maltreatment,
child rearing)



Individual Risk Factors



Peer Influences Social Determinants
(Race/Gender/Income
/Education) at
Individual and Societal
Levels

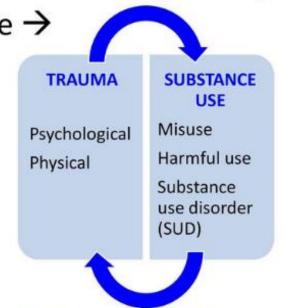


Stress Coping Model of Addiction

Psychological Trauma

Occurs when stress exceeds ability to cope

- Common causes include →
 - ✓ Sexual abuse
 - ✓ Bullying
 - ✓ Domestic violence
 - ✓ Discrimination
 - ✓ Extreme poverty
 - √ Physical trauma
 - √ Career collapse
 - ✓ Death



Often associated with substance use!

Including other addictive behaviors (ie. drug use, gambling)

Discrimination as a Risk Factor to Gambling



Socioeconomic Discrimination



Religious Discrimination



Racial Discrimination



Gender Discrimination



LGBTQ+ Discrimination

Study #1: Racial Associations Between Gambling and Suicidal Behaviors Among Black and White Adolescents and Young Adults

Citation: Ahuja M, Werner KB, Cunningham-Williams RM, Bucholz KK. Racial Associations Between Gambling and Suicidal Behaviors Among Black and White Adolescents and Young Adults. Curr Addict Rep. 2021 Jun;8(2):246-254.

Background



- Between 1991 and 2017, rates of suicide among Black youth have been increasing faster than rates among any other race/ethnic group.
- Prior studies found links between gambling and suicide behaviors
- Black and colleagues (2014) reported that problem gamblers had an 11-fold risk of lifetime suicide ideation versus controls. In a recent report from Great Britain.
- Wardle and McManus (2021) found problem gambling to be associated with suicide attempts in both young men and young women.

Background

- In comparison to White gamblers, Black gamblers are faced with a disproportionate level of adverse consequences.
- According to the Youth Risk Behavior Study (YRBS), there was a 73% increase in suicide attempts among Black youth from 2001–2017, while rates in White youth had reduced by 7.5%.
- The purpose of this study was to assess the association between age of gambling initiation and suicide behaviors, and whether they are differences by race between Black youth and White youth.





Why does early gambling matter?

- Early initiation of gambling, can be defined as initiation gambling <u>at age</u>
 15 or earlier.
- Many will gamble recreationally in high school, throughout young adulthood and not be impacted.
- Like other addictive behaviors, those who initiate gambling early are more likely to:
 - Engage in illicit drug use
 - Have alcohol related consequences
 - Loss of job
 - Financial problems
 - Cutting losses
 - Poor educational outcomes
 - Mental health problems in adulthood



- The sample consists of a sub-sample Black (55.6%) and White (44.4%) participants who completed the gambling questionnaire from the multi-wave Missouri Family Study (MOFAM; N=1349) (Bucholz, PI).
- MOFAM is a longitudinal high-risk family study designed to study the effects of paternal alcohol use disorder on development of offspring alcohol involvement and other outcome.
- Participants were enrolled in the study over 6 years.
 Three of the intake years had three waves of data, collected at 2-year intervals; the remainder had one to two waves





- Two primary outcomes were assessed including (1) suicide ideation and (2) suicide attempt.
- To assess gambling behaviors, the Gambling Assessment Module (GAM-IV-S) as used.
- Participants were queried on the following question, "Have you ever gambled or bet 5 or more times in your lifetime that includes gambling, betting, and playing games for money or for something else of value at a casino, on the computer, at the track, on the street, at home, or any other place?.
- Gambling initiation was based on age first gambled. In instances where age of gambling initiation was reported at more than one assessment wave, age of first report was used



- Chi-squared tests were used to assess differences in predictors and outcomes between race.
- Survival analyses were conducted to determine associations of gambling initiation separately for (1) suicide ideation and (2) suicide attempt.
- Interaction terms between gambling with both gender and race were tested. In cases where interactions were reported (p<.10), data were stratified

Rates of Gambling were higher among Black youth (32.1%) in comparison to White youth (26.7%).

Rates of suicide attempt were higher among Black youth 9.1% vs White youth 7.0%

				- 0
	Total		White participants	χ2f
	(N=1349)	(n=750)	(n=599)	
	N (Column			
	%)			
Age at last interview, M,	20.3 (3.9)	20.3 (4.0)	20.3 (3.7)	
(SD)				
Lifetime report of	401 (29.7)	241 (32.1)	160 (26.7)	4.68*
gambling				
Age of gambling onset,	16.9 (3.5)	16.5 (3.5)	17.4 (3.5)	
M, (SD)				
MDD onset, M, (SD)	14.8 (3.9)	14.7 (3.5)	14.9 (4.2)	
Age of childhood sexual	9.5 (3.4)	9.1 (3.3)	10.4 (3.6)	
abuse, M, (SD)				
Mean age/SD of first	16.2 (2.7)	16.7 (2.8)	15.7 (2.5)	
alcohol drink				
Gender				
Male	647 (48.0)	390 (52.0)	287 (47.9)	
Female	702 (52.0)	360 (48.0)	312 (52.1)	
Lifetime report of suicide)			
behaviors				
Suicide ideation	334 (24.8)	173 (23.1)	161 (26.9)	2.59
Suicide attempt	110 (8.2)	68 (9.1)	42 (7.0)	1.88

- Gambling predicted an increased hazard of suicidal ideation among Black participants.
- Alcohol
 initiation (not
 gambling)
 predicted
 greater hazard
 of suicidal
 ideation
 among White
 participants.

Cox proportional hazard analyses predicting time to first suicidal ideation and to first suicide attempt (N=1349)

Variable	Suicidal ideation					Suicide attempt	
	Black participants (n=750)		White participants (n=599)		Full sample (N=1349)		
	HR	95% CI	HR	95% CI	HR	95% CI	
Gambling initiation	2.06	[1.39, 3.07] *	0.81	[0.45, 1.45]	0.78	[0.37-1.63]	
MDD onset							
Age ≤14	7.80	[4.48, 13.57] *	11.12	[6.58, 18.78] *			
Age ≥15	3.48	[2.21, 5.48] *	4.08	[2.38, 6.98] *			
Age ≤15					12.02	[6.94- 20.80] *	
Age ≥16					4.47	[2.19-9.11] * -	
Alcohol initiation ^a	1.44	[0.99-2.08]	1.66	[1.11, 2.47] *	1.45	[0.94, 2.23]	
Childhood sexual abuse ^b	2.69	[1.89, 3.81] *	1.39	[0.85, 2.28]	2.48	[1.59, 3.85] * -	
Black race					1.19	[0.76, 1.95]	
Male gender	0.71	[0.52, 0.97] *	0.91	[0.64, 1.29]	0.61	[0.38, 0.99]	

Conclusions

- Gambling initiation predicted an <u>increased hazard of suicide</u> ideation among Black participants, but not White participants.
- Legalization and increased opportunity for sports betting, lottery games, horse racing, and casinos have made gambling more accessible
- Although youth do not meet the legal age for these venues, the mere presence of these venues may increase awareness and gambling involvement

Implications and Future Directions

- It is critical that educators, school staff, and youth group leaders have professional development and training opportunities available on the risks of gambling, and their implications.
- Parents and caregivers need to be informed and brought into discussions about the risks of gambling and their implications.
- It is essential to pay particular clinical attention to culturally appropriate treatment for gambling and its associated disorders.
- Games such as "tunk," "the numbers," dice, and craps are more common among Black populations, it is important to place greater emphasis on these games vs casino involvement.





Study #2

 Patterns of gambling and substance use initiation in African American and White adolescents and young adults

• Citation: Werner KB, Cunningham-Williams RM, Ahuja M, Bucholz KK. Patterns of gambling and substance use initiation in African American and White adolescents and young adults. Psychol Addict Behav. 2020 Mar;34(2):382-391. doi: 10.1037/adb0000531.

Gambling and Substance Use Problems

- Strong connection between gambling and substance use (cooccurrence).
- To achieve equity, we must further understand how usage and trends differ across groups.
- We cannot generalize across race/ethnic groups.







- The Missouri Family Study (MOFAM; n=1,349) was used for this analysis.
- The GAM-IV was used to assess lifetime gambling (5 or more times), and if participants had ever played or bet on ten types gambling activities, including slots, lottery, video poker, card games, casino games, dice/craps, bingo, races, sports, or other types of activities.
- Gambling initiation was defined as the age first gambled

- Alcohol, tobacco, and cannabis were assessed.
- The initiation of alcohol, tobacco, and cannabis as the first time the participant ever tried/used each of these substances, and recorded the age of onset as the age the participant first reported using each of these substances.
- Participants were grouped into one of six categories: (1) gambling before substance use, (2) initiation of substance use and gambling at same age, (3) substance use before gambling, (4) gambling only, (5) substance use only, or (6) no substance use or gambling

- Missouri Family Study (n=1349), 450 African American youth and 317 White youth
- Objective was to identify racial differences in overall prevalence of gambling behaviors and patterns of substance use initiation.
- Survival analysis was used to assess
 - A) Did initiation of gambling prediction substance use onset?
 - B) Did substance use initiation predict gambling initiation?
 - C) Are there differences between Black youth and White youth?



- To examine temporal relationships, Cox Proportional Hazards regression analyses to examine the risk associated with alcohol, tobacco, and cannabis use for gambling initiation and the risk of gambling initiation for the initiation of alcohol, tobacco, and cannabis.
- Models also accounted for psychopathology including GAD, MDD, and conduct disorder, as well as demographic characteristics.



Gender as a contributor to risk

When comparing Black females and White females, there is a significantly higher prevalence of

- Bingo
- Betting sports
- Craps
- Casino
- Betting cards
- Video poker

Similar differences were found among males

	Total	White Males	African American Males	White Females	African American Females
	N = 1349	n = 287	n = 360	n = 312	n = 390
	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)
Age at most recent interview	20.3 (3.9)	20.2 (3.8)	20.3 (4.2)	20.3 (3.7)	20.3 (3.8)
	n(%)	n(%)	n(%)	n(%)	n(%)
Ever Gambled	402 (29.8)	115 (40.1)	174 (48.3)	68 (17.4)	45 (14.4)
Mean age onset of gambling	17.4	17.1	16.2	18.4	17.2
Gambling activities					
Slots	175 (13.0)	51 (17.8)	50 (13.9)	32 (10.3)	42 (10.8)
Lottery	278 (20.6)	91 (31.7)	93 (25.9)	41 (13.1)	53 (13.6)
Video poker	104 (7.7)	33 (11.5)	43 (12.0)	10 (3.2)	18 (4.6)
Betting cards	219 (16.3)	80 (27.9)	88 (24.5)	19 (6.0)	32 (8.2)
Casino	79 (5.9)	31 (10.8)	25 (7.0)	8 (2.6)	15 (3.9)
Craps ^a	150 (11.1)	26 (9.1)	105 (29.3)	5 (1.6)	14 (3.6)
Bingo	100 (7.4)	17 (5.9)	41 (11.4)	12 (3.9)	30 (7.7)
Betting races	30 (2.2)	15 (5.2)	8 (2.2)	5 (1.6)	2 (0.5)
Betting sports ^a	192 (14.2)	50 (17.4)	116 (32.3)	7 (2.2)	19 (4.9)
Betting stocks	10 (0.7)	5 (1.7)	4 (1.1)	0 (0.0)	1 (0.3)
Other <u>b</u>	96 (7.1)	20 (7.0)	56 (15.6)	2 (0.6)	18 (4.6)

- Among Black males, initiation of alcohol and cannabis predicted an increased hazard of gambling.
- No significant association found among White males.

Results of Cox proportional hazards regression analyses for the association of substance use with gambling initiation

	White Males	African American Males	White Females	African American Females
	HR (95% CI)	HR (95% CI)	HR (95% CI)	HR (95% CI)
Alcohol Use	1.52 (0.78-2.95)	1.79 (1.22- 2.62)	0.87 (0.23-3.36)	1.55 (0.76-3.15)
Nicotine Use	1.34 (0.69-2.59)	0.82 (0.55-1.23)	1.03 (0.30-3.54)	0.94 (0.54-1.64)
Cannabis Use	0.94 (0.58–1.50)	1.75 (1.19- 2.56)	4.60 (1.72- 12.31)	1.41 (0.80-2.48)
MDD	1.00 (0.56-1.77)	1.20 (0.74-1.96)	0.99 (0.50-1.95)	1.17 (0.57-2.40)
GAD	0.67 (0.22-1.99)	1.12 (0.41-3.06)	2.29 (0.75-6.93)	0.53 (0.07-4.24)
Conduct Disorder	2.15 (1.25- 3.68)	1.42 (0.95-2.13)	0.80 (0.20-3.19)	2.54 (1.27-5.07)

Gambling age 15 or earlier predicted Significantly higher odds of Alcohol initiation among

- Black females
- Black males
- White males

Significant association was not found among White Females.

Results of Cox proportional hazards regression analyses of the association of gambling with time to initiation of alcohol, tobacco, and cannabis use

Gambling associated with Alcohol initiation	White Males	African American Males	White Females	African American Females
	HR (95% CI)	HR (95% CI)	HR (95% CI)	HR (95% CI)
Gambling (<15)	2.48 (1.22- 5.02)	1.70 (1.30- 2.23)	1.72 (0.98- 3.03)	1.61 (1.13- 2.29)
Gambling (≥15)	1.07 (0.73– 1.56)			
MDD	0.84 (0.50- 1.41)	1.06 (0.67–1.67)	0.96 (0.64– 1.43)	1.13 (0.78–1.64)
GAD	0.58 (0.24– 1.43)	1.51 (0.88-2.60)	1.11 (0.62– 1.99)	0.89 (0.47–1.69)
Conduct Disorder (<16)	2.15 (1.38- 3.34)	3.45 (1.86- 6.38)	2.66 (1.64- 4.30)	-
Conduct Disorder (≥16)	0.62 (0.21– 1.79)	1.17 (0.79–1.74)		-
Conduct Disorder (<17)	-	-	-	2.38 (1.45- 3.90)
Conduct Disorder (≥17)	-	-	-	0.65 (0.32-1.34)

 Gambling predicted increased hazard of cannabis among Black males.

 No significant association found among White Males.

Gambling associated with Cannabis initiation	White Males	African American Males	White Females	African American Females
	HR (95% CI)	HR (95% CI)	HR (95% CI)	HR (95% CI)
Gambling	0.81 (0.48- 1.36)	1.90 (1.38- 2.62)	1.40 (0.44- 4.47)	1.43 (0.79–2.59)
MDD (<15)	1.15 (0.72– 1.85)	0.88 (0.51-1.49)	1.40 (0.86- 2.29)	2.68 (1.12- 6.41)
MDD (≥15)				0.85 (0.49-1.48)
GAD	0.82 (0.21– 3.13)	1.48 (0.70-3.15)	1.15 (0.57- 2.31)	2.29 (1.11- 4.72)
Conduct disorder (<15)	-	3.18 (1.87- 5.42)	4.82 (2.36- 9.85)	2.64 (1.57- 4.42)
Conduct disorder (≥15)	-	1.29 (0.77-2.17)		
Conduct Disorder (<17)	3.37 (2.14- 5.30)	-	-	-

Conclusions

- The study highlights the importance of examining racial differences in gambling participation separately for males and females and the order of initiation of gambling and use of substances.
- Of major concern are the disproportionate substance use consequences impacting Black youth who gamble including cannabis and alcohol use.
- Those who use cannabis or alcohol at an early age or more likely to experience adverse consequences including depression, worse educational/job outcomes, higher risk of substance use disorder, and other negative outcomes.





Conclusions

- Youth from disadvantaged neighborhoods may be even more vulnerable to gambling.
- Neighborhood disadvantage has been linked to greater opportunities to gamble and at earlier ages, and therefore heightening risks for not only problem gambling.
- Results are in line with other studies that suggest that gambling and other risk-taking behaviors may resemble gateway drug properties.
- Further work on identifying gambling prevention efforts among Black youth should be considered.





In a Digital World!







- Smartphone penetration over 95%!
- Easy access and targeted internet advertising
 based on search criteria
- How can we save Black youth and prevent further harm>

Moving forward: Working towards reducing gambling related health disparities









DISRUPT THE SOCIAL DETERMINANTS!

- Community Level
- Societal Level
- Place based factors
- At the zip code/street level

Conclusion: Achieving Equity in Gambling Behaviors

- Greater focus on race and gender specific research in gambling.
- Challenges in funding, due to changes in federal diversity, equity, and inclusion laws in the U.S.
- Work <u>together</u> as a community
- Collaboratively help resolve disparities with our partners across multiple stakeholder groups
- Everyone wins if we can reduce such disparities







Questions for Discussion

- The results from both studies demonstrate worse outcomes for Black youth who initiate gambling
 - A) From a public health perspective, what can we do a society to reduce incidence of early gambling among Black youth?
 - B) What should be considered policy-wise for this issue in Canada? In the U.S.? Globally?
- What steps can we take policy-wise to prevent 'predatory gambling' in areas of high minority concentration?
- In a <u>digital world</u>, how can we increase prevention efforts so Black youth can be protected from such harms?
- What steps can we take to increase awareness for this topic among educators, parents, and other stakeholders?
- Did the findings from either study surprise you?

Thank You!



- Manik Ahuja PhD, MA
- ahujam@etsu.edu

References

- 1. Bischof A, Meyer C, Bischof G, John U, Wurst FM, Thon N, et al. Suicidal events among pathological gamblers: the role of comorbidity of axis I and axis II disorders. Psychiatry Res. 2015;225:413–9. 10.1016/j.psychres.2014.11.074. DOI PubMed
- 2. Manning V, Koh PK, Yang Y, Ng A, Guo S, Kandasami G, et al. Suicidal ideation and lifetime attempts in substance and gambling disorders. Psychiatry Res. 2015;225:706–9. 10.1016/j.psychres.2014.11.011. DOI PubMed
- 3. Drapeau C, McIntosh JL, Van Orden K a, et al. USA suicide: 2014 official final data. Clin Psychol Rev. 2014;24:157–63. 10.1177/1066480716628629. DOI
- 4. Dyer O. US suicide rate is climbing steadily with highest prevalence in sparsely populated western states. BMJ. 2018:k2586. 10.1136/bmj.k2586. DOI PubMed
- 5. Bilsen J. Suicide and youth: risk factors. Front Psychiatry. 2018;9. 10.3389/fpsyt.2018.00540. DOI PMC PubMed
- 6. Zolot J. Female youth suicides on the rise, narrowing gap with young males. Am J Nurs. 2019;119:12. 10.1097/01.NAJ.0000577360.53587.b0. DOI PubMed
- 7. Rossen FV, Clark T, Denny SJ, Fleming TM, Peiris-John R, Robinson E, et al. Unhealthy gambling amongst New Zealand secondary school students: an exploration of risk and protective factors. Int J Ment Health Addict. 2016;14:95–110. 10.1007/s11469-015-9562-1. DOI PMC PubMed
- 8. Cook S, Turner NE, Ballon B, Paglia-Boak A, Murray R, Adlaf EM, et al. Problem gambling among ontario students: associations with substance abuse, mental health problems, suicide attempts, and delinquent behaviours. J Gambl Stud. 2014;31:1121–34. 10.1007/s10899-014-9483-0. DOI PubMed
- 9. Petry NM. A comparison of young, middle-aged, and older adult treatment-seeking pathological gamblers. Gerontologist. 2002;42: 92–9. 10.1093/geront/42.1.92. DOI PubMed
- 10. Kausch O. Suicide attempts among veterans seeking treatment for pathological gambling. J Clin Psychiatry. 2003;64:1031-8. 10.4088/JCP.v64n0908. DOI PubMed.
- 11. Nower L, Eyrich-Garg KM, Pollio DE, North CS. Problem gambling and homelessness: results from an epidemiologic study. J Gambl Stud. 2013;31:533–45. 10.1007/s10899-013-9435-0. DOI PubMed
- 12. Giovanni M, Fabiola S, Federica F, et al. Gambling disorder and suicide: an overview of the associated co-morbidity and clinical characteristics. Int J High Risk Behav Addict. 2017.
- 13. Wong PWC, Cheung DYT, Conner KR, et al. Gambling and completed suicide in Hong Kong: a review of coroner court files. Prim. Care Companion J. Clin. Psychiatry 2010. PMC PubMed
- 14. Karlsson A, Håkansson A. Gambling disorder, increased mortality, suicidality, and associated comorbidity: a longitudinal nationwide register study. J Behav Addict. 2018. 10.1556/2006.7.2018.112. DOI PMC PubMed
- 15. Bischof A, Meyer C, Bischof G, John U, Wurst FM, Thon N, et al. Suicidal events among pathological gamblers: the role of comorbidity of axis I and axis II disorders. Psychiatry Res. 2015;225:413–9. 10.1016/j.psychres.2014.11.074. DOI PubMed