



Národní monitorovací
středisko pro drogy
a závislosti

Mental Health and Substance Use

National Survey on Substance Use in
the Czech Republic in 2016

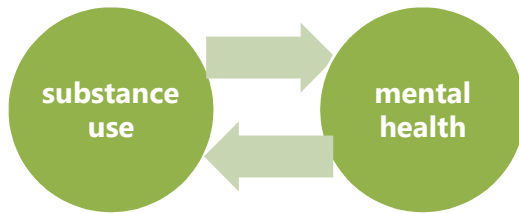
Pavla Chomynová

15–16 May 2018 | GPS expert meeting, EMCDDA, Lisbon



Mental Health and Substance Use: Introduction (1)

„Many individuals who develop substance use disorders (SUD) are also diagnosed with mental disorders, and vice versa.“ (NIDA, 2018; NIDA, 2011)



Certain illegal drugs can cause people with an addiction to experience one or more symptoms of a mental health problem
substance use = primary cause

Mental health problems can sometimes lead to alcohol or drug use, as some people with a mental health problem may misuse these substances as a form of self-medication

substance use = secondary effect/consequence
(e.g. EMCDDA, 2015)

More than **one in four adults living with serious mental health** problems also has a substance use problem. Substance use problems occur more frequently with certain mental health problems, including:

1. **depression**
2. **anxiety disorders**
3. **schizophrenia**
4. **personality disorders**

(<https://www.mentalhealth.gov/>)

„Mental and substance use disorders share some **underlying causes**, including changes in brain composition, genetic vulnerabilities, and early exposure to stress or trauma.“ (<https://www.mentalhealth.gov/>)





Mental Health and Substance Use: Introduction (2)

According to systematic reviews (CR)



½ of the clients treated for substance use suffer from dual diagnosis
½ of the psychiatric patients report substance use
(Orlikova and Csemy, 2016)

methamphetamine users

35–72% have psychiatric comorbidity, especially anxiety disorders and depressions, psychosis, personality disorders, eating disorders, gambling, other substance use
(e.g. Salo et al., 2011)

buprenorphine users

23–42% with diagnosed anxiety disorder and 39–51% mood disorder

alcohol users

45–80 % of patients addicted to alcohol have another psychiatric diagnosis
depression (14–34%)
bipolar disorder (5–35%)
anxiety, social phobia (5–20%)
psychosis (2–10%)

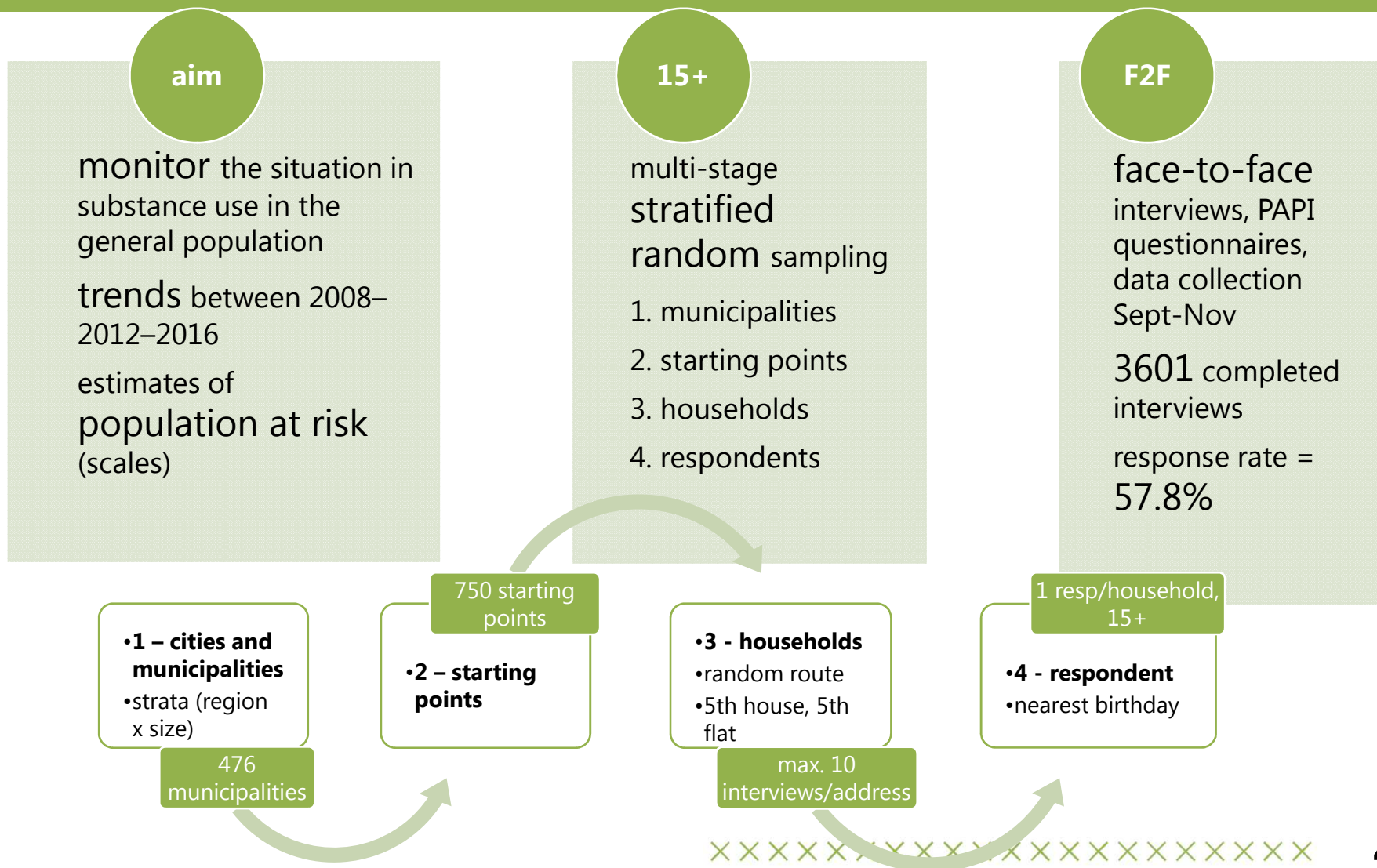
(e.g. Orlikova and Csemy, 2016)



alcohol-dependent patients have **3–4 times higher risk** of developing depression compared to the general population



> National Survey 2016



> National Survey 2016: Topics

1. tobacco smoking,
2. e-cigarettes,
3. alcohol use and regular consumption,
4. psychoactive medicines,
5. illicit drugs,
6. medical use of cannabis,
7. Internet use,
8. gaming and gambling,
9. **mental health, life satisfaction scale, risk sexual behaviour**

Scales:

HSI
CAGE
CAST
PGSI
Lie/bet
MHI-5
SWLS





National Survey 2016: Mental Health

Mental Health Inventory (MHI-5) (Ware et al., 1993, Rumpf et al., 2001, Berwick et al., 1991, Cuijpers et al., 2009, Kelly et al., 2008):

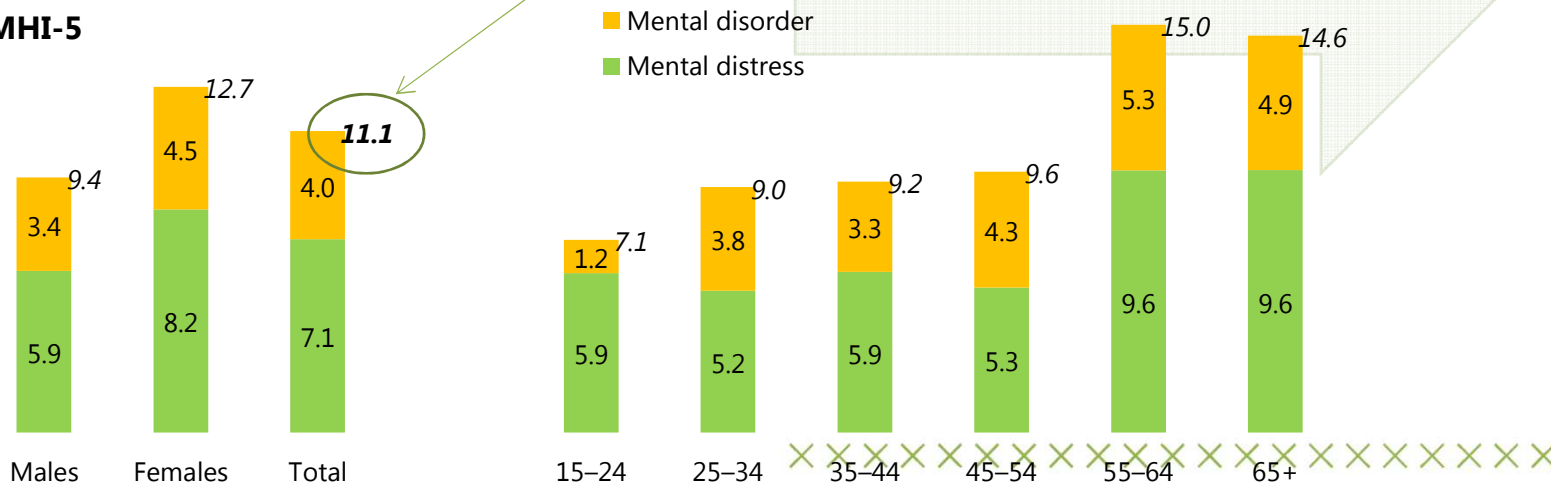
1. Have you been a very nervous person?
2. Have you felt so down in the dumps that nothing could cheer you up?
3. Have you felt calm and peaceful?
4. Have you felt downhearted and blue?
5. Have you been a happy person?

Responses:
1 = never to 5 = always

Sum 5–25

15+ **good state of mental health**
 13–14 **mental distress** (higher probability of anxiety and/or depression symptoms)
 up to 12 **mental disorder** (high probability of mental disorders)

MHI-5





National Survey 2016: Satisfaction with Life Scale

Satisfaction with Life Scale (SWLS) (Diener et al., 1985, Kobau et al., 2010):

1. In most ways my life is close to my ideal.
2. The conditions of my life are excellent.
3. I am satisfied with my life.
4. So far I have gotten the important things I want in life.
5. If I could live my life over, I would change almost nothing.

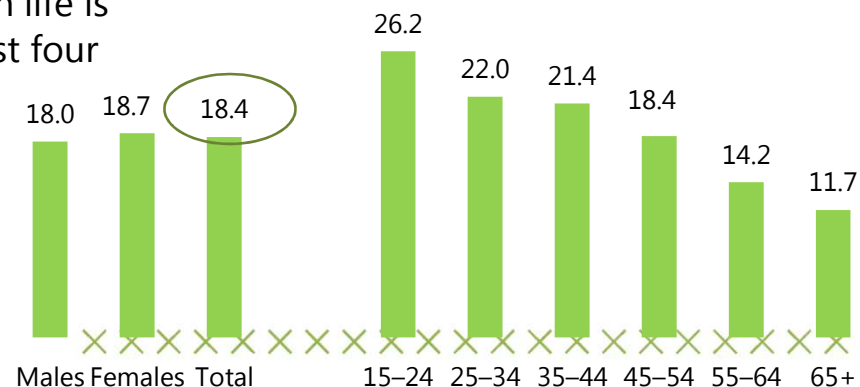
Responses (7-item Likert scale):
1 = strongly disagree to 5 = strongly agree

Sum 5–35

5–9extremely dissatisfied
 10–14dissatisfied
 15–19slightly dissatisfied
 20..... neutral
 21–25.....slightly satisfied
 26–30.....satisfied
 31–35.....extremely satisfied

?! CR: Responses (5-item Likert scale):
1 = strongly disagree to 5 = strongly agree

→ evaluation of the satisfaction with life is based on positive answers on first four questions (Kobau et al., 2010)





Link between Mental Health and Substance Use?

substance use

- tobacco smoking
- alcohol consumption
- cannabis use
- gambling

mental health

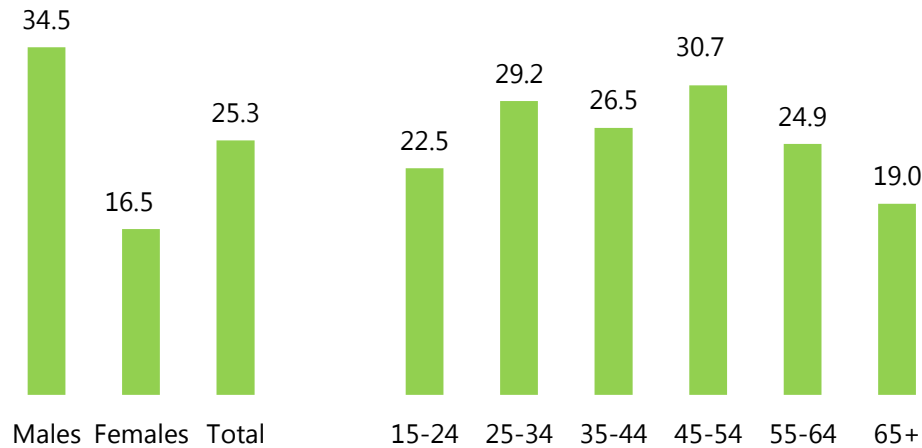
- mental health inventory
- satisfaction with life





National Survey 2016: Tobacco Smoking

Daily tobacco smoking

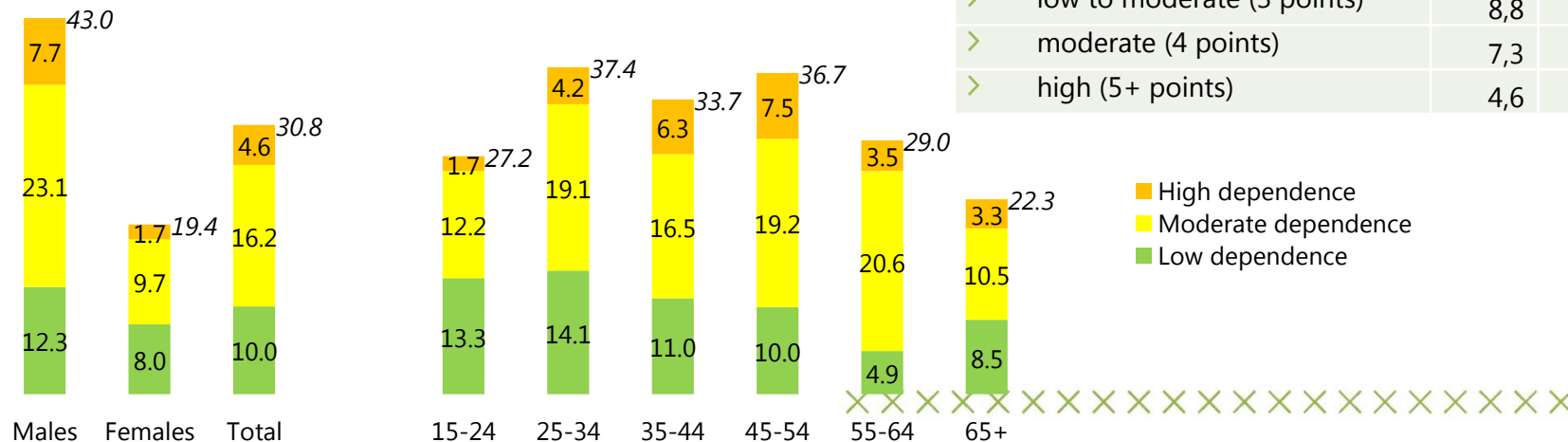


Heaviness of Smoking Index

(Heatherton, 1989):

1. How many cigarettes do you typically smoke per day?
2. How soon after you wake up do you have your first cigarette?

Heaviness of Smoking Index

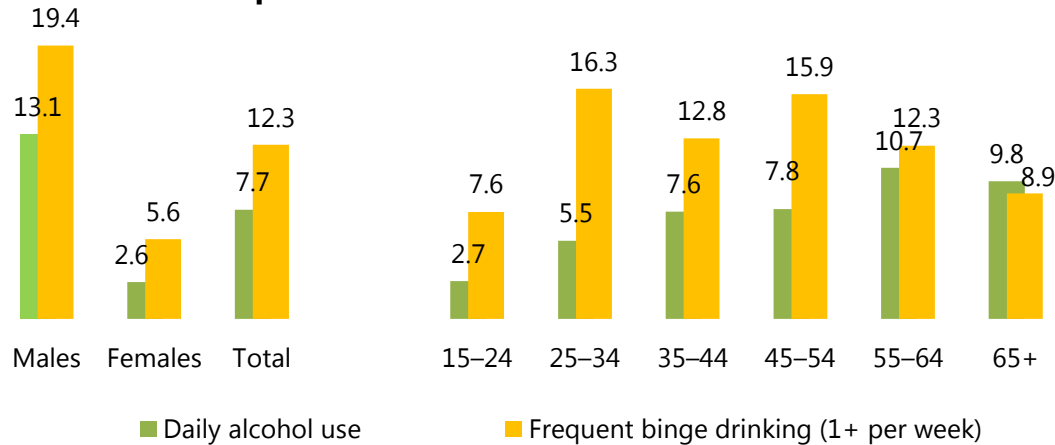


Heaviness of Smoking Index	15+	95% CI
At risk of dependence (1+ points)	30,8	29,1–32,6
> very low (1–2 points)	10,0	8,9–11,2
> low to moderate (3 points)	8,8	7,8–9,9
> moderate (4 points)	7,3	6,4–8,3
> high (5+ points)	4,6	3,8–5,4



National Survey 2016: Alcohol Consumption

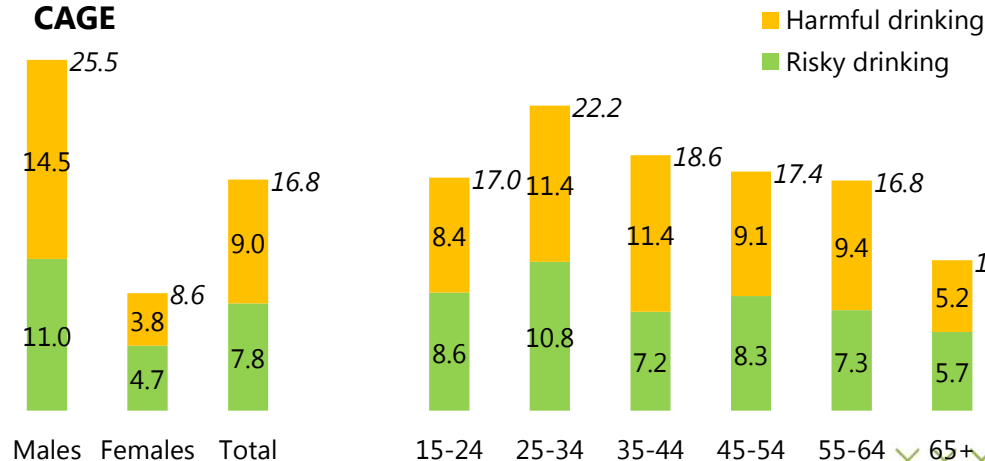
Alcohol consumption



CAGE (e.g. Ewing, 1984, Bühler et al. 2004):

1. Have you ever felt you needed to **C**ut down on your drinking?
2. Have people **A**nnoyed you by criticizing your drinking?
3. Have you ever felt **G**uilty about drinking?
4. Have you ever felt you needed a drink first thing in the morning (**E**ye-opener) to get rid of a hangover?

CAGE

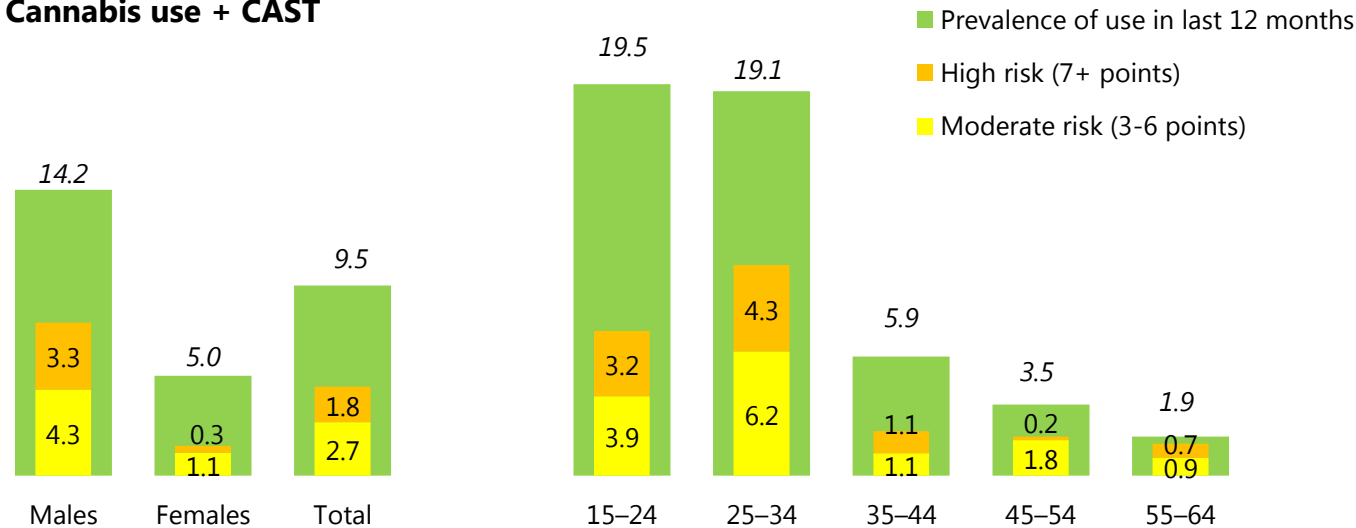


CAGE	15+	95% CI
At risk of dependence (1+ points)	16,8	15,6-18,1
> risky drinking (1 point)	7,8	6,9-8,7
> harmful drinking (2 points)	9,0	8,1-10,0



National Survey 2016: Cannabis Use

Cannabis use + CAST



CAST (e.g. Beck and Legleye, 2008):

1. Have you smoked cannabis before midday?
2. Have you smoked cannabis when you were alone?
3. Have you had memory problems when you smoked cannabis?
4. Have friends or family members told you that you should reduce or stop your cannabis consumption?
5. Have you tried to reduce or stop your cannabis use without succeeding?
6. Have you had problems because of your cannabis use?

CAST	15+	95% CI
At risk of problems (3+ points)	4,4	3,7-5,2
> moderate risk (3-6 points)	2,7	2,1-3,2
> high risk (7+ points)	1,8	1,3-2,3





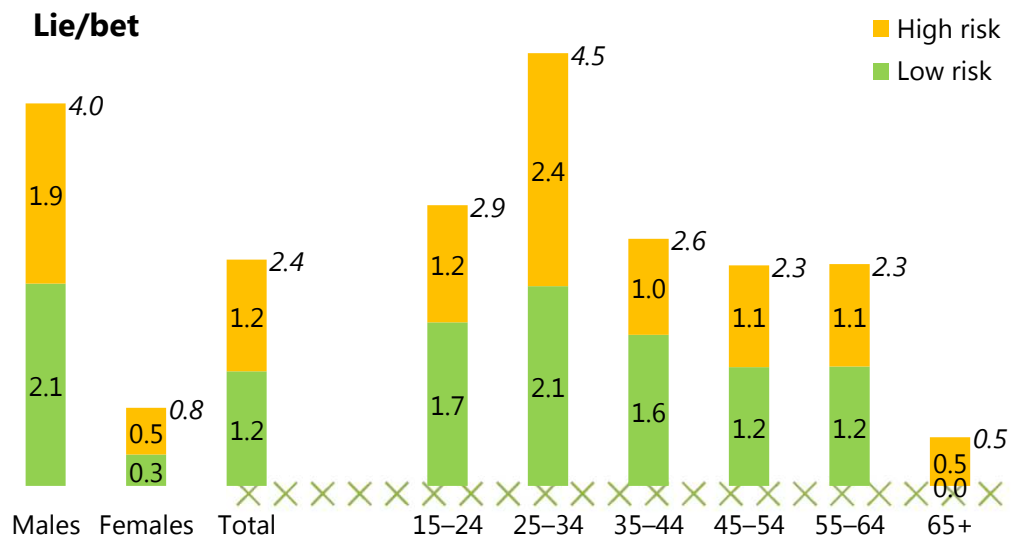
National Survey 2016: Gambling (1)

Gambling in 12 months	15+
Land-based	
EGM, fruit machines	4,2
Betting for sport etc.	4,7
Live betting	2,7
Casino games	0,8
Lotteries	19,3
On-line	
EGM, fruit machines	0,9
Poker, roulette (casino games)	1,1
Betting for sport etc.	1,7
Live betting	1,6
Lotteries	1,2
Total	
Any G land-based (without lotteries)	8,5
Any G on-line (without lotteries)	3,0
Any G (without lotteries)	9,8

Lie/bet (Johnson et al., 1997):

1. Have you ever had to lie to people important to you about how much you gambled?
2. Have you ever felt the need to bet more and more money?

Lie/bet	15+	95% CI
At risk of problems (1+ points)	2,4	1,9–2,9
> moderate risk (1 point)	1,2	0,8–1,6
> high risk (2 points)	1,2	0,8–1,5



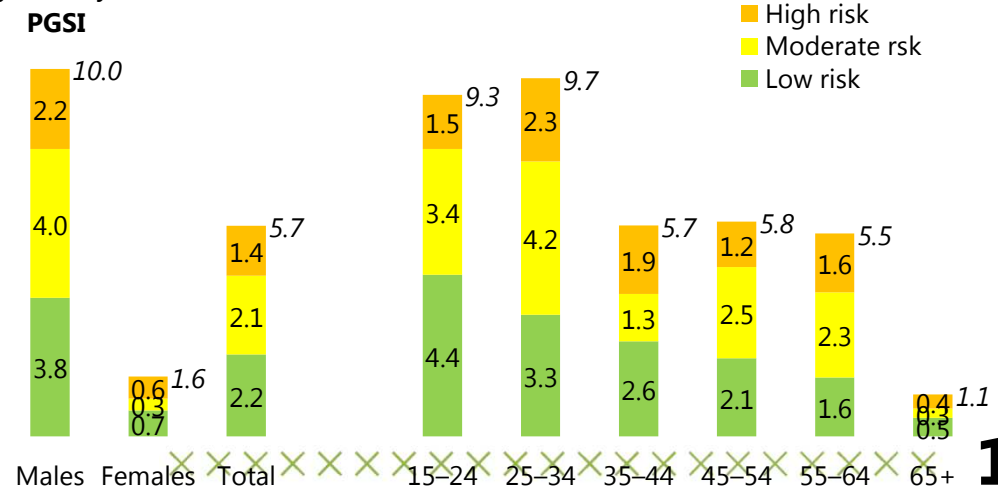


National Survey 2016: Gambling (2)

Problem Gambling Severity Index (Holtgraves, 2009, Currie et al. 2010):

1. Have you bet more than you could afford to lose?
2. Have you needed to gamble with larger amounts of money to get the same feeling of excitement?
3. Have you gone back another day to try to win back the money you lost?
4. Have you borrowed money or sold anything to get money to gamble?
5. Have you felt that you might have a problem with gambling?
6. Have you felt people criticized your betting or told you had a gambling problem regardless of whether or not you thought it was true?
7. Have you felt guilty about the way you gamble, or what happens when you gamble?
8. Has your gambling caused you any health problems, including a feeling of stress or anxiety?
9. Has your gambling caused any financial problems for you or your household?

PGSI	15+	95% CI
At risk of problems (1+ points)	5,7	4,9–6,5
> low risk (1–2 points)	2,2	1,7–2,7
> moderate risk (3–7 points)	2,1	1,7–2,6
> high risk (8+ points)	1,4	1,0–1,8



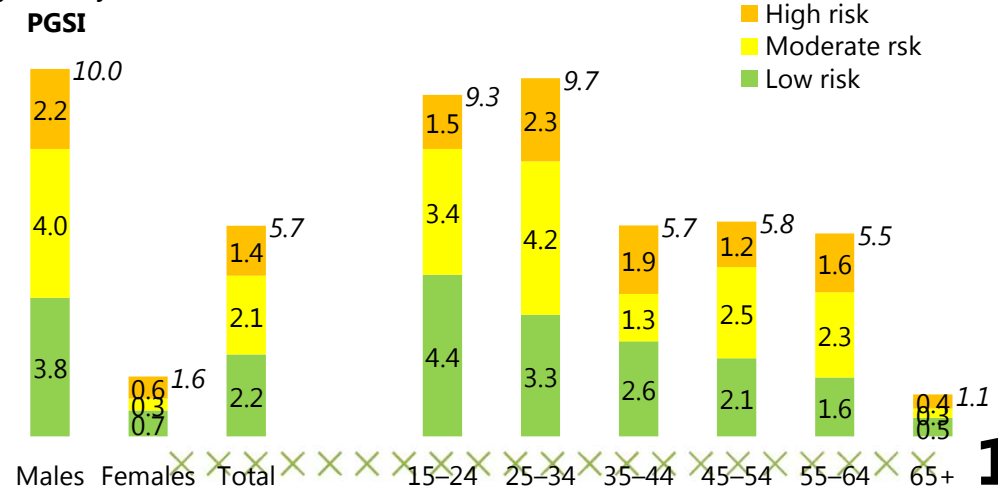


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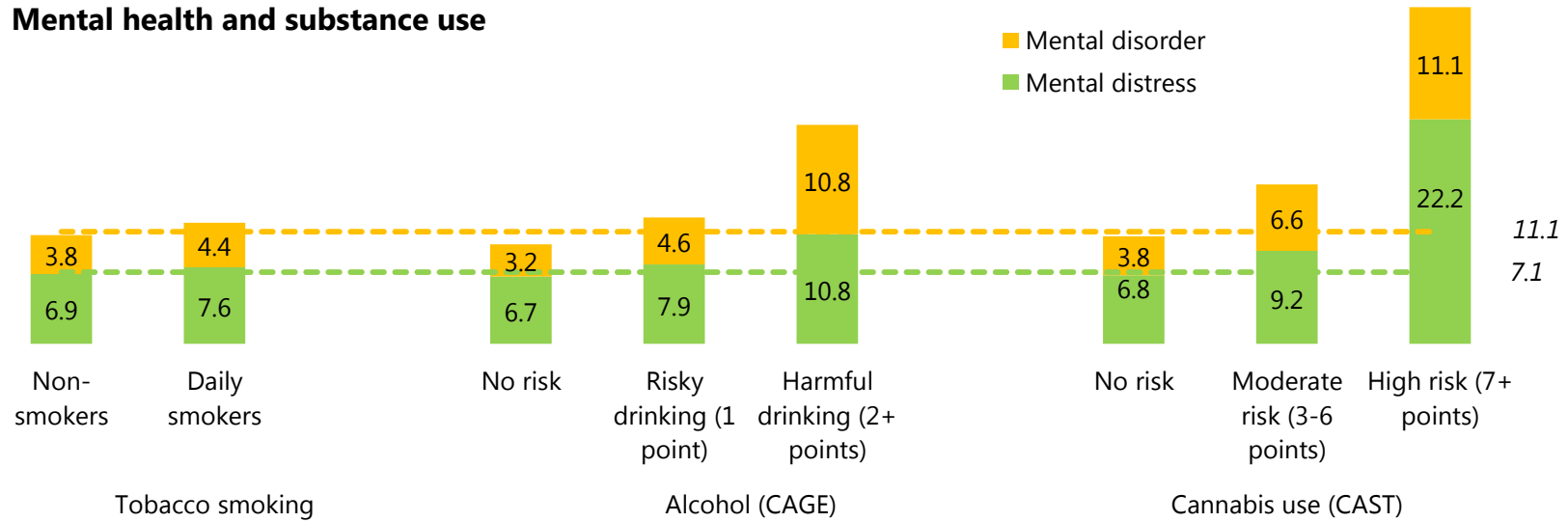
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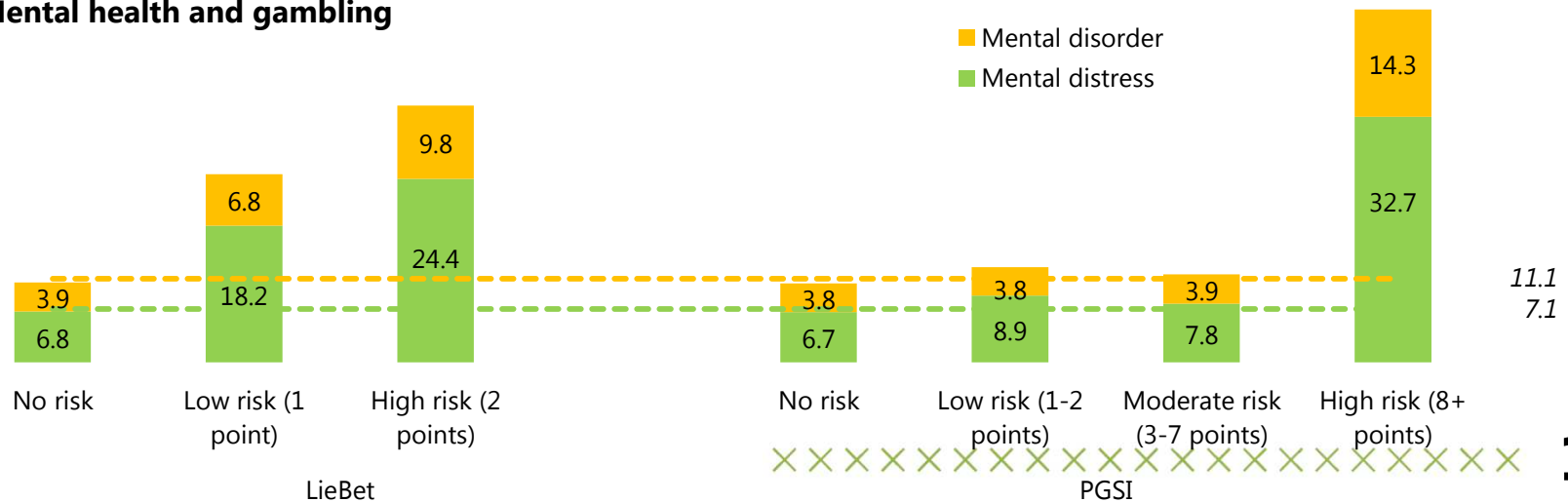


Substance Use and Mental Health

Mental health and substance use



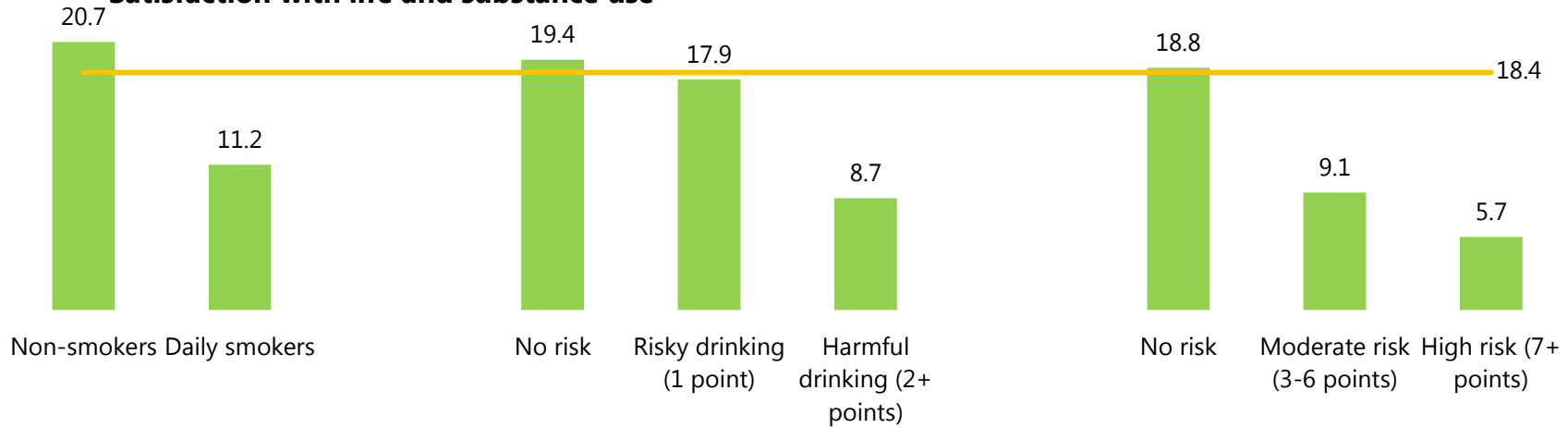
Mental health and gambling



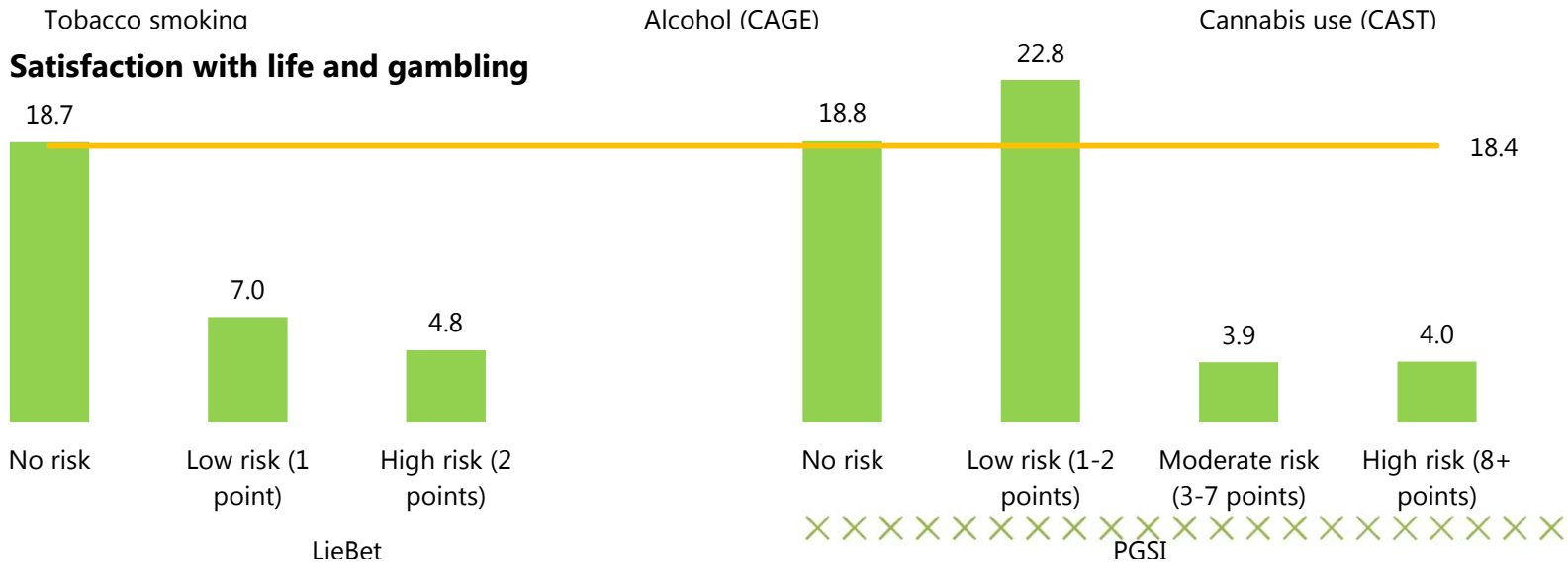


Substance Use and Satisfaction with Life

Satisfaction with life and substance use



Satisfaction with life and gambling



> Summary

Findings:

mental distress in the general population = **7,1 %**
mental disorder in the general population = **4,0 %**
satisfaction with life = **18,4 %**

differences
observed
($p < 0,05$)

Mental distress and mental disorder:

2 times higher among regular **alcohol** users (high-risk users)
3 times higher among regular **cannabis** users (high-risk users)
3–4 times higher among problem **gamblers**

Satisfaction with life:

lower among daily smokers
2 times lower among regular **alcohol** users (high-risk users)
3 times lower among regular **cannabis** users (high-risk users)
3–5 times lower among problem **gamblers**



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Thank you

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www.drogy-info.cz

rvkpp.vlada.cz

www.vlada.cz

www.hazardni-hrani.cz

www.alkohol-skodi.cz

[National website for support of smoking cessation:](#)

www.koureni-zabiji.cz

[National hotline for smoking cessation: 800 35 00 00](tel:800350000)