Mental health and psychological satisfaction in professional poker players **Arkadij Lobov and Marie Juanchich**

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RATIONALE

METHOD

Sample

- 102 professional poker players
- Majority (91%) are members of educational poker groups
- Age: M = 31 years (SD = 5.29)
- Gender: Male 97%
- Poker career tenure: M = 51 months (SD = 38.16)

Self-reported measures (translated to Russian)

- Mental Health¹⁰
- Basic Psychological Needs Satisfaction Index (BPNSI)¹¹
- Higher values represent more satisfaction
- 3. Relative Autonomy Index (RAI)
- Computed from the adapted to poker context Sport Motivation Scale Revised (SMS-II)⁶
- Higher values represent more autonomous motivation for playing poker

Q1: Can negative consequences of pathological gambling replicate in professional poker players?

- Pathological gambling is consistently related to poor mental health and frustration of basic psychological needs: autonomy, competence and relatedness^{1,14}
- Modern diagnostic criteria of gambling behaviour classify professional poker players as a population comparative to pathological gamblers, mainly concerning equivalent gambling intensity rates^{2,12}

Q2: Can autonomous motivation protect professional poker players?

- Pathological gamblers' motivation to engage in gambling activities is extrinsically driven and associated with the external locus of control and overall psychological distress³
- On the contrary, internally driven autonomous motivation serves as a protective mechanism from gambling problems and psychological frustration^{8,15}

Q3: Can profit protect professional poker players?

- Professional poker is recognized as regular work, referring to a pay-for-performance reward scheme in which skilled players receive greater profits^{4,9}
- The adoption of a pay-for-performance reward scheme is associated with mental health problems, specifically in lowperformance populations¹³

Poker measures (1 month)

- Gambling intensity: number of tournaments played
- Profit: actual poker winnings excluding tournament buyin, averaged per tournament



Analysis

- Inclusion criteria: participants who played more than 2400 tournaments per 12 months
- Final sample: 94 participants
- Main hypothesis tested with Spearman correlation and multiple linear regression
- Moderation hypothesis tested with PROCESS v4.2 in SPSS



Relatedness

 β = -.15, CI [-.00, .00]

 β = -.06, CI [-.05, .03]

 β = .14, CI [-.00, .00]

 $F = 1.27, R^2 = 0.04$

CI [4.04, 4.93]



Spearman correlations table

Scale to measure	Gambling Intensity	RAI	Profit
Poker measures			
RAI	17		
Profit	.27**	.08	
Mental Health			
General Distress	03	09	20
Anxious Arousal	.03	.11	03
Anhedonic Depression	.04	24*	08
BPNSI			
Autonomy	-0.01	.50***	.21*
Competence	-0.16	.46***	.11
Relatedness	-0.01	.10	0.08
*p < 0.05; **p < 0.01; ***p < 0.001			

Multiple regression analysis

Mental Health						
	General Distress	Anxious Arousal	Anhedonic Depression			
Constant	CI [13.94, 23.79]	CI [10.89, 17.56]	CI [20.77, 28.55]			
Gambling Intensity	β = .02, CI [01, .01]	β =04, CI [01, .01]	β =.04, CI [01, .01]			
RAI	β =08, CI [60, .26]	β =.01, CI [28, .30]	β =18, CI [64, .04]			
Profit	β =13, CI [04, .01]	β =04, CI [02, .01]	β =15, CI [03, .01]			
Model _(3, 90)	$F = 0.93, R^2 = 0.03$	$F = 0.11, R^2 = 0.00$	$F = 2.32, R^2 = 0.07$			
*p < 0.05; **p < 0.01; ***	^t p < 0.001					

Basic Psychological Needs Satisfaction Index

 $F = 10.94, R^2 = 0.27^{***}$ $F = 9.32, R^2 = 0.24^{***}$

samples. Journal of abnormal Psychology, 104(1), 15.

Competence

 β = -.14, CI [-.00, .00]

 β = .15, CI [.00, .00]

 β = .39, CI [.04, .11]***

CI [2.72, 3.5]

Autonomy

 β = .00, CI [-.00, .00]

 β = .15, CI [.00, .00]

 β = .47, CI [.04, .09]***

CI [2.99, 3.57]

Constant

RAI

Profit

Model (3, 90)

Gambling Intensity

*p < 0.05; **p < 0.01; ***p < 0.001

Mental Health and Addiction, 10(2), 243–257.

- Contrary to the main hypothesis, no relationship was found between gambling intensity and both mental health and psychological satisfaction
- Motivation was negatively associated with one of the mental health symptoms and positively associated with two psychological satisfaction measure
- Profit correlation with general distress reached a near-significant negative relationship (p = 0.06) and positive association with autonomy satisfaction
- When all predictors were added simultaneously, no statistically significant models or individual predictors of mental health symptoms models were found
- Autonomy and competence satisfaction multiple regression models were statistically significant.

- Results reflect previous evidence that professional poker players are better at controlling emotions and tend to be less impulsive than pathological gamblers^{2,9,12}
- Experienced poker players show greater emotional stability and self-reflection, which might alleviate the negative consequences of gambling intensity^{4,5}
- Although we did not split BPNSI into frustration and satisfaction, our findings are in line with previous evidence where autonomous motivation was linked to reduced psychological frustration and protection from gambling problems^{8,15}
- Autonomous motivation potentially help professional poker players experience stronger volitional control, pleasure during gambling⁴, less desire to chase losses or escape from personal problems¹⁵
- Potential influence of profit over mental health and psychological well-being might be

where RAI independently explained more variance
compared with gambling intensity and profit

Moderation hypothesis was not supported: there was no significant influence of both RAI and profit over the relationship between gambling intensity with both mental health symptoms and psychological satisfaction

Management Discoveries, 6(1), 12-38.

undermined by the fact that majority of players participate in "staking" as a requirement of educational group membership⁷

• Overall, professional poker players are protected from negative consequences of increased gambling intensity, potentially through greater autonomous motivation to play poker, whereas poker winnings were less strongly associated with psychological satisfaction and mental health distress

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