

The WAGER, Vol. 18(8) - The Predictive Power of Personality: How the “Big Five” are related to pathological gambling treatment outcomes

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Numerous studies have looked at how different personality traits relate to aspects of addictive behaviors, such as coping styles, patterns of use, and triggers for use (McCormick, Dowd, Quirk, and Zegarram 1998). This week’s WAGER describes a study that examined how the “[Big Five](#)” personality characteristics (i.e., Openness, Conscientiousness, Extraversion, Agreeableness, and Neuroticism) are related to treatment outcomes among treatment-seeking pathological gamblers (Ramos-Grille, Goma-i-Freixanet, Aragay, Valero, &Valles, 2013).

Methods

- Participants included 73 consecutive adult slot-machine pathological gamblers during the period of January 2007-October 2010 entering into outpatient treatment in Spain.
- Researchers used a semi-structured interview to diagnose pathological gambling using DSM-IV-TR (American Psychiatric Association, 2000) criteria. They also administered the NEO personality inventory[\[1\]](#) (Spanish version; Costa and McCrane, 1999), which assesses the “Big Five” personality domains.
- Twelve months after the participants entered into psychotherapeutic treatment, the researchers categorized all participants in two ways: (1) whether patients were abstinent or relapsed[\[2\]](#), and (2) whether patients completed treatment or dropped out[\[3\]](#).
- Logistic regression analyses revealed the associations between personality domains and the treatment outcomes, after controlling for patients’ age.

Results

- As Table 1 shows, participants who reported being less Conscientious were at higher risk for relapse to pathological gambling.
- In addition, participants who reported lower levels of Agreeableness and participants who reported lower levels of Conscientiousness were more likely to drop out of treatment for pathological gambling (see Table 1).

Table 1: Logistic Regression Analysis for the treatment outcomes by personality domain. Adapted from the original study. Abstinent/Completer scored as 0; Relapse/Dropout scored as 1. CI= confidence interval

Personality domains	Abstinent vs Relapsed				Completer vs Dropout			
	<i>B</i>	<i>p</i>	Odds ratio	95% CI	<i>B</i>	<i>p</i>	Odds ratio	95% CI
Conscientiousness	-0.11	.01	0.90	[0.84,0.96]	-0.08	.02	0.92	[0.87, 0.99]
Agreeableness					-0.06	.04	0.94	[0.89, 0.99]

Limitations

- The convenience sample might not generalize to other populations.
 - Most of the individuals were male.
 - The researchers only examined patients who have difficulties with one type of gambling; slot-machines.
- The personality scale was only administered at baseline. To the extent that participants experienced change in their personalities over the course of the year after baseline, this change would not have been captured in the data.

Conclusions

The results of this study indicated that the “Big Five” personality traits are associated with pathological gambling treatment outcomes. This association has implications for the treatment of pathological gambling: First, people who are relatively low in Conscientiousness might need a more personalized style of treatment and additional help maintaining abstinence after completing treatment. This might be because the traits associated with low Conscientiousness include low tolerance for discomfort and difficulty delaying gratification (Ramos-Grille et al, 2013). Second, individuals who are relatively low in Agreeableness might need

extra reassurances and attention from treatment providers to avoid dropping out of gambling treatment prematurely. This is because low Agreeableness may be related to resistance to treatment due to suspicion and lack of cooperation (Ramos-Grille et al, 2013). Future research might test whether treatment that takes into account patients' personality is more successful than treatment that does not.

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[1] 240 item test using a Likert-type scale where the respondents rank each statement on a scale from "strongly disagree" to "strongly agree".

[2] In this instance "relapse" is indicated by more than two isolated episodes of gambling or one episode where the total expense was higher than a week's worth of gambling prior than treatment. Those who dropped out of treatment were also included in the relapse category.

[3] A "dropout" is categorized as termination initiated by the client without

discussion with/against the wishes of the therapist.