

DEVELOPMENTAL EXPERIENCES, GAMBLING COGNITIONS, AND PROBLEM GAMBLING BEHAVIOR

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Summary

The way we perceive the world is a product of our developmental experiences¹. Although the literature on perceptual biases in gambling is large², less is known about the developmental antecedents that generate these perceptions³. In this study, we examined associations between developmental environments, gambling cognitions, and problem gambling. Using two samples of community members, we found that having adverse childhood experiences was a significant predictor of problem gambling severity, over the effects of demographics and gambling cognitions. In short, developmental experiences impact problem gambling, which suggests treatment of problem gambling should include developmental components.

Zero-Order Correlations

Table 1. Zero-Order Correlations from Study 1 and Study 2 .

	1.RFUS	2.ACE	3.GRCD	4.GRCS	5.GFM	6.PGSI	7.GBS
1		.42***	.27***	.30***	.20***	.25***	.27***
2	.24***		.51***	.56***	.47***	.59***	.37***
3	.00	.52***		.79***	.58***	.76***	.59***
4	-.02	.60***	.81***		.69***	.84***	.61***
5	.02	.50***	.56***	.67***		.66***	.50***
6	-.03	.65***	.74***	.87***	.64***		.58***
7	.08	.31***	.41***	.46***	.41***	.47***	

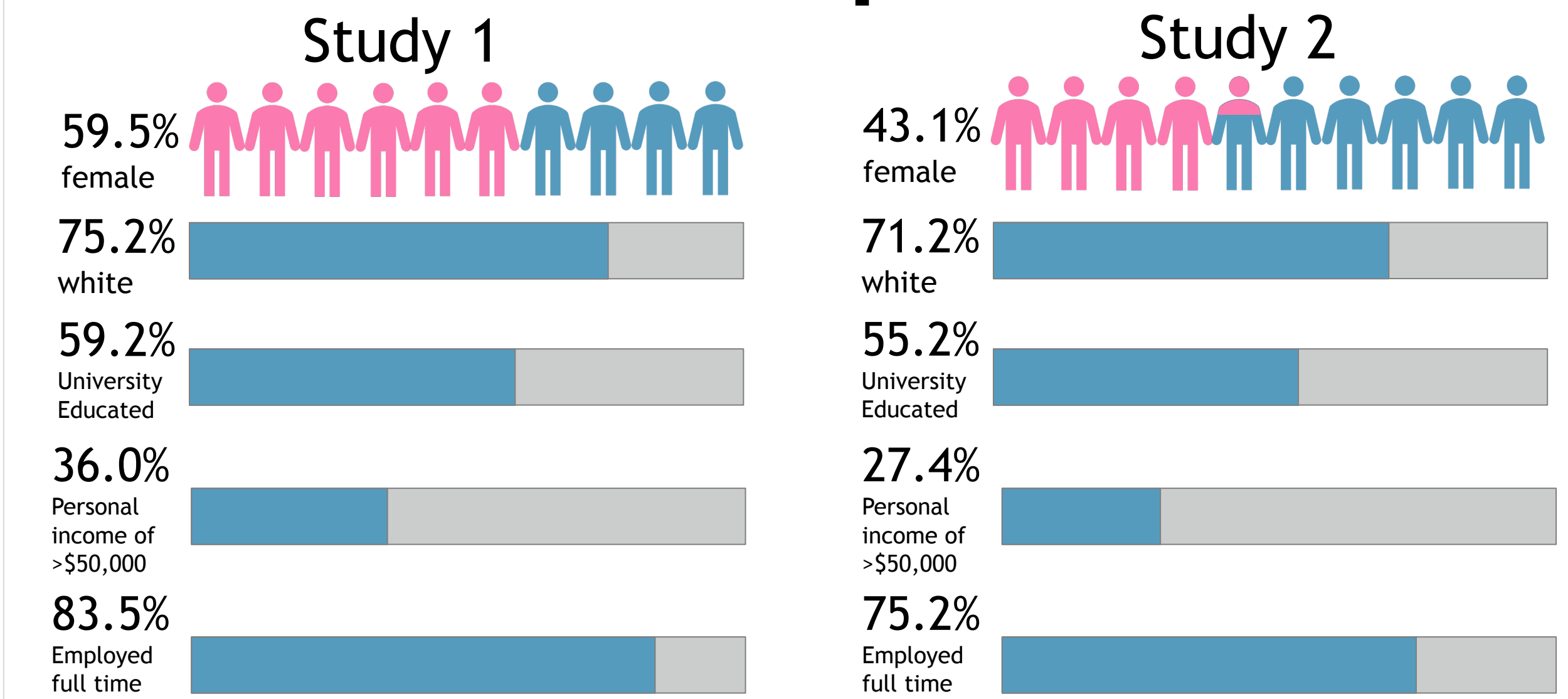
Notes: *** = p < .001. RFUS=retrospective family unpredictability scale; ACE=adverse childhood experiences scale; GRCD=gambling-related cognitive distortions scale; GRCS=gambling-related cognitions scale; GFM=gambling fallacies measure; PGSI=problem gambling severity index; GBS=gambling behavior scale.

Overview of Studies

STUDY	SUBJECT POOL	TOTAL SAMPLE	DEVELOPMENT		GAMBLING COGNITIONS		PROBLEM GAMBLING	
			RFUS	ACE	GRCD	GRCS	GFM*	PGSI
1 Exploratory	MTurk	294	•	•	•	•	•	•
2 Confirmatory	Mturk	299	•	•	•	•	•	•

Notes: *denotes that one of the scale items was not presented to participants, but the internal consistency remained acceptable. MTurk=Amazon Mechanical Turk. RFUS=retrospective family unpredictability scale; ACE=adverse childhood experiences scale; GRCD=gambling-related cognitive distortions scale; GRCS=gambling-related cognitions scale; GFM=gambling fallacies measure; PGSI=problem gambling severity index; GBS=gambling behavior scale.

Participants



Methods

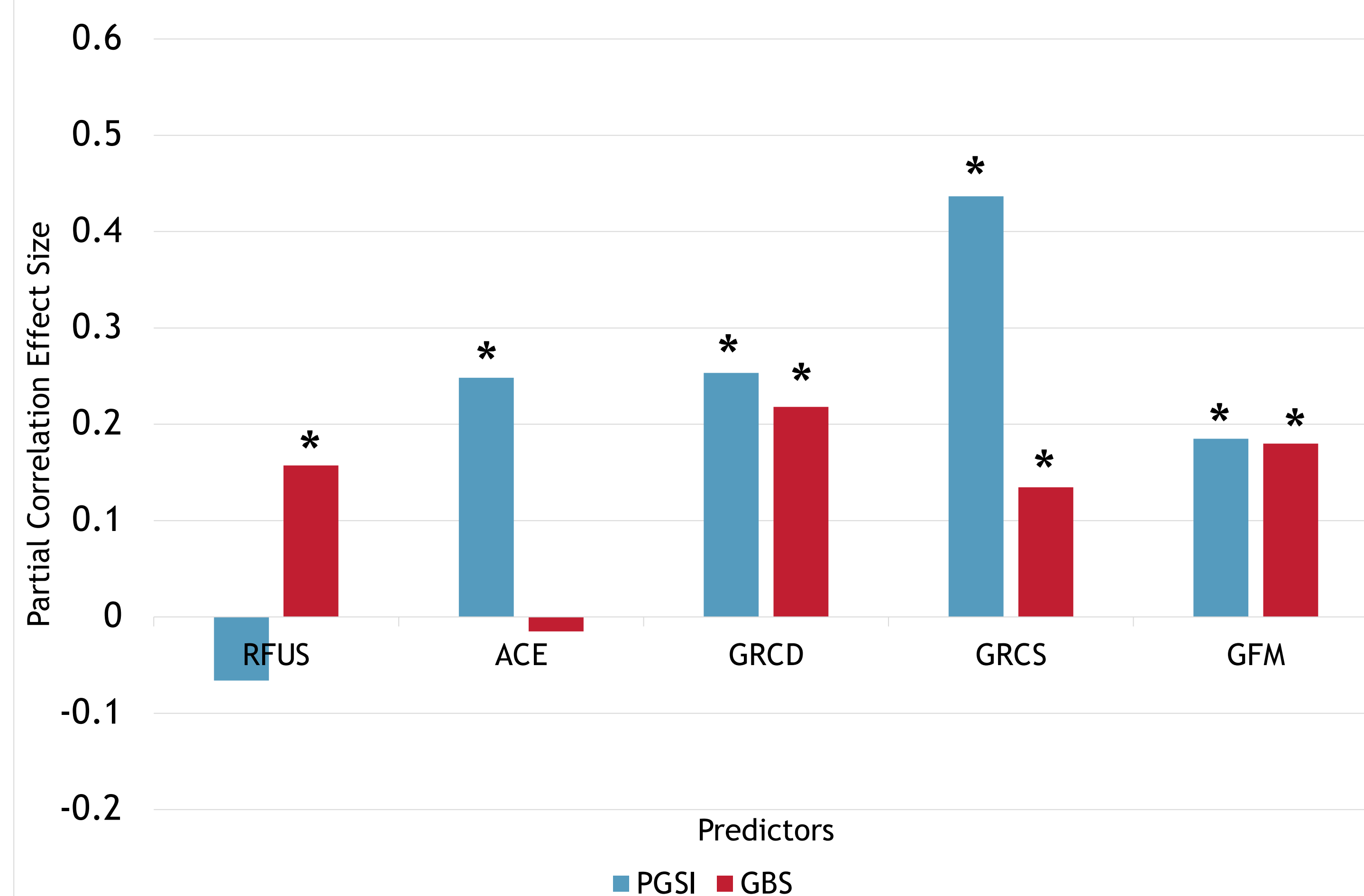
Additional information about measures and supplementary demographic material available:



Study 1

Variance in problem gambling is consistently explained by developmental environments and gambling cognitions.

Figure 1. Partial Correlations from Hierarchical Multiple Regression.



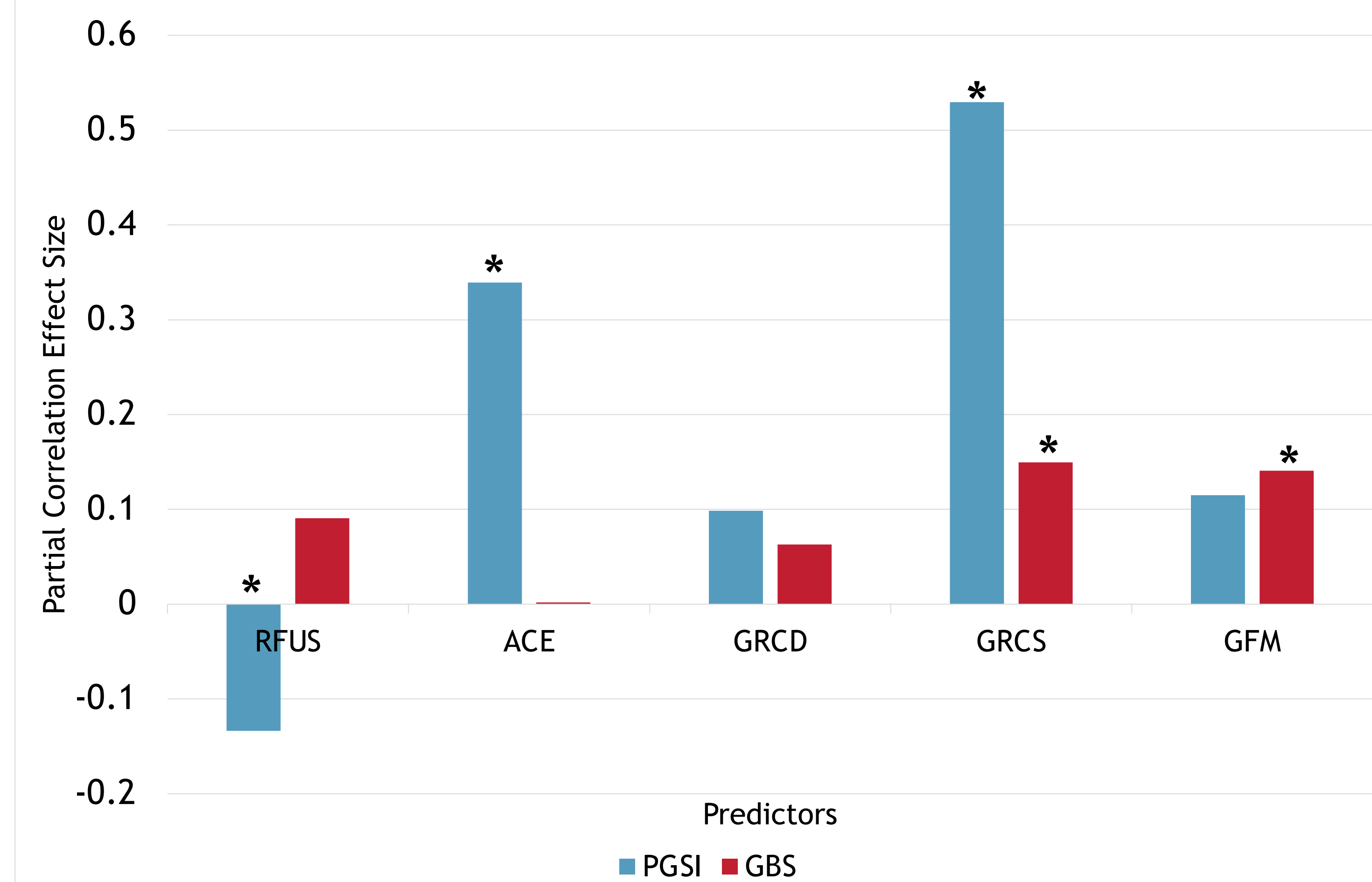
Notes: * denote significant individual predictors in the final step of the hierarchical multiple regression analyses. PGSI= problem gambling severity index; GBS= gambling behavior scale; RFUS= retrospective family unpredictability scale; ACE= adverse childhood experiences scale; GRCD= gambling-related cognitive distortions scale; GRCS= gambling related cognitions scale; GFM= gambling fallacies measure.

76% of unique variance in PGSI explained by demographics, developmental environments (26%), and gambling cognitions (31%). In contrast, 47% unique variance in GBS is explained.

Study 2

Variance in problem gambling was similarly explained by adverse childhood experiences and gambling cognitions, but fewer individual predictors were significant.

Figure 2. Partial Correlations from Hierarchical Multiple Regression.



Notes: * denote significant individual predictors in the final step of the hierarchical multiple regression analyses. PGSI= problem gambling severity index; GBS= gambling behavior scale; RFUS= retrospective family unpredictability scale; ACE= adverse childhood experiences scale; GRCD= gambling-related cognitive distortions scale; GRCS= gambling related cognitions scale; GFM= gambling fallacies measure.

81% of unique variance in PGSI explained by demographics, developmental environments (27%), and gambling cognitions (22%). Sex and education were also significant predictors in this sample. In contrast, 25% unique variance in GBS is explained.

1. Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Prentice-Hall, Inc.
2. Goodie, A. S., & Fortune, E. E. (2013). Measuring cognitive distortions in pathological gambling: review and meta-analysis. *Psychology of Addictive Behaviors*, 27(3), 730-743.
3. Bristow, L. A., Afifi, T. O., Salmon, S., & Katz, L. Y. (2022). Risky Gambling Behaviors: Associations with Mental Health and a History of Adverse Childhood Experiences (ACEs). *Journal of gambling studies*, 38(3), 699-716.