

How is Emotional Intelligence related to health risk behaviour? Sensitivity to Reward and Impulsivity as mediating factors

María T. Sánchez-López, Pablo Fernández-Berrocal, Raquel Gómez-Leal, María José Gutiérrez-Cobo, Rosario Cabello, and Alberto Megías-Robles

University of Málaga, Spain

Introduction

- Risk behaviour refers to any behaviour that may result in a significant loss, objective or subjective, for the individual (Yates & Stone, 1992). Drug initiation, imprudent sexual relations, reckless driving, and alcohol abuse are common health-related risk behaviours.
- Low levels of Emotional Intelligence are related to risky health behaviours (e.g., Fernández-Abascal & Martín-Díaz, 2015; Rivers et al., 2013).
- Sensitivity to reward and impulsivity have shown relationship with the risk construct (e.g., Baltruschat et al., 2020; Reyna & Farley, 2006). This personality traits may be part of the mediating mechanisms underlying the relationship between emotional intelligence and risk health-related risk behaviour.

Present Study

AIM → to explore the relationship between emotional intelligence and health risk behaviour by including reward sensitivity and impulsivity as mediating factors.

Methods

- ✓ **Participants:** 250 participants (28.4% were men; $M_{age} = 23.6$, $SD = 6.67$).
- ✓ **Instruments:** Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT), Domain-specific risk-taking scale (DOSPERT-30), Impulsive behaviour scale (UPPS-P), and Sensitivity to punishment and sensitivity to reward questionnaire-20 (SPSRQ-20).
- ✓ **Statistical analyses:** Pearson's correlation, multiple regression, mediation analysis.

Results

Table 1.- Pearson's correlation matrix for the study variables (controlling gender).

	1	2	3	4	5	6	7	8
(1) Risk-taking	—							
(2) MSCEIT total	-.14*	—						
(3) UPPS positive urgency	.36**	-.27**	—					
(4) UPPS negative urgency	.28**	-.14*	.48**	—				
(5) UPPS lack of premeditation	.24**	-.12	.32**	.36**	—			
(6) UPPS lack of perseverance	.17*	-.15*	.26**	.26**	.32**	—		
(7) UPPS sensation seeking	.33**	-.18*	.33**	.08	.12	.06	—	
(8) Sensitivity to reward	.27**	-.16*	.34**	.21**	.11	.07	.29**	—

* $p < .05$, ** $p < .01$

Table 2.- Final model resulting from the stepwise regression analysis.

Criterion	Predictors	B	Std. error	β	t	p
Risk-taking	UPPS positive urgency	.48	.19	.18	2.56	.01
	UPPS sensation seeking	.48	.13	.22	3.57	< .001
	Sensitivity to reward	.31	.17	.11	1.80	.07
	UPPS negative urgency	.30	.13	.15	2.26	.02
	Gender	-1.66	.80	-.12	-2.08	.04
	Constant	9.27	2.31		4.00	< .001

$R^2 = 0.23$, $p < 0.001$

Discussion

- A significant indirect effect was found between emotional intelligence and health risk behaviour through the mediating role of impulsivity and sensitivity to reward.
- This work sheds light on the understanding of the mechanisms underlying the relationship between emotional intelligence and health risk behaviour.
- These findings could form the basis for the establishment of emotional abilities training programs as a strategy to prevent risky behaviour in our society.

References

- Baltruschat, S., Cándido, A., Megías, A., Maldonado, A., & Catena, A. (2020). Risk proneness modulates the impact of impulsivity on brain functional connectivity. *Human Brain Mapping*, 41(4), 943–951.
- Fernández-Abascal, E. G., & Martín-Díaz, M. D. (2015). Dimensions of emotional intelligence related to physical and mental health and to health behaviors. *Frontiers in Psychology*, 6, 317.
- Reyna, V. F., & Farley, F. (2006). Risk and rationality in adolescent decision making: Implications for theory, practice, and public policy. *Psychological Science in the Public Interest*, 7(1), 1–44.
- Rivers, S. E., Brackett, M. A., Omori, M., Sickler, C., Bertoli, M. C., & Salovey, P. (2013). Emotion skills as a protective factor for risky behaviors among college students. *Journal of College Student Development*, 54(2), 172–183.
- Yates, J. F., & Stone, E. R. (1992). The risk construct. In J. F. Yates (Ed.), *Wiley series in human performance and cognition. Risk-taking behavior* (pp. 1–25). John Wiley.

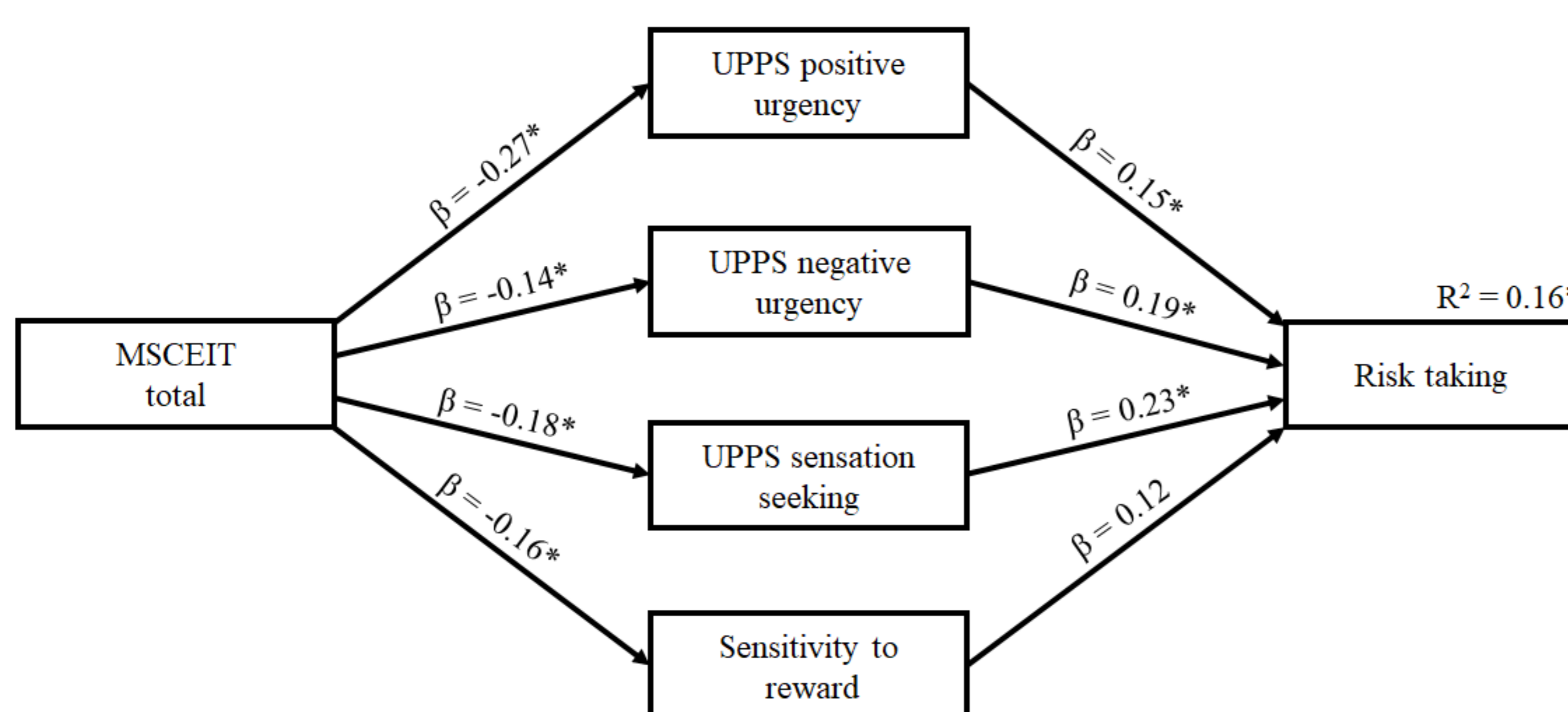


Figure 1. Representation of the mediation model including MSCEIT total as predictor, UPPS positive urgency, UPPS negative urgency, UPPS sensation seeking, and sensitivity to reward as mediators, and health risk-taking as criterion. Standardized path coefficients (β) and explained variance (R^2) are displayed. Asterisks indicate statistical significance at $p < .05$.