



# Comparing Measures of Sensation-Seeking: Associations with Adolescent Risky Behavior

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## Introduction

Sensation-seeking is a term used to describe the urge to pursue thrilling experiences, seek out novel stimuli, and engage in potentially harmful behaviors. (Hittner and Swickert, 2006). Sensation-seeking has been found to correlate with risky behaviors, particularly substance use and sexual activity, among adolescents and young adults (Donohew et al., 2000; Charnigo et al., 2012; Collado et al., 2014). Many previous studies have used the Sensation Seeking subscale of the UPPS-P Impulsive Behavior Scale (Whiteside and Lynam, 2001) to assess sensation-seeking as it relates to risky behavior (Coskunpinar et al., 2013; Dereinko et al., 2014). Another scale that may be useful for this purpose is the antisocial-stimulus seeking (ANT-S) subscale of the Personality Assessment Inventory-Adolescent (PAI-A; Morey, 2007), which is designed to assess sensation-seeking tendencies specifically in adolescents. The aim of the current study is to compare the amount of unique variance in adolescent risky behaviors explained by each of these scales.

## Methods

### Participants

- 123 at-risk adolescents in a residential boot camp facility
- 78% male, average age of 16.74 ( $SD = 0.766$ )
- Primarily Caucasian (64.2%) or African American (25.2%)
- 35.8% with one or more prior arrests

### Measures

- Youth Risk Behavior Surveillance Survey (YRBSS; Centers for Disease Control and Prevention, 2015)
- Sensation Seeking subscale of the UPPS-P Impulsive Behavior Scale (Whiteside and Lynam, 2001), Sensation Seeking subscale
- Antisocial – Stimulus Seeking subscale of the Personality Assessment Inventory-Adolescent (PAI-A; Morey, 2007)

## Results

### Data Analysis

- A multivariate general linear model was tested with UPPS-P and PAI-A subscales as covariates and individual risky behaviors as dependent variables.
- Main effects of each measure were examined.

### Tests of Between-Subjects Effects

Source	Dependent Variable	F	Sig.
UPPS-P – SS subscale	Condom use	.463	.498
	Birth control use	.510	.477
	Lifetime alcohol use	2.002	.160
	Frequency of alcohol use	.031	.860
	Frequency of binge alcohol use	.001	.982
	Number of consequences due to alcohol	1.640	.204
	Lifetime marijuana use	.065	.799
	Frequency of marijuana use	.054	.817
	Lifetime number of drugs used	.129	.721
	Number of consequences due to drugs	.230	.632
PAI-A – ANT-S subscale	Condom use	8.936	*.004
	Birth control use	4.995	*.028
	Lifetime alcohol use	15.793	**.000
	Frequency of alcohol use	21.952	**.000
	Frequency of binge alcohol use	15.001	**.000
	Number of consequences due to alcohol	8.812	*.004
	Lifetime marijuana use	17.904	**.000
	Frequency of marijuana use	15.447	**.000
	Lifetime number of drugs used	12.236	**.001
	Number of consequences due to drugs	10.721	**.001

\*Correlation is significant at the .05 level.

\*\*Correlation is significant at the .001 level.

### UPPS-P – Sensation Seeking subscale

- Did not explain a significant amount of unique variance in any risky behaviors (all  $p > .10$ )

### PAI-A – Antisocial-Stimulus Seeking (ANT-S) subscale

- Explained unique variance in a number of risky behaviors, including:
  - Not using a condom during intercourse ( $F(1,91) = 8.94, p < .05$ )
  - Frequency of alcohol consumption ( $F(1,91) = 21.95, p < .001$ )
  - Frequency of binge drinking ( $F(1,91) = 15.00, p < .001$ )
  - Frequency of marijuana use ( $F(1,91) = 15.45, p < .001$ )
  - Number of other drugs used ( $F(1,91) = 12.24, p < .001$ )

## Discussion

- Prior research has supported the use of the UPPS-P Sensation Seeking subscale as a means of measuring risky behaviors among adolescents and young adults (Coskunpinar et al., 2013; Dereinko et al., 2014).
- The current findings suggest that the PAI-A ANT-S subscale may have better utility than the UPPS-P Sensation-Seeking subscale as a measure to identify youth who are engaging in risky behaviors.

## Implications

- The PAI-A is relatively underrepresented in the literature as a means of measuring sensation seeking in at-risk youth.
- Results of the current study suggest further examination of the PAI-A ANT-S subscale in relation to adolescent risky behavior.
- These results should be of interest to many psychologists, as risky behavior during adolescence is an important problem both on the individual and societal levels.
- A better understanding of the correlates of adolescent risky behavior, and how they might best be measured, could lead to more effective prevention and early intervention strategies.

## References

- Centers for Disease Control (2015). Youth Risk Behavior Surveillance—United States, 2015. *MMWR. Surveillance Summaries*, 65(6), 1-174.
- Charnigo, R., Noar, S.M., Garnett, C., Crosby, R., Palmgreen, P., & Zimmerman, R.S. (2012). Sensation seeking and impulsivity: Combined associations with risky sexual behavior in a large sample of young adults. *The Journal of Sex Research*, 50(5), 480-488.
- Collado, A., Felton, J.W., MacPherson, L., & Lejeue, C.W. (2014). Longitudinal trajectories of sensation seeking, risk taking propensity, and impulsivity across early to middle adolescence. *Addictive Behaviors*, 39(11), 1580-1588.
- Coskunpinar, M.S., Dir, A.L., & Cyders, M.A. (2013). Multidimensionality in impulsivity and alcohol use: A meta-analysis using the UPPS Model of Impulsivity. *Alcoholism: Clinical and Experimental Research*, 37(9), 1441-1450.
- Dereinko, K.J., Peters, J.R., Eisenlohr-Moul, T.A., Walsh, E.C., Adams, Z.W., & Lynam, D.R. (2014). Relations between trait impulsivity, behavioral impulsivity, physiological arousal, and risky sexual behavior among young men. *Archives of Sexual Behavior*, 43(6), 1149-1158.
- Donohew, L., Zimmerman, R., Cupp, P.S., Novak, S., Colon, S., & Abella, R. (2000). Sensation seeking, impulsive decision-making, and risky sex: Implications for risk-taking and design of interventions. *Personality and Individual Differences*, 28(6), 1079-1091.
- Hittner, J.B. & Swickert, R. (2006). Sensation seeking and alcohol use: A meta-analytic review. *Addictive Behaviors*, 31, 1383-1401.
- Morey, L.C. (2007). Personality Assessment Inventory—Adolescent. PAR.
- Whiteside, S.P. & Lynam, D.R. (2001). The five factor model and impulsivity: Using a structural model of personality to understand impulsivity. *Personality and Individual Differences*, 30, 669-689.