Factor analyses of the Protective Behavioral Strategies for Marijuana Scale (PBSM) **revealed two reliable factors (Quantity and Context)** that **uniquely link to cannabis use indices**.

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Factor Analysis of the Protective Behavioral Strategies for Marijuana Scale

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Introduction

- Protective behavioral strategies can **decrease the potential for negative outcomes** associated with substance use
- The **Protective Behavioral Strategies for Marijuana Scale (PBSM)** is a 17-item measure capturing harm reduction strategies for cannabis use (Pedersen, 2016)
- Current Study: Confirm and explore the factor structure of the 17-item PBSM

Methods

N	454
M_{age}	19.6
% White	39
% Female	68.8%

- Demographics
- Weekly Cannabis Use
  M = 2.3 (SD = 2.7) days/week
- PBSM (Pedersen, 2016)
  M = 56.3 (SD = 19)
- Cannabis Problems (CAPQ) (Stephens, 1994, 2000)
  M =9.74 (SD = 12.6)

Conclusion

- CFA indicated the one factor solution to have a poor fit; EFA produced a novel 2 factor solution (Quantity, Context)
- Context more strongly related to use and problems,; only Context predicted fewer cannabis problems and use

References

Pedersen, E. R, Hummer, J. F., Rinker, D. V., Traylor, Z. K., & Neighbors, C. (2016). Measuring protective behavioral strategies for marijuana use among young adults. Journal of Studies on Alcohol and Drugs, 77(3), 441–450.
Stephens, R. S., Roffman, R. A., & Curtin, L. (2000). Comparison of extended versus brief treatments for marijuana use. Journal of Consulting and Clinical Psychology, 68(5), 898–908
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Results

*= p<.05, **=p<.01, ***=p<.001

Factor Analyses

	Confirmatory (1 Factor)	Exploratory (2 Factor)	
Item		Quantity	Context
16. Limit amount to smoke in one sitting	.771	.824	
13. Have set amount of hits	.576	.786	
14. Avoid methods leading more intoxication	.677	.774	
12. Buy less to smoke less	.582	.690	
15. Only use one time during day/night	.718	.514	
8. Use little at a time	.612	.409	
3. Avoid using before work or school	. 681		.767
2. Avoid use while with family	.602		.748
1. Use only among trusted peers	.434		.609
6. Only purchase marijuana from trusted source	.466	.600	
10. Avoid using in public	.630		.574
9. Avoid mixing with other drugs	.583	.517	
4. Avoid using to cope with emotions	.558		.403
7. Avoid using habitually	.742	Items removed due to overlap and margins <.2	
5. Limit use to weekends	.735		
11. Take breaks if using too frequently	. 750		
17. Avoid using before physical activity	. 630		
% of Variance		42.96	10.69

CFA Fit Indices

X^2= 716.7, *df* = 119, *p* < .001
SRMR = 0.07; RMSEA = 0.108; CFI = 0.827; NNFI = 0.80; NFI = 0.80

Bivariate Associations

	1	2	3
(1) Quantity			
(2) Context	.58**		
(3) Use	-.29**	-.40**	
(4) Global CAPQ	-.27**	-.38**	.23**

Predicting Cannabis Use

Variable	B	SEB	T	β [95%CI]	sr^2	Adj. R^2
Step 1						.000
Male	-.10	.23	-.44	-.02[-.55, .35]	-.02	
Step 2						.097**
Male	-.31	.22	-1.4	-.07[-.74, .12]	-.07	
Quantity	-.04	.006	-6.6	-.31**[-.06, -.03]	-.31	
Step 3						.088**
Male	-.43	.21	-2.1	-.10*[-.83, -.02]	-.10	
Quantity	-.01	.01	-1.8	-.10[-.03, -.01]	-.08	
Context	-.06	.01	-6.6	-.37**[-.08, -.04]	-.30	

Predicting CAPQ

Variable	B	SEB	T	β [95%CI]	sr^2	Adj. R^2
Step 1						.01*
Male	.49	.22	2.01	.10*[.01, .97]	.1	
Step 2						.06**
Male	.52	.24	2.2	.11*[.06, .99]	.11	
Cannabis Use	.26	.05	5.0	.24**[.15, .36]	.24	
Step 3						.04**
Male	.37	.24	1.6	.08[-.10, .83]	.07	
Cannabis Use	.19	.05	3.5	.17*[.08, .30]	.17	
Quantity	-.03	.01	-4.1	-.21**[-.04, -.02]	-.20	
Step 4						.06**
Male	.24	.23	1.1	.05[-.21, .70	.05	
Cannabis Use	.10	.06	1.8	.09[-.01, .20]	.08	
Quantity	-.01	.01	-.73	-.12[-.02, .01]	-.03	
Context	-.06	.01	-5.6	-.33**[-.08, -.04]	-.25	

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