



A Cluster Analysis of Juvenile Sexual Offenders

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Introduction

Previous Research

- Few previous attempts to classify juvenile sexual offenders based on standardized psychological instruments.
- Seven offender typologies identified by O'Brien and Bera (1986): naïve experimenter, the unsocialized child sexual exploiter, the pseudo-socialized child exploiter, the sexually aggressive offender, the sexually compulsive offender, the disturbed impulsive offender, and the group influenced offender.
- Using the California Personality Inventory, Worling (2001) established a personality-based typology of juvenile sexual offenders with four distinct subgroups: antisocial/impulsive, overcontrolled/reserved, unusual/isolated, and confident/aggressive.

Goals

- Explore the nature of personality typologies derived from the MACI's personality patterns scales.
- To contribute to personality-based cluster literature and compare results with previous studies.

Methods

Participants

- Juvenile youth-offenders incarcerated at an Alabama Department of Youth Services correctional facility.
- Youth from throughout the state of Alabama were housed within this correctional facility.
- N=429; consecutive admissions from 2000 through 2007.
- Mean age of 15.78 (range = 12.8 to 19.16; SD = 1.48).
- Demographic Breakdown: Caucasian (53.8%), African-Americans (43.1%), and "Other" (3.1%).

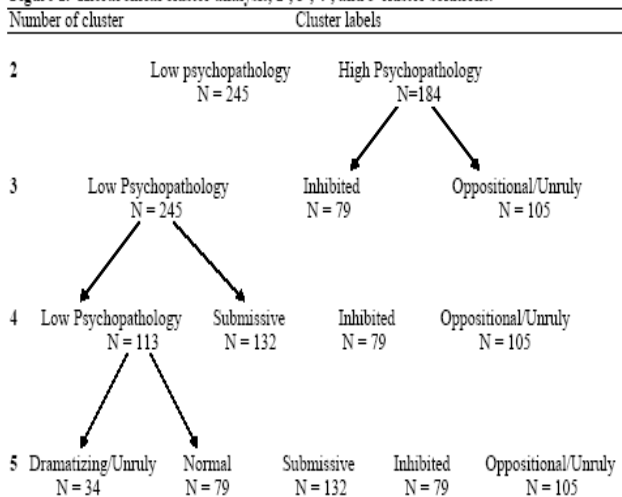
Instrument

- The Millon Adolescent Clinical Inventory (MACI; Millon, 1993).
- 160-item self-report personality inventory specifically targeted to assess troubled adolescents via true-false responses to items.
- The MACI was developed to measure unique concerns, pressures, and situations adolescents face and was designed with a focused sample including adolescents in a variety of clinical treatment environments.
- Participants completed the MACI after an initial facility orientation period of approximately 10 days.

Data Analysis

- The 12 personality patterns scales of the MACI were entered into a hierarchical cluster analysis using Ward's cluster method.
- Ward's method is commonly used for forming hierarchical groups of mutually exclusive subsets as it organizes the data into a proximity matrix before combing groups to derive the least possible within group variance and the highest between-group variance.
- Exploratory analysis resulted in a five-cluster solution (Figure 1). Once cluster group membership was established for each participant, the groups were compared by their mean scores on each of the personality pattern scales through a series of one-way ANOVAs. Tukey post-hoc t tests were conducted to determine which clusters differed significantly.

Figure 1. Hierarchical cluster analysis, 2-, 3-, 4-, and 5-cluster solutions.



Results

- Analyses indicate a five-cluster solution (see Table 1).
- Mean scale score, subsequent ANOVAs, and post-hoc tests support the distinctive characteristics of the five groups.

Discussion

- These results suggest a five group typology of adolescent sexual offenders.
- The cluster grouping suggest the presence of an irresponsible attention seeking profile type, an interpersonally docile and expressively incompetent typology, an insecure and interpersonally avoidant typology, a hostile and aggressive profile type, and a fifth type that displays few characteristics of significant psychopathology.
- Cluster typologies suggest tailoring treatment interventions aimed at addressing individual deficits and strengths in order to be more efficient and effective in reducing offender recidivism.

Future Directions

- Examining the arresting offense of members within each cluster may provide additional support of this five-cluster solution.

For additional information regarding this study or additional information regarding the Mt. Meigs Treatment Facility please contact Patrick Cook at: cookpat@auburn.edu.

Table 1. Mean base rate MACI Personality Patterns scale scores, standard deviations, and ANOVA comparisons by cluster

	Dramatizing/Unruly n=34		Normal n=79		Submissive n=132		Inhibited n=79		Oppositional/Unruly n=105		ANOVA	
MACI Scale	M	SD	M	SD	M	SD	M	SD	M	SD	F (4, 424)	p
1 Introversive	25.03 a	9.78	50.92 b	12.51	46.90 b	15.19	69.44 c	15.642	65.73 c	12.096	91.74	<.001
2A Inhibited	22.12 a	7.85	44.58 b	15.501	49.94 b	16.17	76.41 c	12.684	62.11 d	15.678	102.62	<.001
2B Doleful	31.32 a	14.77	47.09 b	20.76	32.60 a	14.3	71.96 c	11.962	72.55 c	12.2	159.66	<.001
3 Submissive	48.44 a	11.52	57.23 b	7.09	73.52 c	10.33	70.22 c	9.69	48.89 a	12.367	114.03	<.001
4 Dramatizing	79.85 a	9.99	57.08 b	5.85	62.83 b	14.89	39.44 c	14.6	43.39 c	13.21	96.82	<.001
5 Egotistic	67.79 a	6.61	55.13 b	9.06	58.46 b	14.02	35.96 c	13.46	41.97 d	14.48	67.96	<.001
6A Unruly	80.76 a	10.91	63.04 b	13.71	40.49 c	12.63	47.04 d	13.28	72.32 e	12.59	137.69	<.001
6B Forceful	44.41 a	21.7	31.68 b	13.48	16.95 c	11.4	17.51 c	10.47	59.95 d	17.29	164.04	<.001
7 Conforming	54.12 a	7.51	54.13 a	7.05	70.88 b	13.35	52.35 a	8.7	36.52 c	10.86	156.47	<.001
8A Oppositional	58.06 a	13.9	57.30 a	12.08	37.28 b	12.69	65.44 c	10.16	74.47 d	7.62	178.28	<.001
8B Self-Demeaning	24.82 a	12.71	32.76 b	12.97	27.61 a	11.33	63.44 c	13.9	63.08 c	14.35	186.06	<.001
9 Borderline	27.79 a	14.42	34.75 b	13.88	19.02 c	9.41	45.58 d	16.77	62.69 e	15.79	156.99	<.001

Note. Mean cluster scores that share a common superscript in each row indicate differences were not significant at the $p < .05$ level on Tukey post hoc tests.