

ROLES Revision Project: General Environment Types

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Measuring restrictiveness of living environments

- ▶ Environmental restrictiveness is a critical outcome in determining effectiveness of care for children/youth
- ▶ The Restrictiveness of Living Environment Scale (ROLES) has been used since 1992 as a descriptive measure of program restrictiveness
- ▶ Conceptual Definition of the ROLES
 - A living environment can be made restrictive by :
 - ▶ the physical facility, appearance and layout;
 - ▶ the rules and requirements that affect free movement, activity or choice;
 - ▶ and the voluntariness with which children and youths enter or leave the setting permanently

ROLES

- ▶ Jail
- ▶ State mental Hospital
- ▶ County detention center
- ▶ Youth correctional center
- ▶ Intensive treatment unit
- ▶ Drug-alcohol rehabilitation center (inpatient)
- ▶ Medical hospital (inpatient)
- ▶ Wilderness camp (24-hour, year-round)
- ▶ Residential treatment center
- ▶ Group emergency shelter
- ▶ Residential Job Corps center
- ▶ Group home
- ▶ Foster-family-based treatment home
- ▶ Individual-home emergency shelter
- ▶ Specialized foster care
- ▶ Regular foster care
- ▶ Supervised independent living
- ▶ Home of a family friend
- ▶ Adoptive home
- ▶ Home of a relative
- ▶ School dormitory
- ▶ Home of natural parents (for a child)
- ▶ Home of natural parents (18+)
- ▶ Independent living with friend
- ▶ Independent living by self

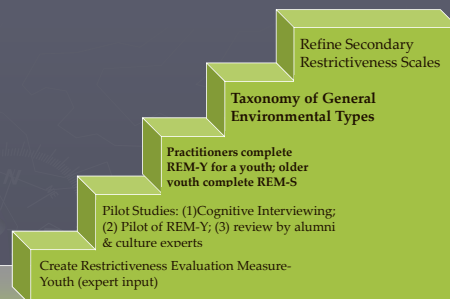
Research Questions

- ▶ Is it possible to create a conceptually-based reliable and valid supplementary measure of restrictiveness that permits greater precision in measuring environmental restrictiveness?
- ▶ Can this measure empirically describe the environments and provide the basis for general types of restrictiveness that are intuitive and flexible?

New Conceptual Definition

Restrictiveness is the ways in which adults in a child's life have anticipated that limits need to be made for the child's safety, developmental and therapeutic needs.

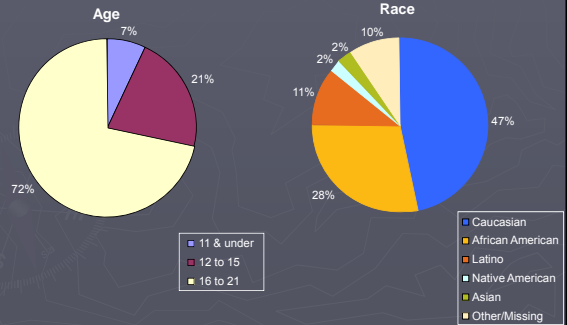
Process



Methods

- ▶ Email sent to 1000+ organizations and associations with link to the REM-Y
- ▶ Networking approach & direct appeals
- ▶ Sample of older youth from Casey Family Programs and Boy's Town
- ▶ Sample of older youth from several colleges
- ▶ The REM-Y or REM-S was completed on 595 youth

Sample Description



Item Misfit Table

	Raw Score	Count	Measure	S.E.	Model	Infit	Outfit	
					MNSQ	ZSTD	MNSQ	ZSTD
Employment	1546	588	-.66	.05	1.92	9.9	2.21	9.9
Educational setting	1362	588	-.17	.04	1.48	7.9	2.06	6.6
Driver's license	1251	391	-.86	.05	1.01	2	1.78	2.8
PSN medication	828	582	-.90	.06	1.38	4.2	1.73	2.9
Finances	1200	486	-.63	.05	1.43	6.2	1.56	6.1
Choice of living setting	1460	489	-1.20	.05	1.25	3.8	1.17	2.3
Treatment decisions	1431	585	-.58	.05	1.17	2.8	1.15	2.2
Mechanical restraint	689	590	.86	.07	1.13	8	1.13	4
Privacy	1318	593	-.21	.05	1.10	1.4	1.12	1.9
Treatment intensity	1255	589	-.20	.04	.87	-2.3	1.10	9
Recreation	1340	594	-.17	.04	.98	-3	1.08	9
Removed contact w/others	862	590	1.11	.07	1.01	2	.98	-2
Discer	1350	590	-.14	.05	.97	-5	.92	-1.2
Family interaction	1047	590	-.58	.05	.93	-1.2	.78	-1.4
Physical restraint	958	580	.85	.05	.92	-1.5	.77	-1.0
Television	884	499	-.01	.07	.87	-1.2	.81	-1.9
Friend selection	951	595	-.36	.05	.83	-2.0	.72	-2.4
Music	1053	595	.65	.05	.81	-3.1	.72	-3.1
Movement in community	1773	594	-.30	.04	.79	-4.0	.74	-3.3
Internet	1710	594	-.86	.04	.77	-4.4	.74	-3.0
Communication	1378	594	-.10	.05	.75	-4.7	.69	-4.6
Movement in setting	1076	594	-.93	.06	.75	-4.1	.71	-4.5
Extra curricular activity	1219	589	-.05	.04	.72	-5.1	.65	-4.4
Interaction with friends	1305	590	-.07	.04	.71	-6.0	.63	-4.7
Mean	1216.7	571.2	.00	.05	1.02	-1	1.07	-1
Standard Deviation	243.0	48.1	.61	.01	.30	4.4	.45	4.0

Summary Statistics (For 21 item scale)

Summary of 593 Measured (Non Extreme) Persons

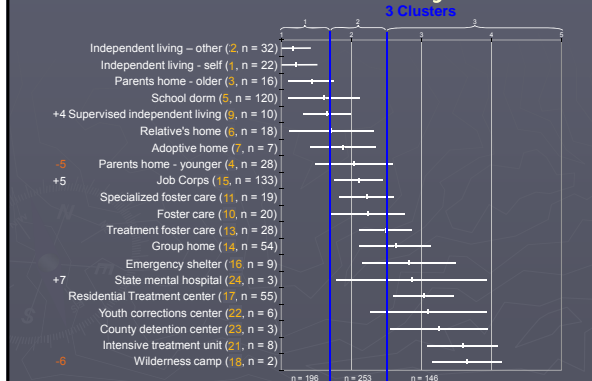
	Raw Score	Count	Measure	S.E.	Model	Infit	Outfit	
					MNSQ	ZSTD	MNSQ	ZSTD
Mean	43.7	20.4	-1.22	.33	1.05	.0	1.06	-.1
SD	13.6	.8	1.24	.18	.53	1.3	.90	1.0
Real MSE	=.41	Adj. SD = 1.17	Separation = 2.89	Person reliability = .89				
Model MSE	=.37	Adj. SD = 1.18	Separation = 3.18	Person reliability = .91				

Summary of 595 Measured (Extreme and Non Extreme) Persons

	Raw Score	Count	Measure	S.E.	Model	Infit	Outfit	
					MNSQ	ZSTD	MNSQ	ZSTD
Mean	43.6	20.4	-1.24	.33				
SD	13.7	.9	1.27	.21				
Real MSE	=.42	Adj. SD = 1.20	Separation = 2.82	Person reliability = .89				
Model MSE	=.39	Adj. SD = 1.21	Separation = 3.07	Person reliability = .90				

Cronbach Alpha (KR-20) = .91

ROLES Overall M and SD by Cluster



Count of ROLES by Cluster

Roles	N	Three Clusters		
		1	2	3
2 Ind. living w/friend	32	31	1	
1 Ind. living - self	22	20	2	
3 Parents home - older	16	13	3	
5 School dorm	120	82	34	4
9 Supervised ind. Living	10	6	4	
6 Relative's home	18	9	7	2
7 Adoptive home	7	3	4	
8 Friend's home	1	1		
4 Parents home - younger	28	10	13	5
15 Job Corps	133	13	118	2
11 Specialized foster care	19	1	13	5
10 Foster care	20	4	11	5
13 Treatment foster care	28	1	13	14
14 Group home	54	1	20	33
16 Emergency shelter	9	1	1	7
24 State mental hospital	3	1		2
17 Res. Treatment center	65	1	6	49
22 Youth corrections center	6	2	4	
20 Inpatient rehab	1	1		
23 County detention center	3		3	
21 Intensive treatment unit	8		8	
18 Wilderness camp	2		2	
Grand Total	595	196	253	146

Limitations

- ▶ Small numbers in some of the settings (state hospital, inpatient rehabilitation) and none in others (jail, medical hospital)
- ▶ Some settings not in the ROLES were not added to the REM-Y e.g. military and homelessness
- ▶ Self-selection in respondents
- ▶ Preliminary—need to continue to establish the validity of the REM-Y and REM-S
- ▶ The REM-Y and REM-S was conceptualized by an adult perception of what makes an environment restrictive
 - Culture and gender bias needs to be further investigated

Conclusions

- ▶ ROLES needed to be revised
 - It is confounded by related issues such as normality, social desirability, etc.
 - Settings out of order, some obsolete, new settings not included
- ▶ The REM-Y is psychometrically sound
 - Development and review process worked to provide a broad range of restrictiveness items
 - IRT helped refine items and supports the soundness of measure
- ▶ Cluster analysis supports and provides the basis for development of the General Environment Types

How would you use the REM-Y

- ▶ REM-Y could provide empirical information about the level of restriction, helping to support the evidence basis for community-based interventions
- ▶ REM-Y could be used to assist with prospective individualized planning for services
- ▶ The REM-Y is free

Contact Information

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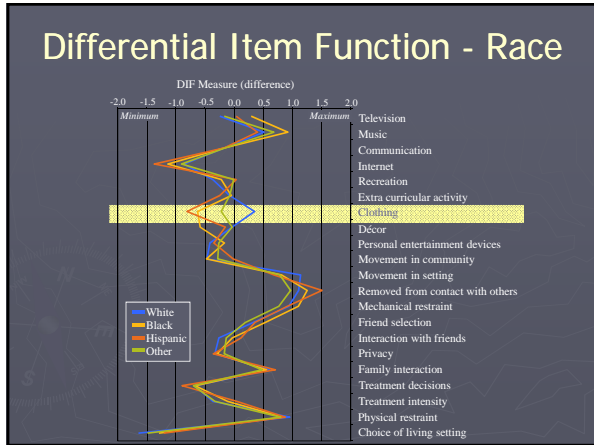
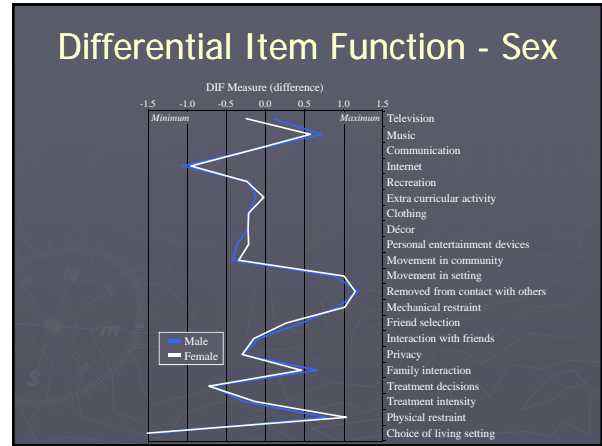
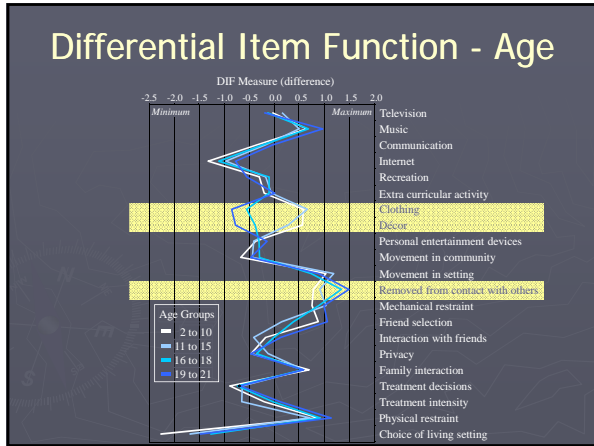
Sponsors



Collaborators

- ▶ Jonathan C. Huefner, Ph.D.
 - Boys Town
- ▶ Mary Beth Rautkis, Ph.D.
 - University of Pittsburgh
- ▶ Kirk O'Brien, Ph.D.
 - Casey Family Programs

Appendix



REM-Y Means by Cluster

Cluster	1		2		3	
	Mean	SD	Mean	SD	Mean	SD
Television	1.36	196 491	1.30	228 522	2.45	75 1,004
Music	1.12	196 329	1.62	253 781	2.90	146 1,059
Communication	1.29	196 584	2.57	252 832	3.27	146 784
Internet	1.39	195 892	2.31	253 854	4.29	146 824
Recreation	1.34	195 745	2.31	253 1,182	3.39	146 964
Extra curr. activity	1.14	194 477	2.04	252 933	3.38	143 1,180
Clothing	1.27	194 628	2.94	252 1,112	2.43	146 917
Décor	1.39	194 558	2.66	252 925	2.85	144 996
Personal ent. device	1.32	194 469	2.34	250 682	3.47	146 880
Movement in comm.	1.26	196 589	2.69	252 1,057	3.76	146 949
Movement in setting	1.25	195 501	1.82	253 590	2.55	146 823
Removed from others	1.16	194 558	1.46	250 553	1.87	146 613
Mechanical restraint	1.04	194 328	1.05	253 305	1.56	143 1,231
Friend selection	1.11	196 332	1.33	253 598	2.71	146 1,292
Friend interaction	1.19	194 477	2.04	251 914	3.88	145 854
Privacy	1.67	195 750	2.31	252 900	2.82	146 947
Family interaction	1.11	194 475	1.65	250 980	2.87	146 1,032
Treatment decisions	1.61	193 810	2.64	248 1,078	3.24	144 1,140
Treatment intensity	1.23	193 580	1.85	250 975	3.83	146 1,171
Physical restraint	1.08	189 453	1.60	247 387	2.49	144 924
Choice in setting	2.05	184 1,054	3.24	206 1,290	4.19	99 778

1.30 ← .85 → 2.15 ← .91 → 3.06

