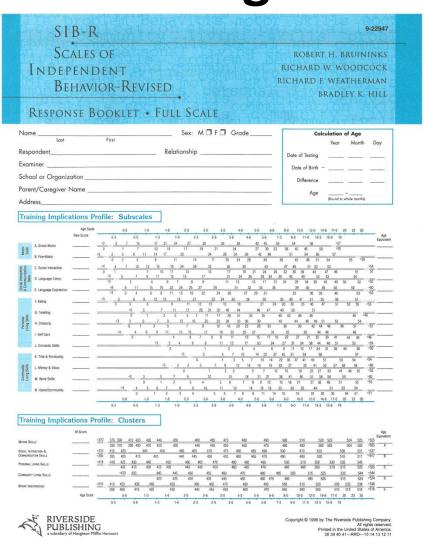
Program Evaluation of Mason LIFE's Independent Living Skills

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Definition

• A Comprehensive Postsecondary, nondegreed program, educating students with Intellectual and developmental disabilities

and

•Supportive apprenticeship for students who are majoring in human service studies which provides practical experience learning from, and working with, individuals with disabilities

Students

- High school graduates, 18-23 years old
- Non-categorical students with Intellectual or Developmental Disabilities (ID/DD)
 - Local, out-of-state, and international
- Take specially designed courses to increase reading, writing, math, technology, independent living, and vocational skills



Framework: Residential Housing Independent Living

Number of units: 7

On campus and off campus townhouses

Number of students: 23

Support Staff:7

Overnight and 13 Day



Purpose

- What are areas of student improvement?
- What are areas of further curriculum development?
- Differences across disability area, rank, or on/off campus?

Adaptive Behavior Defined

- Adaptive behavior represents the conceptual, social, and practical skills that people have learned to be able to function in their everyday lives. Significant limitations in adaptive behavior impact a person's daily life and affect the ability to respond to a particular situation or to the environment.
- Limitations in adaptive behavior can be determined by using standardized tests. On these standardized measures, significant limitations in adaptive behavior are operationally defined as performance that is at least 2 standard deviations below the mean of either (a) one of the following three types of adaptive behavior: conceptual, social, or practical, or (b) an overall score on a standardized measure of conceptual, social, and practical skills.



-AAIDD (2008)

Adaptive Behavior and Persons with ID

• Social and other adaptive skills, including communicative and independent living skills, are essential in achieving independence in daily life and in adjusting to stressful interpersonal situations (Hall et al., 2005; Matson, Taras, Sevin, Love, & Fridley, 1990). Persons with intellectual disability (ID) often have deficits in social and adaptive skills (APA, 2000), thus acquiring these skills is a key factor in an individual's ability to transition from more restrictive living environments, such as institutions, to less restrictive community living settings and having a healthy and happy life (Matson et al., 1990).

-Matson, Terlonge, Gonzalez, Rivet (2006)



Daily Living Skills

 Cognitive, Linguistic and Adaptive Functioning in Williams Syndrome: Trajectories from Early to Middle Adulthood

"Daily Living scores were lowest."

-Howlin, Elison, Udwin, Stinton (2010)

 Developmental Trajectories in Adolescents and Adults With Autism: The Case of Daily Living Skills

"The improvement in daily living skills for individuals with ASD into the late 20s likewise suggests that it may be possible for daily living skills to be gained at later points in development, even as skills in other areas plateau."

-Smith, Maenner, Seltzer, (2012)



Social Skills

- Persons with intellectual disabilities and developmental have been found to have small social networks (when compared to their non-disabled peers) that often included staff members (Robertson et al. 2001).
- Social relationships and supports have been found to have significant influences on the health and well-being of persons with intellectual and developmental disabilities (Lunsky & Benson 2001).
- There is a need to tackle social exclusion and enable people to access a wider range of leisure opportunities. Addressing deficits in adaptive behavior is a way to provide access. (Hall, Strydom, Richards, Hardy, Bernal & Wadsworth 2005)



Participants

 The assessed 23 students are all over the age of 21. Students have diverse disabilities including autism spectrum disorders, intellectual disabilities, cerebral palsy,

and developmental delays.



Student grade levels range from first year, second year, third year, fourth year, and student intern.

Evaluation Method

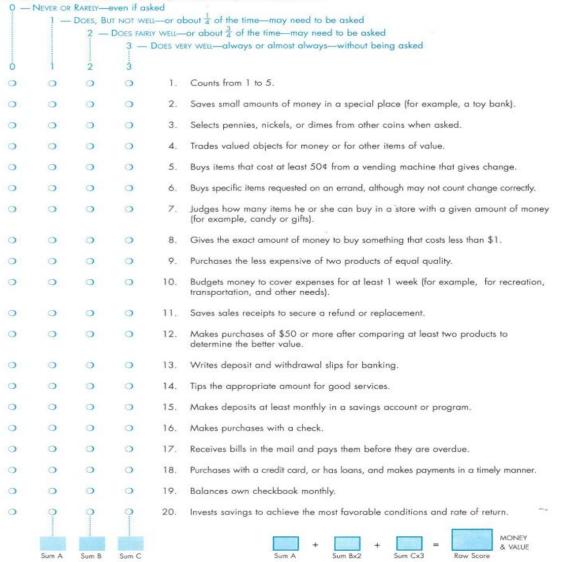
 Bruininks, R., Woodcock, R., Weatherman, R., Hill, B. (1996) Scales of Independent Behavior-Revised to assess student independent living skills. The Scales of Independent Behavior-Revised was designed to assess the functional and adaptive behaviors necessary to live independently. The scale includes 14 subscales, 4 main clusters, and 8 behavior questions. There are a total of 63 subscale questions and 8 behavior questions.

Does (or could do) task completely without help or supervision:

0 - NEVER OR RARELY-even if asked - DOES, BUT NOT WELL-or about $\frac{1}{4}$ of the time-may need to be asked 2 — DOES FAIRLY WELL—or about $\frac{3}{4}$ of the time—may need to be asked 3 — DOES VERY WELL—always or almost always—without being asked 1. Swallows soft foods. Picks up and eats foods such as crackers. Holds and drinks from a glass with little spilling. 3. Eats solid foods with a spoon with little spilling. Eats with a fork by spearing the food when appropriate. Eats soup with a spoon with little spilling. Tests cooked foods that are hot before eating them. Takes appropriate-size portions from serving dishes. Prepares snacks that do not require cooking such as sandwiches or a bowl of cereal. Cuts food with a knife instead of trying to eat pieces that are too large. Opens cans with little spilling using a can opener. Mixes and cooks simple foods such as scrambled eggs, soup, or hamburgers. Uses the burners on an electric or gas stove. Puts leftover food in wrap or containers before putting it away. Mixes and cooks a recipe that contains 6 ingredients and requires measuring fractions (for example, $\frac{1}{2}$ teaspoon or $\frac{1}{3}$ cup). Prepares shopping list for at least 6 items from a grocery store. Plans, prepares, and serves a complete meal for more than two people. Makes new meals out of leftover food. 19. Plans and prepares meals regularly for self and family. EATING & MEAL PREPARATION Sum Cx3

F. Are there skills in eating or meal preparation that should be improved at this time?

Does (or could do) task completely without help or supervision:



L. Are there any skills in using money or understanding value that should be improved at this time?

Does (or could do) task completely without help or supervision:



J. Are there any home skills that should be improved at this time?

ADAPTIVE BEHAVIOR/C. Social Interaction

Does (or could do) task completely without help or supervision:

o —	NEVER OR	RARELY—e	even if ask	ed	And the state of t					
	1 -				bout $\frac{1}{4}$ of the time—may need to be asked					
		2 -			or about $\frac{3}{4}$ of the time—may need to be asked					
			3 — [DOES VE	RY WELL—always or almost always—without being asked					
o	ì	2	3							
0	0	0	0	1.	Reaches for a person whom he or she wants.					
0	0	0	0	2.	Treats at least two people outside the family as friends, different from strangers.					
0	0	0	0	3.	Imitates actions when asked, such as waving or clapping hands.					
0	0	O	0	4.	Rolls a ball or plays other simple games with another person.					
0	0	0	0	5.	Takes part in simple group games and social activities (for example, playing tag or follow-the-leader).					
0	0	0	0	6.	Says, "Please" and "Thank you" when appropriate.					
0	0	0	0	7.	Waits at least 2 minutes for turn in a group activity (for example, taking turns at batting a ball or waiting in line for a drink of water).					
0	0	0	0	8.	Talks about the same things that others in a group are talking about.					
0	0	0	0	9.	Offers help to other people (for example, holds a door open for one whose arms are full or picks up an object dropped by someone else).					
0	0	0	0	10.	Asks for food to be passed.					
0	0	0	0	11.	Uses a napkin to keep hands and face clean while eating.					
0	0	0	0	12.	Says, "Hello" or shakes hands when being introduced.					
0	0	0	0	13.	Covers the mouth or nose when coughing or sneezing.					
0	0	0	0	14.	Plays table or card games with others by the rules (for example, Hearts or Rummy).					
0	0	0	0	15.	Locates or remembers telephone numbers and calls friends on the telephone.					
0	0	0	0	16.	Plans for and entertains others at home (including providing food, beverage, and materials for activities).					
0	0	0	0	17.	 Uses facts to explain or defend a position in a disagreement without losing temper. 					
0	0	0	0	18.	Makes plans with friends to attend activities such as movies or special events_outside the home (without needing permission).					
	Sum A	Sum B	Sum C		Sum A Sum Bx2 Sum Cx3 Raw Score					

C. Are there any social skills that should be improved at this time?_

H. Dressing			I. Personal Self-Care			J. Domestic			K. Time & Punctuality			L. Money δ			M. Work		
Raw			Raw			Raw	Skills		Raw		-	Raw	Value		Raw	Skills	
Score	W	AE	Score	W	AE < 0.9	Score	W	AE	Score	W 398	AE	Score	W	AE	Score	W 432	< 14
0	381	< 0-8	1	420	0.9	0	452	< 1.8 1-8	1	408	< 2.4	0	433	< 1-10 1-10	0	441	< 14
2	397	0-10		429		2	46B	2.2	2	414	2.10	2	447	2-4	2	447	15
3	401	0-11	2	434	0-11	3	472	2-7	3	420	3.2	3	451	2-8	3	452	1-
4 .	406	1-1	3	438	1-1	4	475	3.0	4	425	3-6	4	454	2-11	4	456	1.
5	412 "	- 1-3	4	441	1-3	5	477	3-3	5	429	3-8	5	458	3-4	5	460	2-
6	419	1-6	5	444	1-4	6	479	3-8	6	434	4-0	6 7	460 463	3-7 4-0	6 7	463 466	2
7	425	1-8	6	447	1-6	7	481	4-0	7	438	4-2	8	465	4-4	8	468	2
8	429	1-10	7	449	1-7	8	482	4-3	8	442	4.5	9	467	4-8	9	471	3
9	433	2.0	8	452	1.9	9	484	4.9	10	445	4-8	10	469	5-2	10	473	3
10	436	2-1	9	454	1-11	10	485	5-0	11	453	5-2	11	471	5-6	11	475	4
11	439	2-3	10	457	2.2	11	486	5-4	12	457	5-6	12	473	5-10	12	477	4
12	441	2-4	11	459	2.5	12	487	5-10	13	460	5-8	13	475 477	6-4	13	479	5
13	443	2-6	12	461	2.7	13	489	6-10	14	463	5-11	14 15	480	6-8	14	481	5
14	445	2.7	13	464	3.0	14	490	7-3	15	465	6-1	16	482	7-0	16	484	6
15	447	2-8	14	466	3-4	15	491	7-8	16	467	6-2	17	485	7.7	17	486	6
16	449	2.9				16	492	8-2	17	468	63	18	487	8-0	18	487	6
17	451	2-11	15	467	3-5	17	493	8-6	18	470	6.5	19	490	8-6	19	488	6
18	453	3-0	16	469	3-8	18	494	B-10	19	471	66	20	492	8-9 9-1	20 21	489	7-
19	455	3-2	17	471	4-0	1	495	9-2 9-6	20	473	6-8	21	494	9-1	21	490	7.
20	456 458	3-3	18	473	4-4	20	497	10-0	22	474	6-9	23	498	9-11	23	492	7.
21	459	3-4	19	474	4-6	21	498	10-5	23	475	6-10	24	499	10-3	24	493	7.
22	461	3.7	20	476	5-0	23	498	10.5	24	476	6-11	25	501	11-0	25	494	8
24	462	3-8	21	477	5-3	24	499	10-10	25	477	7.0	26	503	11-8	26	495	8-
25	464	3-10	22	479	5-10	25	500	11.3	26	478	7-1	27	504	12-0	27	496	8-
26	465	3-10	23	480	6-2	26	501	11-7	27	479	7-2	28	506 507	12-7	28	497	9.
27	467	4-1	24	482	6.9	27	502	11-11	28	480	7-3	29 30	508	12-10 13-1	29 30	497	9.
28	468	4.2	25	483	7-1	28	503	12-3	29	481	7-4	31	510	13-7	31	499	9.
29	469	4-3	26	484	7.4	29	504	12-7	30	482	7.6	32	511	13-9	32	500	10
30	471	4-6	27	486	7-10	30	505	12-10	31	483	7.7	33	512	14-0	33	500	10-
31	472	4-7				31	506	13-1	33	485	7-10	34	513	14-2	34	501	10
32	474	4-10	28	487	8-1	32	507	13-4	34	486	7-11	35	514	14-5	35	502	11-
33	476	5-0	29	489	8-6	33	508	13-7	35	487	8-1	36 37	515 516	14-10	36 37	503	11-
34	477	5-2	30	490	8-8	34	509	13-10	36	487	8-1	38	517	15-1	38	504	12
35	479	5-5	31	492	9-2	35	510	14-1	37	488	8-2	39	518	15-4	39	505	12-
36	481	5-8	32	494	9.7	36	511	14-4	38	489	8-4	40	518	15-4	40	506	12-
37	483	5-11	33	496	10-2	37	512	14-7	39	490	8-6	41	519	15-7	41	507	13-
38	486	6-5	34	498	10-10	38	513	14-10	40	491	8.7	42	520	15-10	42	507	13-
39	488	7-2	35	500	11-4	39	514	15-2	41	492	8.9	43	521	16-2	43	508	13-
40	491	8-4	36	503	12-2	40	515	15-6	42	493	8-11	44 45	522 522	16-6 16-6	44 45	509 510	13-
41	495	9.7	37	505	12-7	41	517	16-2	43	495	9-4	45	523	17-0	46	511	14
42	499	10-9	38	508	13-3	42	518	16-7	45	497	9.9	47	524	17-5	47	512	14
43	503	11-B	39	510	13-8	43	519	17.0	46	498	10-0	48	525	17-11	48	513	14-
44	506	12-4				44	520	17-4	47	499	10-4	49	526	18-6	49	514	14
45	510	13-2	40	513	142	45	522	18-2	48	500	10-8	50	527	18-11	50	515	14
46	513	13-9	41	515	147	46	523	18-6	49	502	11-3	51	528 529	19	51	516 517	15-
47	516	14-5	42	517	15.1	47	525	19	50	503	117	52 53	530	20	52 53	518	15-
48	519	15-2	43	520	15-11	48	527	20	51	505	12-3	54	531	21	54	520	16-
49 50	521	15-8	44	522	16-8	50	529 532	21	52	507	12-10	55	533	23	55	522	17-
51	524	16-7 18-8	45	526	18-11	50	532	22	53	509	13-6	56	535	25	56	524	18
52	533	22	46	530	21	52	539	27	54 55	512 515	14-6 15-7	57	537	27	57	527	21
53	540	28	47	536	25	53	546	34	56	522	26	58	541	33	58	531	425
54	552	5388	48	547	4257	54	558	5282	57	533	6985	59 60	547 558	51 80+	59 60	537 549	425
Hom	e/Corr	munity	6	444	2-1	16	481	6-7	26	501	10-10	36	513	14-1	46	523	18-
	ientati		7	448	2-6	17	484	7-0	27	502	11-1	37	514	14-5	47	525	19
law			8	452	3-0	18	486	7-4	28	503	11-5	38	515	14.9	48	526	19
core	W	AE	9	456	3-6	19	489	7-10	29	504	11-8	39	516	15-1	49	527	20
0	416	< 0.9	10	459	3-11	20	491	8-3	30	506	12-2	40	517	15-5	50	529	21
1	423	0.9	11	463	4-6	21	493	8-8	31	507	12.5	41	518	15-10	51	531	22
2	428	1-0	12	468	5-3	22	494	8-11	32	508	12.9	42	519	16-4	52	535	24
3	432	1-2	13	472	5-8	23	496	9.5	33	509	13-0	43	520	16-10	53	540	27
4	436	1-5	14	475	60	24	498	9-11	34	510	13-3	44	521	17-4	54	551	415
5	440	1.9	1.5	478	6-3	25	499	10-3	35	512	13-10	45	522	17-10			

Survey Implementation

 Resident Advisors independently completed the scale in the fall of 2011, and spring of

2012.



Norming Sample

- 2,182 individuals in 15 states and 60 communities
- Three age groups
 - Early childhood (N=670)
 - Childhood (N=758)
 - Adolescent-Adult (N=754)
- Up to age 90
- Sample of children with intellectual disabilities age 6-13 (N=30)

Instrument Reliability

- Median reliabilities for the adolescent/adult age group for the subscales ranged from .51 -.92
- Median reliabilities for the adolescent/adult age group for the cluster scales ranged from .84-.98
- Sub group with intellectual disabilities (childhood) reliability estimates, same subscales from .92-.98

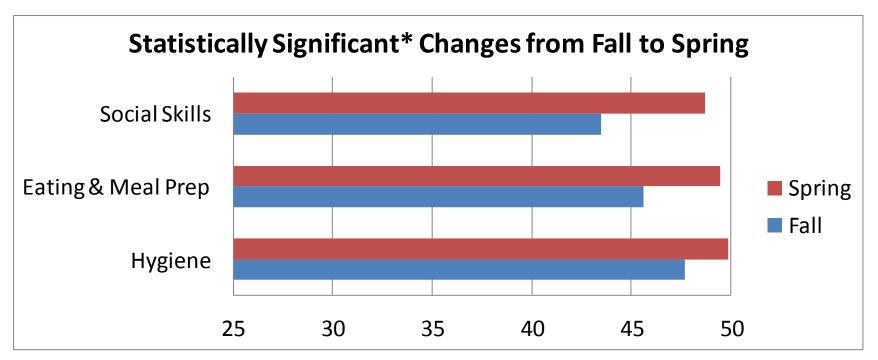
Survey Reliability

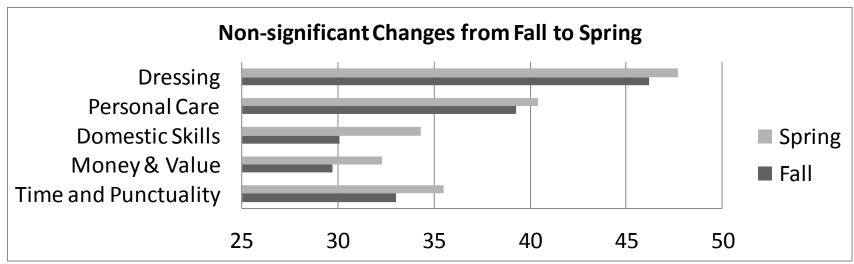
 Scale reliability was assessed using the test of Cronbach's Alpha, which tests for data internal consistency and reliability. A Cronbach Alpha score of .8 was confirmed.



Data Analysis

 SPSS was utilized to analyze data using a matched pairs t-test. The small sample size prohibited Correlational analysizes among gender, disability type, and school year.





*findings are statistically significant at $\alpha = .05$

Potential for Further Analysis

Why is it important to have a larger sample size?

- More complex models were run but they were restricted by a small sample size
 - MANOVA this kind of analysis allows us to look at the differences of groups on multiple outcomes (e.g. the behavior scales) at the same time
 - Logistic Regression this kind of analysis looks at binary outcomes; in our case we can investigate the relationship between the behavior scale scores and the occurrence of problem behaviors
- •Both of these analyses yielded non-significant results. However, with a larger sample we would have more power to detect relationships among our variables, such as disability type, behavior scale scores, and problem behaviors

Conclusions

- The SIB-R is a valuable tool for assessing curriculum and student growth overtime.
- A larger sample size could help in assessing the effectiveness of a program's curricula.
- Future research 2012-2013 to compare commuter to residential students.

Implications for practice

- Revised the curriculum
 - Money
 - Time/Punctuality
 - Domestic Skills
- Staff training and down time
 - Practice
- Look at residential groups across disability and rank order



Videos

• Residential http://www.youtube.com/watch?v=lmml9kefkqo&feature=youtu.be&hd=1



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