

University of Tennessee, Knoxville Trace: Tennessee Research and Creative **Exchange**

Nursing Publications and Other Works

Nursing

1-1-1983

The Development of a Naturalistic Self-Management Inventory

Sandra Thomas University of Tennessee-Knoxville, sthomas@utk.edu

D. Olsen

R.L. Williams

Follow this and additional works at: http://trace.tennessee.edu/utk_nurspubs



Part of the Psychiatric and Mental Health Nursing Commons

Recommended Citation

Thomas, S.P., Olsen, D., & Williams, R.L. (1983, January). The development of a naturalistic self-management inventory. Resources in Education. (ERIC Document Reproduction Service No. ED 219 657).

This Article is brought to you for free and open access by the Nursing at Trace: Tennessee Research and Creative Exchange. It has been accepted for inclusion in Nursing Publications and Other Works by an authorized administrator of Trace: Tennessee Research and Creative Exchange. For more information, please contact trace@utk.edu.

ED 219 657

CG 016 080

AUTHOR

Thomas, Sandra P.; And Others

TITLE

.The Development of a Naturalistic Self-Management

Inventory.

PUB DATE

Mar 82

NOTE

39p.; Paper presented at the Annual Meeting of the American Educational Research Association (66th, New

York, NY, March 19-23, 1982). ,

EDRS PRICE

MF01/PC02 Plus Postage.

DESCRIPTORS

Age Differences; *Behavior Modification; Behavior Patterns; College Students; Field Tests; Higher

Education; *Individual Characteristics; *Personality Measures; *Self Concept; Sex Differences; *Test Construction; Test Reliability; Test Validity

IDENTIFIERS

*Self Description Form; *Self Management

ABSTRACT

The most common approach to self-management-research has been to apply it to a specific target behavior, without attending to the generalizability of changes to other facets of one's life. A procedure for measuring self-management effectiveness under real world conditions was developed which emphasized the successful application of self-change procedures. The Self-Description Form (SDF) was field-tested on a sample of four groups of college students (N=214). Results indicated that normative self-management scores increased as level of education increased. Females had higher self-management scores than males except on the leisure scale. The reliability of the self-description scale was confirmed although validity efforts are still in the preliminary stages of analysis. When fully developed, the form may be useful in evaluating counseling and educational programs and in predicting an individual's future effectiveness in leisure, health, social and work activities. Several tables and figures are provided to illustrate SDF reliability and validity. (JAC)

Reproductions supplied by EDRS are the best that can be made from the original document.

Sandra P. Thomas
Robert L. Williams
Damaris Olsen

University of Tennessee

US DEPARTMENT OF EDUCATION

NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION
CENTERINERICS

This document has been reproduced as received from the person or programization originating it

Minor changes have been made to improve reproducted quality

Points of view or opinions stated in this document do not necessarily represent official NIE position or policy

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC) "^

Correspondence can be directed to:

Robert L. Williams, Ph.D.

Department of Educational & Counseling Psychology 108 Claxton

The University of Tennessed/ Knoxville, TN 37996-3400

9

The Development of a Naturalistic Self-Management Inventory

The major purpose of this ongoing research has been to develop a procedure for measuring self-management effectiveness under real-world conditions. Although the term self-management sometimes refers only to the application of behavior modification strategies in one's personal life, our use of this concept also emphasizes the successful application of various self-change procedures. We have defined self-management in terms of the maintenance of appropriate behaviors, irrespective how those behaviors are being maintained.

The most common approach used in self-management research has been to apply a particular self-management strategy to a <u>specific</u> target behavior such as eating, smoking, exercising, and assertive responses. Self management effectiveness is usually measured in terms of baseline to treatment changes in the target behavior, with secondary attention devoted to the maintenance of that change. Usually no attention is given to the generalizability of the change to other facets of one's life. Thus, this approach provides a very restrictive perception of one's effectiveness as a self-manager.

Our approach involves the sampling of behavior successes in broad areas of one's life. The purpose of our instrument is to provide a generalized, naturalistic assessment of one's self-management effectiveness. Our immediate objective is to identify effective and ineffective self-managers under real work conditions. The long-range objective of our research is to identify the assumptions regarding personal causality which differentiate effective and ineffective self-managers.

Since it is not feasible to follow people around to observe their behavior in many different areas, we have attempted to deal with the concept of selfmanagement effectiveness on a self-report basis. Self-management effectiveness

9

was defined in terms of the self-reported occurrence or non-occurrence of behaviors in different areas of life. The Self-description Form (SDF) includes 56 behaviors to be marked on a continuum from never to always. Embedded within the 56 items are four subscales, each containing 10 items. The remaining items of the inventory are filler and social desirability items. The four subscales relate to different areas of self-management: work, social, health, and leisure activities. The ten items which make up each subscale were selected from an initial pool of 163 items submitted to 20-45 mental health professional (having at least a master's degree in an area related to mental health) for placement in the four primary categories plus a miscellaneous category. (See Table 1 for a listing of the 163 items.) A majority of these professionals had to agree that an item related primarily to a particular area (e.g., work, social for the item to be placed in that category. The average agreement relative to the placement of the items in the subscales was .89.

Insert Table I about here

With the exception of the leisure activities subscale which contains only positive items, all subscales are comprised of an equal number of positive and negative items. The positive items indicate effective self-management in that area and the negative items ineffective self-management. At least 70% of the mental health professionals had to agree that regular participation in the target activity indicated either effective or ineffective living for the item to be considered positive or negative. The average agreement regarding the valence of the items included in the subscales was .87. Items in the various categoreis and their valences are listed in Table 2.

Insert Table 2 about here

Judges Ratings (N=45)

		· <u>Area</u>	Valend	<u>Item</u> .		Area	Valence	<u> Item</u>
	1.	.98W	.76+	Keeping a well organized work area	32.	1.00%	.>8+	Setting work goals
	2.	.95W	.93-	Over-extending oneself in work	33.	.44L	.56?	Keeping a diary
				commitments	34.	.74 S	.77+	Making humorous comments
	3.	.50s	.80+	Speaking concisely in conversation	35.	.91н		Esting excessively
	<u>.</u> 4.	.88W	.91-	Jumping from one task to another	36.	.89н	.93+	
	~ 5. ·	.80н	.80+	Jogging	37.	.89S	.60?	Talking a lot in group situations
	Ĝ.	.86н	.51?		38.	.45H	.84+	
	7.	1.00H	76+	Flossing one's teeth :	39.	.76W	.91-	Running behind schedule
	8.	W08.	'.91-	Putting off unpleasant, but	40.	.89н	.89-	Smoking cigarettes
	,		` '	necessary, tasks	41.	.89L	.51+	Looking at magazines
	9.	.73H	.67+		42.	.75н	.78+	Participating in vigorous physical
,	10.	.84S	.89-	U		•		activity
	11.	.69W	.96+	Being punctual in keeping	43.	.50s	.89+	Engaging in sexual interaction
			-	appointments	44.	.98W	.82+	Making work related phone calls
	12	.981	.79+	Filing work materials	45.	.78L	.49?	Watching television
	13.	.45₩	.98-	Forgeting commitments	46.	.49S	.67?	Dressing formally .
	14.	1.00W	.98-	Losing work related materials	47.	.90H	.73-	Eating junk food
	15.	.68W	.93-	Oversleeping in the morning	48.	.76W	.56-	Abandoning work on specific tasks
	-16.	.96W	.98+	Attaining work goals	49.	.33L	.58+	Doing things on the spur of the
	17.	.658	.87+	Promptly returning borrowed				moment
	10			materials -	50.	.79W	.58+	Working on one thing at a time
	18.	.93W	.93-	0 11 11 11 11 11 11 11 11 11 11 11 11 11	51.	.84L		Listening to the radio \checkmark
	10	5 c		muc h	52.	.86L	.68+	Attending movies
	19.	.96w)	.50-		53.	.828		Criticizing others .
	20,	1.00W	.75+	Accomplishing work well in	54.	.52H		Smoking marijuana
	. 01	0.600		advance of deadlines	55.	.67W		Missing appointments
	21.	.96W	.95-	Failing to meet deadlines	56.	.80s	.80+	Writing letters to friends
	22.	.48W	.95+	Budgeting one's time	57. `	.35L	.49?	Becoming slightly intoxicated
	23.	.49н		O	58.	.56S		Speaking fluently
	24.	.76W	.59?	Making personal phone calls at	\59·	.75L		Attending sports events
	25.	/ 1	, ₇₀	work	60.	•82H		Using the bathroom
		.41H	.73-		61.	.93н		Drinking water
	26.	.66S	•67+	0 1 1 2	62.	.89s		Complimenting others
	27.	0.011	061	home *	63.	. 5 7S		Dressing casually
	28.	.98W	.90%	Completing work assignments on time	64.	.68S		Speaking softly .
	29.	.56H		Using hard drugs	65.	.86S		Smiling during conversation
	30.	.64S .62S	.72-	Complaining	66.	.80S		Touching others
					67.	.69L	.66+	Reading fictional stories
	31.	.70L	·49 † ?	Playing cards	68.	,.80w	.84+	Reading course/professional related
	5	•		7			,	material

	Area	Valence	<u>Item</u>			(N=20	·) ·
69.	.72H	.53?	Going to bed early	101.	.58s	.60+	Using profanity
7 0.	.51L	.64?	Sitting in easy chairs	102.	•53S	1.00-	
71.	.47L	.60?	Whistling				intoxication
72.	.73L	.52?	Reading the sports section of	103.	1.00L	.75+	
			the newspaper	104.	1.00L,		Raising flowers
73.	.78L	.55?	Drawing pictures	105.	.84L	.85+	Reading news magazines 🕌
74.	.81L		Doing nothing in particular	106.	.89L	.65+	Watching sports events on TV
· 75.	.76H	.53+	Walking fast	107.	.858		Cutting in line
76.	.778	.60-	Arguing	108.	•95S	1.00-	Dominating conversation
77.	.75W	.96-	Sleeping during class or pro-	109.	.95H	85-	Missing meals
_2			fessional meetings	110.	1.00L	. 55+	Collecting stamps
78.	.48н	.58?	Yawning	111.	.95L	.80+	Yard work
79.	.56н	.44?	Sleeping late	112.	.79L	.80+	Watching news programs on TV
80.	.80s	.98+	Keeping one's word	113.	.95L	.70+	Reading Poetry
81.	.47L	.64?	Doodling on paper -	114.	•95S	1.00-	Shouting in conversation
82.	.77H		Chewing sugarless gum	115.	.90s	• 75–	Staring '
83.	.778	.90+	Asking questions of others	116.	.785S	~80 -	Frowning
84.	.85S	.98+	Initiating conversation	117.	.61L	.60?	Suntanning
85.	.93L	.60+	Listening to stereo	118.	1.00L	. 84+	Playing a musical instrument
86.	.53W	.71+	Doing housework	▲ 119.	.95L	.45-,	`
87.	.39M	.61+	Shopping	▼		.45?	9
/ 88.	.48L	.69+	Practicing meditation	120.	.95L	.85+	Writing poetry
89.	.815		Listening closely to others	121.	. 89s	.50-	Remaining quiet in group situations
			comments	122.	1.00L	.50+,	•
90.	.51H	.64?	Drinking tea		•	.50?	Collecting coins
91.	.80s		Encouraging others	123.	.90W	.95+	Reading course/professionally relat
92.	.77Н		Doing stretching exercises				material
93.	.93L		Reading entertainment section of	124.	.95н	•60-	Fasting
			newspapers	125.	.95L	.60+	Watching musical programs on TV
94.	.85S	.91+	Attending to others' positive	126.	.79L	.50+	
			characteristics				anything in particular
95.	.60н	.47+	Taking naps	127.	.958	.95-	Criticizing others behind their bac
96.	.898		Interrupting others during	.128.	1.00L		Attending concerts
			conversation	129.	.47L,		* *
97.	.70H	.53?	Drinking carbonated beverages	,	.47H	.85+	Hiking
98.	.60L		Eating out	130.	1.00L		Gourmet cooking/baking
99.	.80L		Bird-watching	131.	1.00L	.84+	Woodworking
100.	.80s		Showing affection toward others	132.	.898	.85-	Chewing food with mouth open
				133.	.90L	.75+	Sewing
	,						•
	p=-9				`		

,	Area	Valence	•	
1 34.	958 -	80-	Reprimanding others	
135.	.80L	.85+	Watching documentaries on TV	
136.	.79L	.80+	Working in the yard	AREA NOTATIONS
137.	1.00S	.90-	Bragging	
138.	1.00S	.90-	Burping	
139.	.89L	.60?	Watching movies on TV	Work (W), Social (S), Healthy (H), Leisure (L)
140.	.95S	.75-	Looking away from the other person	
141.	1.00L	.80+	Needlework activity (e.g., cro- cheting and knitting)	VALENCE NOTATIONS
142.	.56н	.85+	Bicycling	Generally indicative of effective living (+)
143.	1.00L	.85+	Woodworking	, , , , , , , , , , , , , , , , , , , ,
144.	95L	.80+	Photographic activity	Generally indicative of ineffective living (-)
145.	.72L	.85+	Dancing	7
` 146.	1.008	.90-	Changing subject abruptly in conversation	Not really indicative of either effective or in-
147.	1.00H	.85-	Engaging in vigorous exercise when not in condition	effective living (?)
148.	.955°	.65-	Focusing attention on oneself in conversation	Item 103 was expanded to read "Creating art objects."
149.	.80L	.60-	Watching TV programs depicting violence	Items 105 and 113 were combined into "Reading leisure
150.	1.00L	.80+	Singing	(e.g., poetry, fiction, magazines)."
151.	.95L	.90-	Camping	
152.	1.00H	.90-	Crash dieting	Items 111 and 136 were combined into one item, "Garde
153.	.95H	.80-	Gulping meals	. Garde
154.	.84S	.95-	Making verbal threats	ing/working in the yard."
155.	.90s	.95-	Name-calling	
156.	.50M	.80?	Doodling	Items 129, 151, and 158 were combined into one item,
<u> 157.</u>	1.00L	.55L	Working crossword puzzles	
158.	1.00L	.85+	Fishing	"Engaging in outdoor nature activities."
159.	1.00L	.55+	Playing electronic games	
160.	1.00L	.95L	Engaging in a hobby	1
161.	. 56S	.75?	Shifting feet	
162.	.89S	.95-	Revealing something told in conference	•
163.	.83M	.90?	Crossing legs	-
164.	1.00L	.85+	Attending art and cultural exhibits	
1 6 5.	.958		Ignoring concerns expressed by others	·

Table 2 Percentage of Agreement on Valence and Placement of

			ems in the Self-Do	escription form		•	•
			WOR	K			•
	Positive It	tems	(Negative Items			
	Item	Valence Category Placement		Item	<u>Val ence</u>	Category Placement	
2. 13.	Filing work materials Attaining work goals	.79 .98 .98 .98	7.	Over-extending myself in work commitments	.93	.95	
	Completing work assign-	•	19.	Jumping from one task to another	.91	.88	
36.			30.	Putting off unpleasant, but necessary, tasks	.91	£80°	P=.
47.	Reading course/profes- sionally related mater- ials	.84 .80		Losing work related materia		1.00	V=.
				Failing to meet deadlines	.95	.96	
			SOCIA	.L			
_8	Keeping my word	.98 .80	3.	Rambling in conversation	.89	.84	
	Initiating conversation	.98 .85	14.	Criticizing others behind their back	.76	. 82	
	Listening closely to others' comments	.98 .81	25.	Interrupting others mg	.84	. 89	P=.8
42.	Encouraging others	.93 .80	• 37	Conversation To			V=.9
	Showing affection toward others	.8880	37. 48.	-	1.00	.95	

	<u> </u>	<u> </u>					<u> </u>				
:					,	HEALTH			v .		
· · · · · · · · · · · · · · · · · · ·	Positive It	ems	Categor		.,		Negativ	e Items		Category	\
;	<u>Item</u> <u>Va</u>	lence,	Placemen	<u>t</u>			Item		Valence	Placement	
4.	Flossing my teeth	.76		. ; •	g). Using	harderugs	,	.98	. 56	
15.	Getting adequate rest at night	.93	.89		`	, -	excessively	. ;	.98	.91	P=.
26.	Participating in vigorous physical exercise	.78	.75	; ;		•	g cigarettes	, a	.89 .73	.90	V=.
38.	Drinking water	.80	.93	· · ·		Gulpin	. ,		.80	.95	'
49.	Doing stretching exer-	.73	.77	•	•	,	• •	√19~			
											
÷			,	,	LEISURE	TIME (all	+'s)				
	,	,	,	•			,				
5.	Creating art objects	.80	1.00	. '	33	Readin poetry	leisurely (fiction, ma	(e.g., ig-	.74	.83	
10.	Attending art and cul-	.85	1.00	•	•	azines		,	•		
16.	Playing a musical instru-	.84	1.00		39	Garden yard	ing/Working i	in the	. 80	.87	P= .
22.	Ment Attending concerts	.80	1.00		. 44	/ Engagi activi	ng in outdoor ties	nature	.85	.81	V=.
27	Writing creatively (e.g., poetry, short stories)	.85	.95	,	50		ng in a hobby isted in ques			1.00 ,	'
٥	•	•		•	- 56	5. Dancin	•		.85	.72	1

Our definition of self-management effectiveness is obviously based on the value judgments of our mental health reference group. It is possible that a different set of mental health professionals might reach somewhat different conclusion about what behaviors are effective or ineffective. However, our reference group represented all the major therapeutic orientations and is quite typical of the diversity within the mental health profession.

In addition to evaluating self-management effectiveness by norms from our mental health reference group, we also deemed it important to examine one's effectiveness as a self-manager from his/her personal perspective. Consequentl each respondent in the total sample was asked to indicate whether his/her level of involvement in a particular behavior contributed to good feelings, bad feeli or neutral feeling about him/herself. The respondent indicated his personal evaluation by putting a +, -, or 0 in the appropriate column following each behavior. Let us emphasize that the respondent was not asked to evaluate the behavior but rather his/her level of participation in that behavior. Thus, one might indicate that s/he rarely participates in a behavior but still give that participation level a plus rating. The respondent indicated participation level by checking one of the following categories for each behavior: never, rarely, periodically, regularly, and always. Definitions for these time concepts are provided in the instructions for the inventory (see Table 3).

Insert Table 3 about here

Like all self-report inventories, the Self-description Form is plagued with the possibility of subject falsification. We assumed that the tendency to represent oneself in an unduly positive light might be present among some

3

3

Self-Description Form

In the course of your personal and professional activities each week, you probably in many different behaviors. We want you to indicate how frequently you engage in each behaviors listed below by using the following distinctions.

- Under no circumstances do you ever engage in the behavior.

Rarely You engage in the behavior a few times a year.

- You engage in the behavior a few times a month.

- You engage in the behavior several times a week.

- You engage in the behavior every time an opportunity presents it Always Circle the number in the column that best corresponds to your level of participation in

behavior.

We would also like for you to indicate how your level of participation in each beha (ranging from never to always) makes you feel about yourself. If your level of particip

and	tributes to good feelings about yoursel relevel of participation contributes to if your level of participation has no of 0 in the "Value" column.					
.		Never	Rarely	Period- ically	Regular ly	Aľways
1.	Drinking coffee	, 0 ,	1	2	,\ 3 ·	4
	Filing work materials	0	ŀ	2.	3 `	4
	Rambling in conversation	0	1	, 2	3	4
	Flossing my teeth	0	1	2	3	. 4
	Creating art objects	0 _	1	2	3	
6.	Speaking softly	0	1	2	. 3	4 .
7.	Over-extending myself in work commitments	0	1	2	3 .	 -
8.	Keeping my word	₩ 0 '`	1	2	3	³ 4 .
9.	Using hard drugs	0	1	2	1.3	4
10.	Attending art and cultural exhibits	0	1.	2	· /3	4
11.	Donating to all good causes	. 0 ·	.1	2.	3	
12.	Going to bed early	0	1	2	3	4 😅
13.	Attaining work goals				, ,	4.

0

1

2

Criticizing others behind their

participants. We checked out this possibility by including a social desirabilist scale in the inventory and by doing a comparison between the participants' responses and others' perception of their behaviors.

The social desirability scale was comprised of behaviors that most of us seldom exhibit, e.g., donating to all good causes, aiding stranded motorists on the interstate, eating only nutritious food, helping anyone needing help, exerc more than twice a day, and stopping a mugging. The higher the score on this scale, the greater the likelihood of falsification on the other items in the inventory.

Another way to determine if a participant was representing him/herself accurately was to compare the participant's own rating with someone else's ration of the participant. An individual who knew the subject well (such as spouse, room-mate, or co-worker) was asked to fill out the inventory as s/he perceived the subject. This individual's rating was placed in a sealed envelope and returned to the experimenters withouth the participant's ever seeing those ratings.

To this point, the Self-description Form has been administered to 214 participants. The participants came from 4 groups: (1) college freshmen (n=57) (2) 2nd and 3rd year nursing students (n=95), (3) college upper classmen (n=25), and (4) graduate students (n=37). Only the graduate students were used in the test-retest reliability checks (2-3 weeks apart); only the upper classmen and graduate students were used in the social comparison check; and only the nursing students were used in the comparison of work self-management and work ratings by supervisors. Sociodemographic data on the sample are presented in Table 4.

The SDF is scored by giving 0 (never) to 4 (always) weighting for the designated responses in the four subscales. For the work, health, and social scales, the weighting is added for positive items and subtracted for negative items. The score on each scale is the positive credit minus the negative credit

Table 4
Sociodemographic Data N=214

			21,	/
*	Group	Frequency	*	Per Cen
	College Freshmen	<i>5</i> 7	•	27
	Nursing Students	95		44
	College Upperclassmen	25.		12
	Graduate students	37		17
	<u>Sex</u>			
	Female	· .166	,	79
	Male	44 7	,	21 -
•	Age	•		•
	13-18 years	. 36	•	17
	19-24 years	119		• 57 ·
•	25-30 years	30	•	14
	31-35 years) 15 \	•	7
٠.	35 → years	10	*	· 5 ,
. •	Employment	. ~		
,	Student, not employed	95	•	45
	Employed full-time	19	•	9
	Employed part-time	. 95		45
	Income	e j jan e		
	\$5,000 or lese	140	· ·	70
	\$5,000 - 9,999	24	,	12
	\$10,000 - 14,999	17	. ^	9
	\$15,000 24,999	. 14	•	7
	\$25,000 +	5 .	•	3

Thus the scores can range from +20 to -20 on these three scales. Since the leisure scale is comprised only of positive items, the total credit for items in this scale is divided by two to make the score more comparable to scores on the other scales. The scores on the leisure scale can range from +20 to 0.

Results of field testing

Distribution of scale scores

Means and standard deviations for scores computed from SDF scores are presented in Table 5. The goal of roughly normally distributed scale scores was achieved. The discrepancy between scale means and medians was negligible, ranging from 0.1 to 0.6 points. Standard deviations were approximately one-fifth to one-sixth of scale ranges.

As anticipated, highest scores were earned by participants on self-management of leisure activities. However, this trend may partially be attributed to the difference in scoring procedures of the leisure sub-scale. Social activities received second highest scores, followed by work and then health behaviors. Similar patterns were evident on the normative evaluations (based on judgments of mental health professionals) and the personal evaluations (based on judgments of subjects themselves). Since our sample consisted entirely of students we suspect that the low-scores on health may be due to the erratic eating, sleeping, and exercise habits which often characterize college students.

When the four subsamples were compared, normative self-management scores increased as level of education increased. Freshman students had the lowest means on total self-management and on each of the subscales, while graduate students had the highest means on all normative subscales. However, nursing students were more satisfied with their level of participation in activities that any other group, scoring higher on total personal evaluation and on three of the four subscales (the one exception being the social subscale). The group most satisfied with the level of social participation was the freshmen. These results

Table 5

Means and Standard Deviations for Self-Description Form Scales

Scale	Scoring Range	Mean	S.D.
Total Self-Management	-1 to 41	22.9	
Work subscale	-4 to 15	4.2	7.9
Social subscale	0 to 15	6.4	3.4
Health subscale	-7 t o 14	3.8	3.0 3.9
Leisure subscale	2 to 15.5	8.4	2.6
· · · · · · · · · · · · · · · · · · ·	.)		
Total Personal Evaluation	-1 <i>s</i> to 33	10.4	7.8
Work subscale	-6 to 10	.2.3	2.8
Social subscale	~7 to 10	2.6	2.8
Health subscale	-6 to 10	1.7	2.9
Leisure subscale .	-6 to 10	3.8	. 3.4

Possible range for Total Self-Management: -60 to +80

Possible range for Work, Social, and Health subscales: -20 to +20

Possible range for Leisure subscale: 0 to 20

Possible range for Total Personal Evaluation: -40 to +40

Possible range for Work, Social, Health, and Leisure Personal Evaluations: -10 to +10

Table 6
Comparison of Group Means

	•		^					
	Freshmen (n=57)	,	"Nur	sing students	(n=95)	opperclassmen (n=25)	Grad.S	tudont
	Total self-management	21.2		. 22.8		_		
•	Work subscale	. 2.9		4.5	٠,	22.8		26.2
•	Social subscale	6.6	,	6.3	~ <u>`</u>	.4.2	•	5.5
	Health subscale	3.2		3. <i>5</i>		6.0	•	6.9
	Leisure subscale	δ .5 .		8.4		4.7		5.0
	Total Personal eval.	•				7.8		8.8
	· Work-subscale	10.5		11.9		7.2		9.5
, i	Social subscale	1.5		3.2		1.7	•	2.1
,	Health subscale	3.5		2.7	i.	1.3	•	2.2
•	Leisure subscale	1.96	, .	1.98	•	1.2		1.1
	relante annacate	3.5	/	4.1	•	3.0		4.2
		,		'Compari	son by G	ender		•
	1	Females	: .	, , <u>-</u>	•	Males	•	
4 ,	Total se	lf-manage	men+	23.3				•
	ork sub		· · ·	4.5		Total self-management	21:9	
	Social s			6.5		lork subscale	3.3	
٥	liealth s		•	4.0		Social subscale	6.3	
	Leisure					lealth súbscale	3.5	
- •	•			8.4	Ĭ	Leisure subscale	8.3	
	· · · · Total Per		al.	10.4	,	dotal lersonal eval.	10.9	τ
, ,	, work subs			2.6		ork subscale	1.4	
	· Social so		`	2.6		Social subscale	3.0	
	Health su			1.4		lealth subscale	2.8	
	Leisure s	subscale		3.8		eisure subscale	3.7	
<i>(</i>	00	. <	•				٠٠١ ^	~
	THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TWO IS NA						•	

With the leisure scores excluded from the analysis, a Lindquist Type I design was used in determining the significance level of differences just described. A non-significant interaction in combination with two significant main effects led to overall significant superiority of Group IV over Group I and significant superiority of the social scores over the work and health scores, which/did not differ significantly.

A Lindquist Type I analysis of the Personal Evaluation Scores produced a significant interaction between groups and subscales. A Tukey-HSD followup on that interaction showed that Leisure scores were generally superior to the other subscale scores except for the University upperclassmen where the subscale scores did not differ. A comparison of the Groups at the different subscale levels showed that the Graduate Students were superior to the Freshmen in their work satisfaction and the Freshmen were superior to the University Upperclassmen in their social satisafaction. All other group differences at the subscale levels proved non-significant.

Females had higher normative self-management scores than males on all subscales except the leisure scale, but the personal evaluations of females were higher on only two subscales.

Groups scoring high and low on self-management were also selected for comparison. High scorers were those subjects whose total self-management score were equal to or greater than one standard deviation above the mean (230.8, n = 39), and low scorers were those whose scores were equal to or less than one standard deviation below the mean (415.03, n = 40). The pattern of scores for these two groups is presented in Figure 1. Differences of the greatest magnitudes were evident on the health and work subscales.

It is evident from the pattern of scores depicted in Figure 1 that effective self-managers have achieved a more optimum balance across the four major aspect of life than the ineffective self-managers. This finding is consistent with the proposal of Williams and Long (1983) that a self-management approach can result in a higher degree of control over all aspects of one's life style. The philosophy holds that the impact of self-management can be felt most keenly in the multiplicity of everyday experiences, of individuals. When work and health are managed more effectively, the social and leisure components of life are enhanced. Not only were high scorers managing important areas of their lives more effectively, but their self-evaluations were also more positive. The mean personal self-evaluation score for high scorers was 16.65, as compared to 5.79 for low scorers.

Reliability

Findings regarding the test-retest reliability of the Self-Description Formare summarized in Table 7 and indicated two clear trends. Correlation coefficients for the total self-management scale and for each of the four subscales well exceeded the .50 standard for reliability coefficients suggested by Helmstadter (1973). The correlation for total self-management was .82, and correlations for subscales ranged from .61 to .86, indicating that scale scores are sufficiently

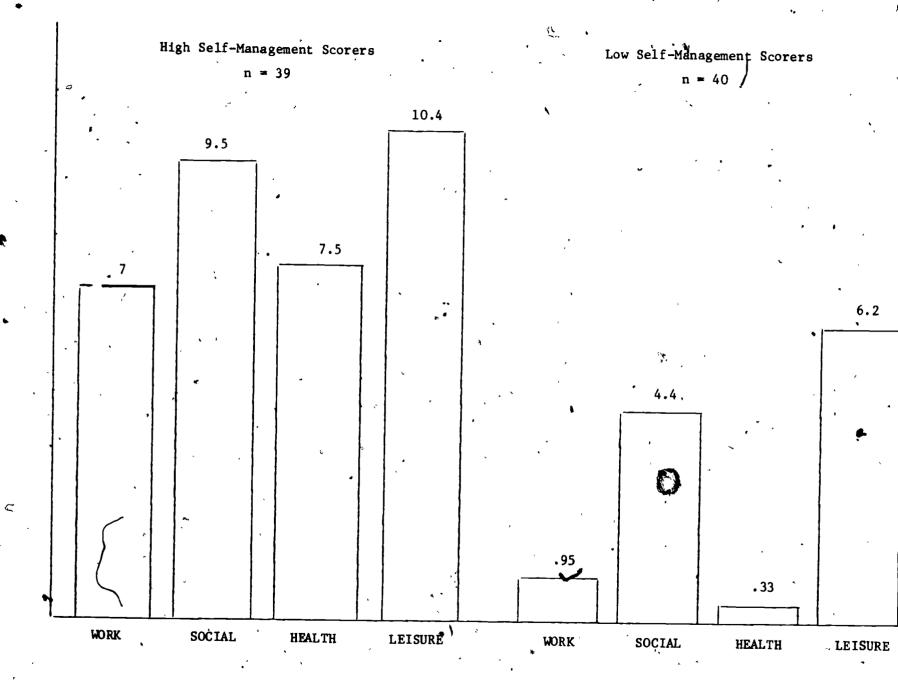


Figure 1. Pattern of Scores for High and Low Self-Managers

Table 7
Test+Retest Reliability Coefficients*

Scale	•	Test.	-retest coeffic	cient	Pro	bability
Total Self-Manageme	ent\	•	.82	• "•		.0001
Work subscale			.61			.0004
Social subscale	*		.72			.0001
Health subscale			. 86, •			.0001 ,
Leisure subscale			7.76	,	e)	.0001
Total Personal Eval	Luation	, ,	.50		•	.0077
Work subscale	,	2	.19		*	. 3231
Social subscale	t	, *	.47	•	~	.0122
Health subscale	· · · ·		.47		•	.0125 `
Leisure subscale			.62		•	.0004

^{*}Pearson Product Moment Correlations

Reliability was not as high for personal evaluation scores, although the .50 standard was achieved for total personal evaluation. Correlation was highest for the leisure subscale (.62) and just under .50 for the social and health subscales. However, the test-retest reliability of the work subscale was very low. This probably indicates actual change in valuing of certain work-related items due to escalating pressures on these students as the quarte progressed. It is reasonable to speculate that inefficient study habits were devalued, while productive behaviors were valued more highly.

Another way we examined reliability was by determining the extent to which an individual's high and low sub-scale scores remained consistent from pre to post. (Because the leisure scores may have been somewhat inflated by the different scoring procedure for that sub-scale, they were excluded from this analysis.) After ties were eliminated from the comparison, 15 matches and 9 non-matches remained for the highest pre-post sub-scale score, whereas 18 matches and 6 non-matches remained for the lowest propost sub-scale score. A sign test of the proportion of matches proved significant for both the high matches (p<.05) and low matches (p<.005).

Validity

The Self-Description Form is assumed to have adequate face validity by virtue of the high degree of consensus among the mental health professionals regarding the placement and valence of the test items. Because there are no similar measures of self-management effectiveness, criterion validation was no possible. Consequently, we used four other methods of examining the validity of our instrument.

The first method consisted of examining the inter-relationships among tot self-management and the various subscales. Results of this correlational analysis appear in Table 8 and indicate that each subscale is highly correlated. 5.50) with Total Self-Management and that the four subscales are not highly correlated with each other. The integrity of the subscales thus appears to be valid, i.e., they are independent of one another, and each scale measures the construct it was intended to measure to a greater extent than it measures other constructs.

A second approach to validity involved examining the relationship of normative self-management scores (based on judgments of mental health professionals) and personal evaluation scores (based on judgments of subjects themselves). We predicted that these scores should be positively correlated, but not too highly correlated, because different views of the behaviors are being tapped. Results of this correlational analysis appear in Table 9 and generally conform to our prediction.

Table 8

Correlation Matrix

Relationships Among Total and Subscale Scores (N=212)

Normative Self-Managemen	<u>nt</u>			, (
	Total	Work	Social	Health	:
Total		. ` .	•		
Work	.63				*
Social	•57	,17	,	•	
Health	.68	.18	.14	~	
Leisure	. 52	.11	.15	.15	
, , , , ,	/	1			
Personal Evaluation	Total	Work	Social	Health .	1
Total		- ,	•		`
Work	.61	*			
Social	.67	.25 🔪	ı		
Health	.69 。	.25	.35		
Leisure	.66	.15	.21	.25	

Table 9

Relationship of Normative Self-Management Scores and Personal Evaluation Scores

,	\$cales .	Correlation ' (Pearson r's)	Probability
To an	tal Normative Self-Management d Total Personal Evaluation	.47	.0001
	rk Normative and rk personal evaluation	.50	.0001
	cial normative and Cial personal evaluation	₩ .27	.0002
he	alth normative and alth personal evaluation	.37	.0001
	isure normative and isure personal evaluation	.58	.0001
Group 1 (Freshmen)	and Personel Total Normative Self-Management	rmative Self-Manag Evaluation Scores	ement Scores by Group
	and Total Personal Evaluation	.52	.0001
	Work normative/work personal	49	.0002
•	Social/normative/social persona		.0614
	Health normative/health persona		.0017
	Leisure normative/leisure perso	nal .61	.0001
Group 2 (Nursing Students)	Total Normative Self-Management and Total Personal Evaluation	.46	
·	Work normative/work personal	.37	.0001
	Social normative/social persona		•
	Health normative/health persona	, ,	.0151
_	Leisure normative/Leisure person		.0047
Group 3 (Upper Classmen)	Total Normative Self-Management and Total Personal-Evaluation	.58	.0026
	Work normative/work personal	66	.0003
	Social normative/social personal	.32	.1238
	Health normative/health personal	1 .65	.0005
	Leisure normative/leisure person	nal .45	0239
Group 4 (Graduate Students)	Total Normative Self-Management and Total Pérsonal Evaluation	.52	.0005
	Work normative/work personal	.61	.0001
	Social normative/social personal	•	.1532
	Health normative/health personal		.0024
	Leisure normative/leisure person		.0001

A third approach to validity was the comparison of participants' selfratings with ratings by significant others (spouses, room-mates, co-workers)
who completed identical questionnaires. The only significant correlation was
on ratings of health behaviors. This approach obviously did not fulfill our
expectations, for reasons which are unclear. However, this method was used
with only a small number (n=27) of the total sample, and it is possible that
participants did not give the forms to persons who really knew their behavior
patterns well.

The final attempt to ascertain validity involved comparing self-managemen scores for the nursing students with their academic averages and clinical performance grade averages. Correlations were only modest: .38 for the work subscale with academic averages, and .32 for the work subscale with clinical averages.

The issue of social desirability did not turn out to be as problematic as anticipated originally. We had designated a score of 18 a priori as a cutoff point for eleiminating subjects, but no subject scored that high on the social desirability subscale. Scores ranged from 1-17, with a mean of 8.4, median of 8, mode of 7, and standard deviation of 2.9.

Another indication that the participants were not inflating their scores comes from the comparison between self-ratings and the ratings by significant others. With the exception of the leisure sub-scale (which may be the least value laden of any subscale), the other-scores were higher than the self-scores. The total other mean was 26.19 whereas the total self mean was 22.93. Despite the confidentiality of ratings by others, these ratings may have been affected by the same phenomenon that is so often reflected in recommendations.

In summary, our efforts to ascertain the validity of the Self-Description Form should be considered preliminary at this point. Content and construct validity appear adequate, but further work is necessary to establish social validity of the instrument. We plan to enlarge our data pool with samples drawn from both professional populations (i.e., successful individuals presume to be effective self-managers) and clinical populations (i.e., substance abuse and others presumed to be ineffective self-managers) in the near future. Additionally, concurrent validity will be explored by correlating subscales of our instrument with appropriate subscales of widely used personality inventories such as the 16 PF.

A major facet of our work that remains to be done is to determine the contributions of the individual items to the various subscales and total self-management score. As an example, we have examined the contributions of two items from the Health Scale: Item 26--Participating in vigorous physical activity; and Item 32--smoking cigarettes. These items were chosen because one represents a deliberate attempt to improve health and the other a flagrant abuse of health. We wondered what these two items by themselves might tell us about a person's self-management style.

While the specific contributions of these items are described in Table 10, the general indication is that both items are substantially correlated with the Health subscale score (exercise + and smoking -) and to a lesser, but nonetheless significant, degree with the total score (exercise + and smoking -). The smoking item was not correlated with any other subscale score besides Health, whereas the exercise item was modestly correlated with the work and leisure scores also. This pattern did not surprise us because we have strongly believed that exercise contributes to work productivity and leisure activities. Somewhat surprisingly, the smoking and exercise items

Table 10

Correlations of Normative Scores for Exercise and Smoking Items with Other Aspects of the Self-Description Form *

	Exercise (Item 26)			Smoking (Item 32)				
1	Normative		Personal	÷	Normative			Personal
1.	Total	1.	Total	1.	Total		1.	Total
	Self-management	-	Self-management		Self-management			Self-management
,	r=.2617		r=.17		r=15			r=06
	(<u>p</u> <.0001)		(p<.005)		(p<.005)		2.	Health .
2.	Health	2.	Health	2.	Health	•		r=09
	r=.3513 /		r=.2625		r=3085		3.	Item 32
-	(<u>p</u> <.0001)		(<u>p</u> <.0001)		(p<.0001)			r=4927
3.	Work	3.	Item 26	3.	Work	• .		· (p<.0001)
	r=.11825		r=.4849		r=02			· ·
	(<u>p</u> <.05)		(<u>p</u> <.0001)	4.	Social			
4.	Social	•	,		r=002			•
	r=05		•	5.	Leisure			•
5.	Leisure	- (r=007			
	r=.21			6.	Item 26			•
	(<u>p</u> <.0001)				r=04			

^{*} Most of these correlations (Kindall Tau) are based on Ns above 200.

did not correlate with each other (we had anticipated a negative relationship Thus, you can't predict people's smoking habits by knowing their exercise habits or vice versa. However, the personal evaluation of these items indicates that smokers tend to feel very bad about their smoking and exercisers very good about their exercise. We suspect that in many instances individuals may use exercise to negate bad feelings about smoking.

Conclusion

When fully developed and standardized, the Self-Description Form could be quite useful in evaluating the effectiveness of a variety of counseling and educational programs. It should also be predictive of one's future effectiveness in the four broad areas assessed by the instrument. Thus, to the extent that it is important and useful to determine how one will function with respect to work, social, health, and leisure time dimensions of life, this inventory could make a practical contribution in the helping professions.

References

Helmstadter, G. C. Principles of Psychological Measurement. New York: Appleton-Century-Crofts, 1973.

Williams, R. L. and Long, J. D. <u>Toward a Self-Managed Life Style</u> (3rd Ed.) Boston, Mass.: Houghton-Mifflin, 1983.