Feelings Scale (CES-D) Grade 2/Year 3

Fast Track Project Technical Report Anne Corrigan October 5, 2002

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Citation

Instrument

National Institutes of Mental Health (NIMH). *Center for Epidemiologic Studies Depression Scale*. Available from NIMH, 6001 Executive Boulevard, Room 8184, MSC 9663, Bethesda, MD 20892-9663, (301)443-4513. E-mail: nimhinfo@nih.gov

Radloff, L S. (1977). The CES-D scale: a self-report depression scale for research in the general population. *Applied Psychological Measurement*, 1, 385-401.

Reports

Corrigan, A. (2002). *Feelings Scale (CES-D) Second Grade/Year* 3 (Fast Track Project Technical Report). Available from the Fast Track Project Web site, <u>http://www.fasttrackproject.org</u>

Miller-Johnson, S. & Maumary-Gremaud, A. (1995). Feelings Scale *(Fast Track Project Technical Report).* Durham, NC: Duke University.

Data Sources

Unscored: P3D

Scored: FSC3

I. <u>Scale Description</u>

The Feelings Scale (Center for Epidemiologic Studies Depression Scale) is a 20-item self-report measure that assesses symptoms of depression in the general population (Radloff, 1977).

Each of the twenty items on the scale states an experience related to depression that the respondent may have had. Sixteen of the items express negative experiences, e.g., "I did not feel like eating; my appetite was poor," and four items express positive experiences, e.g., "I felt that I was as good as other people." Responses are coded on a four-point Likert scale and include: "Rarely, or none of the time (less than 1 day)," "Some or a little of the time (1-2 days)," "Occasionally or a moderate amount of time (3-4 days)" and "Most or all of the time (5-7 days)." For each item, the respondent selects the value (1, 2, 3 or 4) that best describes how frequently the experience occurred during the previous week.

II. Report Sample

This report contains data collected on Cohort 1, Year 3. The data include a high-risk control sample n=155) and a normative sample (n = 387) for a total n = 463, including overlap.

Thirty-six of 463 are missing responses for the entire scale, including 29 normative students (five from Durham, seven from Washington, seven from Pennsylvania and ten from Nashville), and thirteen control students (four from Durham, four from Washington, two from Nashville and three from Pennsylvania). Four additional students (two from Durham, one from Pennsylvania and one from Nashville) are missing responses for individual scale items.

III. <u>Scaling</u>

A total score is calculated as the sum of responses to the 20 items.¹ Total scores on the Feelings Scale range between 0 - 60. In addition, a dichotomous score ("0" = non-depressed, "1" = depressed) is formed using a clinical cutoff of 16 on the total score. Respondents with a total score at or above the clinical cutoff receive a "1" to indicate elevated levels of depression symptoms. If more than ten items on a measure are missing responses (i.e., 50%), a total score is not calculated. Measures with all responses missing are not scored.

The Feelings Scale does not contain subscales. In the original study, Ratloff (1977) reported high internal consistency among items (ranging from .84 to .90). Because of the high internal consistency, the author of the original study recommended using the total score. A later study (Miller-Johnson & Maumary-Gremaud, 1995) also reported high internal consistency among the 20 items, and again recommended use of the total score.

The alpha coefficients for the normative sample and control sample are:

	Normative Sample	Control Sample
Feelings Scale	.877	.884

IV. Differences Between Groups

T-tests of means on the total depression score between the normative and control samples yielded a significant t value.

	Normati Sample	ve	Control	Sample	DF	t Value	Pr > t
	Mean	SD	Mean	SD			
Feelings Scale –Total Score	11.04 8.20		15.15	9.69	425	4.60	<.0001

¹ Codes for the four positive item responses are inverted before the 20 items are summed.

The frequency distribution of the Depression score among the high-risk control and normative samples is:

Table of Depression Score by Group										
Depression Score	Sai	Sample								
Frequency Col Pct	Control	Normative	Total							
0	83	219	302							
	58.45 ^a	76.84								
1	59	66	125							
	41.55	23.16								
Total	142	285	427							

^aColumn Percentage

With χ^2 (1, N=427) = 15.48, p< 0.0001, the hypothesis of independence between risk category (Normative or High-Risk Control) and diagnosis of Depression is rejected for these data.

V. Recommendations for Use

The total score on 20 items should be used to estimate depression. Although the Feelings Scale has no subscales, in their 1995 study, Miller-Johnson & Maumary-Gremaud noted that if an estimate of a respondent's feelings of social rejection is needed, items 15 and 19 can be used together. However, they also reported a somewhat low reliability (0.58) for the items. Additionally, analysts should be aware of distributional issues: the total score is slightly skewed in a positive direction for the normative sample in year three.

VI. Item and Scale Means and SDs

Variable	Label	Mean	N	Std Dev	Minimum	Maximum
P3DFS1	Were you bothered by things	0.82	358	0.85	0	3.00
P3DFS2	You did not feel like eating	0.69	358	0.88	0	3.00
P3DFS3	Cannot shake off the blues	0.53	357	0.81	0	3.00
p3sfs4r	Reversed-Feel you were just as good as others	0.55	357	0.90	0	3.00
P3DFS5	Have trouble keeping your mind on things	0.90	357	0.95	0	3.00
P3DFS6	Did you feel depressed	0.52	358	0.74	0	3.00
P3DFS7	Feel everything you did was an effort	1.28	358	1.14	0	3.00
p3sfs8r	Reversed-Feel hopeful about the future	0.56	358	0.81	0	3.00
P3DFS9	Think your life had been a failure	0.33	358	0.70	0	3.00
P3DFS10	Did you feel fearful	0.41	358	0.69	0	3.00
P3DFS11	Was your sleep restless	0.91	358	0.91	0	3.00
p3sfs12r	Reversed-Were you happy	0.50	358	0.71	0	3.00
P3DFS13	Did you talk less than usual	0.71	358	0.88	0	3.00
P3DFS14	Did you feel lonely	0.47	358	0.77	0	3.00
P3DFS15	Were people unfriendly	0.46	358	0.75	0	3.00
p3sfs16r	Reversed-Did you enjoy life	0.37	358	0.72	0	3.00
P3DFS17	Did you have crying spells	0.29	357	0.63	0	3.00
P3DFS18	Did you feel sad	0.60	358	0.77	0	3.00
P3DFS19	Did you feel that people dislike you	0.30	358	0.64	0	3.00
P3DFS20	Did you feel you could not get going	0.80	358	0.86	0	3.00
p3dfsdep	Total Depression Score	12.02	358	8.91	0	46.00

Means and Standard Deviations for Feelings Scale Cohort 1, Year 3, Normative Group

Means and Standard Deviations for Feelings Scale Cohort 1, Year 3, Control Group

Variable	Label	Mean	N	Std Dev	Minimum	Maximum
P3DFS1	Were you bothered by things	1.02	142	0.87	0	3.00
P3DFS2	You did not feel like eating	0.77	142	0.89	0	3.00
P3DFS3	Cannot shake off the blues	0.68	142	0.88	0	3.00
p3sfs4r	Reversed-Feel you were just as good as others	0.62	141	0.87	0	3.00
P3DFS5	Have trouble keeping your mind on things	1.14	142	0.97	0	3.00
P3DFS6	Did you feel depressed	0.76	142	0.92	0	3.00
P3DFS7	Feel everything you did was an effort	1.38	142	1.08	0	3.00
p3sfs8r	Reversed-Feel hopeful about the future	0.75	142	0.88	0	3.00
P3DFS9	Think your life had been a failure	0.45	142	0.79	0	3.00
P3DFS10	Did you feel fearful	0.55	142	0.77	0	3.00
P3DFS11	Was your sleep restless	1.12	142	0.99	0	3.00
p3sfs12r	Reversed-Were you happy	0.70	142	0.76	0	3.00
P3DFS13	Did you talk less than usual	0.77	142	0.88	0	3.00
P3DFS14	Did you feel lonely	0.71	142	0.93	0	3.00
P3DFS15	Were people unfriendly	0.54	142	0.78	0	3.00
p3sfs16r	Reversed-Did you enjoy life	0.58	142	0.84	0	3.00
P3DFS17	Did you have crying spells	0.40	142	0.74	0	3.00
P3DFS18	Did you feel sad	0.71	142	0.80	0	3.00
P3DFS19	Did you feel that people dislike you	0.43	142	0.70	0	3.00
P3DFS20	Did you feel you could not get going	1.07	142	0.94	0	3.00
p3dfsdep	Total Depression Score	15.15	142	9.69	0	46.00

VII. Item and Scale Correlations

Feelings Scale - Item Correlations) Combined Normative and Control Samples

Pearson Correlation Coefficients, N = 423 Prob > r under H0: Rho=0											
	P3DFS1	P3DFS2	P3DFS3	p3sfs4r	P3DFS5	P3DFS6	P3DFS7	p3sfs8r	P3DFS9	P3DFS10	P3DFS11
P3DFS1	1.00000	0.32447	0.48576	0.09124	0.24266	0.44508	0.19491	0.11856	0.28726	0.33273	0.30887
Were you bothered by things		<.0001	<.0001	0.0608	<.0001	<.0001	<.0001	0.0147	<.0001	<.0001	<.0001
P3DFS2	0.32447	1.00000	0.38610	0.12962	0.20625	0.34213	0.22671	0.09960	0.29775	0.30556	0.32685
You did not feel like eating	<.0001		<.0001	0.0076	<.0001	<.0001	<.0001	0.0406	<.0001	<.0001	<.0001
P3DFS3	0.48576	0.38610	1.00000	0.16647	0.34584	0.64212	0.22730	0.22494	0.41345	0.45902	0.36081
Cannot shake off the blues	<.0001	<.0001		0.0006	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001
p3sfs4r	0.09124	0.12962	0.16647	1.00000	-0.00485	0.19447	0.08761	0.28988	0.16255	0.13048	0.07944
Reversed-Feel you were just as good as others	0.0608	0.0076	0.0006		0.9208	<.0001	0.0719	<.0001	0.0008	0.0072	0.1028
P3DFS5	0.24266	0.20625	0.34584	-0.00485	1.00000	0.26230	0.20518	0.10945	0.35241	0.25330	0.15679
Have trouble keeping your mind on things	<.0001	<.0001	<.0001	0.9208		<.0001	<.0001	0.0244	<.0001	<.0001	0.0012
P3DFS6 Did you feel depressed	0.44508 <.0001	0.34213 <.0001	0.64212 <.0001	0.19447 <.0001	0.26230 <.0001	1.00000	$0.17465 \\ 0.0003$	0.24366 <.0001	0.50578 <.0001	0.47954 <.0001	0.39432 <.0001
P3DFS7 Feel everything you did was an effort	0.19491 <.0001	0.22671 <.0001	0.22730 <.0001	$0.08761 \\ 0.0719$	0.20518 <.0001	0.17465 0.0003	1.00000	-0.00287 0.9530	0.22783 <.0001	0.15866 0.0011	0.20418 <.0001
p3sfs8r	0.11856	0.09960	0.22494	0.28988	0.10945	0.24366	-0.00287	1.00000	0.26569	0.18404	0.16218
Reversed-Feel hopeful about the future	0.0147	0.0406	<.0001	<.0001	0.0244	<.0001	0.9530		<.0001	0.0001	0.0008
P3DFS9	0.28726	0.29775	0.41345	0.16255	0.35241	0.50578	0.22783	0.26569	1.00000	0.48835	0.25625
Think your life had been a failure	<.0001	<.0001	<.0001	0.0008	<.0001	<.0001	<.0001	<.0001		<.0001	<.0001
P3DFS10 Did you feel fearful	0.33273 <.0001	0.30556 <.0001	0.45902 <.0001	$\begin{array}{c} 0.13048 \\ 0.0072 \end{array}$	0.25330 <.0001	0.47954 <.0001	0.15866 0.0011	$\begin{array}{c} 0.18404\\ 0.0001\end{array}$	0.48835 <.0001	1.00000	0.26786 <.0001
P3DFS11 Was your sleep restless	0.30887 <.0001	0.32685 <.0001	0.36081 <.0001	$0.07944 \\ 0.1028$	0.15679 0.0012	0.39432 <.0001	0.20418 <.0001	0.16218 0.0008	0.25625 <.0001	0.26786 <.0001	1.00000
p3sfs12r	0.27585	0.22810	0.29727	0.24532	0.12162	0.37401	0.11639	0.39112	0.28427	0.21633	0.19742
Reversed-Were you happy	<.0001	<.0001	<.0001	<.0001	0.0123	<.0001	0.0166	<.0001	<.0001	<.0001	<.0001
P3DFS13	0.25771	0.22418	0.33178	0.19194	0.20307	0.26525	0.21892	0.11340	0.29180	0.25849	0.19337
Did you talk less than usual	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	0.0197	<.0001	<.0001	<.0001
P3DFS14	0.35171	0.27519	0.51427	0.12927	0.25184	0.56669	0.18813	0.24685	0.53038	0.46932	0.32575
Did you feel lonely	<.0001	<.0001	<.0001	0.0078	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001
P3DFS15	0.25513	0.15770	0.25425	-0.01176	0.26129	0.20153	0.19563	0.08222	0.33093	0.25368	0.13186
Were people unfriendly	<.0001	0.0011	<.0001	0.8094	<.0001	<.0001	<.0001	0.0912	<.0001	<.0001	0.0066
p3sfs16r	0.20889	0.12960	0.32233	0.22890	0.25177	0.41247	0.10674	0.41765	0.39345	0.24753	0.13525
Reversed-Did you enjoy life	<.0001	0.0076	<.0001	<.0001	<.0001	<.0001	0.0282	<.0001	<.0001	<.0001	0.0053
P3DFS17	0.38252	0.30313	0.46026	0.08479	0.23991	0.47775	0.14464	0.15861	0.42703	0.44907	0.27933
Did you have crying spells	<.0001	<.0001	<.0001	0.0815	<.0001	<.0001	0.0029	0.0011	<.0001	<.0001	<.0001
P3DFS18	0.41480	0.34363	0.51104	0.19178	0.27667	0.57329	0.18721	0.28897	0.48578	0.45343	0.39708
Did you feel sad	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	0.0001	<.0001	<.0001	<.0001	<.0001
P3DFS19	0.32026	0.23633	0.29202	0.05534	0.23944	0.32782	0.09310	0.12456	0.44828	0.35664	0.14866
Did you feel that people dislike you	<.0001	<.0001	<.0001	0.2561	<.0001	<.0001	0.0557	0.0103	<.0001	<.0001	0.0022
P3DFS20	0.24548	0.32888	0.36982	0.09415	0.28594	0.35259	0.27979	0.27793	0.39336	0.33279	0.36851
Did you feel you could not get going	<.0001	<.0001	<.0001	0.0530	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001

Feelings Scale - Item Correlations (continued) Combined Normative and Control Samples

Pearson Correlation Coefficients, N = 423 Prob > r under H0: Rho=0											
	P3DFS1	P3DFS2	P3DFS3	p3sfs4r	P3DFS5	P3DFS6	P3DFS7	p3sfs8r	P3DFS9	P3DFS10	P3DFS11
P3DFS1	1.00000	0.32447	0.48576	0.09124	0.24266	0.44508	0.19491	0.11856	0.28726	0.33273	0.30887
Were you bothered by things		<.0001	<.0001	0.0608	<.0001	<.0001	<.0001	0.0147	<.0001	<.0001	<.0001
P3DFS2	0.32447	1.00000	0.38610	0.12962	0.20625	0.34213	0.22671	0.09960	0.29775	0.30556	0.32685
You did not feel like eating	<.0001		<.0001	0.0076	<.0001	<.0001	<.0001	0.0406	<.0001	<.0001	<.0001
P3DFS3	0.48576	0.38610	1.00000	0.16647	0.34584	0.64212	0.22730	0.22494	0.41345	0.45902	0.36081
Cannot shake off the blues	<.0001	<.0001		0.0006	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001
p3sfs4r	0.09124	0.12962	0.16647	1.00000	-0.00485	0.19447	0.08761	0.28988	0.16255	0.13048	0.07944
Reversed-Feel you were just as good as others	0.0608	0.0076	0.0006		0.9208	<.0001	0.0719	<.0001	0.0008	0.0072	0.1028
P3DFS5	0.24266	0.20625	0.34584	-0.00485	1.00000	0.26230	0.20518	0.10945	0.35241	0.25330	0.15679
Have trouble keeping your mind on things	<.0001	<.0001	<.0001	0.9208		<.0001	<.0001	0.0244	<.0001	<.0001	0.0012
P3DFS6	0.44508	0.34213	0.64212	0.19447	0.26230	1.00000	0.17465	0.24366	0.50578	0.47954	0.39432
Did you feel depressed	<.0001	<.0001	<.0001	<.0001	<.0001		0.0003	<.0001	<.0001	<.0001	<.0001
P3DFS7	0.19491	0.22671	0.22730	0.08761	0.20518	0.17465	1.00000	-0.00287	0.22783	0.15866	0.20418
Feel everything you did was an effort	<.0001	<.0001	<.0001	0.0719	<.0001	0.0003		0.9530	<.0001	0.0011	<.0001
p3sfs8r	0.11856	0.09960	0.22494	0.28988	0.10945	0.24366	-0.00287	1.00000	0.26569	0.18404	0.16218
Reversed-Feel hopeful about the future	0.0147	0.0406	<.0001	<.0001	0.0244	<.0001	0.9530		<.0001	0.0001	0.0008
P3DFS9	0.28726	0.29775	0.41345	0.16255	0.35241	0.50578	0.22783	0.26569	1.00000	0.48835	0.25625
Think your life had been a failure	<.0001	<.0001	<.0001	0.0008	<.0001	<.0001	<.0001	<.0001		<.0001	<.0001
P3DFS10 Did you feel fearful	0.33273 <.0001	0.30556 <.0001	0.45902 <.0001	$\begin{array}{c} 0.13048\\ 0.0072\end{array}$	0.25330 <.0001	0.47954 <.0001	0.15866 0.0011	$\begin{array}{c} 0.18404\\ 0.0001\end{array}$	0.48835 <.0001	1.00000	0.26786 <.0001
P3DFS11	0.30887	0.32685	0.36081	0.07944	0.15679	0.39432	0.20418	0.16218	0.25625	0.26786	1.00000
Was your sleep restless	<.0001	<.0001	<.0001	0.1028	0.0012	<.0001	<.0001	0.0008	<.0001	<.0001	
p3sfs12r	0.27585	0.22810	0.29727	0.24532	0.12162	0.37401	0.11639	0.39112	0.28427	0.21633	0.19742
Reversed-Were you happy	<.0001	<.0001	<.0001	<.0001	0.0123	<.0001	0.0166	<.0001	<.0001	<.0001	<.0001
P3DFS13	0.25771	0.22418	0.33178	0.19194	0.20307	0.26525	0.21892	0.11340	0.29180	0.25849	0.19337
Did you talk less than usual	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	0.0197	<.0001	<.0001	<.0001
P3DFS14	0.35171	0.27519	0.51427	0.12927	0.25184	0.56669	0.18813	0.24685	0.53038	0.46932	0.32575
Did you feel lonely	<.0001	<.0001	<.0001	0.0078	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001
P3DFS15	0.25513	0.15770	0.25425	-0.01176	0.26129	0.20153	0.19563	0.08222	0.33093	0.25368	0.13186
Were people unfriendly	<.0001	0.0011	<.0001	0.8094	<.0001	<.0001	<.0001	0.0912	<.0001	<.0001	0.0066
p3sfs16r	0.20889	0.12960	0.32233	0.22890	0.25177	0.41247	0.10674	0.41765	0.39345	0.24753	0.13525
Reversed-Did you enjoy life	<.0001	0.0076	<.0001	<.0001	<.0001	<.0001	0.0282	<.0001	<.0001	<.0001	0.0053
P3DFS17	0.38252	0.30313	0.46026	0.08479	0.23991	0.47775	0.14464	0.15861	0.42703	0.44907	0.27933
Did you have crying spells	<.0001	<.0001	<.0001	0.0815	<.0001	<.0001	0.0029	0.0011	<.0001	<.0001	<.0001
P3DFS18	0.41480	0.34363	0.51104	0.19178	0.27667	0.57329	0.18721	0.28897	0.48578	0.45343	0.39708
Did you feel sad	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	0.0001	<.0001	<.0001	<.0001	<.0001
P3DFS19	0.32026	0.23633	0.29202	0.05534	0.23944	0.32782	0.09310	0.12456	0.44828	0.35664	0.14866
Did you feel that people dislike you	<.0001	<.0001	<.0001	0.2561	<.0001	<.0001	0.0557	0.0103	<.0001	<.0001	0.0022
P3DFS20	0.24548	0.32888	0.36982	0.09415	0.28594	0.35259	0.27979	0.27793	0.39336	0.33279	0.36851
Did you feel you could not get going	<.0001	<.0001	<.0001	0.0530	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001