

PROBLEMS IN A MEASURE
OF SELF-ESTEEM
IN A CORRECTIONAL SETTING

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ABSTRACT

In two previous studies Bennett, et. al., reported the development of a measure of self-esteem for use in the correctional setting. This measure was tested to determine the effects of social desirability and machiavellianism on self-esteem scores. The measure was found to be heavily contaminated by both forms of artifact, and it was recommended that extreme caution be used in interpreting the findings of the previous studies.

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Background: The California Scale

In 1971 Bennett, Sorensen and Forshay reported the development of a measure of self-esteem for use in a correctional setting. This measure consisted of fifty items with a dichotomous response format (see Appendix 1 for a copy of the original scale). The authors tested the measure on a group of 337 male felons entering the California Department of Correction's Reception Guidance Center.

Contrary to expectations, the distribution of scores in the California study was negatively skewed, with large numbers of subjects receiving high self-esteem scores. On this basis, the authors stated that:

The distribution of scores suggests that the impact of institutionalization is not the same for all inmates, and/or that inmates have levels of self-esteem of different strengths at the time of entering upon this new experience. The small group who score at the lower end of the scale may be seen as being closer to the picture outlined by prediction based upon clinical impressions. (p. 6)

In a later study using the same scale, Bennett (1974) examined changes in self-esteem scores during the period

of incarceration. Again contrary to expectations, he found that:

the curve over phases of institutional stay did not resemble the hypothesized inverted U but rather presented a picture of an upward slope with the positive acceleration diminishing between the mid-phase and exit point. (p. 13)

Possible Contamination of the Scale

In a critique of the first study, Lelos (1973, p. 102) questioned the reliability of the measure:

Reliability is not a characteristic of the test per se, but of the test in given situation. The direction of motivational influences is particularly relevant to self-report type data, especially in a prison population. It is conceivable that a conscious distortion might enter into a self-report measure if the testee has reason to believe that it is to his advantage to present a "normal" or even "hypernormal" facade, especially if he suspects that the test results may be introduced into his record and might hinder an otherwise favorable parole board decision.

Such a defensiveness factor might be advanced as a possible explanation for the surprisingly high self-esteem scores in the first study, and for the upward slope of scores over time in the second study, both of which were reported by the authors as contrary to their predictions. While a substantial number of inmates might be expected to resort to deliberate misrepresentation at intake, the percentage could increase over time as others become enculturated to the exigencies of prison life.

A Test of Two Contaminating Factors

During the spring of 1972 the author, aided by a consulting specialist in attitude measurement, Dr. Herbert J. Greenwald, and Research Assistant John Christopher, conducted a study of the influence of social desirability (the desire to look good) and machiavellianism (the tendency to manipulate others for one's own ends) on responses to the California self-esteem measure. An instrument containing a twenty-item social desirability scale (Greenwald and Satow, 1970), a twenty-item machiavellianism scale (Christie and Geis, 1969) and the self-esteem measure was administered to a group of inmates, and correlation coefficients of the self-esteem scores (and of each of the self-esteem items individually) with the two measures of artifact were computed.

Items of the machiavellianism and social desirability scales were interspersed randomly. However, since these two scales used a five-point Likert response format, and the self-esteem measure called for a dichotomous format, the latter remained separate. A copy of the instrument is included as Appendix 1 of this report.

The three inventories were administered to fifty

inmates of Massachusetts Correctional Institution-Concord under circumstances similar to those in the first California test -- i.e., the men were new arrivals in the correctional setting, segregated from the general population, and the instrument was presented as part of the normal intake procedure.

Since at the time of this study Massachusetts had no central receiving facility, the "New Line" reception section of this single institution was used as the closest available equivalent to California's Reception Guidance Center. All men arriving at Concord during a six-week period were tested, in groups ranging from five to fourteen. (No significant correlation was found between "date of administration" and any other variable.) Two inmates refused, and two Spanish-speaking inmates were excused from testing because they were unable to read English. This left a total of fifty completed instruments at the time it was necessary to terminate testing due to personnel changes at M.C.I.-Concord.

Results

Correlation coefficients for total self-esteem score with total social desirability score and total machiavellianism score are reported in Table 1. Both of these coefficients were quite high, indicating that self-esteem

TABLE 1

self-esteem/ machiavellianism	$\underline{r} = -.41, \underline{p} < .01$
self-esteem/ social desirability	$\underline{r} = .59, \underline{p} < .001$

scores were likely to be contaminated by both kinds of artifact.

The individual items of the self-esteem scale were then examined to screen out items that were primarily responsible for the high correlation of the total self-esteem score with social desirability and machiavellianism. A relatively low criterion ($\underline{r} = .21$) was used for eliminating items to take into account the possibility that the total score of the scale may correlate with social desirability and machiavellianism at a higher level than with individual items, due to the cumulative effect of the relationship. (Greenwald, 1968, p. 12)

Twenty of the original fifty self-esteem items were found to meet this retention criterion. A complete table of correlations of self-esteem items with social desirability and machiavellianism may be found in Appendix 2.

The self-esteem scales were rescored using only the above twenty items. The measure was then screened for

internal consistency by computing the correlation coefficient of each item to the total score. The twenty-item scores were used since the scores for the fifty-item scale were known to be contaminated. For this step, a self-esteem item was discarded if it did not correlate significantly with the total self-esteem score at the .05 level (i.e., $r = .28$). Eleven items met this criterion. Item-total correlations for all twenty items are shown in Appendix 3.

Finally, the scales were again rescored, this time using only the eleven items found to be relatively independent of social desirability and machiavellianism, and able to meet the internal consistency criterion. The total self-esteem score were also found to be relatively independent of the two artifacts (see Table 2), a marked improvement over the condition observed in the original fifty-item scale.

TABLE 2

*Correlation of Self-Esteem with
Social Desirability and Machiavellianism*

		<i>Social Desirability</i>	<i>Machiavellianism</i>
<i>Self- Esteem</i>	<i>Original 50 items</i>	.59	-.41
	<i>Revised 11 items</i>	.12	.07

The eleven-item scale also exhibited good internal consistency, with an average item-total r of .48 ($p < .001$). Individual item correlations are shown in Appendix 4.

The frequency distribution of scores shown in Table 3 indicates a marked clustering of high scores (mean score = 7.98), as was also true of the original fifty-item scale.

TABLE 3
Frequency of Scores
on Eleven-item Self-esteem Scale

<u>score</u>	<u>frequency</u>
1	0
2	0
3	2
4	4
5	3
6	2
7	7
8	9
9	7
10	10
11	6

Additional factors, uncontrolled in this test, which may have contributed to the pattern of high scores are the preponderance of positively-keyed items (seven to four) and the dichotomous response format, which may have inflated the scores by forcing genuinely neutral subjects into extreme responses. With a short scale this problem would

be especially noticeable, since each inaccuracy would carry a high weight.

Discussion

The results clearly supported the suspicions of contamination expressed by Lelos. In this administration of the California self-esteem measure, both social desirability and machiavellianism were major contributors to the scores obtained. While a shorter, eleven-item version of the scale seemed relatively free of these forms of artifacts, it appeared to be too short, and too weighted toward high scores, to be of practical use.

This study has illustrated the extreme difficulty of adapting measures developed on non-prison populations for use in the correctional setting. In any environment, social desirability is probably the most pervasive artifact in attitudinal research; inside the walls of a prison, the pressures that produce this tendency are multiplied manyfold. Serious questions must be asked concerning the reliability of any attitudinal measure employed in correctional research that has not been originally developed from, or thoroughly tested on, an inmate population. Certainly the findings reported by Bennett, et. al., in the two studies quoted must be interpreted with extreme caution.

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APPENDIX 1

The Research Instrument

Name _____

Date _____

PLEASE MARK EACH STATEMENT IN THE FOLLOWING WAY:

If the statement describes how you usually feel, put a circle around the "L" in the column, "Like Me."

If the statement does not describe how you usually feel, put a circle around the "U" in the column, "Unlike Me."

There are no "right" or "wrong" answers to these questions. Just state honestly what is true about you.

	<u>LIKE</u> <u>ME</u>	<u>UNLIKE</u> <u>ME</u>
1. I spend a lot of time daydreaming.	L	U
2. I'm pretty sure of myself.	L	U
3. I often wish I were someone else.	L	U
4. I'm easy to like.	L	U
5. I never worry about anything.	L	U
6. My parents and I used to have a lot of fun together.	L	U
7. I wish I were younger.	L	U
8. There are lots of things about myself I'd change if I could.	L	U
9. I can make up my mind without too much trouble.	L	U
10. I'm a lot of fun to be with.	L	U
11. I get upset easily when dealing with others, especially with those close to me.	L	U
12. I always do the right thing.	L	U
13. Someone always has to tell me what to do.	L	U
14. It takes me a long time to get used to anything new.	L	U
15. I'm often sorry for the things I do.	L	U
16. I'm popular with people my own age.	L	U
17. I'm never unhappy.	L	U
18. I'm doing the best work that I can.	L	U
19. I give in very easily.	L	U
20. I can usually take care of myself.	L	U

	<u>LIKE ME</u>	<u>UNLIKE ME</u>
21. I'm pretty happy.	L	U
22. I'm usually proud of what I am doing.	L	U
23. My parents expected too much of me.	L	U
24. I like everyone I know.	L	U
25. I understand myself.	L	U
26. It's pretty tough to be me.	L	U
27. Things are all mixed up in my life.	L	U
28. Younger fellows usually follow my ideas.	L	U
29. I never got scolded.	L	U
30. My parents understood me pretty well.	L	U
31. I can make up my mind and stick to it.	L	U
32. I really don't like being a male.	L	U
33. I have a low opinion of myself.	L	U
34. I don't like to be with other people.	L	U
35. There are many times when I'd like to leave home.	L	U
36. I'm never shy.	L	U
37. I often feel upset in school.	L	U
38. I often feel ashamed of myself.	L	U
39. I'm not as nice looking as most people.	L	U
40. If I have something to say, I usually say it.	L	U
41. The staff makes me feel I'm not good enough.	L	U
42. I always tell the truth.	L	U
43. I don't care what happens to me.	L	U
44. I'm a failure.	L	U
45. Most people are better liked than I am.	L	U
46. I usually felt as if my parents were pushing me.	L	U
47. I always know what to say to people.	L	U

	<u>LIKE</u> <u>ME</u>	<u>UNLIKE</u> <u>ME</u>
48. I get upset easily when I'm called down about something.	L	U
49. Things usually don't bother me.	L	U
50. I can't be depended on.	L	U

INSTRUCTIONS FOR THE REMAINING ITEMS

Please read each of the statements starting on the next page, and then indicate how much you agree or disagree with each one. To do this, enter the number from the scale below that shows how you feel, in the blank to the left of the statement.

<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>
Agree very much	Agree a little	Neither agree nor disagree	Disagree a little	Disagree very much

For instance, if the statement was: 2 41. I wish everyone could be happy. and you agreed a little with this statement, you would enter a "2" in the blank, as shown. If you disagreed with the statement very much, you would enter a "5" instead.

Again, there are no "right" or "wrong" answers. We are interested only in your personal opinion.

<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>
Agree very much	Agree a little	Neither agree nor disagree	Disagree a little	Disagree very much

- ___ 1. I am always willing to admit when I make a mistake.
- ___ 2. On a few occasions, I have given up doing something because I thought too little of my ability.
- ___ 3. Most people won't work hard unless you make them do it.
- ___ 4. I have never intensely disliked anyone.
- ___ 5. It is better to be ordinary and honest than famous and dishonest.
- ___ 6. A criminal is just like other people except that he is stupid enough to get caught.
- ___ 7. I always try to practice what I preach.
- ___ 8. I am quick to admit making a mistake.
- ___ 9. Successful people are mostly honest and good.
- ___ 10. At times I have wished that something bad would happen to someone I disliked.
- ___ 11. It is smart to be nice to important people even if you don't really like them.
- ___ 12. I am always courteous, even to people who are disagreeable.
- ___ 13. It is possible to be good in every way.
- ___ 14. Sometimes you have to cheat a little to get what you want.
- ___ 15. It's better to tell someone why you want him to help you than to make up a good story to get him to do it.
- ___ 16. I am sometimes irritated by people who ask favors of me.
- ___ 17. No matter who I'm talking to, I'm always a good listener.
- ___ 18. I am always attentive to the person I am with.
- ___ 19. I have never deliberately said something that hurt someone's feelings.
- ___ 20. I would never think of letting someone else be punished for my wrongdoings.
- ___ 21. Most people are good and kind.
- ___ 22. Never tell anyone why you did something unless it will help you.
- ___ 23. I sometimes feel resentful when I don't get my own way.
- ___ 24. You should do something only when you are sure it is right.

<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>
Agree very much	Agree a little	Neither agree nor disagree	Disagree a little	Disagree very much

- ___ 25. You should always be honest, no matter what.
- ___ 26. There have been times when I was quite jealous of the good fortune of others.
- ___ 27. It hurts more to lose money than to lose a friend.
- ___ 28. It is smartest to believe that all people will be mean if they have a chance.
- ___ 29. The best way to get along with people is to tell them things that make them happy.
- ___ 30. I have always faced up to the bad as well as the good consequences of the things I have done.
- ___ 31. Most people are brave.
- ___ 32. On occasion I have had doubts about my ability to succeed in life.
- ___ 33. Most people can not be easily fooled.
- ___ 34. I sometimes take unfair advantage of another person.
- ___ 35. Sometimes you have to hurt other people to get what you want.
- ___ 36. It is never right to tell a lie.
- ___ 37. I sometimes try to get even, rather than forgive and forget.
- ___ 38. There have been occasions when I took advantage of someone.
- ___ 39. Anyone who completely trusts anyone else is asking for trouble.
- ___ 40. There have been times when I felt like rebelling against people in authority even though I knew they were right.

APPENDIX 2

Item correlations to social desirability and machiavellianism
-- fifty-item scale

item no.	social desirability	machia- villianism
1	.26	.32
*2	.04	.18
3	.26	.14
*4	.06	.19
*5	.07	.04
*6	.19	.03
*7	.02	.13
8	.32	.12
9	.20	.25
10	.23	.08
11	.43	.39
12	.29	.15
*13	.15	.15
14	.35	.23
15	.29	.14
*16	.03	.15
*17	.08	.02
18	.36	.23
*19	.09	.09
*20	.20	.09
21	.27	.21
22	.23	.03
*23	.05	.17
*24	.14	.04
*25	.13	.08
26	.25	.29
27	.46	.29
*28	.02	.16
*29	.01	.03
30	.21	.08
*31	.20	.07
*32	.01	.00
33	.34	.38
34	.24	.16
35	.46	.43

*items retained for twenty-item scale

Appendix 2 -- continued

item no.	social desirability	machia- vellianism
36	.19	.28
37	.37	.27
38	.30	.11
*39	.12	.02
*40	.00	.16
41	.30	.34
42	.40	.17
43	.37	.24
44	.23	.36
*45	.20	.08
46	.11	.31
47	.40	.07
48	.36	.28
49	.32	.14
50	.19	.21

*items retained for twenty-item scale

APPENDIX 3

Item-total Correlations -- Twenty-item Self-esteem Scale

	item no.	<u>r</u>
retained for scale	40	.61
	31	.61
	16	.54
	45	.46
	28	.45
	23	.44
	2	.43
	20	.38
	4	.37
	39	.33
	7	.28
discarded	25	.24
	6	.21
	19	.20
	32	.18
	24	.17
	13	.14
	5	.11
	29	.11
	17	.00

APPENDIX 4

Item-total Correlations -- Eleven-item Self-esteem Scale

item no.	<u>r</u>	<u>p</u>
31	.68	<.001
40	.62	<.001
16	.59	<.001
45	.54	<.001
28	.48	<.001
4	.43	<.01
2	.43	<.01
23	.43	<.01
39	.36	<.01
7	.35	<.05
20	.32	<.05