SEX AND EDUCATIONAL LEVEL DIFFERENCES IN REPORTED PERCEPTIONS OF SELF AND OTHERS

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The purposes of this study were to describe and compare conceptions of self and others reported by four groups of majors in Education, and to describe some characteristics of the reporting device used. Data were obtained for graduate students enrolled at the University of Georgia during the 1963 summer quarter in the one course required in all graduate programs in Education and for undergraduate students enrolled in three of the five summer school sections of educational and adolescent psychology. Two graduate groups, divided by sex, and two undergraduate groups, similarly divided, were the subjects of the study--a total of 167 graduate students and ninety-seven undergraduates. Bills' Index of Adjustment and Values (IAV), adult and high school level, was the device used, and of six scores obtained with it for each individual, this study was concerned with four--the reported self-perception (SI), reported self-acceptance (SII), reported estimate of peer self-perception (OI), and reported estimate of peer self-acceptance (OII).

Description of the IAV

Bills' Index of Adjustment and Values consists of forty-nine adjectives descriptive of self (see Table 1), printed on each of two sheets--a Self sheet and an Others sheet. This list, as explained in the manual, was selected from Allport's list of over 17,000 traits on the basis of frequency of occurrence in client-centered interviews. The respondent begins with the Self sheet, answering each of three questions concerning the first listed trait and doing like-wise for the succeeding forty-eight. The three questions are:

1. How often are you this sort of person?
2. How do you feel about being this way?
3. How much of the time would you like this trait to be characteristic of you?

After completing the Self sheet, the respondent considers in turn each trait listed on the Others sheet, answering the three questions about each before going on. On the Others sheet, the subject "places himself in the shoes of" the typical person among his peers, answering as he thinks this

Table 1

Item Content of the Index of Adjustment and Values

Item No.	Adjective	Item No.	Adjective	Item No.	Adjective
1	Acceptable	17	Efficient	33	Reasonable
2	Accurate	*18	Fearful	*34	Reckless
3	Alert	19	Friendly	35	Responsible
4	Ambitious	20	Fashionable	*36	Sarcastic
*5	Annoying	21	Helpful	37	Sincere
6	Busy	22	Intellectual	38	Stable
7	Calm	23	Kind	39	Studious
8	Charming	24	Logical	40	Successful
9	Clever	*25	Meddlesome	*41	Stubborn
10	Competent	26	Merry	42	Tactful
11	Confident	27	Mature	43	Teachable
12	Considerate	*28	Nervous	44	Useful
*13	Cruel	29	Normal	45	Worthy
14	Democratic	30	Optimistic	46	Broad-minded
15	Dependable	31	Poised	47	Businesslike
16	Economical	32	Purposeful	48	Competitive
				*49	Fault-finding

*In scoring Column I and III responses, weights assigned to the options are reversed for these items.

typical person would. On both sheets, answers to the three questions are structured. For questions one and three, an answer is selected from these five: seldom, occasionally, about half the time, a good deal of the time, most of the time. For question two, options are: very much dislike, dislike, neither like nor dislike, like, like very much. Likert fashion, arbitrary weights of 1, 2, 3, etc., are assigned to the options. On each sheet, the subject responds forty-nine times (one per trait) to each of the three questions. The Self and Others responses are placed on separate answer sheets, each so arranged that answers to question one are placed in Column I; to question two, in Column II; and to question three, in Column III. On each sheet a total score for each column is obtained by summing the weights assigned to options selected. Each total score can range from 49-245, inclusive.

Characteristics of the IAV

For reasons presented by Combs (Combs, Soper, and Courson, 1963), responses to Bills' Index are probably self-report devices (Strong and Feder 1961) reported that "The data which have been collected from several studies indicate that the Index is a valid and reliable measure of adjustment and values..." The manual for the high school and adult level of IAV presents evidence concerning the content validity, concurrent validity, and construct validity. It also reports internal consistency and stability of response reliability data. Coefficients of internal consistency reported range from .53 (SI) to .94 (OII) with only two below .80. Coefficients of stability, six weeks interval, were reported as .90 (SI) and .83 (SII). In this study, the authors obtained coefficients of stability, one month interval, of .64 and .67 for SII and OII, respectively, with standard errors of measurement of 10 and 12.

Strong (1962) reported that the Index, in common with the Butler-Haigh SIO Q-Sort and the Worchel Self-Activity Inventory, measures the perceived self and that the social desirability (SD) of Index items has little influence on responses to them. In another study, IAV self acceptance scores were correlated with scores obtained with the Taylor Manifest Anxiety Scale, the Couch-Keniston Yeasay-Naysay Scale, the Marlowe-Crowne Social Desirability Scale, and the Bass Social Acquiescence Scale, resulting in correlation coefficients of -.71, -.56, .28 and -.25. With IAV Self Acceptance scores as the independent variable, a multiple-R of .80 was obtained (Winkler and Myers, 1963).

Table 2 contains data collected in this study relating to the care and consistency with which subjects responded to IAV. The authors selected from the forty-nine traits, five pairs the members of which are either synonyms or antonyms. For each of these pairs, answers were checked for consistency. Responses to a pair were defined as consistent if they differed by not more than one when the appropriate arbitrary weights were assigned. These checks were made using a sample of fifty nine (stratified as "graduate" and "undergraduate") from the 264 students. Entries in Table 2 show that large percentages responded consistently to the self-perception (SI and OI) questions, but that the percentages responding consistency to the self-acceptance (SII and OII) questions were small. Table entries identify these small percentages of consistent responses as associated with the pairs of antonyms. Examination of the answer sheets suggested that self-acceptance and peer self-acceptance responses to socially undesirable (non-SD) traits (e.g., "nervous," "fearful," "cruel") accounted for the inconsistencies. Most SII and OII responses indicated some degree of lack of self-acceptance even though the self-perception responses indicated that the trait does not characterize the subject much of the time (most SI and OI responses to these traits were "seldom" or "never").

Responses to each of two 5-option questions may be consistent as defined above through random selection of the two options. Of twenty-five possible combinations of the two options, thirteen are consistent; twelve, inconsistent. Through random selection of options, therefore, the expected percentage of consistency is fifty-two. Chi-squares with one degree of freedom were computed for the percentages of consistent and inconsistent responses for each of the five pairs of items to ascertain if the obtained percentages differed significantly (.05 significance level) from chance expectancy. In Table 2, eighteen of the twenty percentages tabled for self-perception (SI and OI) did so differ, while nine of the twenty tabled for self-acceptance (SII and OII) did.

The three pairs of antonyms on IAV were also used in checking responses to socially desirable (SD) items with those to non-socially desirable items. The graduate males and females were used in this check. For each pair of antonyms, the mean SI and OI responses to the SD member of the pair were compared with those to the non-SD member of the pair. Of the six differences between SI means in Table 3, the socially desirable item response mean was larger in two instances and smaller in four than the non-socially desirable item response mean. A similar situation obtained with respect to the six OI mean differences. Thus there appeared

Table 2

Percentages of Consistent Responses to Five Pairs of IAV Items*

Item Numbers	SI-U	SI-G	SII-U	SII-G	OI-U	OI-G	OII-U	OII-G
12 and 42	82	97	77	100	82	97	91	87
22 and 39	(73)**	92	82	78	86	100	86	81
7 and 28	77	78	(50)	(51)	91	97	27	(46)
11 and 18	(73)	95	(59)	(49)	86	86	(50)	(57)
13 and 23	91	92	(64)	(49)	100	92	(51)	(60)

*Column headings are coded as follows:

S	Self sheet
O	Others sheet
I	Column I (self-perception) responses
II	Column II (self-acceptance) responses
U	Undergraduates, N = 22
G	Graduates, N = 37

**Percentages in parenthesis did not differ significantly from chance expectancy (.05 level of significance). All other tabled percentages did so differ.

Table 3

Means and Variances of Responses (Graduate Male and Female) to the Paired Antonyms

IAV ITEM	Graduate Males (N=94)		Graduate Females (N=74)	
	Reported Self-Perception (SI)			
	Mean	Variance	Mean	Variance
7 Calm	3.72	0.98	4.14	0.53
28 Nervous	3.72	1.04	4.08	0.76
11 Confident	3.73	0.73	4.11	0.51
18 Fearful	4.26	0.38	4.11	0.48
23 Kind	4.53	0.49	4.35	0.48
13 Cruel	4.86	0.12	4.84	0.14
	Estimate of Peers' Self-Perception (OI)			
	Mean	Variance	Mean	Variance
7 Calm	3.89	0.48	4.08	0.60
28 Nervous	3.85	0.58	4.11	0.56
11 Confident	4.05	0.39	4.20	0.49
18 Fearful	4.18	0.55	4.08	0.71
23 Kind	4.31	0.43	4.31	0.46
13 Cruel	4.76	0.21	4.76	0.27

no tendency for mean responses to socially desirable items to be greater than those to non-socially desirable items. Dispersions of scores about the means did tend to be larger for the non-SD items. Consideration was given to checking further on possible response sets through use of a technique reported by Peabody (1964), but in view of evidence already obtained, it was decided to forego this check.

Comparison of the SI and SII Means by Educational Level and Sex

Norm data available for IAV do not contain information concerning possible college graduate student-undergraduate student differences or possible sex differences. Review of other studies did not identify such information, although a limited amount of data was found pertaining to differences obtained with other self-report measures. For 233 freshman women given the Gough Adjective Check List, ninety-seven per cent ormore of the group reported themselves as honest, loyal, adaptable, appreciative, considerate, cooperative, fair-minded, and good natured (Broxton, 1963). In another study, 402 graduate students evaluated themselves from "very poor" to "superior" on ten traits--reasoning power, originality, memory, alertness, accuracy, application, cooperation, moral attitudes, health, and zeal for investigation. They rated themselves high on cooperation, health, and moral attitudes; low, on the other seven traits (Potter, 1962).

Since the 264 students in this study comprised a small finite population rather than a sample from a very large one, formulating and testing the usual kinds of statistical inferences were unwarranted (Campbell and Stanley, 1963, pp. 193-194). It was proper, however, to explore the question of internal validity with reference to reliability of measurement. Two types of mean differences were tested--differences between group means for the groups used in this study, and the appropriate norm means. In all tests, the .05 significance level was used. Techniques used in testing these kinds of differences are described in Davis (1964, p. 224 and 227). For the groups in this study, the SI, SII, OI, and OII reliability coefficients were each taken conservatively as .64; the SI and SII standard errors of measurement, as 10; and the OI and OII standard errors of measurement. as 12. The norm group N was 1221; the SI, SII, OI, and OII norm group standard deviations were 19, 25, 23, and 24, respectively.

Table 4 contains data pertaining to the self-perception (SI) and self-acceptance (SII) scores. The self-perception

Table 4

Educational Level and Sex Differences
Among the SI and SII Means

N	Group	Mean SI	Mean SII	S.D. SI	S.D. SII	r*(SI,SII)
94	Graduate Male	196	185	19	22	.51(.79)
73	Graduate Female	196	178	18	22	.37(.56)
33	Undergraduate Male	192	181	21	21	.64(.98)
64	Undergraduate Female	190	177	19	23	.78(.99)
1221	NORM	186	172	19	25	----

Groups Compared	Mean Differences SI	SII
Graduate Male-Graduate Female	0	7**
Undergraduate Male-Undergraduate Female	2	4
Graduate Male-Undergraduate Female	6**	8**
Undergraduate Male-Graduate Female	-4	3
Graduate Male-Undergraduate Male	4	4
Graduate Female-Undergraduate Female	6**	1

Code for Symbols Used

S.D. Standard Deviation
r(SI,SII) Pearson-r for the SI and SII scores
*r's in parenthesis have been corrected for attenuation.
**Significant at .05 significance level

means of all four groups were significantly higher than the norm mean of 186. Similarly, all four self-acceptance means were significantly higher than the norm of 172. The data revealed no regularity of influence of sex or educational level on either self-perception or self-acceptance. With respect to self-acceptance, graduate males reported themselves more favorably than either group of females.

Corrected for attenuation, the correlation coefficients in Table 4 ranged from .56 to .99, indicating consistency between the self-perception and self-acceptance reports ranging from moderate to very high. Graduates were less consistent than undergraduates, with a more pronounced drop in consistency for females than for males.

Comparison of the OI and OII Means by Educational Level and by Sex

The OI and OII scores reflected estimates of peer self-perception and peer self-acceptance. Table 5 contains data pertaining to these estimates. All of the OI and OII means were higher than the respective norms, with all but the undergraduate male OI and undergraduate female OII means significantly so. With respect to estimates of peer self-perception, every comparison of graduates with undergraduates yielded a significant difference favoring the graduates. Sex differences among the estimates of peer self-perception were slight. With respect to estimates of peer self-acceptance, graduate males and females made significantly more favorable estimates than did the undergraduate group of the same sex. At the graduate level, there was a significant sex difference favoring the males.

Corrected for attenuation, correlations between the estimates of peer self-perception and peer self-acceptance ranged from .20 to .84, indicating consistency between the estimates ranging from low to moderately high. For each sex, there was less consistency at the graduate than at the undergraduate level, with graduate females showing very little consistency.

Summary

This study examined differences in the reported perceptions of self and others accompanying differences in the sex and educational level of respondents, and checked on the reliability of the self-report device used. Bills' Index of Adjustment and Values (IAV) was given to 264 majors in Education enrolled in the 1963 summer session of the University of Georgia. Reliability estimates showed that IAV could be

Table 5

Educational Level and Sex Differences
Among the OI and OII Means

N	Group	Mean OI	Mean OII	S.D. OI	S.D. OII	r (OI,OII)
94	Graduate Male	198	190	17	23	.47(.73)*
73	Graduate Female	197	186	17	21	.13(.20)
33	Undergraduate Male	189	184	20	19	.54(.84)
64	Undergraduate Female	192	181	21	24	.44(.69)
1221	NORM	186	178	23	24	----

Groups Compared	Mean Differences OI	OII
Graduate Male-Graduate Female	1	4**
Undergraduate Male-Undergraduate Female	-3	3
Graduate Male-Undergraduate Female	6**	9**
Undergraduate Male-Graduate Female	-8**	-2
Graduate Male-Undergraduate Male	9**	6**
Graduate Female-Undergraduate Female	5**	5**

Code for Symbols Used

S.D. Standard Deviation
r(OI,OII) Pearson-r for the OI and OII scores
*r's in parenthesis have been corrected for attenuation
**significant at .05 significance level

used for group comparisons, although such estimates were lower than ones previously reported. Evidence was adduced that directions for responding to undesirable traits on the self-acceptance portions of IAV are likely to be misunderstood.

A review of previous research with IAV failed to reveal data relevant to sex and educational level differences in IAV responses, although a few studies reported similar data pertaining to other instruments. Students in this study made significantly more favorable estimates of self and others than did the norm group of college students reported in the IAV manual. Neither sex nor educational level seemed to exert systematic influence on these estimates. Consistency between the self perception and self acceptance estimates ranged from moderately high to very high, with graduates evidencing less consistency than undergraduates.

With respect to estimates of peer self-perception, educational level apparently exerted systematic influence, graduates tending to make more favorable estimates than the undergraduates. Sex differences among such estimates were slight. With respect to estimates of peer self-acceptance, graduates of each sex made more favorable estimates than undergraduates of the same sex. Consistency between the estimates of peer self-perception and peer self-acceptance ranged from low to moderately high, with graduate females showing little consistency.

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