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Comparisons between scales on the Strong Vocational Interest Blank (SVIB), Form T-399 and the Kuder Occupational Interest Survey (KOIS), Forms D & DD, sometimes show confusing results. Correlational studies comparing all scales on the SVIB and the KOIS, Form D (King & Powers, 1963) and the SVIB and KOIS, Form DD (O'Shea & Harrington, 1971) showed many low correlations between same-named scales and sometimes higher correlations between those same scales and scales that were obviously different. Correlational studies between same-named scales only corroborated the findings cited above (Zytowski, 1968, and Wilson & Kiaser, 1968). Lefkowitz (1970), in a study of the scoring procedures on the SVIB and the KOIS found differences in the obtained scores on same-named scales.

Past investigators have attempted to determine whether the SVIB and the KOIS yielded comparable information on a testee by analyzing the scale scores or the scoring procedures, and they have been in general agreement that the tests yield different information. Since the test construction and standardization populations are different, it may be useless to search for comparability using statistical procedures alone. Carek (1972) found, however, that correlations between standard scores on the SVIB and ranked scales on the KOIS yielded generally higher coefficients than those reported previously. The Carek findings suggest the probability that a procedure that will compare the occupations without analyzing the scores may show comparability not yet found.

In his theory of vocational choice, Holland (1966) proposed that occupations and personalities may be described by six types: Realistic, Investigative, Artistic, Social, Enterprising, and Conventional. Because he found no perfect matches between occupations and personalities and the six types, he coded occupations and personalities according to their three major orientations, for example, occupations and personalities whose most prominent characteristics were Realistic, Investigative, Artistic were coded RIA. In his Occupations Finder which accompanied the Self-Directed Search (Holland, 1971B) he provided three-letter codes for 414 occupations, or for occupations held by 95% of the work force. Viernstein (1971) increased the number of coded occupations to include all occupations listed in the Dictionary of Occupational Titles.

In his Self-Directed Search, Holland provided a procedure for devising a Summary Code, or a composite occupational code, for an array of occupational codes. When Holland's Summary Coding procedure is used, an array of high interest occupations on the SVIB and KOIS can be compared by analyzing similarities between the Summary Codes. The purpose of this study was to investigate the similarities between the array of high interest occupations produced by the SVIB and the KOIS when they were administered to the same individual.

Method

Subjects

The files of the University Counseling Center at a large, Eastern university were surveyed for males who had taken both the SVIB and KOIS. Sixty white, male freshmen, sophomores, juniors, seniors, and graduate students between the ages of 17 and 27 were found. The students applied for

educational-vocational counseling, were assigned the tests simultaneously during an intake interview, and completed them within an 18-month period prior to the beginning of the survey. Permission was granted by the University Counseling Center for the use of the data, and absolute confidentiality was observed.

Procedures

The KOIS protocol for males lists up to 10 occupations on an interpretable instrument. All occupations that are within .06 of the highest scored occupation are listed when space permits. When additional space is available, a line is drawn under the last high interest occupation, and occupations more than .06 less the highest scored occupation are listed. The occupations on the KOIS on which the Subject scored highest and those within .06 of his highest scored occupation were listed and assigned their three-letter codes. Each occupation in the A and B+ interest levels on the SVIB for each Subject was also listed and assigned its three-letter code. A Summary Code was computed for each list of occupations for each Subject as follows: The characteristics that appeared in the first position were summed and multiplied by three; those in the second position were summed and multiplied by two; those in the third position were summed and multiplied by one; the values for each position were then summed horizontally to arrive at the value of each characteristic; and the three characteristics with the highest values were assigned as the Subject's Summary Code. No KOIS was used when it had a V score below 40.

When ties occurred in the Summary Code, the following procedure was used. Because the Holland Personal and Occupational categories are listed beginning with Realistic, Realistic was used as the beginning point. When a tie occurred in the first position, the characteristic closest to Realistic was used in first place; the other was placed second; and the characteristic with the second highest score was placed third. This procedure was followed for ties in the second and third positions. The tied characteristics recorded to create the Original Summary Codes were reversed and analyzed as the Adjusted Summary Codes (Table 3).

Original Summary Codes and Adjusted Summary Codes were analyzed as perfect hits and unordered hits. A Summary Code was considered a perfect hit if all characteristics of the two instruments were the same and in the same order, if the first two characteristics were the same and in the same order, or if the first characteristics were the same. A Summary Code was considered an unordered hit if three, two or one of the characteristics in each code was the same but not in the same order.

Results

To determine whether the SVIB and the KOIS produce different quantities of the six personal and vocational characteristics, correlated t tests were computed between each characteristic. The results are presented in Table 1. The KOIS produced a significantly higher mean on Realistic ($p < .05$) than did the SVIB, and the SVIB produced a significantly higher mean on Artistic ($p < .01$) and Enterprising ($p < .05$). No significant differences were found between Investigative, Social, and Conventional.

Enter Table 1 About Here

To determine the comparability of interrelationships between the six characteristics from the SVIB and the KOIS, an intercorrelation matrix was computed. Holland (1971A) stated that the "categories can be ordered according to a hexagon in which distances between occupational classes are inversely proportional to the size of the correlations between them," (p. 13). These data tend to support this finding; however, there was a pattern of negative correlations for both the SVIB and the KOIS which were always adjacent to each other around the hexagon and never exceeded three. They were frequently in positions on the hexagon where Holland found low correlations. The results along with Holland's correlation coefficients are reported in Table 2.

Enter Table 2 About Here

A frequency percent count was made of the Summary Codes derived from the SVIB and the KOIS to ascertain the extent to which codes from one instrument would occur on the other. For the Original Codes perfect hits occurred for the three characteristics in 17% of the cases, the first two characteristics in 10% of the cases and the first characteristic in 22% of the cases for a total of 49%. Unordered hits occurred for the three position in 43% of the cases, for two positions in 42% of the cases and for one position for 15% of the cases for a total of 100%. Inspection of Table 3 suggested no difference when the codes were adjusted.

Enter Table 3 About Here

Discussion

The SVIB and the KOIS produced similar information about the testee in a general way. The marginal percentage of perfect hits (49%) suggested that there can be only low expectation that the tests will produce identical Summary Codes (17%), and the addition of perfect hits in positions one and two (10%) and in position one (22%) does not increase expectations better than chance. However, unordered hits produced at least one identical characteristic in each case, and two identical characteristics were found in 85% of the cases.

The Pearson r correlation coefficients from the SVIB and KOIS showed a marked similarity to those reported by Holland (1971A). They supported his finding of an inverse relationship between the size of the correlation coefficient and the distance between the categories. The high number of negative

correlations, however, suggested that a given set of occupational characteristics greatly reduced the probability that others would occur. The analysis of Summary Codes as opposed to the Subjects' scores on all characteristics is a probably partial explanation for some of the negative correlations on the SVIB, but this raises a question concerning the range of occupations on the instrument. Secondary interest occupations on the KOIS, which would have affected the Summary Codes, were not included in the data and add to the probable effect of analyzing Summary Codes only.

The KOIS produced a significantly higher mean on Realistic. This is a logical finding since the KOIS has a larger number of trade and specialty occupations as opposed to the large number of college-required occupations on the SVIB. However, the magnitude of the SVIB means on Artistic and Enterprising were exaggerated by the investigator's rigid adherence to listing only those KOIS occupations that were within .06 of the highest ranked occupations.

Whether the SVIB and the KOIS are used together or separately, computing a Holland Summary Code from the array of occupations may be a useful adjunct to the counselor's typical interpretation method. These data suggested that the two instruments produce similar information on a testee in a general way.

Two questions that need to be investigated are the effects of extending these procedures using Subjects who have the same expressed interests and the effects of using all high interest occupations on the KOIS.

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TABLE 1

CORRELATED t TEST ANALYSIS OF SVIB AND KOIS OCCUPATIONS CODED ACCORDING TO HOLLAND'S SUMMARIZING PROCEDURE

		N	Mean	S.D.	t
Realistic	SVIB	60	4.80	5.53	
	KOIS	60	6.80	6.76	2.53*
Intellectual	SVIB	60	14.18	8.28	
	KOIS	60	15.37	6.90	1.03
Artistic	SVIB	60	9.78	7.01	
	KOIS	60	5.37	3.75	6.05**
Social	SVIB	60	15.70	9.71	
	KOIS	60	13.40	7.43	1.90
Enterprising	SVIB	60	7.25	7.38	
	KOIS	60	5.23	5.05	2.20*
Conventional	SVIB	60	5.18	5.22	
	KOIS	60	4.12	3.77	1.57

* = $p < .05$

** = $p < .01$

TABLE 2

PEARSON r CORRELATIONS OF HOLLAND VOCATIONAL CHARACTERISTICS DERIVED FROM SVIB-M AND KOIS HIGH INTEREST OCCUPATIONS PRESENTED WITH HOLLAND'S HEXAGONAL DATA

		R	I	A	S	E	C
Holland r		1.00	.46**	.16	.21	.30*	.36**
SVIB	Realistic	1.00	.31*	-.37**	-.47**	.18	.38**
KOIS		1.00	.62**	.13	-.32*	-.28*	-.08
Holland r			1.00	.34**	.30*	.16	.16
SVIB	Intellectual		1.00	.36**	.34**	-.32*	-.30*
KOIS			1.00	.49**	.28**	-.27*	-.13
Holland r				1.00	.42**	.35**	.11
SVIB	Artistic			1.00	.44**	-.41**	-.50**
KOIS				1.00	.34**	-.16	-.33**
Holland r					1.00	.54**	.38**
SVIB	Social				1.00	.09	-.13
KOIS					1.00	.38**	.34**
Holland r						1.00	.68**
SVIB	Enterprising					1.00	.80**
KOIS						1.00	.80**
Holland r							1.00
SVIB	Conventional						1.00
KOIS							1.00

SVIB-M & Kuder N = 60

* = $p < .05$

** = $p < .01$

TABLE 3

PERCENTAGE ANALYSIS OF ORIGINAL AND ADJUSTED SUMMARY CODES

	Original Codes		Adjusted Codes	
Perfect Hits	Cases	Percentages	Cases	Percentages
Same 1st, 2nd & 3rd Characteristics	10	(17%)	10	(17%)
Same 1st & 2nd Characteristics	6	(10%)	6	(10%)
Same 1st Characteristic	13	(22%)	12	(20%)
Total	29	49%	28	47%
Unordered Hits				
All Characteristics Found	26	(43%)	22	(37%)
Two Characteristics Found	25	(42%)	28	(47%)
One Characteristic Found	9	(15%)	10	(17%)
Total	60	100%	60	101%

N = 60

*One hundred-one percent is due to rounding to nearest hundredth.