ED 137 339	TH 006 140
AUTHOR TITLE	Mowsesian, Richard; Holley, Steven I. Reliability and Validity of the CMI by Sex, Ethnicity
PUB DATE Note	and Time. [Apr 77] 32p.; Paper presented at the Annual Meeting of the
NOIL	American Educational Research Association (61st, New York, New York, April 4-8, 1977)
EDRS PRICE	MF-\$0.83 HC-\$2.06 Plus Postage.
DESCRIPTORS	*Caucasian Students; Cultural Differences; Grade 8; Junior High Schools; Maturity Tests; *Mexican Americans; Occupational Tests; Rural Youth; Sex Differences; *Test Reliability; *Test Validity; *Vocational Maturity
IDENTIFIERS	*Career Maturity Inventory (Crites)

ABSTRACT

Crites' Career Maturity Inventory (CMI) was administered to rural eighth grade Anglo and Mexican-American students. Test-retest reliability, internal consistency, and validity are reported by sex and ethnicity. Data analyses indicate that questions may be raised regarding Crites' postulated monotonic relationship of career maturity to grade and Competency Test scale reliability. Another finding was that career maturity is considerably lower for Mexican-American students than Anglo students and that both groups responded differently than did the norm group reported in the CMI Manual. It is concluded that caution should be employed when using the CMI with rural eighth grade youth. (Author)

Reliability and Validity of the CMI by Sex, Ethnicity and Time F.

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Richard Mowsesian

The University of Texas at Austin

and

Steven I. Holley

The University of Texas at Austin

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Abstract

1

Crites' Career Maturity Inventory (CMI) was administered to rural 8th grade Anglo and Mexican-American students. Test-retest reliability, internal consistancy, and validity are reported by sex and ethnicity. Data analyses indicate that questions may be raised regarding Crites' postulated monotonic relationship of career maturity to grade and Competency Test scale reliability. Another finding was that career maturity is considerably lower for Mexican-American students than Anglo students and that both groups responded differently than did the norm group reported in the CMI Manual. It is concluded that caution should be employed when using the CMI with rural 8th grade youth.

Reliability and Validity of the CMI

By Sex, Ethnicity and Time *

2

The concept of career maturity has evolved from "trait and factor" and psychoanalytic theories of career dicision making. Contemporary career development theory advocates that career decision making behavior is a function of a developmental process for most individuals as they progress from childhood through adolescence to early adulthood (Ginzberg, Ginzberg, Axelrad, and Herma, 1951; Super, 1953, 1957, 1953; Crites, 1961, 1965, 1969; Gribbons and Lohnes, 1968). Origins for this conceptualization of career development may be found in the early work of Carter (1940) and Super (1942). The Career Maturity Inventory (CMI) was specifically designed to measure the developmental process of career decision making behavior (Crites, 1973) and is a direct outgrowth of the earlier work pioneered by Super (1942) and elaborated upon by Gribbons and Lohnes (1968). In assuming the developmental model of career decision making, Crites, (1973) attempted to address himself to the psychometric problems concerned with the development of such a paper and pencil instrument. It is to those psychometric properties and their attending problems that this research is primarily directed.

Purpose

The major purpose of this investigation was to examine the test

*Presented at the American Educational Research Association 1977 Annual Meeting. New York, April 4-8, 1977. Session No. 15,12

retest reliability of Crites Career Maturity Inventory (CMI) when used with Anglo and Mexican American eighth grade students in a rural agricultural community. A further purpose was to investigate the underlying CMI constructs as they relate to sex, ethnicity, and time. A final question raised concerned the relationship of Crites' published norm data to the data gathered for this investigation.

Method and Data Source

The data for this investigation were gathered as part of a larger investigation concerning career development. The subjects were 160 male and female Anglo and Mexican-American eighth grade students in a rural agricultural community in central Texas. Total usable CMI responses resublted in data from 97 Anglo and 63 Mr ican-American students. CMI data were gathered in early September and early December providing for a three month time interval. All CMI responses were hand scored in preparation for data analyses. Test retest reliability and internal consistancy coefficients were computed for each subscale of the CMI by sex and thenicity. Pair wise analyses of means were conducted between sex and ethnicity and with the appropriate norm group reported in the CMI manual. Concurrent validity was determined through comparison of the CMI scale scores with the California Achievement Test (CAT) and the Work Values Inventory (WVI).

Results

Estimates of CMI scale score reliabilities were computed by correlating pretest and posttest data. The obtained reliabilities for

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sex, ethnicity, and total group are reported in Table 1. Reliability

Insert Table 1 about here

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coefficients for the Attitude Scale range from a .67 for the Anglo group (N=87) to a .81 for females (N=65). These reliability coefficients are well within the range Crites (1973) reports and are "... low enough to allow for maturational variance but high enough to establish systemic measurement of the variable being quantified" (p 14). The test retest reliability coefficients for the Competence Tests appear to be more variable and are ganerally lower across all groups. The reliability coefficients are higher for males than females and higher for Anglos (N=97) than Mexican-Americans (N=63). A review of the pre-post means and standard deviation reported in Table 2 indicate that post test mean scores were generally

Insert Table 2 about here

lower than pretest mean scores while the standard deviations rose. This suggests greater variability of responses thus contributing to lowered reliability.

While Crites (1973) reports fairly high internal consistancy coefficients for the Competence Tests suggesting that sub test items are relatively homogenious, the data reported in Table 1 and 2 and the internal consistancy coefficients reported in Table 3 would suggest that the Competence Tests when used with this sample were not quite as stable as one might desire. Competency Scale five for all groups was found to

Insert Table 3 about here

be the least stable with alphas ranging from .00 (Mexican-Americans) to

.44 (Anglos). Overall the stability of the CMI scales (Attitude and Competency) are questionable for use with Mexican-American eighth grade youth. This last is further supported by the relatively lower test-retest reliabilities reported in Table 1 for this same group.

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Reported in Table 4 are the pre and post mean CMI scores and standard deviations (SD) for the Anglo and Mexican-American subjects in this investigation as well as the compariable means and SD from the appropriate norm groups published in the CMI manual. Inspection of these data indicate that the Anglo group results (pre and post) are similar to the reported norm group. However, the Mexican-American sample means and SD are lower. The ttest comparisons for these means are reported in Table 5. All comparisons

Insert Table 4 and 5 about here

for the Mexican-American sample with the norm group are significantly different supporting Crites' contention that non-anglo groups respond differently on the CMI than Anglo groups. The Anglo group means are observed to be generally similar to the reported norm group. Some exceptions are noted and where observed the mean scores are higher than the norm group except Competance Test I post score which was lower.

The differences noted above would suggest questioning the utility of the reported norms in the CMI manual at least for research purposes. Crites suggests that career attitude maturity be assessed in terms of local norms where an individual's rate of development may be compared

to the reference group norm table. But here we find a contradiction in that earlier Crites (1973) states that the "... Attitude Scale was not normed on a national sample ..." (p 13). If the norm reference group <u>is not</u> representative then we are left with a question regarding the confidence one may place on any comparison. For purposed of this investigation our Anglo group is generally similar to the norms reported_____ by Crites. However, one might properly assume that the reported norm group would include respondents from various ethnic groups. The rather large differences observed with our Mexican-American group would suggest that combining their scores with the Anglo group would lower the total group scores to a point where differences with the norm group would be observed on all parts of the CMI.

Another concept associated with the CMI is that there is a monotonic relationship between career maturity and grade. A review of the pre to post mean scores for the Attitude Scale and Competency Tests eported in Table 2 and the t-tests of these mean scores reported in Table 6 suggest that monotonicity is questionable. There appears to be a slight trend

Insert Table 6 about here

in the expected monotonic direction for the male, female and Anglo groups but not so for Mexican-Americans. These trends on the Attitude Scale Mean Scores are not significant as noted in the t-test comparisons reported in Table 6. When reviewing the mean pre-post Competency Test scores we note

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a reverse direction. Mean scores for all groups declined. Only three of these differences were found not to be significant; Competency Test IV (Males and Mexican-Americans) and Competency Test V (Mexican-Americans). For this sample, while slight non significant positive changes are noted on the Attitude Scale the students lose ground on the Competency Tests.

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A final question of concern in this investigation has to do with the predictive validity of the CMI. Two comparisons were made: achievement as measured by the California Achievement Test (CAT) and work values as measured by Super's Work Values Inventory (WVI).

Comparisons of the CMI pre and post testing with the CAT are presented in Tables 7 and 8. These intercorrelations were consistently

Insert Tables 7 and 8 about here

positive and significant across all groups. For the male, female, and Anglo sub groups there are no clear patterns to the correlations; all are between .32 and .82. The preponderance of the correlations are between .50 and .70. The Mexican American sub group show a similar pattern with the exception being with the CAT Mathmatics-Computation Scores on the pretest with the CMI. Competency Test IV just reaches p < .05. However, this may be an artifact of the data as the Mexican-American subjects achieved low scores with little variance on the Mathmatics - Computation test of the CAT. Higher CAT scores on the post test with larger variance was observed thus the significant and positive correlations with the post CMI scores. In general, for all

sub groups, it appears that high scores on the CMI scales are strongly associated with high scores on the CAT which seems to indicate that the CMI is tapping academic achievement.

Intercorrelations of the CMI scale scores with the WVI scale scores both pre and post suggest that the two instruments are measuring similar phenomenon about one half of the time and at a low but significant order. The CMI scales in general relate positively with Surroundings and Way of

Insert Tables 9, 10, 11, 12 about here

Life and negatively with Esthetics for the males. The female CMI responses relate positively to Achievement, Surroundings, Way of Life and to a lesser extent with Security and Variety and negatively with Esthetic's. The Anglo group CMI responses were positively associated only with the Way of Life Scale. Finally, the Mexican American group CMI responses were positively related to Achievement, Surroundings, Way of Life, Variety, and Economic returns.

Generally speaking the CMI seems more highly correlated with school achievement and to a lesser extent with work values. However, these relationships must be viewed with caution due to the low and apparently erradic reliablities reported earlier.

Conclusions

It was found that the test re-test reliability and internal consistancy for the Attitude Scale of the CMI for this group of rural eighth grade Anglo and Mexican-American students was similar to that reported by Crites in the CMI manual. However, this investigation failed

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to support a similar finding for the CMI Competancy Scales. What was found was that internal consistancy was rather low especially for the Mexican-American group. This would suggest that users of the CMI exercise extreme caution when using the Competancy Tests.

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A slight trend toward monotanicity was suggested from the results of responses to the Attitude Scale, reported to be an important component for career maturity, and is supportive of this concept. No such monotonic relationship was observed with the Competancy Test. The reverse was observed. All groups, regardless of sex or ethnicity, were observed to have lower post test Competancy Test scores.

Finally, the strongest relationships of the CMI was observed to be with scholastic achievement. CMI correlations with the WVI were of a low magnitude and generally inconsistant. This would suggest a weak relationship of career maturity as measured by the CMI to work values. Super's (1963) contention that career maturity and school achievement are related seems to be supported.

The CMI has been put forth as an instrument "... to assess the maturity of ... career behaviors, as the young person grows up during the choice years" (Crites, 1973; p 30). Further, it has been designed "... as a measure of the model of career maturity to its application in assessing career education programs and career counseling" (Crites, 1971, p 31). That these are laudable objectives are not questioned. What is of concern is the degree to which one may place confidence in the CMI when used with rural Anglo and Mexican-American eighth grade

youth. Often major decisions are made at this choice point and intervention programs are instituted and evaluated on the basis of minimum resources. The stimuli for these decisions and actions must be subjected to close scrutiny. The call for this scrutiny has been set forth by Crites (1973). This research has attempted to respond to this request in an effort to positively enhance the development of useful tools in career development and career decision making. The ultimate conclusion of this investigation is that the CMI Attitude Scale is a reliable tool and has utility. There are some severe reservations and limitations when using the Competency Tests with rural eighth grade students.

	Se	x	Ethnicity		
	1. S.		Lunnerty	•	Total
	M(90)	F(65)	Anglo (87)	M-A (62)	Gp. (155)
de .	75	81	67	71	78
ence Tests					
now Yourself	74	52	63	53	66
now About Jobs	66	60	57	57	64
hoosing a Job	64	48	57	43	58
ooking Ahead	73	33	65	45	65
hat Should hey Do	69	43	56	38	58
	now Yourself now About Jobs hoosing a Job ooking Ahead hat Should	now Yourself 74 now About Jobs 66 hoosing a Job 64 ooking Ahead 73 hat Should	now Yourself 74 52 now About Jobs 66 60 hoosing a Job 64 48 ooking Ahead 73 33 hat Should	now Yourself 74 52 63 now About Jobs 66 60 57 hoosing a Job 64 48 57 ooking Ahead 73 33 65 hat Should	now Yourself 74 52 63 53 now About Jobs 66 60 57 57 hoosing a Job 64 48 57 43 ooking Ahead 73 33 65 45 hat Should

TEST-RETEST RELIABILITY * FOR CMI SCALES BY SEX AND ETHNICITY

Table 1

* All reported reliability coefficients are significant \underline{p} < .001

Decimals omitted

Sca1	e		Ma	ales	Fema	ales	Ang	10	M-A	
			Pre(93)*	Post(90)	Pre(67)	Post(65)	Pre(91)	Post(87)	Pre(63)	Post(62)
Atti	tude	x	27.62	28.62	28.45	29.08	31.11	32.82	23.54	23.37
		SD	6.52	7.79	5.90	8.07	6.05	6.94	4.79	5.23
Comp	etancy Tests									
Ι.	Knowing Yourse	$f \bar{x}$	9.54	8.41	10.46	8.18	11.57	9.79	7.71	6.26
		SD	4.36	5.00	3.59	4.23	3.87	5.04	3.31	3.30
II.	Knowing About	x	10.89	9.32	10.87	9.14	12.54	10.69	8.48	7.15
	Jobs	SD	4.25	5.11	3.97	4.72	3.63	4.74	3.58	4.49
III.	Choosing a	x	9.74	8.67	9.37	8.26	10.74	9.70	7.97	6.74
	Job	SD	3.74	4.51	3.42	3.65	3.49	4.36	3.07	3.22
IV.	Looking Ahead	x	9.33	9.02	9.69	8.58	10.97	10.22	7.27	6.76
		SD	4.41	4.64	4.18	5.02	4.24	4.76	3.41	3.92
۷.	What Should	x	6.90	6.44	6.93	6.22	8.12	7.30	5.25	5.02
	They Do?	SD	2.96	3.28	3.11	2.98	2.99	3.32	2.16	2.47

MEANS & S.D. FOR CMI PRE AND POST BY GROUPS (GRADE 8)

* Numbers in parentheses are the number of responding subjects

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	Atti	tude,	Knowing Self	Knowing About Job	Choosing s A Job	Looking Ahead	What They Should Do
	Pre	Post	1	2	3	4	5
Total Gp. N=160	70*	81	71	75	68	70	37
Males N=93	68	81	74	77	71	72	34
Females N=67	74	82	65	73	63	68	42
Mexican American N=63	51	59	58	64	60	51	00
Anglo N=97	70	82	69	71	67	71	44

ALPHA COEFFICIENTS ON CMI SCALES

Table 3

Decimals omitted *

	COM	PARISON	OF SAMPLE	Ss AND NO	RM GROUP S	S ON THE CMI
SCALE			Sam	ole Ss		Published Norm Gp. Ss
	. P	An re(91)	glo Post(87)	M-A Pre(63)	Post(62)	8th Gr. (n)
Attitude	x .	31.11	32.82	23.54	23.37	30.40 (Texas N=575
	SD	6.05	6.94	4.79	5.23	6.08
Competan Tests	су					
I	x	11.57	9.79	7.71	6.26	10.97 (307)
	SD	3.87	5.04	3.31	3.30	4.21
II	x	12.54	10.69	8.48	7.15	11.59 (28)
	SD	3.63	4.74	3.58	4.49	4.60
III	x	10.74	9.70	7.97	6.74	10.59 (309)
	SD	3.49	4.36	3.07	3.22	5.12
IV	x.	10.97	10.22	7.27	6.76	8.99 (262)
	SD	4.24	4.76	3.41	3.92	5.07
V	x	8.12	7.30	5.25	5.02	7.66 (215)
	SD	2.99	3.32	2.16	2.47	3.74

Table 4

		Mexican-Ameri Pre-Norm Post-N			
.7345	2.460**	5.72***	5.17***		
.8805	1.477*	4.4048***	6.3212***		
1.3358	1.1088	3.8263***	4.9213***		
.6907	1.0916	3.1754***	4.5703***		
2.4621**	1.4294*	2.0063**	2.4638**		
.7682	.5665	3.8953***	4.0861***		
	Pre-Norm .7345 .8805 1.3358 .6907 2.4621**	.7345 2.460** .8805 1.477* 1.3358 1.1088 .6907 1.0916 2.4621** 1.4294*	Pre-Norm Post-Norm Pre-Norm .7345 2.460** 5.72*** .8805 1.477* 4.4048*** 1.3358 1.1088 3.8263*** .6907 1.0916 3.1754*** 2.4621** 1.4294* 2.0063**		

Table 5

t tests of Comparison Ss with Norm Gp.

* <u>p</u><.10 **<u>p</u><.05 ***<u>p</u><.01

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	Males (93)	Females (67)	Anglo(97) M-A (63)
Attitude	.10	.27	.31	.88
Competancy Tests				
I	3.26**	4.83***	4.34***	3.68***
II	4.13***	3.80***	4.78***	2.98**
III	3.20**	2.86**	3.10**	3.11**
IV	1.48	2.39*	2.45**	1.27
ν	2.37*	2.18*	3.24**	.96

t-test of Pre to Post CMI Mean Scores

Table 6

* <u>p</u><.05 **<u>p</u><.01 ***<u>p</u><.001

						CMI	(Males)**					
CAT	A++			Pre		v				st	T.1/	
CAT	Att	I	II	III	IV	<u>V</u>	Att	I	<u> </u>	III	IV	<u>v</u>
Read-Voc	70**	79**	73**		66**	68**	66**	69**	74**	70**	62**	67**
Read-Comp	73**	78**	74**	71**	71**	73**	63**	72**	77**	73**	70**	65**
Read-Total	73**	82**	75**	69**	71**	73**	66**	73**	78**	74**	69**	68**
Math-Comput	42**	53**	47**	45**	44**	47**	53**	68**	65**	65**	64**	59**
Math-Concept	64**	71**	64**	55**	57**	59**	52**	67**	72**	66**	71**	61**
Math-Total	57**	67**	59**	54**	54**	57**	54**	67**	69**	66**	68**	61**
Lang-Mech	61**	72**	60**	62**	57**	59**	63**	66**	67**	68**	68**	61**
Lang-Usage	55**	59**	48**	61**	54**	56**	49**	60**	68**	61**	55**	50**
Lang-Total	64**	74**	63**	65**	63**	64**	62**	67**	71**	68**	66**	60**
Spelling	55**	73**	57**	60**	43**	49**	52**	66**	66**	58**	53**	56**
	**r=.	17 p	<.05	r=.24	<u>p</u> <.	01						
							Females *					
Read-Voc	58**	70**	74**	62**	59**	59**	75**	40**	52**	43**	45**	41**
Read-Comp	63**	67**	68**	58**	56**	61**	69**	48**	62**	52**	42**	36**
Read-Total	64**	72**	74**	63**	61**	63**	75**	47**	60**	51**	46**	40**
Math-Conput	46**	40**	40**	54**	52**	40**	59**	33**	31**	38**	42**	28**
Math-Concept	55**	53**	56**	61**	68**	49**	74**	48**	55**	45**	49**	37**
Math-Total	53**	50**	50**	61**	63**	47**	68***	39**	40**	41**	44**	31**
Lang-Mech	51**	64**	70**	67**	66**	61**	68**	39**	54**	44**	37**	46**
Lang-Usage	40**	56**	40**	51**	51**	45**	60**	41**	43**	43**	32**	36**
Lang-Total	52**	69**	68**	68**	68**	61**	72**	43**	51**	45**	36**	43**
							66**	44**				

Table 7 CORRELATION * OF CMI WITH CAT SCORES

				·		CMI	(Anglo)					
~ A T	A++			Pre		v	A++		Pos			
CAT	Att	I	II	III	IV	<u>v</u>	Att	I	II	III	IV	V
Read-Voc	54**	71**	70**	61**	52**	60**	57**	56**	62**	57**	46**	54**
Read-Comp	57**	68**	67**	64**	55**	64**	52**	58**	67**	60**	52**	47**
Read-Total	58**	73**	70**	64**	57**.	65**	57**	60**	68**	62**	52**	52**
Math-Comput	39**	49**	44**	48**	44**	39**	44**	52**	48**	54**	52**	44**
Math-Concept	50**	61**	56**	53**	50**	45**	45**	56**	57**	56**	58**	48**
Math-Total	46**	58**	53**	54**	50**	45**	44**	53**	51**	54**	55**	44**
Lang-Mech	48**	61**	55**	59**	51**	49**	54**	43**	49**	48**	45**	45**
Lang-Usage	42**	56**	41**	57**	50**	47**	44**	48**	45**	42**	31**	40**
Lang-Total	51**	66**	57**	61**	57**	54**	55**	47**	48**	46**	40**	42**
Spelling	50**	63**	52**	55**	42**	45**	54**	47**	48**	39**	33**	38**
	** r=	.17	p<.05	r=.2	4 p<	.01						
			-		Me	xican	American					
Read-Voc	37**	62**	55**	44**	58**	37**	49**	39**	53**	40**	43**	37**
Read-Comp	51**	57**	58**	49**	61**	40**	46**	54**	61**	53**	47**	44**
Read-Total	47**	65**	63**	51**	65**	45**	50**	48**	59**	50**	48**	44**
Math-Comput	08	15	11	19	21*	20	45**	46**	51**	41**	32**	37**
Math-Concept	36**	43**	43**	35**	52**	38**	40**	48**	71**	44**	44**	37**
Math-Total	27*	38**	33**	32**	44**	35**	46**	52**	68**	48**	43**	42**
Lang-Mech	44**	66**	57**	49**	59**	54**	44**	47**	58**	44**	35**	46**
Lang-Usage	31**	41**	27*	35**	36**	33**	25*	23*	60**	46**	34**	15
Lang-Total	43**	67**	57**	52**	60**	53**	44**	46**	65**	49**	38**	44**
Spelling	26*	67**	61**	48**	37**	36**	38**	52**	50**	38**	33**	34**

Table 8

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						CMI (Ma	les)**					
			F	re					Pos	st		
WVI	Att	I	II	III	IV	٧	Att	I	II	III	IV	۷
Creativity	-07	-12	04	05	-05	01	30**	-04	03	14	01	02
Management	-35**	-30**	-26**	-11	-13	-11	30**	-01	06	16	04	17*
Achievement	30**	34**	40**	41**	48**	34**	25**	16	22*	24**	12	17*
Surroundings	09	17*	31**	25**	23*	25**	16	17*	26**	25**	21*	17*
Suprv. Rel.	00	07	26**	30**	16	14	08	17*	12	19*	14	07
Way of Life	30**	41**	45**	45**	34**	32**	04	32**	25**	29**	27**	30**
Security	08	22*	27**	37**	29**	14	16	03	07	14	01	-05
Associates	04	12	17*	19*	10	24**	07	-03	-05	08	-06	-04
Esthetics	-29**	-41**	-28**	-22*	-23*	-23*	08	-33**	-30**	-29**	-27**	-24**
Prestige	-07	-08	-01	07	11	00	14	-04	-10	-04	-14	-04
Independence	14	21*	23*	04	10	25**	24*	12	23*	26**	13	13
Variety	04	21*	16	25**	12	19*	02	18*	19*	25**	16	13
Economic Returns	-05	10	26**	29**	17*	09	17*	13	07	07	03	03
Altruism	14	21*	16	16	26**	23*	01	05	11	18*	21*	15
Intel. Stim	19*	05	09	13	11	13	02	17*	30**	27**	24**	25**

** r=.17 <u>p</u><.05 r=.24 <u>p</u><.01

Table 9

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						CMI (Fem	ales)**			2		
WVI	Att	1	II	Pre III	IV	٧	Att	I	PO II	st III	IV	۷
Creativity	08	09	00	05	06	22*	13	-06	03	-01	05	13
Management	-16	-07	-18	-25*	-08	-19	-25*	-15	-14	-06	04	00
Achievement	38**	47**	43**	45**	40**	51**	28*	39**	37**	41**	28*	28*
Surroundings	20*	26*	41**	32**	39**	41**	27*	20*	36**	36**	23*	22*
Suprv. Rel.	12	15	20*	08	13	15	14	17	19	28*	22*	09
Way of Life	46**	44**	44**	41**	45**	37**	27*	40**	36**	48**	39**	30**
Security	12	29**	21*	16	25*	10	09	25*	26*	29**	20*	16
Associates	22**	19	02	26*	22*	27*	17	10	06	18	02	-01
Esthetics	-17	-25*	-32**	-19	-25*	-14	-23*	-21*	-23*	-17	-05	-07
Prestige	17	15	25*	36**	28*	25*	14	02	11	13	11	05
Independence	12	17	18	22*	13	33**	-03	-14	-02	-10	-05	01
Variety	27*	31**	26*	22*	23*	33**	23*	-13	20*	21*	19	11
Economic Returns	10	16	19	16	25*	22*	17	30**	36**	36**	27*	17
Altruism	36**	36**	43**	36**	32**	37**	14	15	19	10	24*	31**
	14	06	-10	04	00	05	-02	07	07	03	08	02

Table 10 ORRELATION * OF CMI WITH WVI SCORES

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Management-3Achievement33Surroundings05Suprv. Rel.03Way of Life24	-10 1** -25** ** 30** 16 09 ** 42**	11 04	Pre III -03 -22* 30** 17* 18* 33**	IV -03 -13 37** 23* 10	V 12 -17* 36** 27** 17*	nglo)** <u>Att</u> 09 -11 08 11 12	I 03 -04 15 10	II 17* 03 14 18*	st III 19* 12 24** 19*	IV 07 -01 10 11	V 19* 13 18* 18*
Creativity00Management-3Achievement33Surroundings05Suprv. Rel.03Way of Life24	-10 1** -25** ** 30** 16 09 ** 42**	04 -31** 44** 28** 22*	-03 -22* 30** 17* 18*	-03 -13 37** 23*	12 -17* 36** 27**	09 -11 08 11	03 -04 15 10	17* 03 14 18*	19* 12 24**	07 -01 10	19* 13 18*
Management-3Achievement33Surroundings05Suprv. Rel.03Way of Life24	1** -25** ** 30** 16 09 ** 42**	-31** 44** 28** 22*	-22* 30** 17* 18*	-13 37** 23*	-17* 36** 27**	-11 08 11	-04 15 10	03 14 18*	12 24**	-01 10	13 18*
Achievement33Surroundings05Suprv. Rel.03Way of Life24	** 30** 16 09 ** 42**	44** 28** 22*	30** 17* 18*	37** 23*	36** 27**	08 11	15 10	14 18*	24**	10	18*
Surroundings05Suprv. Rel.03Way of Life24	16 09 ** 42**	28** 22*	17* 18*	23*	27**	11	10	18*			
Suprv. Rel. 03 Way of Life 24	09 ** 42**	22*	18*						19*	11	18*
Way of Life 24	** 42**			10	17*	12	2.120				
•		41**	33**				12	03	19*	09	04
Security 07	10		55	30**	29**	21*	29**	21*	27**	25**	29**
	12	12	14	18*	-01	06	00	-07	11	-06	-08
Associates 02	07	14	10	09	18	-12	-03	-07	06	-05	-10
Esthetics -0	4 -27**	-16	-22*	-11	-08	-18*	-23*	-20*	-25**	-15	-14
Prestige -0	9 -07	-04	09	15	08	-05	-11	-10	-04	-13	-02
Independence 11	20*	26**	01	03	20*	00	03	13	14	02	15
Variety 03	18*	12	13	07	19*	11	10	11	17*	07	09
Economic Returns -1	5 02	15	10	07	10	10	23*	09	16	07	09
Altruism 14	25**	25**	13	27**	21*	01	10	15	19*	26**	23*
Intel. Stim. 12	16	10	11	08	14	-01	19*	31**	30**	22*	26**

Table 11 DRRFLATION * OF CMI WITH WVI SCOR

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	CMI (Mexican-American)**											
	Pre Post											
WVI	Att	<u> </u>	II	III	IV	<u>v</u>	Att	<u>I .</u>	II	III	IV	V
Creativity	-08	03	-05	15	01	02	08	-22*	-20	-16	-02	-22*
Management	06	06	15	20	19	21*	16	07	06	20	32**	25*
Achievement	14	38**	23*	51**	50**	34**	39**	37**	42**	33**	25*	18
Surroundings	23*	25*	44**	39**	39**	37**	24*	25*	41**	40**	32**	12
Suprv. Rel.	04	10	26*	24*	24*	04	09	23*	30**	24*	30**	06
Way of Life	23*	22*	29*	40**	28*	14	18	28*	26*	36**	25*	11
Security	07	43**	41**	50**	43**	31*	20	38**	53**	37**	38**	26*
Associates	17	19	-02	36**	18	37**	23*	09	09	23*	-01	10
Esthetics	-09	-07	-14	16	-04	05	-30**	-22*	-23*	-02	-01	-04
Prestige	08	02	06	25*	18	05	24*	12	09	10	11	-02
Independence	-11	-05	-01	15	05	30*	33**	03	16	16	15	-01
Variety	16	26*	20	32**	26*	26*	23*	17	23*	26*	25*	04
Economic Returns	30*	31**	41**	49**	49**	32*	31**	21*	42**	28*	34**	16
Altruism	28*	22*	16	28*	23*	31*	23*	02	10	02	11	12
Intel. Stim	15	-01	00	20	21*	21*	26*	17	19	09	22*	09

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Table 12											
ORRELATION	*	0F	CMI	WITH	WVI	SCORE					

** r=.21 <u>p</u><.05 r=.31 <u>p</u><.01

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