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Career Indecision Scales Do Not Measure Foreclosure

Laurel A. Brisbin Child and Family Advocacy Program Canton, Ohio

Mark L. Savickas Northeastern Ohio Universities College of Medicine

Career indecision scales may obscure important differences between students who are committed to self-chosen vocational goals and students who are committed to goals chosen for them by significant others. To examine this possibility, 199 students responded to a measure of identity status along with the Career Decision Scale (Osipow, Carney, Winer, Yanico, & Koschier, 1976), My Vocational Situation (Holland, Gottfredson, & Power, 1980), and the Career Decision Profile (Jones, 1989). A MANOVA using identity status as the independent variable and the three decisional measures as dependent variables indicated that the decisional measures discriminated the diffused and moratorium groups from each other and from the identity achieved and foreclosed groups. However, the measures did not discriminate between the achieved and foreclosed groups.

Measures of career indecision have become popular with researchers who investigate vocational development and practitioners who provide career counseling. Increasingly, the measures of career indecision are being linked, conceptually and empirically, with Erikson's construct of ego-identity (Blustein, Devenis, & Kidney, 1989; Grotevant & Cooper, 1988; Holland et al., 1980; Savickas, 1985). These linkages have been forged in an effort to use insights from the personality literature to understand problems in career decision making. One outcome of this linkage has been the heuristic idea that the obverse of career indecision is vocational identity. This idea has generated some interesting studies and observations (Blustein, 1994; Forrest & Mikolaitis, 1986; Vondracek, 1992). Moreover, the link prompted the idea that measures of career indecision may obscure important distinctions among diverse paths to identity crystallization (Savickas, 1991).

In investigating paths to identity crystallization, many researchers have used the identity-status paradigm devised by Marcia (1966, 1980). Marcia classified an individual into one of four identity-status groups based on the individual's experience of a decisional crisis and extent of commitment to a goal. Identity achievers have commitment following a crisis, whereas

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foreclosers have commitment without experiencing a crisis. The moratorium status designates individuals in crisis and the diffused status designates individuals with no commitments regardless of whether or not they have experienced a decisional crisis.

Because identity achievers and foreclosers are both committed to occupational goals, measures of career indecision may not be able to distinguish between the two. This would be an important omission because the achievers and foreclosers probably will eventually differ in choice satisfaction, choice stability, and occupational adjustment. Individuals with foreclosed identities, often referred to as having made pseudocrystallized choices, probably would benefit from career interventions that assist them to engage in autonomous decision making. Unfortunately, they may not be offered these interventions if career counselors note the high degree of certainty and commitment represented by their scores on measures of career indecision.

The primary purpose of the present study was to investigate whether measures of career indecision distinguish among the four identity-status groups, especially between the achieved and foreclosed groups. We hypothesized that measures of career indecision significantly differentiate identity-status groups and expected that identity achievers would score higher in career decidedness than would identity foreclosers, followed by moratoriums and then diffusions.

The secondary purpose of the present study was to investigate whether a typology constructed with scores from a career indecision measure (Jones & Chenery, 1980; Jones, 1989) could distinguish identity achievers from identity foreclosures. Jones and Chenery devised a typology that classifies individuals into one of four quadrants defined by the dimensions of decidedness about career choice and comfort with the decision-making process: decided-comfortable, decided-uncomfortable, undecided-comfortable, and undecided-uncomfortable. Jones and Chenery reported that 158 decidedcomfortable students scored significantly higher than did 21 decideduncomfortable students on the Identity Scale (Holland, Gottfredson, & Nafziger, 1975). However, Jones (1989) later suggested that "the absence of significance for the interaction between decidedness and comfort found with the multivariate analysis of variance indicates that it is more valid to view these two dimensions separately" (p. 484). Jones' recommendation notwithstanding, the present study investigated whether the decidednessby-comfort typology could discriminate identity achievers from identity foreclosers. We hypothesized that the identity achievers are likely to be decided-comfortable, whereas identity foreclosers are likely to be decideduncomfortable.

Methods

Measures

Identity status was measured with the Dellas Identity Status Inventory— Occupation (DISI-O; Dellas & Jernigan, 1981), an objective measure of Marcia's identity statuses that deals specifically with occupational identity. Three measures of career indecision were selected for investigation. The Career Decision Scale was selected because it is the prototype for this type scale. My Vocational Situation was selected because it includes the Vocational Identity Scale which was originally presented as a potential link between the indecision and ego-identity literatures. The Career Decision Profile was selected because it is a critically well-received measure (Slaney, 1988) that represents a second-generation inventory of career indecision.

The Career Decision Scale (CDS) consists of two scales. The two-item Certainty Scale has respondents indicate, on a 4-point scale, degree of certainty about their choice of college major and career. Higher scores indicate greater certainty. The 16-item Indecision Scale has respondents rate, on a 4-point scale, their similarity to statements about reasons for career indecision. Higher scores indicate greater indecision. Evidence supporting the validity of the scale as a measure of career choice certainty includes its negative correlation to the Indecision Scale (generally about -.6, plus or minus .1) and its positive correlation to measures of career choice certainty and satisfaction (Savickas, Carden, Toman, & Jarjoura, 1992). The Indecision Scale has been used frequently in research and extensive evidence supports its reliability and validity for assessing career decidedness (Osipow, 1987; Savickas, 1990; Slaney, 1988.) For the participants in the present study, the coefficient alpha of internal consistency was .84 for the Certainty Scale and .88 for the Indecision Scale

My Vocational Situation (MVS) was designed to provide a diagnostic scheme for differential treatment in career counseling. The MVS consists of a scale and two checklists. The Vocational Identity Scale contains 18 items that respondents answer true or false. The total score is the number of false answers. Higher scores indicate greater clarity and stability of vocational identity. The Occupational Information Checklist consists of four items that allow respondents to answer yes or no to the need for occupational information. The Barriers Checklist consists of four items that allow respondents to answer yes or no regarding obstacles to their chosen occupational goal. Reliability and validity information that support the use of the MVS appears in Holland et al. (1980) and Holland (1991). Alpha coefficients of internal consistency for participants in the present study were .84 for the Vocational Identity Scale, .67 for the Occupational Information Checklist, and .36 for the Barrier Checklist.

The Career Decision Profile (CDP) consists of three scales that operationally define the three dimensions in Jones and Chenery's (1980) model of vocational decision status: Decidedness, Comfort with decisional status, and Reasons for decisional status. The Decidedness Scale contains two items that respondents answer on an 8-point Likert scale (1 = strongly disagree/8 = strongly agree) to indicate degree of certainty about their preferred occupational field and choice of occupation. The Comfort Scale contains two items that respondents answer on the 8-point scale to indicate degree of comfort with their decisional status. Career Decision Needs Scale, which measures the Reasons dimension in the Jones and Chenery model, contains four 3-item subscales that respondents answer using the 8-point scale: Self-Clarity (self-understanding of interests, abilities, and personality

and their fit with different occupations), Knowledge about Occupations and Training (perceived amount of educational and occupational information), Decisiveness (estimated ability to make decisions without unnecessary delay, difficulty, or reliance on other people), and Career Choice Importance (import ascribed to choosing and working in an occupation). Alpha coefficients for the participants in the present study were Decidedness .63, Comfort .77, Self-Clarity .86, Knowledge .80, Decisiveness .59, and Importance .59. These coefficients are sufficiently strong to support using the subscales in research with groups, yet raise a question about using the subscales in counseling individuals.

The Dellas Identity Status Inventory—Occupation consists of 35 items based on the criteria of crisis and commitment characterizing the identitystatus characteristics described by Marcia (1964, 1966). The items are arranged in seven sets of five items. Each item in a set of five corresponds to one of five identity-status positions: achieved (crisis and commitment), moratorium (no commitment and crisis), foreclosed (commitment and no crisis), diffused-diffused (no commitment and superficial search), and diffused-luck (no commitment and dependence on luck or fate). Having two scales to represent the diffused status was justified by results of a factor analysis (Dellas & Jernigan, 1981) although a subsequent study (Dellas & Jernigan, 1987) questioned the need for two diffusion scales in that only 1% of 1,033 1st-year cadets at the U.S. Air Force Academy were classified as diffused-luck. In responding to the DISI-O, participants selected the statement in each set that most accurately described their current situation. A participant was assigned to an identity status if she or he chose four or more of the seven possible statements which correspond to that status. A participant who did not select at least four statements from one identity status was placed in an unclassified status. Dellas and Jernigan (1981) provided reliability and validity data for the DISI-O that indicates the scales possess reasonable internal consistency (ranging from .64 -.91) and the assignment of respondents to a status had 90% agreement with assignment using Marcia's semi-structured interview. In the present study, the alpha coefficients of internal consistency for the scales were Foreclosed .90, Achieved .91, Moratorium .83, and Diffused .80.

Participants

The participants for the present study were 100 male and 99 female college students with a mean age of 19.1 and a modal age of 18 years. The 199 students included 147 freshmen, 33 sophomores, 13 juniors, and 6 seniors. They were recruited from introductory psychology classes and from counseling center clients.

Data Collection and Analyses

Data were collected, following informed consent procedures, from students individually or in small groups. The four measures were administered in random order to participants. The inferential statistic computed to test the hypothesis was a one-way multivariate analysis of variance (MANOVA) with identity status as the independent variable and the 11 subscales from the three measures of career indecision as dependent variables. As a follow-up to the

MANOVA, we used a discriminant analysis to examine the differences among the groups and to determine which dependent variables best characterized differences among the identity-status groups.

Results

Table 1 presents mean scores and standard deviations for each subscale. The means and standard deviations were similar to those obtained in other studies using these measures with one exception. The means on the MVS Barriers checklist for males (.57) and females (.81) were considerably lower than the means of 3.4 for males and 3.2 for females reported by Holland, Daiger, and Power (1980). Point-biserial correlations between sex and each of the 11 subscales yielded two statistically significant results. Sex correlated significantly (p < .05) to the MVS Barrier Checklist (r = .15) and to the CDP Decidedness Scale (r = .16). Given the small difference in the two sets of means, the value of the means difference relative to the standard deviations, and the low absolute value of the correlations to sex, we concluded that the statistically significant correlations of the Barriers Checklist and the CDP Decidedness Scale to sex did not represent meaningful sex differences in the data set. Therefore, the data sets for males and females were combined in computing the inferential statistics.

Table 2 shows the frequency distribution of participants in each of the identity-status groups for the entire sample and by sex. Only one student

Table 1
Means and Standard Deviations on My Vocational Situation (MVS),
Career Decision Scale (CDS), and Career Decision Profile (CDP)
for Total Sample and By Sex

	Sample	(N = 199)	Males (n = 100	Females	(n = 99)	
Subscale	M	SD	M	SD	M	SD	Range
MVS Identity Scale	10.93	4.43	10.95	4.43	10.90	4.45	0-18
MVS Information	2.47	1.33	2.48	1.31	2.45	1.31	0-4
MVS Barriers	.69	.85	.57	.71	.81	.95	0-3
CDS Certainty	5.86	1.66	5.91	1.58	5.81	1.74	2-8
CDS Indecision	29.40	8.75	30.18	8.58	28.62	8.91	2-8
CDP Decidedness	12.96	2.30	12.51	2.72	13.41	2.82	4-16
CDP Comfort	11.22	3.49	10.76	3.38	11.67	3.56	2-16
CDP Self-Clarity	15.27	6.07	16.01	5.70	14.53	6.36	3-24
CDP Knowledge	14.50	5.62	14.53	5.38	14.48	5.38	3-24
CDP Decisiveness	17.58	5.25	18.28	4.39	16.87	5.52	3-24
CDP Career Choice Importance	20.52	3.77	20.02	3.98	21.02	3.55	8-24

was assigned to the diffused-luck group so this student and group were dismissed from the study. More than half of the sample was assigned to either the achieved or moratorium group. This result resembles the classification of this type of population reported in the original article by Dellas and Jernigan (1981). A chi-square analysis to determine if there were sex differences between the identity status groups was not significant ($\chi^2 = 4.54$, df = 4, p < .05). Table 3 presents the mean scores and standard deviations on the 11 subscales of the three career indecision measures for each identity-status group.

The MANOVA on the 11 dependent measures produced a significant result, F(44, 706) = 5.62, p < .01. As can be seen in Table 4, univariate F-tests for each dependent measure were all significant (p < .001) with the single exception of the MVS Barriers Checklist which was not significant. Tukey post hoc tests indicated that, in general, the three measures of career indecision could discriminate the diffused and moratorium groups from each other and from the identity and foreclosed groups. However, the measures did not discriminate between the achieved and foreclosed groups. For example, consider the results for two of the scales. On the MVS Vocational Identity Scale, the diffused group differed significantly (p < .05)from all other groups; the unclassified group scored significantly lower than did the achieved and foreclosed groups; and there was no difference between achieved and foreclosed groups. On the CDS Indecision Scale, the foreclosed and achieved groups scored significantly lower in indecision than the moratorium, unclassified, and diffused groups. There was no significant difference between foreclosed and achieved groups.

Because the primary purpose of this study was to determine if measures of career indecision are sensitive to differences between the foreclosed and achieved groups, a discriminant analysis was computed using these two groups as the criterion variable with the same 11 predictors. The result of the analysis was not significant, Wilks' lambda = .91, df = 4, p < .05. Thus, no underlying dimension emerged that could distinguish the identity-achieved group from the identity-foreclosed group.

Table 2
Frequency Distribution of Subjects Within Identity-Status Groups

Group	Sample $(N = 199)$	Males (n = 100)	Females $(n = 99)$
Achieved	58	34	24
Moratorium	56	29	27
Foreclosed	28	10	18
Diffused	22	11	11
Unclassified	35	16	19
Total	199	100	99

Mean Scores and Standard Deviations for 11 Dependent Measures by Identity-Status Group Table 3

	VIS		í	INFO	B/	BARR	ວ	CER	IND	2	DEC	S
	M	as	M	as	M	as	M	as	M	SD	M	as
Achieved	13.93	2.68	2.07	1.24	.53	89.	16.91	1.10	23.56	6.04	14.57	1.74
Foreclosed	14.61	2.86	1.61	1.23	.61	66.	7.25	.93	22.04	6.71	15.11	2.10
Moratorium	9.32	3.83	2.66	1.28	.80	.83	5.29	1.33	33.09	7.04	11.05	2.31
Diffused	6.27	3.54	3.22	1.00	98.	1.04	4.05	1.25	37.27	6.42	10.18	2.92
Unclassified	8.51	3.66	2.97	1.25	.74	88.	5.06	1.61	34.63	6.70	12.66	2.54
	COM	M	S	sc	K	KNOW	ă	DSV	CCI	F.		
25	M	as	M	as	M	SD	M	as	М	as		
Achieved	13.53	2.35	19.05	4.29	17.69	4.84	19.71	3.91	21.66	2.57		
Foreclosed	13.86	2.53	18.11	5.71	18.83	5.23	18.64	6.13	21.82	3.47		
Moratorium	9.30	2.59	14.07	5.67	12.89	4.75	16.89	4.48	20.25	3.66		
Diffused	8.77	3.16	10.77	5.38	12.09	4.09	14.77	6.20	17.09	4.47		
Unclassified	98.6	3.59	11.49	5.16	9.77	3.44	16.06	5.63	20.17	4.09		

Note. VIS = MVS Vocational Identity Scale; INFO = MVS Information Scale; BARR = MVS Barrier Scale; CER = CDS Certainty Scale; IND = CDS Indecision Scale; DEC = CDP Decidedness Scale; COM = CDP Comfort Scale; SC = CDP Self-Clarity Scale; KNOW = CDP Knowledge Scale; DSV = CDP Decisiveness Scale; CCI = CDP Career Choice Importance Scale.

Table 4
Univariate F-Tests for 11 Dependent Measures

Scale	df	F	p<
MVS Identity Scale	4, 194	38.90	.001
MVS Information	4, 194	9.42	.001
MVS Barriers	4. 194	1.07	.372
CDS Certainty	4. 194	36.28	.001
CDS Indecision	4, 194	39.16	.001
CDP Decidedness	4, 194	28.17	.001
CDP Comfort	4, 194	29.24	.001
CDP Self-Clarity	4, 194	19.38	.001
CDP Knowledge	4, 194	26.17	.001
CDP Decisiveness	4, 194	5.72	.001
CDP Career Choice Importance	4, 194	7.78	.001

To test the second hypothesis, that is, whether identity achievers and foreclosers could be differentiated by the decidedness-comfort typology, we classified participants according to Jones' (1989) recommendations. Participants were considered decided if they scored 10 or above and undecided if they scored 9 or below on the CDP Decidedness Scale. Likewise, participants were classified as comfortable if they scored 10 or higher and uncomfortable if they scored 9 or below. Table 5 presents the results of the classification using the decidedness-comfort typology for the five identity-status groups. The typology did not distinguish the identity achievers and foreclosers. Both identity-status groups were disproportionately classified as decided-comfortable.

Discussion

Based on the results of this study, we concluded that the three measures of career indecision can distinguish among identity-status groups. The measures distinguished the moratorium and diffused statuses from each other and from the achieved and foreclosed statuses. However, the measures did not distinguish the achieved status from the foreclosed status. For example, the VIS showed the diffused with low identity (M=6.27), moratorium with medium identity (9.32), and the achieved (13.93) and foreclosed (14.61) with high identity. The same pattern appeared in the CDS data with diffused being most undecided (37.27), followed by moratorium (33.09), and then by the achieved (23.59) and foreclosed (22.04). The findings that the measures could (a) distinguish the two uncommitted

Decidedness	Achieved	Foreclosed	Foreclosed Moratorium	Diffused	Unclassified	Row total
Decided-comfortable	52	24	19	9	18	119
Decided-uncomfortable	2	ຄ	26	œ	13	55
Undecided-comfortable	0	П	8	81	1	7
Undecided-uncomfortable	1	0	80	9	ဗ	18
Column total	58	28	56	22	35	199

statuses (diffused and moratorium) from each other and from the committed statuses (achieved and foreclosed), and (b) create a continuum ranging from diffused (low) to moratorium (medium) to achieved/foreclosed (high), support the validity of the measures for their intended purpose, that is, to measure degree of indecision. The authors of the inventories do not claim that the inventories can differentiate between types of commitment (self-chosen vs. directed by others).

Although the measures do not carry claims that they can differentiate between types of commitment to occupational goals, it was important to investigate whether they could. Thus, the primary purpose of the present study was to determine if the inventories could distinguish between the two committed statuses. Unfortunately, the data showed that the inventories are insensitive to differences in path to commitment, that is, self-chosen versus assumed from others. It is disappointing, yet not unexpected, to find that the inventories did not differentiate between the achieved and the foreclosed identity statuses.

We interpret the conclusion of the present study to mean that there is some possibility that counselors may misinterpret the meaning of high scores on career indecision inventories. Low and medium scores unambiguously reflect low and medium levels of decidedness. High scores reflect a high degree of decidedness, but not whether the choice is crystallized or pseudocrystallized. Distinguishing between achieved/crystallized and foreclosed/pseudocrystallized has important implications for practice. A career counselor, seeing the high scores, could easily assume that the individuals have made suitable and viable career choices and subsequently use interventions which aid in specification and implementation of those choices. Unfortunately, the foreclosed client actually needs a different counseling intervention, one that deconstructs the pseudocrystallized choice by fostering self-exploration, autonomy, assertiveness, and reality testing. Foreclosed individuals who receive the intervention which is appropriate for achieved individuals are likely to encounter a great deal of dissatisfaction with their career choice when reality testing occurs. A pseudocrystallized choice is essentially unstable and is likely to dissolve when it is specified or implemented. We suggest that practitioners who use these inventories as screening devices with large groups carefully interpret the meaning of high scores. In working with individual clients, counselors may wish to follow up high scores with an interview question or two designed to consider the possibility of pseudocrystallized choice.

How career indecision inventories reflect crystallized and pseudocrystallized choices needs to be investigated by researchers who develop the current inventories both at the scale and item levels. Unfortunately, what we had considered to be a promising scale-level idea did not work. The decidedness-comfort typology constructed from two CDP scales did not differentiate the achieved from the foreclosed. At the scale level, the CDP Self-Clarity and Decisiveness Scales appear to be the most sensitive in differentiating the achieved and foreclosed groups, although these differences were not statistically significant. With further refinement, these scales may become more useful in this regard. This is a reasonable expectation given that

these two scales seem to measure the aspects of crisis as portrayed in Erikson's model of psychosocial identity development. At the item level, researchers may be able to identify some critical items that could be used, somewhat like the MMPI (W. G. Dahlstrom, Welsh, & L. E. Dahlstrom, 1972) critical items, to call attention to the possibility of foreclosure as a serious problem. In a post hoc analysis, we tried the critical item approach with CDS items 6 ("against the wishes of someone who is important to me"), 7 ("haven't had many experiences in making decisions on my own"), and 18 ("I feel I need some additional support") from the present data set. Unfortunately these "critical" items, separately and in combination, could not discriminate the achieved from the foreclosed.

Researchers who construct new career indecision inventories should consider adding items or subscales that directly assess the crisis or decision-making component of identity achievement so as to distinguish crystallized from pseudocrystallized choices. Such items might assess parental influence (e.g., "My parents are very pleased with my career choice."), age at which the career choice was made (e.g., "I have known what occupation I have wanted since I was a small child."), if the individual experienced a period of self-exploration and crisis (e.g., "Choosing a career has been easy for me."), and if a pattern of similar career choices runs in the client's family-of-origin (i.e., "My career choice reflects a family tradition.").

The present study may contribute to learning the meaning of DISI-O scores. Examining prior research that used the DISI-O revealed that the unclassified group was not included in the analyses. In the present study, the unclassified group was included and an interesting pattern emerged. On almost every scale, the unclassified group scored lower than the moratorium group and higher than the diffused group. The individuals in the unclassified group appear to be moving from a state of indifference to a state of awareness that they face choices regarding their futures.

The conclusions of the present study need replication. One study performed with one group of college students cannot fully examine the hypotheses that were posed. Hopefully, future research will examine the hypotheses with a broad range of high-school and college students as well as with other methods of assigning identity status, such as structured interviews. For now, the findings of the present study seem sufficiently strong to urge counselors to be cautious in how they interpret the meaning of high scores on measures of career decidedness.

References

Blustein, D. L. (1994). "Who am I?": The question of self and identity in career development. In M. Savickas & R. Lent (Eds.), Convergence in career development theories: Implications for science and practice (pp. 139-154). Palo Alto, CA: Consulting Psychologists Press.

Blustein, D. L., Devenis, L. E., & Kidney, B. A. (1989). Relationship between the identity formation process and career development. *Journal of Counseling Psychology*, 2, 196-202.

Dahlstrom, W. G., Welsh, G. S., & Dahlstrom, L. E. (1972). An MMPI handbook: Vol. 1. Clinical interpretation (rev. ed.). Minneapolis: University of Minnesota Press.

Dellas, M., & Jernigan, L. (1981). Development of an objective instrument to measure identity status in terms of occupation, crisis and commitment. Educational and Psychological Measurement, 41, 1039-1050.