DOCUMENT RESUME

ED 344 178 CG 024 171

AUTHOR Herman, Bruce G.; And Others

TITLE Examining Dimensions of Counseling Psychology Program

Quality.

PUB DATE 89

NOTE 27p.

PUB TYPE Reports - Research/Technical (143)

EDRS PRICE MF01/PC02 Plus Postage.

DESCRIPTORS *Counselor Educators; Counselor Training;

*Educational Quality; Higher Education; *Program

Evaluation

IDENTIFIERS *Counseling Psychology

ABSTRACT

There seems to be a great need for institutions with common goals to know how they compare to each other. Academicians and educators are also invested in determining what the better programs are and how they compare to these programs. In this study different indicators of Counseling Psychology program quality were assessed and examined for their covariation. Specifically for the years 1983-1989, Counseling Psychology programs were ranked for their publication productivity in the Journal of Counseling Psychology, The Counseling Psychologist, and the Journal of Vocational Behavior; their presentations at the American Psychological Association's (APA) annual conventions; and perceived prestige as rated by 26 Council of Counseling Psychology Training Programs (CCPTP) Training Directors (a 41% response rate). There was a high correlation among the five indicators of program quality. Only two programs ranked in the top 10 on all six scales: University of Maryland and State University of New York at Albany. A multidimensional scaling analysis of the correlations among the five indicators revealed that the two dimensions of practical relevance versus empirical rigor and visibility versus research productivity characterized the domain of Counseling Psychology program quality. Of the publication rankings the rankings for The Counseling Psychologist were most highly correlated with the prestige rankings. The ranking of APA convention presentations was even more highly correlated with general prestige, again probably because it draws on such a wide range of areas. (ABL)



Examining Dimensions of Counseling Psychology Program Quality

Bruce G. Herman, James P. Guinee,
Lora Vasilisakas, and Terence J. Tracey

Department of Educational Psychology
University of Illinois at Urbana-Champaign

Running Head: COUNSELING PROGRAM QUALITY

Correspondence regarding this manuscript should be addressed to Terence J. Tracey. 210 Education, UIUC, 1310 S. Sixth St., Champaign IL 61820.

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

This document has been reproduced as received from the person or organization originaling it.

D Minor changes have been made to improve reproduction quality.

PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY Vames P. Guinee





TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

Abstract

Different indicators of Counseling Psychology program quality were assessed and examined for their covariation.

Specifically, for the years 1983-1989, we ranked Counseling Psychology programs for their publication productivity (in JCP, TCP, and JVB), their presentations at American Psychological Association's annual conventions, and their perceived prestige as rated by CCPTP Training Directors. There was a high correlation among the 5 indicators of program quality. A multidimensional scaling analysis of the correlations among the five indicators revealed that the two dimensions of practical relevance vs. empirical rigor and visibility vs. research productivity characterized the domain of Counseling Psychology Program quality.



Relation Among Several Indicators of Counseling Psychology
Program Quality

There seems to be a great need for institutions with common goals to know how they compare to each other. For example, in this country a great deal of attention is given to ranking sports programs and the various ratings arrived at are often criticized and compared. Similarly, academicians and educators are also invested in determining what the better programs are and how they compare to these programs. The rankings that result may have a large impact on faculty and students perceptions of themselves, their training, and on program continuance and support. Given the fascination with and the importance of these academic program rankings, it is crucial that we have valid indices of program quality.

There have been a variety of studies on the ranking of graduate programs in Counseling Psychology (Haase, Snow, Warner, & Winer, 1980; Howard, 1983; Skovholt, Stone, & Hill, 1984; Watkins, McBride, and Himmell, 1986). Most of these studies have examined one indicator of program quality such as peer rating, or more typically in counseling psychology, the amount of contribution to a refereeed journal, or more recently, multiple journals. Howard (1983) evaluated contributions to the Journal of Counseling Psychology, Haase, et al. (1980) and Watkins, McBride, and Himmell (1986) evaluated contributions to the Journal of Vocational Behavior. While studies such as these have given us



information regarding program contributions to a particular journal, they have not helped in developing a more comprehensive understanding of a program's contributions to the field of Counseling Psychology as a whole.

More recently Skovholt, Stone, and Hill (1984) made an effort to include multiple measures of contribution including presentations at Division 17 programs of American Psychological Association (APA) conventions, articles in the Journal of Counseling Psychology (JCP), and The Counseling Psychologist (TCP). This wider focus allowed for an examination of a broader range of contributions to the field of counseling psychology, albeit their study did not include the Journal of Vocational Behavior (JVB), the major outlet for publication of research in the vocational area, an important part of Counseling Psychology's identity.

Clark, Hartnett, and Leonard (1976) in their study assessing the quality of graduate reducation across three fields, Chemistry, History, and Psychology, suggested that more meaningful and useful ratings of graduate programs might be obtained by the use of multiple indicators of program quality. They suggested that multiple ratings are equitable in that they take into account various kinds of output and contribution; are more useful in that they are more likely to identify specific strengths and weaknesses, and are more likely to stimulate internal thinking about and discussions of program strengths and weaknesses.



The present study reexamined many of the same variables as Skovholt, Stone, and Hill, (1984) for the period from 1983-1989; thus updating the rankings and affording an opportunity to examine how they have changed over the past decade. This study was unique in that it examined many indicators of program quality in several arenas. First, the research productivity of programs in a number of outlets (not just 1 or 2) was assessed. The publication productivity of programs in JCP, TCP, and JVB were all examined. The addition of JVB was in recognition of the importance of the role of the study of vocational behavior to Counseling Psychology. In addition, as in Skovholt, Stone, and Hill (1984), we tabulated the presentations made at the annual APA conventions. The inclusion of more research outlets allowed for a more complete examination of research productivity, and yielded a more accurate picture of this aspect of program quality.

We also assessed perceptions of program prestige to which allowed us to compare the research productivity rankings with general perceptions of status. This measure was important because it gave us some indication of how people in the field viewed programs. It was expected that, though research productivity might be correlated with perceived status, factors such as political involvement in Division 17 and general reputation of host institutions would limit this correlation.



In all we generated five indicators of program quality (productivity in JCP, TCP, JVB and APA convention presentations, plus perceived prestige). Comparisons of these ratings yielded an understanding of the nature of the contributions that different programs make to the field, and the composite index provided a more complete indication of program quality. Together they constituted a move toward broader program quality evaluation as suggested by Clark, et. al (1976).

Method

Procedure

The institutional affiliation of authors in JCP, TCP, and JVB for the years 1983-1989 were tallied. Scoring of each publication was conducted in a variety of ways. Method one, that of Skovholt, Stone, and Hill (1984), assigned a fixed number of points for each level of authorship. The following points were assigned for each article: 5 points for affiliation of first author, 4 points to affiliation of second author, 3 points to affiliation of third author, two points to affiliation of fourth author, and one point to affiliation of fifth author or beyond. This method gave greater credit to the institution that employed the primary authors, and resulted in articles with multiple authors having more impact on the ratings. In order to differentially apportion credit to major pieces and reaction



papers, half credit was given to papers labeled as reactions to other articles.

Method two, that used by Howard (1983), assigned a unit value of 100 to each article and divided this by the number of authors. Again reaction papers were given half credit. In this method each article had the same potential to affect the ratings but, it did not discriminate between levels of authorship.

Lastly, a simple modification was made to the each of the two basic methods above to create two other publication scoring methods that gave more credit to larger more significant contributions. Information on article length was collected as an indicator of the significance of contribution. The above authorship values were multiplied by the number of pages in the article. This was justified by the assumption that journal editors consider the significance of the article in allocating it space. When article length was considered no additional adjustment was made for reaction papers. Method three of tabulating the data resulted from making these modifications to method one, and method four was obtained by making these length modifications to method two. In this manner we generated four methods of tabulating the data on journal productivity that allowed us to examine the effect of taking into account article length, and the manner in which credit is apportioned to author's institutions.



In addition to examining contributions to scholarly journals we conducted tallies of institutional affiliation for authors of APA convention presentations (accepted papers, posters, symposia, and invited and presidential addresses excluding business and non scholarly meetings), which had Division 17 of APA as the primary sponsoring division for the years 1983, 1985-1989 (we were could not obtain data for 1984). We assigned values to each of these presentations in the same manner as methods one and two for the journal articles.

We obtained productivity ranks of Counseling Psychology
Training Programs for: JCP, TCP, JVB, and APA presentations.
From these four sources we generated a composite
productivity score by summing the scores from each of the
four sources and then rank ordering the sums.

We also mailed out a survey assessing program quality to all Council of Counseling Psychology Training Programs (CCPTP) Training Directors to yield an indicator program prestige (Osipow, 1980). This questionnaire requested that Training Directors rate programs on quality of program, quality of faculty, visibility of program, status of program, and their familiarity with the program. In addition they were asked to list the top ten counseling psychology programs. Two weeks after the initial mailing to training directors, a follow-up letter was sent requesting participation. Two weeks following the follow-up, phone



calls were made to Training Directors who had yet to respond. We sent out 64 questionnaires and received 26 responses for a response rate of 41%. Because of the length of the questionnaire and the poor response rate to many items, only the list of top 10 programs, which was completed by 22 respondents was used to estimate prestige. A usable response rate of 34% was yielded. These ratings were tallied giving 10 points for a rating of first, 9 points for a rating of second, etc. The total number of points assigned to each institution were summed and a rank order was determined. The inclusion of this subjective ranking allowed us to examine the relationship between the various indices of research productivity and the subjective impressions of those who run these programs.

Results

The correlations among the different methods of scoring productivity across the sources (JCP, JVB, TCP, and APA conventions) are presented in Table 1. Method 1 (Level of Authorship, that of Skovholt, Stone, and Hill (1984)) and method 2 (Each Article, that of Howard (1983) were highly correlated indicating that both yield similar information. In subsequent analysis, we chose to focus on the second of these, that of Howard (1983)), because the high correlation of these methods suggests that the importance of this distinction in the two scoring methods is minimal.



Insert Table 1 about here

The two other scoring methods, method 3 and 4, with which we collected data on article length, were very highly correlated for all the journals except for TCP. suggests that including length of contribution did not have an important effect on the other journals, but that it did have an important effect on evaluating contributions to TCP. This is probably because of TCP's different format, and more theoretical nature, which includes a limited number of major contributions followed by many shorter reactions. To differentially recognize the greater contribution of the large major contributions and in subsequent analysis in TCP, we present the data for all the journals using method four that did take page length into account. We chose to do this because of the magnitude of the rest of the correlations and because our desire to recognize differences in contribution size in TCP.

The two methods of data collection for APA convention participation were correlated .99. Given the magnitude of this correlation we chose to present the data from method two as this was more consistent with the method selected for evaluating journal contributions. The program rankings obtained by the above method of evaluating scholarly activity in JCP, JVB, TCP, at the APA convention and the overall

productivity composite are presented in Table 2. The prestige rankings from the CCPTP training directors yielded are also presented.

insert Table 2 about here

It is clear in examining the various rankings that there is a fair amount of variance across sources in the institutional rankings. Only two programs University of Maryland and State University of New York at Albany ranked in the top 10 on all six scales. Only four more programs ranked in the top 10 on five scales. These included University of California Santa Barbara, University of Illinois Urbana-Champaign, Ohio State University, and University of Iowa.

To examine the covariation of rank across source, each of the separate rank order variables were correlated. These rank order correlations across source are presented in Table 3. These correlations between the various rankings, ranged from .43 to .88 with the highest correlation not including the productivity composite reaching .68 (see Table 3). This suggests that while there was some correlation among the rankings, there was no consensus among the rankings and they likely measured different dimensions of quality. To understand better the relations among the different source rankings, we conducted a multidimensional scaling (MDS) analysis, utilizing the SYSTAT MDS module (Systat, 1987) and

a Kruskal's stress formula as a fit criterion, in order to attempt to characterize the dimensional space of these rankings across indicators. The MDS analysis of the rank order correlations of the four selected indices of productivity, (JCP, JVB, TCP, and APA) and the perceived quality yielded a one dimensional solution with a Kruskal's stress of .08542 and a two dimensional solution with a Kruskal's stress of .00. We selected the two dimensional solution due to its greater parsimony and interpretability (see Figure 1). Analysis of more than 2 dimensions was not possible because of the limited number of objects and would generate a fully or partially degenerate solution.

Insert	Table	3	about	here
Insert	Figure	1	about	here

The first dimension had TCP on the one end representing material most relevant to the practitioner and JVB on the other end covering material of a more empirical nature in the more circumscribed area of vocational development, while prestige, JCP, and APA fell in the middle



on this dimension. On the second dimension, which seemed to represent visibility apart from research productivity, peer prestige was at high end with the research oriented JCP at the other end with JVB, APA, and TCP in the middle.

Discussion

The inclusion of four sources for scholarly contributions in Counseling Psychology enabled us to gather more information about the scholarly contributions of different programs as suggested by Clark, Hartnett, and Leonard (1976) who held that multiple indicators reduce the halo effect resulting from peer ratings being affected by university reputation or previous performance. called for investigators to give information about the quality and nature of training rather than focusing only on research productivity. The modest correlations among the various sources suggest that different programs have different specialties. How the programs rank in general may be of less interest than how they rank in their area of specialty. The inclusion of multiple measures of scholarly contributions also gives prospective students more information about the strengths of programs and the area in which the programs have active research programs.

Despite the variability in the rankings it was possible to characterize the domain of counseling psychology program quality along two dimensions yielded in an MDS analysis.



These dimensions seem to represent degree of practical relevance to the practitioner and general visibility. The existence of these two dimensions supports the idea that status contains many components that may must beneficially be examined separately. The measures that rank at the different ends of dimension one, degree of practical relevance, would be of interest to different individuals and for different purposes. The distance between prestige and JCP, the primary research outlet in Counseling Psychology, on the second dimension that of general visibility suggests that opinions of program prestige may be more related to factors outside productivity than to research productivity. JCP was lowest on this dimension suggesting it may have been the ranking most distinct from political and general visibility while the peer prestige rating was highest on this dimension suggesting it may be most related and responsive to these general visibility factors. The existence of this dimension suggests that when training directors consider the prestige of programs they heavily consider factors related to the reputation of the institution and political involvement rather than just considering more objective measures of research productivity.

Of the publication rankings, the rankings for TCP were most highly correlated with the prestige rankings. This was probably because all reaction papers in TCP were invited, and therefore probably came from more prestigious programs, and



because it is a general journal covering many aspects of the field. The ranking of APA convention presentations was even more highly correlated with general prestige, again probably because it draws on such a wide range of areas. This also may reflect the fact that "prestigious" programs may have been more active in encouraging student participation in convention presentations.

The rankings showed some change from those presented in 1984 by Skovholt, Stone, and Hill. Some of these changes may have been due to different criterion used, especially our addition of JVB. Though there has been some shifting in the rankings, one of the two programs ranked in the top 10 on all six scales in this study, the University of Maryland, was the top ranked program in Skovholt et al. (1984). The other two top ranked programs in Skovholt, et al's 1984 rankings, Ohio State University, and University of Iowa, were among the four programs ranked in the top 10 on five scales in this study.

In our study SUNY Albany also ranked in the top 10 on all six scales, and the University of Illinois at Urbana-Champaign and the University of California Santa Barbara ranked in the top 10 on five scales. These programs ranked high in the Skovholt, et al. (1984) study. Thus these rankings represent some shift in program productivity rankings, but do not suggest any major changes.

The high correlation between the composite productivity ratings and the peer prestige ratings suggested that, while



prestige and productivity were not isomorphic, they were very highly related. This addresses an important issue not dealt with in previous examinations of prestige or productivity: to what degree are the perceptions of professionals about the relative status of programs related to objective measures that the profession holds as indicative of productivity and therefore worthy of contributing to programs status? It is possible that this correlation was partially the result of previous productivity studies, which we assume Training Directors attend to. This would increase their awareness of productivity of programs and could significantly affect their subsequent prestige ratings. In fact, an examination of our ratings and those of Skovholt, et al. (1984) suggests that the current prestige ratings may be more related to past productivity ratings than with the current productivity ratings. This suggests there may be some lag before changes in productivity are reflected in ratings of prestige.

This study provides a broader view of counseling psychology program evaluation than in the past and allows for an examination of the domain of status in counseling psychology. Future studies could improve on this by including other areas of program quality including; quality of teaching and clinical training. If studies in the future could include these they would be more useful in portraying a broad view of program's strengths and weaknesses. Also the possibility now exists to more easily collect the data we



collected, as well as to collect additional data on how often works from institutions are cited. This could be done by utilizing computer data bases such as Social Science Citation Abstracts, allowing future studies to assess more easily the importance of scholarly contributions. Given current ease of data base services, it is remarkably easy to conduct and calculate productivity ranking, it is expected that these will become more common. But, other less easily accessed indicators of program quality should not be ignored.



References

- Clark, M.J., Hartnett, R. T., & Leonard, B. L. (1976).

 Assessing dimensions of quality in doctoral education: A technical report of a national study in three fields.

 Princeton: Educational Testing Service.
- Haase, R. F., Snow, N. E., Warner, G. D. & Winer, J. L. (1980). Institutional and personal sources of manuscripts in the Journal of Vocational Behavior, 1971-1978. Journal of Vocational Behavior, 16, 1-6.
- Howard, G. S. (1983). Research productivity in counseling psychology: An update and generalization study. <u>Journal of Counseling Psychology</u>, 30, 600-602.
- Osipow, S. H. (1985). Skovholt, Stone and Hill's (1984)
 "Institutional affiliations of contributors to scholarly
 and professional activities in counseling psychology:
 1980-1983" a critique. Journal of Counseling Psychology,
 32. 466-468.
- Skovholt, T. M., Stone, G. L., & Hill, C. E. (1984).

 Institutional affiliations of contributors to scholarly and professional activities in Counseling Psychology 1980-1983.

 Journal of Counseling Psychology, 31, 394-397.
- Watkins, C. E., McBride, P., & Himmell, C.D., (1986).

 Institutional and personal sources of manuscripts in the

 Journal of Vocational Behavior, an update. Journal of

 <u>Vocational Behavior</u>, 28, 175-182.



Wilkinson, L. (1987). <u>SYSTAT: The system for Statistics</u>. Evanston, IL: SYSTAT Inc.



Table 1

Correlations of Methods for 1	<u>Nabulat</u>	ing Ranki	ngs of	Periodio	als
			Ran	king Methods	
Ranking Methods				_	
Journal of Counseling Psychol	Logy (J	1 CP) (N=59		3	
Rank of Author (Skovholt, Stone, and Hill)	(1)	1.00			
Each Article (Howard)	(2)	. 98	1.00		
Rank of Author w/#pgs.	(3)	.88	.88	1.00	
Each Article w/#pgs.	(4)	.88	.88	. 99	1.00
Journal of Vocational Behavio	or (JVB) (N=43)			
Rank of Author (Skovholt, Stone, and Hill)	(1)	1.00			
Each Article (Howard)	(2)	.95	1.00		
Rank of Author w/#pgs.	(3)	. 91	.95	1.00	
Each Article w/#pgs.	(4)	.89	. 96	.99	1.00



Table 1 (continued)

Ranking Methods

Ranking Methods					
		1	2	3_	4_
The Counseling Psychologist	(TCP)	(N=52)			
Rank of Author (Skovholt, Stone, and Hill)	(1)	1.00			
Each Article (Howard)	(2)	.95	1.00		
Rank of Author w/#pgs.	(3)	.73	.79	1.0	00
Each Article w/#pgs.	(4)	.70	.77	.99	1.00
Combined (JCP, TCP, JVB) (N=	- 62)				
Rank of Author (Skovholt, Stone, and Hill)	(1)	1.00			
Each Article (Howard)	(2)	.96	1.00		
Rank of Author w/#pgs.	(3)	.84	.87	1.00	
Each Article w/#pgs.	(4)	84	.87	.99	1.00

Overall Ranks of Programs for Scholarly Contributions and Prestige
Ratings in Counseling Psychology

Ranking Source

Institution	JCP	JVB	TCP	APA	Comp.ª Prod.	Prestige
Univ. of Maryland	1.0	3.0	2.0	1.0	1.0	1.0
U.IL. Urbana-Champ.		5.0	13.0	4.0	2.5	6.0
U.C. Santa Barbara		14.5	1.0	8.0	2.5	8.0
Ohio State Univ.	8.0	2.0	15.0	3.0	4.0	2.0
SUNY-Albany	2.0	4.0	10.0	6.0	5.0	9.0
Iowa	9.0	24.5	5.0	2.0	6.0	4.0
U. of MinnPsych.		6.0	21.0	17.0	7.0	13.0
Nebraska	4.0	36.5	33.0	5.0	8.0	50.0
Arizona State U.		12.0	7.0	13.0	9.0	18.5
North Carolina	13.0	19.0	6.0	18.0	10.0	28.5
Penn. State	12.0	10.0	39.0	11.0	11.0	28.5
Kansas	25.0	24.5	23.0	16.0	12.5	27.0
Tennesee	23.0	22.0	29.5	14.0	12.5	
Virg.Commonwealth	6.0	54.0	13.0	10.0	14.0	12.0
Missouri Columbia						
Psych. Dept.	11.0	54.0	13.0	9.0	15.5	3.0
Iowa State	17.0	1.0	44.0	22.0	15.5	18.5
Southern Il. Univ.	3.0	8.0	58.5	12.0	17.0	7.0
Colorado State	16.0	28.5	3.0	30.0	18.0	10.0
North Dakota	10.0	54.0	4.0	21.0	19.0	5.0
Texas	57.0	18.0	8.0	7.0	20.0	14.0
Michigan State	24.0	17.0	28.0	37.0	21.0	50.0
Florida	31.0	7.0	39.0	40.0	22.0	21.0
Boston university	46.0	36.5	23.0	25.0	23.0	50.0
Kent State	35.0	21.0	26.0	15.0	24.0	50.0
Washington	26.5	27.0	11,0	28.0	25.0	50.0
Missouri Columbia						
Ed. Psych. Dept.		30.0	20.0	39.D	26.5	3.0
		14.5	46.5	44.0	26.5	22.0
Columbia		23.0	16.0	31.0	28.0	20.0
SUNY-Buffalo	47.0	39.0	31.0	24.0	29.0	24.5
Auburn	45.0	28.5	25.0	19.0	30.0	50.0
Fordham	20.0	32.0	39.0	45.0	31.0	50.0
Utah	15.0	54.0	29.5		32.0	24.0
Indiana	22.0	36.5	33.0	50.0	33.5	30.5
	37.0	11.0	23.0	52.0	33.5	32.5
	32.0	16.0	17.0	33.0	35.0	32.5
_	36.0	40.5	58.5	35.0	36.0	30.5
Texas A&M	29.5	34.0	58.5	26.0	37.0	50.0
Ball State	42.0	20.0	50.0	20.0	38.0	24.5
Univ. of MinnCSPF	739.U	13.0	39.0	29.0	39.0	11.0



Table 2 (continued)

Institution					Comp.	
-	JCP	JVB	TCP	APA	Prod.	Prestige
Oregon	19.0	32.0	27.0	41.0	40.0	24.5
Denver	55.0	54.0	9.0	38.0	41.0	34.5
Rutgers	40.0	26.0	33.0	61.0	42.5	50.0
Temple	52.0	9.0	46.5	63.0	42.5	50.0
Oklahoma	29.5	54.0	51.5	32.0	44.0	50.0
North Texas	33.5	54.0	18.0	51.0	45.0	34.5
Georgia	54.0	54.0	19.0	34.0	46.0	17.0
North Dakota	21.0	54.0	46.5	46.0	47.0	50.0
Georgia State	48.5	42.0	43.0	60.0	48.0	50.0
Kentucky	50.0	32.0	58.5	43.0	49.0	50.0
Western Michigan	39.0	40.5	58.5	53.5	50.0	50.0
Indiana State	52.0	36.5	49.0	55.0	51.0	50.0
Penn. State	57.0	54.0	39.0	48.0	52.0	16.0
Miami	38.0	43.0	58.5	57.0	53.0	50.0
Southern Miss.	57.0	54.0	35.0	36.0	54.0	15.0
Oklahoma State	33.5	54.0	58.5	42.0	55.0	50.0
U. of Southern Cal	41.0	54.0	39.0	63.0	56.0	50.0
Texas Woman's	62.0	54.0	46.5	53.5	57.0	50.0
MissKansas City	62.0	54.0	39.0	47.0	58.0	50.0
U. Mass Amherst	48.5	54.0	58.5	49.0	59.0	50.0
New Mexico	43.5	54.0	58.5	59.0	60.0	50.0
Pittsburgh Univ.	62.0	54.0	51.5	57.0	61.0	50.0
Harvard	52.0	54.0	58.5	57.0	62.0	50.0
New Mexico State	62.0	54.0	58.5	63.0	63.5	50.0
North Colorado	62.0	54.0	58.5	63.0	63.5	50.0
	62.0	54.0	58.5	63.0	63.5	50.0

a Comp. Prod. = Composite index of productivity



Table 3.

Correlations Among Rankings of Scholarly Contributions and

Prestige Ranks

			Source	<u>e</u>		
					Product.	
Source	JCP	JVB	TCP	APA	Сотр	Prest
JCP	1.00					
JVB	.48	1.00				
TCP	.48	. 36	1.00			
APA	.68	. 52	. 63	1.00		
Productiv:	ity					
Composite	.81	.72	.72	.88	1.00	
Prestige	. 52	.43	.63	. 65	.66	1,00



Figure Caption

Figure 1. Two dimensional solution to MDS analysis of correlations among rankings of scholarly contributions and prestige ranks





