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ABSTRACT

Validity evidence was determined for an instrument used at a state university to measure student perception of the institutionally stressed importance of various professional traits and his/her performance of these traits. Subjects were 87 preservice teachers at the end of student teaching. Scores from the institutionally stressed importance component of the instrument were correlated with scores from another instrument developed at a different university that was intended to measure the same construct. The same procedure was followed regarding students' perceived performance. Significant correlational coefficients of 0.82 and 0.78 between the instruments purporting to measure the same constructs provided supportive convergent validity evidence. The two constructs of each university's instrument were also correlated with American College Testing Program Assessment scores, with resulting correlational coefficients that provided evidence supportive of discriminant validity. Alpha reliabilities of 0.92 or higher supported the internal consistency of the two components of both measures. An exhibit presents the developed instrument. (SLD)

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TO THE EDUCATIONAL RESOURCES
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"THE CONVERGENT AND DISCRIMINANT VALIDATION OF A SUMMATIVE
EVALUATION INSTRUMENT FOR STUDENT TEACHING"

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Presented at the Annual Meeting of the
Mid-South Educational Research Association

Nashville, Tennessee
November 9, 1994

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ABSTRACT

The purpose of this investigation was to obtain validity evidence regarding an instrument used at a state university in which student perception of institutionally stressed importance and his/her performance of various professional traits was measured. These measures were obtained from a sample of 87 preservice teachers at the end of student teaching.

Scores obtained from the institutionally stressed importance component of this instrument were correlated with scores obtained from another instrument developed at a different state university claiming to measure the same construct. The same procedure also was followed regarding the students' perceived personal performance component of these instruments. Significant ($p < .001$) correlational coefficients of .82 and .78 between these instruments purporting to measure the same constructs provided supportive convergent validation evidence. The two constructs from each university's instrument were also correlated with ACT scores. Resulting correlational coefficients of -.13, -.19, -.16, and -.13 ($p > .01$) provided supportive evidence regarding discriminant validation. Alpha reliabilities of .92 or higher supported the internal consistency of which the two different components of both instruments measured.

Thus, some support for the instrument's validity was established. However, the researcher has suggested that additional validation procedures (e.g. predictions about group differences) be employed.

INTRODUCTION

Criteria for assessing clinical experiences in college of education teacher preparation programs are needed. Standards for developing models of clinical experiences that provide appropriate support of program goals as well as validity data for instrumentation used to determine if the preestablished criteria have been obtained needs to be established.

The most important question regarding any instrument (i.e. validity) concerns whether it actually provides the information that it purports to measure (e.g. Thorndike, Cunningham, Thorndike, & Hagen, 1991; Kulriszyn & Borich, 1990; Mehrens & Lehmann, 1991; Murphy & Davidshafer, 1991; Gronlund, 1985). Validity is not self-evident. Data need to be collected and analyzed to determine whether or not empirical and statistical evidence supports its claims. The purpose of this investigation was to obtain validity evidence regarding a summative evaluation instrument used at a state university in which student perception of institutionally stressed importance of various professional traits as well as his/her performance of these aforesaid traits was allegedly measured. Since perception is classified as a construct convergent and discriminant validation procedures (i.e.

specific construct validation methods) were used to establish partial validity evidence.

METHOD

Subjects were 87 student teachers attending a Final Evaluations Seminar who had just successfully completed their student teaching, mean American College Test Score was 18.99 (SD = 4.05.

Subjects were to indicate degree of importance and degree of performance on two summative evaluation instruments (See Exhibits 1 and 2). The first instrument had five categories: personal qualities, professional traits, instructional skills, communication skills, and classroom management. The second instrument had three categories: personal qualities, instruction, and classroom management.

The instruments were part of an evaluation packet that included program assessment instruments, supervisor evaluations, and cooperating teacher evaluations. The Seminar was held in the Student Commons Building Auditorium and all students were given instructions concerning all assessments and evaluations prior to beginning to complete the evaluation packet. The Director of Clinical Experiences presided over the Seminar, gave instructions, monitored the process, and collected the evaluation packets.

RESULTS

Scores obtained from the institutionally stressed importance component of the summative evaluation instrument were correlated with the scores obtained from another summative evaluation instrument developed at a different state university claiming the measure the same aforesaid construct. A significant correlation coefficient value ($p < .001$) of .82 was obtained. Thus convergent validity evidence was established indicating support for the instrument's claim that it actually measures student perception of institutionally stressed importance of various professional traits. The same correlational procedure also was conducted regarding the scores of students' perceived personal performance component of both state summative evaluation instruments. A correlational coefficient value of .78 that was statistically significant ($p < .001$) was established. Again the convergent validation evidence that was obtained provided support for the additional claim that the summative evaluation instrument actually measures student perception of perceived personal performance.

The two constructs (i.e. scores from student perception of institutionally stressed important professional traits' and student perception of personal performance of professional traits' components were also correlated with scores from another instrument, the ACT. It claims to measure a different construct other than those aforesaid constructs allegedly measured by the

two state university summative evaluation instruments. Resulting ACT correlational coefficient values of $-.13$, and $-.16$ ($p > .01$) provided supportive evidence regarding discriminant validation of the student perception of institutionally stressed important professional traits' component for both summative evaluation instruments. When ACT scores also were correlated with the student perception of personal performance of professional traits components of the two state university instruments coefficient values of $-.19$ and $-.12$ ($p > .01$) resulted. Thus, supportive evidence regarding discriminant validation of student perception of personal performance of professional traits for both summative evaluation instruments was obtained.

Since it is necessary for an instrument to be reliable (i.e. provide accurate information) in order to be valid, alpha reliabilities were calculated for the two different components of both summative evaluation instruments. The resulting alpha reliabilities of $.92$ and $.94$ supported the conclusion that the student perception of institutionally stressed important professional traits component of both state university instruments reflected that these instruments measure with a high degree of internal consistency. Since alpha reliabilities of $.95$ and $.97$ were obtained with the student perception of personal performance component with both universities evaluative instruments support evidence was established for the reliability of this aforesaid component. Thus, it is appropriate to conclude that both components of each state university's instrument

measured with a high degree of accuracy.

CONCLUSION

Even though the data presented in this study provide strong support for the construct validation of the summative evaluation instrument investigated, it is appropriate only to conclude that partial evidence exists for its validation. It is inappropriate to conclude that these data prove conclusively that this instrument is a valid indicator of the two constructs in question. Other specific construct validation procedure (e.g. correlations with logically related criteria, Factor Analysis, studies involving group differences and studies involving experimental treatments) need to be employed with both components of the summative evaluation instrument to ascertain if resulting empirical and statistical data repeat the aforesaid findings presented in this research.

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**COLLEGE OF EDUCATION
CLINICAL EXPERIENCES ASSESSMENT**

SS# _____ SEMESTER _____ YEAR _____
 BEGINNING _____ LEVEL II (T/LC) _____
 COMPLETING _____ LEVEL III (JR. BLOCK/ESE 484) _____
 LEVEL IV (STUDENT TEACHING) _____

DIRECTIONS: In the first columns, indicate your degree of importance placed on the item. In the second columns, indicate your degree of performance at this stage of your program.

I. PERSONAL QUALITIES

- a. Exhibits initiative
- b. Exhibits good attendance
- c. Demonstrates reliability
- d. Exhibits punctuality
- e. Exhibits a cooperative spirit
- f. Exhibits a positive attitude toward supervision
- g. Is appropriately dressed and groomed
- h. Demonstrates maturity and self-control
- i. Possesses physical stamina for demands of teaching
- j. Shows initiative in all areas of teacher responsibility
- k. Cooperates with faculty and peers
- l. Uses good judgement

II. PROFESSIONAL TRAITS

- a. Exhibits ethical professional relationships
- b. Exhibits commitment to teaching profession
- c. Seeks to improve teaching skills

III. INSTRUCTIONAL SKILLS

- a. Assesses student needs
- b. Uses appropriate diagnostic and evaluative instruments
- c. Attempts to meet student needs
- d. Demonstrates respect for students
- e. Prepares effective lesson plans
- f. Prepares effective unit plans
- g. Utilizes effective long-range plans
- h. Meets planning deadlines
- i. Used teaching time efficiently
- j. Demonstrates knowledge of subject matter
- k. Uses a variety of resources
- l. Used academic technology effectively
- m. Uses learning theories appropriate to age and development of students
- n. Stimulates critical thinking
- o. Provides for individual differences

IV. COMMUNICATION SKILLS

- a. Uses standard oral English
- b. Uses standard written English
- c. Maintains proper voice quality
- d. Listens to students
- e. Uses appropriate facial expressions/gestures

V. CLASSROOM MANAGEMENT

- a. Maintains satisfactory physical environment
- b. Demonstrates proper use and care of equipment and supplies
- c. Handles classroom routines efficiently
- d. Uses adequate classroom discipline
- e. Perceives health problems
- f. A ware of students' social interaction
- g. Maintains balance in teacher/student talk

	No Opinion	Not Important	Somewhat Important	Important	Very Important		No Opinion	Unsatisfactory	Improving	Satisfactory	Outstanding
	1	2	3	4	5		1	2	3	4	5
I. PERSONAL QUALITIES											
a. Exhibits initiative											
b. Exhibits good attendance											
c. Demonstrates reliability											
d. Exhibits punctuality											
e. Exhibits a cooperative spirit											
f. Exhibits a positive attitude toward supervision											
g. Is appropriately dressed and groomed											
h. Demonstrates maturity and self-control											
i. Possesses physical stamina for demands of teaching											
j. Shows initiative in all areas of teacher responsibility											
k. Cooperates with faculty and peers											
l. Uses good judgement											
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DIRECTIONS: In the first columns, indicate your degree of importance placed on the item. In the second columns, indicate your degree of performance at this stage of your program.

	No Opinion	Not Important	Somewhat Important	Important	Very Important		No Opinion	Unsatisfactory	Improving	Satisfactory	Outstanding
	1	2	3	4	5		1	2	3	4	5
Personal Qualities											
Poise, confidence											
Appearance											
Enthusiasm											
Initiative											
Courtesy, tact											
Sense of humor											
Cooperative attitude											
Punctuality											
Communication skills:											
A. Clarity of expression											
B. Pronunciation											
Instruction:											
Makes long range plans											
Prepares daily plans											
Knows subject											
Motivates learners/stimulates interest											
Asks questions at various levels											
Uses a variety of methods and materials											
Adapts plans and materials to student needs											
Evaluates student progress											
Classroom Management:											
Attitude toward students											
Student's attitude toward teacher											
Classroom control											
Attention to housekeeping											
Attention to detail paper work, care of material, etc.											
Attention to student safety											