ABSTRACT OF THE THESIS OF

Charmaine Wesley for the degree of Doctor of Philosophy in Education presented on February 15, 1989.

Title: A Task Analysis of Correctional Counselor Needs of University Graduates with Majors in Counseling.

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Dr. E. Wayne Courtney

This research identified the core related tasks necessary to graduates with majors in the field of correctional counseling. The focus was toward job performance needs in the field. Data were gathered from a random sample of 151 respondents who represented employed correctional counselors in the state of Oregon.

The fifteen (15) item instrument was validated by DELPHI methodology with the Hoyt-Stunkard procedure establishing content reliability. The reliability was established as +0.72, indicating moderate consistency of response.

Factor analysis was used to identify the necessary clusters of tasks which were deemed important to the correctional counseling curriculum. This procedure produced four (4) distinct factors when
the minimum factor loading was set at 0.41, with all fifteen tasks being accounted for in the resultant matrix. The four identified clusters were: I. Treatment and Supervision Practices (4 tasks), II. Work Decisions (4 tasks), III. Counseling Skills (4 tasks), and IV. Caseload Management Techniques (3 tasks). Means for the fifteen tasks ranged from 4.669 to 3.940 on the five (5) point Likert type scale.

The results of the study showed a pattern which may be used in the development of instructional objectives for the preparation of correctional counselors.
A Task Analysis of Correctional Counselor Needs of University Graduates With Majors in Counseling

by

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# TABLE OF CONTENTS

## INTRODUCTION TO THE STUDY

- Background and Related Literature ........................................... 1
- Statement of Objectives ......................................................... 3
- Importance of the Study .......................................................... 3
- Identification of Educational Research Tasks ............................. 6
- Utilization of Clustering Methods ............................................. 9

## METHOD OF THE STUDY

- The Dependent Variable ......................................................... 13
- The Instrument ........................................................................ 14
- Reliability of the Instrument .................................................. 17
- The Sample .............................................................................. 19
- Collection of Data .................................................................... 20
- Statistical Design ..................................................................... 20

## RESULTS AND DISCUSSIONS

- Reliability of the Instrument .................................................. 22
- Results of Test Mean Scores .................................................... 23
- Results of Factor Analysis ....................................................... 25
- Common Factor Variance ......................................................... 28

## CONCLUSIONS AND IMPLICATIONS

- Restatement of the Problem ..................................................... 33
- The Dependent Variable .......................................................... 33
- Reliability of the Instrument .................................................. 33
- Factor Analysis Conclusions .................................................... 34
- Implications ............................................................................. 34
- Suggestions for Future Study .................................................. 35

## REFERENCES

- ..................................................................................................... 37

## APPENDICES

- A: Correctional Counselor Needs Study .................................... 46
- B: Survey Questionnaire ............................................................ 50
- C: Overall Means By Variable .................................................. 54
- D: Principal Components Analysis .......................................... 56
- E: Means Ranked By Importance .............................................. 58
- F: Model For Curricular Change ............................................... 60
# LIST OF FIGURES

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Schematic Illustration of the Centripetal Approach</td>
<td>10</td>
</tr>
<tr>
<td>2.</td>
<td>Common Factor Variance</td>
<td>29</td>
</tr>
</tbody>
</table>
LIST OF TABLES

Table | Page
--- | ---
I. The Reliability Coefficient for the Instrument | 22
II. Task Means and Standard Errors | 24
III. Percent of Common Variance for the R-mode | 28
IV. Factor I - Treatment and Supervision Practices | 30
V. Factor II - Work Decisions | 31
VI. Factor III - Counseling Skills | 31
VII. Factor IV - Caseload Management Techniques | 32
I. INTRODUCTION TO THE STUDY

Background and Related Literature

It is an inescapable fact that within today's rapidly changing technology, and high level of job competitiveness, there exists a critical need to focus on assessment techniques which identify competencies of individual workers. Assessment needs, an important component of worker occupational skills, has been established by Courtney (1986), and because of the academic community's responsiveness to job market trends, views this as an essential influence in the selection and design of curriculum planning. Past researchers have established the methods to isolate and identify competency factors of working professionals through the methodology of task analysis (McCormick, et al., 1954; Cureton and D'Agostino, 1983).

Recognition of assessment needs are important to the aspiring professional faced with entering a work force that has, within the last decade, faced unparalleled modifications, and in some areas, radical changes. These forces, coupled with the need to identify worker competencies, form the basis of the present study, which stipulates that the professional in the field is the best
judge of the identification of competency needs for entry level correctional counselors. This specialized group of counselors must work within a complex society of diverse populations, where the legal parameters mandate training in order to retain adequate job performance, and meet the liability issues of the profession. These concepts are applicable to both the design and philosophy of the present research endeavor.

Research by Halsted (1985) and Staltzman (1986) stressed the important role education contributes to the training of counselors for the field of corrections. The model for the present research is drawn from studies by Burton (1984), Soukup (1986) and Starmach (1988). These studies focused on curriculum content in research and statistical methods for professions in the field of education. The model's application promises challenge to both the graduate level curriculum planner and the student population served by educators. Lick (1985) suggests that with increased level of criminal activity being experienced in many communities, counselors entering the field of correctional counseling need to possess specific competencies which prepare them for working within the criminal justice system. Thus, identification of these competencies become paramount to the college student who wishes to focus on the area of corrections in his or her
graduate counseling program. The intent of the present research was to address this important educational issue.

Statement of Objectives

The goal of this research project was to examine the field of correctional counseling and to identify a core of tasks which are necessary to entry-level graduates with majors in correctional counseling. The following issues were addressed in the study:

1. Identification of related tasks or competencies which are required of correctional counselors who are university graduates with majors in counseling.

2. Determination of specific clusters of related tasks or competencies relevant to university counseling curriculums.

Importance of the Study

The importance of the study can best be appreciated through the various professional areas within the disciplines of education, psychology, sociology, counseling and criminal justice (Larson and Valentine, 1985; Worthen et al., 1971; Worthen, 1976; Glasner, 1973; and Copperwheat, 1985). The Oregon Corrections Department (Meyer, 1987) estimates that at least two-thirds (2/3) of
all adult criminals are released on community-based status before completing their prison or jail sentences. This release rate is projected to be even higher for juvenile offenders, who are often placed into temporary community facilities or foster homes.

It has been suggested that offenders, housed in the community or in some form of rehabilitative or institutional environments, put a greater responsibility on the counselor's need for specialized knowledge and skills (Meyer, 1986). Rainbolt (1986) reports that, in addition to their "regular" law enforcement duties, correctional counselors are often required to participate in such "extra-curricular" activities as facilitating or co-facilitating therapy groups, or to conduct other tasks which focus on various dynamics of sexual offenses, substance abuse or deviant behavioral issues.

Government agencies have long acknowledged the need for highly trained counselors to work within criminal justice systems and rehabilitative community agencies. The Oregon Corrections Division anticipates a continuing requirement for graduates of counseling, psychology, sociology and criminal justice programs who possess levels of competence that are relevant to the department and the populations it supervises (Barker, 1985). Professional correctional counselors are in demand in areas of juvenile
and adult parole and probation, state and federal correctional institutions, community detention centers, half-way houses, substance abuse programs and mental health agencies specializing in the rehabilitation of criminal offenders.

A recent survey of twenty colleges and universities revealed that counseling curriculums failed to offer programs that addressed the distinct task needs of counseling professionals who work with juvenile and adult criminals (Wesley, 1986). The study found that most counselors were trained in the traditional manner of providing therapy to motivated individuals who, at the very least, could decide on how long to participate in the counseling process. However, within the correctional system, this is not the rule. The court system decides on the length and sometimes the type of therapy in which an offender must participate. Counselors must often attempt to work with individuals who are hostile, aggressive, and who possess a long criminal history. Additionally, a significant number of these people have a long-standing substance abuse problem which tends to inhibit the rehabilitative process. Yochelson (1987), a specialist in the field of criminal personality, emphasizes the need for trained counselors who understand deviant-thinking processes, and who are not easily manipulated by
charismatic and persuasive personalities. These types of counselees are often characterized by their inability to take responsibility for their actions. Further, their illogical thinking allows them to continue deviant and anti-social behaviors that keep them out of the mainstream of society. Although they are usually resistant to counseling, such individuals will attend therapy sessions as a way of eluding a more serious sentence, or to facilitate an early release from jail or prison. The counselees and the conditions under which they are supervised in the community present serious and unique problems for the correctional counselor who walks a fine line between the law and traditional counseling practices. Unfortunately, skill development for the correctional counselor usually consists of regular in-service or on-the-job training after being assigned a caseload of criminal offenders.

Identification of Educational Research Tasks

The academic community has been a significant participant in the effort to integrate skill assessment into curriculum planning. Educators have long recognized the importance of incorporating assessment into the technical and vocational areas. Courtney and Halfin (1969) were pioneers in this area, focusing on training tasks
assessment by identifying competency requirements for teachers in the field of technical and industrial instruction. Parallel to this work was research by Worthen and Gagne (1969) and Anderson et al. (1971), who identified skills and competencies seen as necessary for educators. Glass and Worthen (1979), in participation with the American Educational Research Task Force, identified training needs and considered methods for addressing those needs.

Closely related to this identification process are studies which set the stage for the methodological aspects of this study. Gunderson (1971) looked at educational competencies that were needed by teachers who worked within the vocational field. This study was conducted because most research up until that time had found that performance-based curriculum development was generally descriptive, failing to identify the necessary specific competencies required by instructors.

Behroozian (1981) identified competencies required by ESL and bilingual teachers. A needs statement questionnaire was designed and presented to a Delphi panel for evaluation. Behroozian's methodology used factor analysis, a two-way analysis of variance, and the Hoyt-Stunkard internal consistency procedure for the data analysis. Lindahl (1971), Miller (1971), Hammer (1983),
Burton, (1984) and Soukup (1984) also considered the issue of educational competencies in their research.

A similar design was utilized by Samahito (1984). Again, a questionnaire was developed using a scale to which respondents judgementally scored competencies necessary for physical education teachers in Thailand. The Delphi technique established the content validity for the instrument, and the data analysis utilized factor analysis. The Hoyt-Stunkard procedure was used for determining internal consistency reliability.

Dalkey and Helmer (1963), Stamps (1979), and Porter et al. (1980) surveyed experts in their fields and designed instruments which identified patterns of relationships through the clustering of competencies. These studies found the Delphi technique to be a valuable validation method and forecasting tool for both technical and social research.

More recently, and of interest to the present endeavor to identify skills and competencies necessary for correctional counselors, are studies by Rutherford (1986), Lick (1985) and Halsted (1985). These researchers examined current correctional training requirements and stressed assessment needs within the areas of parole and probation. The Department of Corrections for the State of Oregon anticipates that future entry level counselors will possess
increased skills relevant to supervision of the criminal population. In-service training by the state or community organizations are presently used to increase competencies that will upgrade the correctional counselors's level of expertise (Copperwheat, 1985). The criminal justice system recognizes the importance of curriculum planning in the development of counselors at the entry level (Halsted, 1985). These perspectives provide some of the foundation for consideration in this research.

Utilization of Clustering Methods

The conceptual basis for the method of data analysis to be used in this study is drawn from McCormick et al. (1954), who were industrial psychology workers at Purdue University. Their studies examined the occupational requirements of industrial workers by analyzing job interrelationships, focusing on the identification of pertinent job components (McCormick et al., 1954; Chalupsky, 1954; Schieps, 1954 and Finn, 1954). Sjorgen (1967) used factor analysis techniques to examine job behaviors to demonstrate an inter-correlation between technical occupations. The identification of job entry needs of correctional counselors, along with a factor-based grouping of competencies, is important to the designers of such university programs.
Courtney and Coster (1963) suggest that within an occupation, what the worker does is the critical element in establishing criteria for job classification. Thus, to the educational researcher, it is important to identify a common set of job experiences which, in fact, lead to job proficiency. These researchers suggest using the centripetal approach, where curriculum design is basically centered on the identification of a "common core" of knowledge, which is assumed to be peculiar to a given occupation. These identified "elements" of knowledge or competencies are usually found to be quite general within the design.

Figure 1. Schematic Illustration of the Centripetal Approach
The goal of the centripetal approach is to focus on isolating a "common core" of least common denominators of an occupation. Through this assessment, important curricula content becomes identified (Courtney and Coster, 1963). Thus, once isolated, the information becomes a valuable tool to the concerned university curriculum planner.

The real advantage of the centripetal approach lies its ability to identify correctional counselor application tasks for graduate students. This identification, coupled with a factor-based grouping of job activities, is of significant importance to designers of curricula. The framework for the study drawn from Courtney and Halfin (1963), is as follows:

1. Using worker-assigned values, verification of task statements can be identified.
2. Job preparation criteria are then established from the analyses of task statements.
3. As content is identified, performance-based guidelines can be developed to assist the graduate degree holder with a major in counseling.
4. The specific performance objectives can be designed and incorporated into the development of university programs.

From a quantitative documentation, job preparation needs of correctional counselors can be ascertained. The basic thesis of this framework is that a standardized set
of dimensions can be developed for correctional counselors that will assist in their career preparation.
II. THE METHOD OF THE STUDY

The design of the present research incorporates the method of analysis by stating conditions under which observations can be made relevant to the dependent variable of a stated objective (Courtney, 1986). The following is the framework for the analysis component of the study.

The Dependent Variable

The dependent variable for this research was a judgmentally assigned value given by each of the subjects in the sample. The scale was comprised of five (5) levels which represented perceived tasks or competencies necessary to the job of correctional counseling. The instrument was designed and developed according to the Delphi method of validation (Lindstone, 1975). These procedures were previously used by Dalkey and Helmer (1963), Sackman (1974), Linstone and Turoff (1975) and Burton (1984). This method surveys experts in a field of study and combines the advantages of surveys and panels to determine tasks necessary for an occupation.

Initially, the Delphi process requires that panel members comment on whether an extensive list of potential items contain ambiguous or redundant statements. The following checklist was used for this purpose (See
Appendix A.  

Retain ________  
Reject ________  
Retain with the following modification(s)  

Respondents were then asked to indicate the level of importance of each counseling task during the second round of evaluation. The scores were based on a five-point Likert-type scale. Each task was considered independently. The following descriptors were used with each item in the instrument:

1 - Very unimportant to my work  
2 - Of little importance to my work  
3 - Of some importance to my work  
4 - Important to my work  
5 - Very important to my work

The Delphi procedure generated fifteen (15) items which constituted the study's instrument.

The Instrument

The instrument used in this study was a survey form designed for mailing. The instrument's format enabled the respondent to judgementally assign values considered
necessary to college graduate recipients with majors in counseling. It contained fifteen (15) items, each using a five (5) point scale.

Use of the Likert-type scale in research methodology has long been established and used. Worthen (1969) synthesized research by the American Educational Research Association (AERA) Task Force by presenting competencies needed in the field of educational research. Andreyka at al. (1976) developed a similar list of skills and tasks for teachers. Additionally, studies by Halfin and Courtney (1970), Lindahl (1971), Miller (1971), Behroozian (1981) and Samahito (1984) contributed to the basis for using the equal-appearing interval scale as the dependent variable base.

The Delphi technique is a highly efficient research tool within the field of educational research and curriculum design. It has promising applications in the following areas:

1. As a forecasting tool for studying thinking processes and critically examining future options.

2. As a teaching method which encourages viewing the future from more diverse and complex perspectives.
3. As a planning instrument which assists organizations with their personnel needs.

The Delphi method incorporates a methodology that is simple to administer, requiring minimal time and cost investments. The following attributes of this technique contribute to its popular use:

1. To guarantee the content validity of the data where heterogeneity of the subjects must be maintained.

2. A large population is needed to properly interact in a one-to-one setting.

3. Research does not need to use specific analytical techniques, but instead may draw from subjective scaled responses.

4. Cost and time constraints prohibit the necessary grouping of individuals.

The Delphi procedure was selected as a method for establishing the content validity for the instrument used in this study. It grouped potential tasks or competencies which were seen to exist in the fields of education, criminal justice and psychology, and were viewed as necessary to the profession of correctional counseling.
The preliminary list of task statements was developed through an initial review of literature that focused on performance and competency requirements in the field (Grabow, Sevy and Houston, 1983). Six (6) panel representatives were used in the validation process (See Appendix A.) Panel members were chosen on the basis of possessing not less than five (5) years of work experience as a correctional counselor.

The Reliability of the Instrument

Hoyt and Stunkard (1952) developed a procedure which was used in establishing the reliability of the instrument used in this study. Researchers Halfin and Courtney (1970), Lindahl (1971), Miller (1971), Stamps (1979), Behroozian (1981), Samahito (1984) and Andreyka et al. (1976) each established reliability for unrestricted scoring items according to this method, incorporating the procedure into the framework of their research. In each instance, the analysis of variance method addressed the concern for establishing the reliability coefficient for unrestricted scoring items. Fifteen (15) competencies were included in the instrument for the present study.

For the present reliability calculation there was one matrix, using fifty (50) randomly selected subjects from the total sample, fifteen (15) competencies and one
response per cell. Schematically, the model matrix for the reliability calculation was as follows:

<table>
<thead>
<tr>
<th>Competencies</th>
<th>Subjects</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 1 2 3 J</td>
<td>50</td>
</tr>
<tr>
<td>2 Y11 Y12 Y13 Y1J Y1</td>
<td>50</td>
</tr>
<tr>
<td>3 Y21 Y22 Y23 Y2J Y2</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>I Y11 Y12 Y13 Y1J Y1</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>K YK1 YK2 YK3 YKJ YK</td>
<td>50</td>
</tr>
<tr>
<td>TOTAL Y.1 Y.2 Y.3 Y.J Y.</td>
<td>50</td>
</tr>
</tbody>
</table>

The two-way analysis of variance process produced sums of square values for both subjects and items: the residual sum of squares was obtained by substraction. The estimate of reliability was obtained through the following formula:

\[
R = \frac{\text{Mean Square Subjects} - \text{Mean Square Residual}}{\text{Mean Square Subjects}}
\]

Task analysis studies using equal-appearing interval scale instruments have produced results in reliabilities
exceeding +0.90 (Behroozian, 1981; Samahito, 1984; Soukup, 1984; Burton, 1984 and Starmach, 1988) where this formulation was employed.

The Sample

A random sample was selected from within the population of professional correctional counselors who were employed within the State of Oregon. The sample members had to meet the pre-determined qualifications of working as a correctional counselor for at least five (5) years. The total sample size was 151. Data interpretation, through the use of factor analysis, requires that there be approximately ten (10) sample respondents per instrument item (Courtney, 1983). Courtney (1983) states that where the sample is drawn from homogeneous population or from stratified sub-populations, fewer subjects may be acceptable in reducing the error variance associated with this technique. Because the sample for this study was drawn from a homogeneous environment, the 151 responses were considered adequate to meet the sample size requirements. At the same time, the sample size met the rule-of-thumb criteria advocated by Courtney.
Collection of Data

A mailed questionnaire was used for the collection of data. Included with the survey form was an explanatory letter to the area supervisors at various parole and probation departments throughout the State of Oregon (See Appendix B.) A stamped, self-addressed envelope was attached. The questionnaire were numbered in order to provide anonymity. The supervisors had been previously contracted by phone, and had agreed to distribute the questionnaires to randomly selected correctional counselors under their supervision. The time period under which the data were collected covered a four (4) week timeframe.

Statistical Design

This research study used factor analysis as the primary statistical method of data analysis. Descriptive statistics were calculated for each item to supplement the primary analysis. The R-Mode, with varimax rotation, was used as the method for clustering the competency tasks.
The statistical model for the factor analysis is shown below:

\[ V_t = V_{co} + V_{sp} + V_e \]

where:

- \( V_t \) is the total variance,
- \( V_{co} \) is the variance that two or more measures share in common,
- \( V_{sp} \) is the variance which is specific to an individual measure, and
- \( V_e \) is the variance attributed to error.

A task item was considered as being a member of a cluster if the factor loading weight reached +0.41.
III. RESULTS AND DISCUSSIONS

The current analysis utilized factor analytic techniques for data analysis. Instrumentation was validated for reliability using the Hoyt-Stunkard method.

Reliability of the Instrument

The reliability of the instrument was tested using the Hoyt-Stunkard method of analysis. A total of fifteen (15) items comprised the instrument. The Hoyt-Stunkard method utilized "between respondent variance" and "error variance" to examine the correlation for reliability of the unrestricted scoring items scale which were utilized as data. A sample of 50 randomly selected respondents were used to establish reliability of the instrument. The reliability was determined to be +.7164. This reliability is qualitatively rated as moderate according to Starmach and Courtney (1986).

TABLE I

The Reliability Coefficient for the Instrument

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>df</th>
<th>MS</th>
<th>r</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respondents</td>
<td>49</td>
<td>1.658</td>
<td>0.7164</td>
</tr>
<tr>
<td>Residual</td>
<td>700</td>
<td>.470</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>749</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The calculation of reliability for the sample data is detailed as follows:

\[
\begin{align*}
r &= \frac{\text{MS Respondents} - \text{MS Residual}}{\sqrt{\text{MS Respondents}}} \\
1.658 - .740 &= .470 \\
r &= .7164
\end{align*}
\]

Results of Test Mean Scores

The range of the overall mean values was from a high of 4.668 to a low of 3.9040. Task #3 (utilize interviewing and counseling skills with cooperative and uncooperative individuals) had the highest mean. Task #7 (able to tolerate a stressful and potentially dangerous work environment) had the lowest mean, being represented by a score of 3.940. Table II and Appendix C show the task mean scores. The mean distribution is as follows: twelve (12) of the mean scores ranged between 4.000 and 4.669, and three (3) were in the range of 3.940 and 3.993. No tasks means were judged less than 3.00.

The sample mean for each task was computed for the study's random sample of 151 respondents. The resulting
distribution closely approximated the normal curve.

The higher mean scores were in the areas of treatment and supervision practices, work decisions and counseling skills. The lowest task means focused on the area of caseload management techniques.

### TABLE II
**TASK MEANS AND STANDARD ERRORS**

<table>
<thead>
<tr>
<th>Task Number</th>
<th>Task Description</th>
<th>( \bar{X} )</th>
<th>( S_x )</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Knowledge of psychology, human development and deviant behavior.</td>
<td>4.391</td>
<td>0.054</td>
</tr>
<tr>
<td>2.</td>
<td>Knowledge of the criminal justice system, procedures and terminology.</td>
<td>4.411</td>
<td>0.052</td>
</tr>
<tr>
<td>3.</td>
<td>Utilize interviewing and counseling skills with cooperative and uncooperative individuals.</td>
<td>4.669</td>
<td>0.054</td>
</tr>
<tr>
<td>4.</td>
<td>Knowledge of chemical use, abuse and testing procedures.</td>
<td>4.119</td>
<td>0.062</td>
</tr>
<tr>
<td>5.</td>
<td>Use good oral communication skills.</td>
<td>4.530</td>
<td>0.045</td>
</tr>
<tr>
<td>6.</td>
<td>Use good written communication skills.</td>
<td>4.404</td>
<td>0.053</td>
</tr>
<tr>
<td>7.</td>
<td>Able to tolerate a stressful and potentially dangerous work environment.</td>
<td>3.940</td>
<td>0.052</td>
</tr>
<tr>
<td>8.</td>
<td>Skill in observing and documenting situations and behaviors.</td>
<td>4.437</td>
<td>0.061</td>
</tr>
<tr>
<td>9.</td>
<td>Utilize flexibility and resourcefulness in providing treatment and referral sources.</td>
<td>3.974</td>
<td>0.059</td>
</tr>
<tr>
<td>10.</td>
<td>Able to work under high levels of pressure and frustration.</td>
<td>4.358</td>
<td>0.057</td>
</tr>
</tbody>
</table>
TABLE II (Cont'd)

TASK MEANS AND STANDARD ERRORS

<table>
<thead>
<tr>
<th>Task Number</th>
<th>Task Description</th>
<th>X</th>
<th>Sx</th>
</tr>
</thead>
<tbody>
<tr>
<td>11.</td>
<td>Use social skills effectively in working and supervising individuals from diverse social and cultural areas.</td>
<td>4.026</td>
<td>0.045</td>
</tr>
<tr>
<td>12.</td>
<td>Possess assertiveness and self-esteem in enforcing the laws and department procedures and policies.</td>
<td>4.099</td>
<td>0.051</td>
</tr>
<tr>
<td>13.</td>
<td>Able to make intelligent and sound independent decisions.</td>
<td>4.603</td>
<td>0.051</td>
</tr>
<tr>
<td>14.</td>
<td>Able to organize, prioritize and use sound caseload management techniques.</td>
<td>3.993</td>
<td>0.060</td>
</tr>
<tr>
<td>15.</td>
<td>Possess dependability, integrity and commitment in adhering to the professional ethics and department goals.</td>
<td>4.510</td>
<td>0.052</td>
</tr>
</tbody>
</table>

Results of Factor Analysis

This study used factor analysis to identify clusters of related correctional counselor tasks. The R-mode clustered tasks which reflected respondent ratings on a 5-point scale covering the fifteen (15) variables in the study's instrument. This process resulted in a total of four (4) factors (clusters) being generated, where the minimum factor loading was set at .41. Fruchter (1954) classifies factor loadings of greater than .50 as being highly significant. However, for the present study, the
minimum factor loading was set at .41 in order to accommodate and account for all of the items.

The four (4) clusters were assigned titles which reflected the nature of the tasks within each cluster. They are as follows:

Factor I - Treatment and Supervision Practices
Factor II - Work Decisions
Factor II - Counseling Skills
Factor IV - Caseload Management Techniques

Factor I - Treatment and Supervision Practices

The first factor is comprised of four (4) task statements. For this cluster, factor loadings ranged from a low of .52823 for Task 12 (possess assertiveness and self-esteem in enforcing the laws and department procedures and policies) to a high of .61497 for a Task 4 (knowledge of chemical use, abuse and testing procedures). This cluster accounted for 41.2% of the common factor variance.

The overall means for Factor I ranged from a high of 4.119 for Task 4 (knowledge of chemical use, abuse and testing procedures) to a low of 3.974 for Task 9 (utilize flexibility and resourcefulness in providing treatment and referral sources).

Factor III - Work Decisions

This factor included four (4) tasks with factor
loadings which ranged from a low of .41165 to a high of .7484. The overall cluster means ranged from 4.358 for Task 10 (able to work under high levels of pressure and frustration) to a high of 4.603 for Task 13 (able to make intelligent and sound independent decisions). This cluster accounted for 18.3% of the common factor variance.

Factor III - Counseling Skills

The counseling skills factor contains four (4) tasks. The factor loadings ranged from .44805 for Task 2 (knowledge of the criminal justice system, procedures and terminology) and a mean of 4.391 to .62149 for Task 3 (utilize interviewing and counseling skills with cooperative and uncooperative individuals). The latter group's mean was 4.667. Factor III accounted for 11.4% of the common factor variance.

Factor IV - Caseload Management Techniques

Three (3) tasks clustered under this factor. Task 7 (able to tolerate a stressful and potentially dangerous work environment), had the lowest factor loading at .44521 coupled with a mean of 3.940. Task 6 (use a good written communication skills) had the next highest factor loading of .72529. It had the highest mean of 4.404. Finally, Task 14 (able to organize, prioritize and use sound caseload management techniques) showed a factor loading of
.79104 with a mean 3.993. Factor IV accounted for 10.2% of the common factor variance in the analysis.

Common Factor Variance

Common factor variance is present when there exists a sharing of variance between two or more tasks. When this occurs, the tasks are seen as correlated within a factor. This is directly accountable to the clustering of some trait in common.

The analysis of this study resulted in the generation of fifteen (15) tasks. Table III shows the percent of common variance accounted for by the four (4) clusters. Figure 2 is a plot of these results.

<p>| TABLE III |
| PERCENTAGE OF COMMON VARIANCE FOR THE R-MODE |</p>
<table>
<thead>
<tr>
<th>Factor</th>
<th>Percentage of Variance</th>
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<tr>
<td>1</td>
<td>41.2</td>
</tr>
<tr>
<td>2</td>
<td>18.3</td>
</tr>
<tr>
<td>3</td>
<td>11.4</td>
</tr>
<tr>
<td>4</td>
<td>10.2</td>
</tr>
</tbody>
</table>


Within the parameters of the factor analysis model, there exists a structure that supports the assumption which accounts for the largest percent of common variance. This structure proposes that less percentages are accounted for as subsequent factors and are drawn from the analysis. The present analysis supports the factor analysis model premise regarding common variance. Tables IV, V, VI, and VII report means and factor loadings for each of the tasks. Figure 2 charts the common factor variance for each of the
clusters.

Similar studies with factor analysis designs (Starmach, 1988; Burton, 1984; and Samahito, 1984) each generated common factor variances for the first cluster which exceeded 41.2%. For the present study, the 41.2% figure is low for Cluster 1.

Results of Factor (Cluster) Analysis

TABLE IV

FACTOR I - TREATMENT/SUPERVISION PRACTICES

<table>
<thead>
<tr>
<th>Task Number</th>
<th>Task Description</th>
<th>X</th>
<th>Factor Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>Knowledge of chemical use, abuse and testing procedures</td>
<td>4.119</td>
<td>0.615</td>
</tr>
<tr>
<td>9</td>
<td>Utilize flexibility and resources in providing treatment and referral sources.</td>
<td>3.974</td>
<td>0.563</td>
</tr>
<tr>
<td>11</td>
<td>Use social skills effectively in working and supervising from diverse social and cultural areas.</td>
<td>4.026</td>
<td>0.598</td>
</tr>
<tr>
<td>12</td>
<td>Possess assertiveness and self-esteem in enforcing the laws and department procedures and policies.</td>
<td>4.099</td>
<td>0.528</td>
</tr>
</tbody>
</table>
### TABLE V
**FACTOR II - WORK DECISIONS**

<table>
<thead>
<tr>
<th>Task Number</th>
<th>Task Description</th>
<th>( \bar{X} )</th>
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</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Use good oral communication skills.</td>
<td>4.530</td>
<td>0.420</td>
</tr>
<tr>
<td>10</td>
<td>Able to work under high levels of pressure and frustration.</td>
<td>4.358</td>
<td>0.412</td>
</tr>
<tr>
<td>13</td>
<td>Able to make intelligent and sound independent decisions.</td>
<td>4.603</td>
<td>0.749</td>
</tr>
<tr>
<td>14</td>
<td>Possess dependability, integrity and commitment in adhering to professional ethics and department goals.</td>
<td>4.510</td>
<td>0.791</td>
</tr>
</tbody>
</table>

### TABLE VI
**FACTOR III - COUNSELING SKILLS**

<table>
<thead>
<tr>
<th>Task Number</th>
<th>Task Description</th>
<th>( \bar{X} )</th>
<th>Factor Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Knowledge of psychology, human development and deviant behavior.</td>
<td>4.391</td>
<td>0.612</td>
</tr>
<tr>
<td>2</td>
<td>Knowledge of the criminal justice system, procedures and terminology.</td>
<td>4.412</td>
<td>0.448</td>
</tr>
<tr>
<td>3</td>
<td>Utilize interviewing and counseling skills with cooperative and uncooperative individuals.</td>
<td>4.669</td>
<td>0.621</td>
</tr>
<tr>
<td>8</td>
<td>Skills in observing and documenting situations and behaviors.</td>
<td>4.437</td>
<td>0.468</td>
</tr>
<tr>
<td>Task Number</td>
<td>Task Description</td>
<td>( \bar{x} )</td>
<td>Factor Loading</td>
</tr>
<tr>
<td>-------------</td>
<td>-----------------------------------------------------------------------------------</td>
<td>---------------</td>
<td>----------------</td>
</tr>
<tr>
<td>6</td>
<td>Use good written communication skills.</td>
<td>4.404</td>
<td>0.725</td>
</tr>
<tr>
<td>7</td>
<td>Able to tolerate a stressful and potentially dangerous work environment.</td>
<td>3.940</td>
<td>0.445</td>
</tr>
<tr>
<td>14</td>
<td>Able to organize, prioritize and use sound caseload management techniques.</td>
<td>3.993</td>
<td>0.791</td>
</tr>
</tbody>
</table>
IV. CONCLUSIONS AND IMPLICATIONS

Restatement of the Problem

The primary objective of this research was to identify a core of related tasks necessary to graduates with majors in the field of correctional counseling. This focus was accomplished by examining job performance needs which were seen as essential to counselors pursuing careers in corrections.

The Dependent Variable

The dependent variable in this study was a score which was judgementally assigned by the study's respondents. In all, there were fifteen (15) individual responses, each representing a particular task's level of importance to fifteen (15) correctional counseling variables.

Reliability

The reliability coefficient for respondents was based on the Hoyt-Stunkard method of analysis for unrestricted scoring items. This coefficient was determined to be +0.7164 (See Table I.) The results indicated that the qualitative consistency of the instrument was moderate (Starmach and Courtney, 1986).
Factor Analysis Conclusions

The present research identified a core of job related tasks necessary for students majoring in counseling, and who plan to work within the professional arena of corrections.

Factor analysis was the primary analysis tool used to determine clusters of related tasks necessary for correctional counseling. The R-mode was utilized to cluster tasks. Data were collected using an instrument which consisted of fifteen (15) variables. This process resulted in the formation of four (4) factors (clusters), where the minimum factor loading was set at 0.41. All fifteen (15) tasks were accounted for in the analysis, the loadings were all positive, and there were no spurious tasks.

Implications

The implications of the research study are drawn from both the results of the data analysis and from the review of current literature. On the basis of the above information, the following implications can be considered:

1. Tasks can be clustered which represent related job requirements necessary for counseling graduates entering the correctional professions.

2. The recognition of a common core of knowledge and
skills, based on data collection, form the basis for curriculum planning of those identified knowledge and skill requirements.

3. The same skills may be used to design performance-based objectives relative to graduate program instruction.

4. The results of the curriculum model used in this study validate its use in terms of content identification and curriculum planning. The successful use of the model supports future research and instructional planning at the graduate level.

5. The data analysis results impact upon the design and implementation of training programs for entry-level correctional counselors.

Suggestions for Further Study

The following suggestions are presented to further examine the present research endeavor, and are drawn from the findings and conclusions proposed in this study.

1. Other demographic data should be collected to ascertain if variables such as age, gender, educational background, or years in the profession influences these factors. For such a study, a
multiple regression analysis model might be an appropriate analysis method.

2. Sample size should be increased and samples drawn from other areas of law enforcement and corrections should be examined.

3. The study should be replicated to include related populations involved in other social science disciplines.

4. The results of the present study should be utilized to implement the construction of performance objectives and instructional materials for the preparation of correctional counselors in Oregon's public universities. An appropriate model for curriculum change is that which is reported by Starmarch (1988) and shown as Appendix F.
REFERENCES
REFERENCES


Courtney, E. Wayne. *Analysis*. Division of Continuing Education, Oregon State University, Corvallis, 1983.


Courtney, E. Wayne and Halfin, Harold. *A factor analysis of the training needs of teachers of occupational education*. Madison, Board of Regents, Wisconsin State University. Educational Resource Information Center
No. ED 034 843, Microfiche, 1969.


Stamps, Margaret F. *An analysis of the acceptance and the


APPENDIX A
DELPHI PROCEDURE
APPENDIX A

June 6, 1988

To: Darryl Rainbolt
    Al McCan
    Joan Copperwheat
    Tony Meyer
    Larry Wibbenmeyer
    R. Ott

From: Charmaine Wesley

Thank you for agreeing to serve as a Delphi panelist for the study which I am conducting to identify competencies and task related to correctional counselor needs of graduates in counseling programs. Your input will serve as a major contribution to the existing research information in the topic area. The results could play a critical role in future curriculum planning of universities with counseling programs.

The Delphi technique suggest that you react individually and independently from other panelists. I will serve as a liaison for the data collection, and will provide each of you with feedback as the study progresses. It is anticipated that only one or two iterations will be required before consensus is reached. Consensus among the panel members will be considered when 80% of you agree on the content for the instrument (questionnaire).

The initial job for the panel members is to assess, evaluate and, if necessary, modify the attached list of tasks which are to be considered for inclusion in the instrument to be mailed to samples of correctional counselors. Your instructions on this task are to take each of the listed tasks and either RETAIN, REJECT OR MODIFY its content according to your judgement of acceptability. A second instrument (revised and based upon the first iteration) may be forwarded to you for review at a later date.

Thank you again for agreeing to participate in this study.
Directions: The major objectives of the Delphi procedure is to determine the items (tasks) which are to be included in the survey questionnaire. In essence, the panel members have as their role the establishment of content validity for the instrument. Thus, for each statement to indicate whether to RETAIN, or REJECT the item as a part of the final questionnaire. If you wish to RETAIN the item only after it is modified, rewrite the task in the space which is provided.

Please accept my sincere appreciation for your input in this matter. Should you have any questions please call me at (415) 635-6301 (home).
ROUND ONE DELPHI PANEL
QUESTIONNAIRE

1. KNOWLEDGE OF PSYCHOLOGY, HUMAN DEVELOPMENT AND DEVIANT BEHAVIOR (Knowledge of symptoms of emotional disorders and mental illness; human development; counseling, crisis intervention, and problem solving techniques; and value systems of different groups or cultures.)

RETAIN _________ REJECT _________ REVISE as follows:

2. KNOWLEDGE OF THE LEGAL SYSTEM, PROCEDURES AND TERMINOLOGY (Legal terminology and documents, civil and court procedures, the criminal justice system, the confidentiality of records, the rights of convicted individuals and the potential liabilities of the profession.)

RETAIN _________ REJECT _________ REVISE as follows:

3. INTERVIEWING AND COUNSELING SKILLS (Ability to gather information through interviews, counseling and to provide support and facilitate behavior change.)

RETAIN _________ REJECT _________ REVISE as follows:

4. KNOWLEDGE OF CHEMICAL USE, ABUSE AND TESTING PROCEDURES (Symptoms and effects of substance abuse.)

RETAIN _________ REJECT _________ REVISE as follows:

5. ORAL COMMUNICATION SKILLS (Skill in communicating verbally.)

RETAIN _________ REJECT _________ REVISE as follows:
6. **WRITTEN COMMUNICATION** (Grammar, spelling and sentence structure. Able to write legibly, and to prepare clear and understandable reports, case notes and other correspondence.

RETAIN _______ REJECT _______ REVISE as follows:

7. **STRESS TOLERANCE** (Tolerance for the stress of working in a potentially dangerous environment; able to maintain self control when confronted with verbal harassment or threats and to stay calm and respond with composure in emergencies.)

RETAIN _______ REJECT _______ REVISE as follows:

8. **SKILL IN OBSERVING BEHAVIOR** (Accurately observing and documenting behavior, and environments, and remaining alert to potential problems.)

RETAIN _______ REJECT _______ REVISE as follows:

9. **FLEXIBILITY** (Resourcefulness in thinking of alternative approaches to treatment techniques, community resources, and to adjust to new and unfamiliar situations/duties and setbacks.)

RETAIN _______ REJECT _______ REVISE as follows:

10. **TOLERANCE OF THE NEGATIVE ASPECTS OF THE JOB** (The physically unpleasant field environments.)

RETAIN _______ REJECT _______ REVISE as follows:
11. PERSONAL ORGANIZATION (Skill in organizing work, files and other materials, and in use of time in meeting deadlines.)

RETAIN _______ REJECT _______ REVISE as follows:

12. ASSERTIVENESS/SELF-ESTEEM (Self-assurance, and decisiveness; ability to influence and confront others, to enforce rules and interact confidently with a wide range of individual from diverse social and ethnic backgrounds.)

RETAIN _______ REJECT _______ REVISE as follows:

13. INTELLIGENCE AND JUDGEMENT (Ability to effectively recall, analyze and synthesize large amounts of information, and to make sound independent decisions.)

RETAIN _______ REJECT _______ REVISE as follows:

14. SOCIAL SKILLS (Effectiveness in working with other in a consistent and fair manner, demonstrate insight, sensitivity and concern for other different values and beliefs.)

RETAIN _______ REJECT _______ REVISE as follows:

15. MOTIVATION AND DEPENDABILITY (Trustworthiness and reliability and a willingness to put in extra time and effort; persistence in seeking information; integrity and adherence to professional ethics; commitment to the department goals and objectives.)

RETAIN _______ REJECT _______ REVISE as follows:
APPENDIX B
SURVEY QUESTIONNAIRE
APPENDIX B

Date:
To: Area Supervisors
From: Charmaine Wesley
Subject: Survey questionnaires

As per our recent conversation I have enclosed a packet of survey forms for distribution to correctional counselors under your supervision. As agreed, in order to provide them with anonymity, they do not need to identify themselves on the survey forms. After the questionnaires are completed they can be forwarded to me in the enclosed self-addressed stamped envelope that has been provided for your convenience.

Again, I appreciate your cooperation in assisting me with this research project. The results of this study could influence educational programs which prepare future individuals for the professional of correctional counseling.

If you have any questions please feel free to contact me during the day at (415) 769-6994.
SURVEY OF APPLIED CORRECTIONAL COUNSELOR NEEDS

DIRECTIONS: Please evaluate each of the following tasks in accordance with your perception of its importance for inclusion in a graduate program in the field of correctional counseling.

<table>
<thead>
<tr>
<th>VERY IMPORTANT</th>
<th>VERY UNIMPORTANT</th>
</tr>
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<tr>
<td>1. Knowledge of psychology, human development and deviant behavior</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>2. Knowledge of the criminal justice system, procedures and terminology</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>3. Utilize interviewing and counseling skills with cooperative/uncooperative individuals</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>4. Knowledge of chemical use, abuse and testing procedures</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>5. Use good oral communication skills</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>6. Use good written communication skills</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>7. Skill in observing and documenting situations and behaviors</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>8. Able to tolerate a stress and potentially dangerous work environmental</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>9. Use flexibility and resourcefulness in providing treatment and referral sources</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>10. Utilize social skills effectively in working and supervising individuals of diverse social and ethnic background</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td></td>
<td>VERY IMPORTANT</td>
</tr>
<tr>
<td>---</td>
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</tr>
<tr>
<td>11.</td>
<td>Able to work under high levels of job pressure and frustration</td>
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<td>12.</td>
<td>Possess assertiveness and self-esteem in enforcing the laws and department procedures and policies</td>
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<td>13.</td>
<td>Able to make intelligent and sound independent decisions</td>
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<tr>
<td>14.</td>
<td>Able to organize, prioritize and use sound caseload management techniques</td>
</tr>
<tr>
<td>15.</td>
<td>Possess dependability, integrity and commitment in adhering to professional ethics and department goals and objectives</td>
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APPENDIX C

OVERALL MEANS BY VARIABLE
### OVERALL MEANS BY VARIABLE

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<td>4.411</td>
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<td>4.603</td>
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<td>3.993</td>
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<td>15</td>
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APPENDIX D

PRINCIPAL COMPONENTS ANALYSIS
## PRINCIPAL COMPONENTS ANALYSIS

<table>
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<th>Percent of Variance</th>
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APPENDIX E

MEANS RANKED BY IMPORTANCE
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<td>Utilize Interviewing Skills</td>
<td>4.669</td>
</tr>
<tr>
<td>2</td>
<td>13</td>
<td>Independent Decisions</td>
<td>4.603</td>
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<td>3</td>
<td>5</td>
<td>Oral Communications</td>
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<td>4</td>
<td>15</td>
<td>Ethics</td>
<td>4.510</td>
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<tr>
<td>5</td>
<td>8</td>
<td>Observe Behaviors</td>
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</tr>
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<td>6</td>
<td>2</td>
<td>Justice System</td>
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<td>Written Skills</td>
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<tr>
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APPENDIX F

MODEL FOR CURRICULAR CHANGE
(Adapted from Starmach, 1988)