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ATTITUDES OF WASHINGTON STATE ELEMENTARY
AND SECONDARY TEACHERS TOWARD
SCHOOL PSYCHOLOGISTS

A Thesis
Presented to
the Graduate Faculty
Central Washington State College

In Partial Fulfillment
of the Requirements for the Degree
Master of Education

by
Jim D. Gower
August 1966

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APPROVED FOR THE GRADUATE FACULTY

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CHAPTER I

THE PROBLEM, HYPOTHESES, AND DEFINITIONS

I. THE PROBLEM

Statement of the Problem

Many advances in the field of School Psychology have been made relatively recently in Washington State. Prior to April 4, 1960 specific, professional certification requirements for school psychologists were non-existent even though many schools were recipients of psychological services provided by individuals employed by local districts. Effective July 1, 1961, The State Department of Public Instruction established certification requirements which that department recommended for use by public school districts in the recruitment and employment of school psychologists.

During the 1961-1962 school year sixty-four Provisional and sixty-eight Standard General School Psychology Certificates were issued by the Office of the State Superintendent of Public Instruction. As of July 1, 1965 one hundred fifty-one Provisional and one hundred thirty-four Standard Certificates had been issued.

Due to the sizeable increase in the number of school psychologists currently employed in the State of Washington, it was felt that a determination of the manner in which these individuals were perceived in their contacts with teachers would facilitate the training efforts of institutions which prepare school psychologists for certification.

Undergraduate and graduate students contemplating entering the field also may be anxious to become informed of the acceptance of school psychologists by teachers--the group with whom they will collaborate and serve most extensively.

Practicing school psychologists are themselves conscious of the image they establish, perpetuate and must occasionally defend. As members of a professional team endeavoring to achieve meaningful goals, school psychologists need to be concerned with the degree they fulfill their intended purpose. It seemed that an evaluation of various aspects of the work of school psychologists by teachers would aid school psychologists in their efforts to function more effectively with that group.

The purpose of this study was to determine the attitudes held by a group of Washington State elementary and secondary teachers toward school psychologists with

whom they may have had contact in their teaching experience.

The investigation involved samples drawn from graduate students attending 1966 summer session courses at Central Washington State College in Ellensburg, Washington. A questionnaire employing the Edwards-Kilpatrick Technique of Attitude Scale Construction was devised for data-gathering purposes. It was hoped that the scale would isolate factors pertinent to the workaday activities of school psychologists, to which the general attitudes could be attributed.

II. HYPOTHESES TO BE TESTED

One general hypothesis was the primary basis of the study. As this researcher believed that negative references seemed to be made more frequently than those of a positive nature concerning report writing, follow-up, teacher-psychologist rapport, etc., the major hypothesis was stated negatively: The attitudes reflected by responses to the opinionnaire employed indicate that teachers have unfavorable attitudes toward school psychologists.

Several specific hypotheses, capable of testing, are stated to provide greater detail concerning attitudes toward school psychologists.

1. Teachers with one to five years of experience hold significantly higher attitudes toward school psychologists than those who have six or more years of teaching experience.
2. Female teachers' attitudes toward school psychologists are significantly more positive than those of male teachers.
3. Significant differences exist among the attitudes of Primary, Intermediate and Secondary teachers.
4. Significant differences exist among the attitudes of those teachers who have never referred students to a school psychologist, those who have referred one to five times, and those who have referred on six or more occasions.
5. Teachers who have had no contact with a school psychologist, those who have had contact with only one and those who have had dealings with more than one psychologist have significantly different attitudes toward psychologists.
6. Significantly different attitudes toward school psychologists exist among teachers attending summer session courses: (1) to complete fifth year requirement, (2) to complete Master's Degree requirement, and (3) for other purposes.

III. DEFINITIONS OF TERMS FOR PURPOSES
OF THIS STUDY

School Psychologist

An individual who, regardless of his or her preparation, duties or level of competency, is commonly referred to by a majority of the teachers with whom he functions as the psychologist, the school psychologist, etc. (Seldom, since certification, is such an individual employed by Public School systems if he or she cannot meet the State Board of Education requirements for the Provisional School Psychologist's Certificate.)

Teacher

An individual who, regardless of his or her preparation, duties or level of competency has functioned as a classroom teacher for a period of one or more years. (Only in rare instances does one encounter in Washington State Public Schools, teachers who do not hold Bachelor's Degrees and these hold emergency certificates which must be renewed each year).

CHAPTER II

REVIEW OF THE LITERATURE

I. BACKGROUND THEORY AND RESEARCH

In 1896 Witmer, at the University of Pennsylvania, established the first psychological clinic concerned with the learning problems of children. Three years later in Chicago the first public school department of child study was established (7:2). The Connecticut State Board of Education became the first state in the Union to create a school psychologist's position in 1915. Dr. Arnold Gesell was appointed to the position and instructed to "make mental examinations of backward children in rural, village and urban schools, and to devise methods for their better care in the public schools" (4:24).

Despite the existence of psychological services in the public schools for approximately 65 years, there is a paucity of literature directly related to the topic of this thesis. This may be explained in part as being due to the comparative youthfulness of the profession of school psychology (The Division of School Psychology was the sixteenth division of the American Psychological Association --APA--to become established).

Prior to 1955 only a few universities had well defined training programs in school psychology. More recently other institutions have established such programs but reliable information about the extent of training facilities in the United States is not available (7:6).

As late as 1960, twenty-one states did not have either specifications or plans for the certification of school psychologists (7:8). The varied requirements of those states which offer certification and the lack of program uniformity among universities which offer training in school psychology, coupled with the manner in which school psychologists subsequently function in the schools, have resulted in their being referred to by no less than thirty-eight job titles (7:9).

It seems highly probable then, that school psychologists, having been called many things by many people, may have been the related subjects of investigations conducted in the broad area of guidance. However, this investigator found no evidence in the literature of studies which have been conducted, using attitude scaling techniques, to ascertain the attitudes of elementary and secondary teachers toward school psychologists, most particularly in the State of Washington.

Guidance services as commonly perceived usually encompass a number, and in some instances all, of the activities of school psychologists as well as counselors. The term "guidance services," as commonly employed, denotes a degree of breadth sufficient to warrant the inclusion of psychology, psychometry, social work, counseling, case-work, and a variety of loosely-defined, closely related professional areas. This thesis is directly concerned only with elementary and secondary teachers and their attitudes toward school psychologists. However, because of the similarities which exist between duties, techniques and relationships of school psychologists and other guidance personnel, it seems that literature pertinent to the broad guidance services area may be of significance in this study.

Cason, for an unspecified number of years, collected comments from teachers regarding their experiences with individuals and agencies offering special services. (Although the term specialist is used extensively, the author was referring to school psychologists, psychiatrists and social workers.) The following represent examples of procedures used by specialists which were cited by Cason's report as not being helpful to the classroom teacher (3:132).

1. The specialist's failure to communicate in any way with the teacher after accepting a referral.
2. The failure of the specialist to offer any recommendations on helpful school procedure.
3. The recommendations made by the specialist tend to be very general.
4. The recommendations made by the specialist are impractical due to limitations of time, equipment, or necessary teacher skills.
5. Specialists make recommendations in areas in which the teacher does not concede his competence.
6. The specialist's report includes professional concepts above the level of the teacher's understanding or acceptance.
7. Specialist's reports carry implications of blame.

Cason hypothesized that problems similar to those in the foregoing arise in at least three areas and result in a lack of rapport between the teacher and the specialist. The areas deemed by Cason to be most detrimental to teacher-specialist relationships are:

1. The specialist is competent in his own field, but is not acquainted with classroom procedures. Such an individual has difficulty translating general policies of procedure into terms of specific classroom programs that are to be carried on by the teacher.
2. Limited personal contacts between the specialist and the teacher may lead to too much reliance on written reports. The teacher, usually the recipient of the reports, may feel excluded from interaction with the psychologist whether she is capable of coping with a particular situation or not.

3. Teachers may exaggerate the values to be received from referral to the specialist or tend to leave the entire responsibility with the specialist. Some teachers have such a vague understanding of the contributions the specialist is capable of making that they tend to falsely believe, for example, that the diagnostic interview alone will effect a miracle (3:132).

Russell and Willis, after conducting a cursory survey of the recent literature on guidance evaluations, found that teacher opinion concerning the effectiveness of guidance services is being neglected. Feeling that a definite need exists for a comprehensive and continuous evaluation of guidance programs by guidance personnel, administrators and teachers, these investigators surveyed the opinions of 135 classroom teachers in five of thirteen Fairfax County, Virginia intermediate schools. An eight item scale, comprised of comments and criticisms which had come to the attention of the investigators during their work as intermediate counselors, was distributed to 187 teachers. Responses from 135 teachers constituted a 72 per cent return. Other items used in the questionnaire were based on items taken from the 1959 Evaluation Report, Department of Guidance and Counseling, Tucson Public Schools. The teachers were asked to mark the intensity of their opinion on each item on a five point continuum which ranged from agreement to disagreement. As the authors of this study readily admit, caution must be used

in drawing implications from a survey involving so small a sampling of teacher opinion. The survey did, however, yield at least two generalizations:

1. A significant difference of opinion existed among teachers concerning the role of guidance in discipline matters; i.e., some teachers feel counselors overprotect students.
2. Guidance programs did not have the support of a large minority of teachers (17:707-709).

McDougall and Reitan feel that models suggested for elementary school guidance programs have been wrongfully devoid of the opinions of elementary school administrators, as these individuals are to a great extent responsible for the role that elementary guidance people play, regardless of their academic preparation. These investigators conducted a survey in the states of Idaho, Oregon, and Washington to sample the perceptions of elementary school principals in the three states. Responses were received from 169 or 69.5 per cent of the 243 member sample. Inspection of the returns revealed no major differences in patterns of responses (from different states); therefore, the data were analyzed as a single sample.

This survey was specifically concerned with:

1. Counselor training, as perceived by principals and was arbitrarily divided into four areas of psychology, counseling and guidance, professional education and selected related disciplines.
2. Background experience other than course work. This area was divided into work experience outside of school and in the school.

Results of the survey indicated that elementary principals tend to feel that elementary counselors should take extensive course work in psychology, and counseling and guidance. The responding principals placed relatively less importance on practicum or internship training than on other coursework, yet preferred trained counselors. Such a discrepancy seems to suggest that while they preferred trained counselors, many principals were not aware of the need for the supervised practice which has been a traditional portion of such training.

A large majority of the principals viewed elementary teaching experience as a prerequisite for counseling and favored well-trained elementary counselors. They also favored certification and additional compensation for the elementary school counselor.

McDougall and Reitan as a result of their survey, drew the implication that principals viewed the job of

the elementary counselor as being a vital portion of the elementary school program (14:348-354).

During the 1956-57 academic year, Stewart investigated various factors influencing teacher attitudes toward, and participation in guidance services in Washington State. Stewart's study was conducted for the following specific purposes: (19:729-734)

1. To devise a scale which would indicate the degree of teacher participation in guidance services.
2. To devise a scale which would determine the attitudes of teachers toward guidance services.
3. To determine the relationship, if any, between teacher attitudes and participation in guidance services.
4. To determine whether teachers' preparation, experience, grades and other relevant factors, were significantly related to attitudes toward guidance services and/or participation in guidance services.
5. To determine whether participation in guidance services could be predicted from knowledge of teachers' training, experience, and other known variables.

The Participation-In-Guidance-Scale employed by Stewart was comprised of items selected by seventy-two experts in the field of guidance. Two fifteen item teacher's attitude-toward-guidance scales were constructed and standardized by the Edwards-Kilpatrick Technique of scale discrimination. The thirty items comprised two

scales having an alternate scale reliability coefficient of 0.58.

The sample was drawn from persons holding valid Washington State Teaching Certificates who:

1. Had taught for at least one year.
2. Had secured the majority of their professional training in Washington State.
3. Were spending over two-thirds of their time in classroom instruction.

Stewart received responses from 71 per cent of his sample. Four hundred four returns were received from 102 secondary schools and 32 returns were received from nine elementary schools. All respondents within each category were selected randomly.

The fifty respondents having the most favorable attitudes toward guidance and the fifty with the least favorable scores were asked to complete the Minnesota Teacher Attitude Inventories. Of this group, 39 of the highs and 45 of the lows responded.

Analysis of the data collected by sex, marital status, experience, type of school, grades taught, institutions conferring degrees, and graduate experience, revealed significant differences in mean participation scores.

Attitudes toward guidance services, however, were found to differ only according to sex. Women scored significantly higher on the attitude scale than did men.

There was also evidence that attitudes toward guidance were positively related to general attitudes toward teaching. The most reliable predictors of scores on the Participation-In-Guidance Scale were found to be attitude scores and years of experience (19:729-734).

Quite obviously teachers' perceptions of school psychologists stem in large measure from their contacts with previous school psychologists. Historically, teachers have viewed the school psychologist as a tester, usually an examiner for special class placement (10:193). School psychologists tend also to be attributed the magical, mystical aura frequently assigned to individuals associated with the study of psychology and its seemingly nebulous titles, processes and activities. The school psychologist is often viewed as one who isolated the abnormal and bizarre. . . "whose first office purchase is his couch, who sleeps with a set of Rorschach pictures under his pillow" (10:193).

These two role perceptions, held by many with whom the school psychologist strives to function effectively, do not facilitate his attempts to gain the acceptance of teachers.

School psychologists, because of their usually high level of training, may also be regarded by teachers as being omnipotent individuals capable of and subsequently possessed with, intentions of solving any and all problems brought to their attention. Should a school psychologist be desirous of being regarded as an expert, teachers often innocently yet ignorantly afford him opportunities to do so.

There is a trend however, which suggests that teachers are becoming more realistic in their perceptions of the role of school psychologists. Teachers seem to be relying less on psychologists for pat answers and magical diagnoses and appear willing to accept a role for the psychologist as one who is allied with teachers in helping them develop further skills and understandings in their work with children (7:64).

Adverse reactions toward school psychologists are sometimes generated by the reluctance of teachers to refer youngsters for evaluation. Conscientious teachers may

construe requests for assistance as being synonymous with their having failed to cope effectively with atypical pupil problems (7:64).

Standing in loco parentis, the teacher is legally responsible for students and assumes, in the classroom, the powers and duties which the parent has in the home. Psychologists must be cognizant of the respect accorded the teacher by his or her students and tread softly lest he destroy pupil morale and disrupt the learning situation (4:68).

School superintendents interviewed by Division 16 members of the APA at the Thayer Conference expressed the following major criticisms of school psychologists.

(Underlines emphasized by the writer.)

1. School psychologists tend to be laws unto themselves in their daily activities. They do not inform superintendents of even the broader aspects of their work, they fail to notify principals when they enter a building, they give orders to principals, expect teachers to meet for conferences at the psychologist's convenience and ignore building schedules when working with children.
2. Psychologists were felt to be inadequately skilled in human relations. They fail to earn the liking and confidence of principals, lack tact, possess a superior attitude and an aloofness from the community.

3. A minority of the superintendents interviewed felt that too often school psychologists were rigid and compulsive and tried to be spectacular in dress, manner and conduct.
4. Failing to understand the practical problems of the classroom, psychologists recommend on the basis of individual children, whereas, teachers are forced to interpret the recommendations in terms of a group.
5. Recommendations are difficult for the teacher to comprehend and so tend to promote misunderstandings.
6. Reports merely parrot back to the teacher information she has related to the psychologist and fail to include sufficient data and suggestions.
7. Poorly trained psychologists fail to realize their limitations and try to make their services too inclusive (4:69-70).

II. SUMMARY OF LITERATURE REVIEW

Studies surveyed in the periodical literature have, in the main, been concerned with the broad field of guidance of which school psychology is but a part.

McDougall and Reitan, although they confined their investigation to elementary principals in the State of Washington, were concerned primarily with the respondents' opinions regarding the academic preparation and previous experience of counselors. Approximately 8 per cent of the elementary principals in the State of Washington were included in their survey.

The study conducted by Russell and Willis was designed to sample teacher opinion regarding guidance services as provided in one county in the State of Virginia.

Stewart confined his investigation to Washington State teacher's attitudes toward guidance services and their degree of participation in same. The reliability coefficient (0.58) reported for the attitude scale devised, however, leads one to interpret his findings cautiously. Stewart received 404 returns from 102 secondary schools in Washington State and only 32 from 9 elementary schools.

Cason's contribution to the literature consisted primarily of comments, historically compiled, regarding specialist, i.e., psychologists, psychiatrists and social workers, coupled with hypotheses based on such comments and personal experiences.

The Thayer Conference Report edited by Cutts, offered summaries of interviews with approximately 31 public school superintendents and one classroom teacher. The interviews were conducted in attempts to assess those individuals' opinions regarding the functions of school psychologists.

As much research has been conducted concerning the broad guidance services area, it was felt that an examination of teacher attitudes toward one segment of the area, i.e., school psychology, would yield information of pertinent value to school psychologists.

CHAPTER III

PROCEDURE OF THE STUDY

I. DEVELOPMENT OF THE ATTITUDE SCALE

A Likert-type attitude scale, accompanied by "open ended" completion-type phrases, was employed in this study. It was believed that while the Likert-type items would enable one to assess objectively the range, intensity and consistency of the subject's responses to a number of structured statements, the completion items would provide the respondents with opportunities to express personal opinions pertinent to a much larger number of areas or practices not specifically covered by the Likert-type items.

The Attitude Scale

The Edwards-Kilpatrick scale-discrimination method of attitude scale construction was employed in the selection of items. It is essentially a combination of the methods of item evaluation employed by Thurstone, Likert and Guttman, yet possesses advantages not inherent in any of these methods considered separately. The scale-discrimination method is so called, because it employs Thurstone's scaling technique as well as Likert's procedure for evaluating the

discriminatory value of items. Unlike the Guttman method, the scale-discrimination technique provides an objective basis for item selection and the items selected cover a wider range of content than do the intuitively-arrived-at Guttman items (6:382-383).

The initial step in the item-selection-process was the collection of a large number of statements pertinent to school psychologists: their activities, relationships with those with whom they interact, etc. These statements concerning school psychologists were collected from various sources. Many resulted from the review of the literature, statements submitted by teachers, school psychologists and advanced students; while other were inspired as a result of the researcher's own experience. The items were then edited and those items were eliminated which:

1. Were likely to be endorsed by individuals with opposed attitudes.
2. Were factual (reducing opportunity for expression of opinion) or could be interpreted as such.
3. Were obviously irrelevant to the issue under consideration.
4. Appeared likely to be endorsed by everyone or no one.
5. Seemed to be subject to varying interpretations for any reason.
6. Contained a word or words not common to the vocabularies of college students (6:377).

One-hundred seven statements were collected to be included in the initial administration of the trial form of the scale. These items were then presented to sixty judges, through the use of a six-page form. (See Appendix A) The task of this group of judges was to rate each of the 107 items on a nine-point scale according to the degree of favorableness or unfavorableness of the given item.

Twenty-three of the judges were enrolled in Introduction to Graduate Study courses, eighteen were students in a course of Educational Foundations and nineteen were taking a course in Social Psychology. All were regularly enrolled summer session students at Central Washington State College in Ellensburg, Washington. No requisites for participation in the rating or judging of the 107 items was demanded of these individuals. The six-page form was administered and collected during regular class sessions, with the cooperation of the respective instructors.

To facilitate processing of the judges' responses to each of the items, tally sheets were constructed (See Appendix B).

The judges were asked to respond to each item on a nine-point continuum (the letters A through I). It followed logically that each item could be rated by one or more, or none, of the judges at any point on the continuum. Items

with an apparent majority of responses near the "A" or positive end of the nine-point scale were considered to be expressing favorable attitudes toward school psychologists. When the judges' ratings tended to fall near the "I" or negative end of the continuum the item, so rated, was considered to be one which expressed an unfavorable attitude toward school psychologists. If the responses failed to exhibit an apparent pattern, the item was considered to be neutral or ambiguous (Appendix B--Items 28, 29, 30).

Q-values, or ambiguity-values, as well as scale-values, were calculated for each of the 107 items. (See Appendix A)

The scale value of each item is found by locating the point on the continuum above which and below which 50% of the judges place the item. The spread of the judges' rating is measured by Q, the interquartile range. A high Q-value for an item indicates that the judges are in disagreement as to the location of the item on the continuum and this, in turn, is taken to mean that the item is ambiguous. Both Q-and scale-values are used in selecting items for the attitude test (6:374).

Applying the criteria cited above to the scale and Q-values of items 28, 29 and 30, one can readily determine the discriminatory power and nature of the items, i.e., negative vs positive.

	<u>Scale Value</u>	<u>Q Value</u>
28. Principals welcome the confidential comments of school psychologists pertaining to inappropriate methods employed by teachers.	5.75	4.93
29. School psychologists can be trusted with confidential information.	8.71	1.19
30. School psychologists tend to be gossips.	1.11	.59

Item 28 was perceived by the judges as being much more ambiguous than items 29 and 30; therefore, the high Q value. Item 28, with a scale value of 5.75 on the continuum represented by 9 - 1, was also perceived by most judges as being a neutral item; hence, one, which if included in the final scale, would not be likely to contribute to the determination of attitudes for or against school psychologists. An illustration of the computation of Q-and scale-values for Item 29 may be found in Appendix C.

The statements were ranked from low-to-high according to Q-values. The median Q-value of the group was calculated, and all items with Q-values greater than that value were discarded. The median Q-value was 2.75 and the range of Q-values, .59 through 5.32.

Table I contains, for each surviving statement: its respective scale-value, Q- or ambiguity-values, its number on the scale administered to the original group of judges, and its corresponding number on the second-trial form.

Thus the 50 per cent of the statements which exhibited the greatest degree of spread of ratings were eliminated. Those statements which exhibited the least amount of ambiguity were retained for inclusion in the final item selection process (5:210-211).

TABLE I
 SCALE (MEDIAN) AND AMBIGUITY (Q) VALUES FOR
 THE LEAST AMBIGUOUS ITEMS AND PHI
 COEFFICIENTS FOR SURVIVING
 ITEMS

1st Admini- stration Item Number	2nd Admini- stration Item Number	Scale (Median) Value	Ambiguity (Q) Value	Phi Coeffi- cients
2	1			
4	2*	8.69	1.59	.58
8	5	8.50	2.14	.48
12	6	5.19	2.55	.13
13	7*	2.25	2.42	.28
18	9*	1.25	1.45	.26
19	10	8.67	1.91	.28
20	11	8.10	2.82	.14
22	12	8.42	1.98	.13
27	13	8.30	2.25	.50
29	14	8.71	1.19	.59
30	15			
34	16			
36	17			
40	19*	8.36	1.96	.39
41	20*	7.95	2.58	.50
44	22	8.36	1.89	.63
45	23	8.56	2.07	.40
50	24*	8.27	2.28	.63
53	27	8.67	1.33	.59
59	30	8.77	1.03	.16
70	34	8.33	1.96	.38
79	38	7.75	2.66	.63
87	42*	8.79	0.94	.38
89	44	7.93	2.57	.67
93	47*	7.17	2.62	1.00
98	48*	8.53	2.14	.74

*Selected for final form of attitude scale

The 54 items which remained (Appendix D) had Q-values ranging from .59 through 2.82. These items comprised the second trial form of the scale and were administered to 32 students at Central Washington State College and enrolled in Introduction to Graduate Study courses. In contrast to the directions for the ratings of the judges, these subjects were asked to check the mark along a six-point continuum which most nearly described their attitude toward each statement. Response weights were assigned to the 54 items from the ratings, so that the items could be scored in the usual Likert fashion:

5	4	3	2	1	0
SA	A	MA	MD	D	SD
Strongly Agree	Agree	Mildly Agree	Mildly Disagree	Disagree	Strongly Disagree

The response-weights were reversed on items one and six (Appendix G) from the above order. Typical of the Likert scales, this allows a respondent to express a favorable attitude by disagreeing with a negative statement.

Total response-scores ranged from 127 through 227. The range of scores possible was from 0 through 270. The upper and lower 25 per cent of the opinionnaires, in terms of total response scores, were then selected for further statistical treatment. As 32 subjects had participated in

this phase of the construction of the scale, the eight highest and eight lowest opinionnaires are referred to as the high group and the low group.

The upper and lower groups were isolated in order to facilitate the selection of items which were most discriminating between the two groups. If, for example, a majority of the subjects in the high group tended to assign high response-weights to a statement, and if a majority of those in the low group assigned low response-weights to a statement, the statement would be considered to be discriminating between the two groups. Such items were retained for inclusion in the final form of the scale. Items which failed to exhibit such correlation were labeled non-discriminatory and discarded.

For each of the 54 statements, a distribution was obtained which exhibited the frequency for each response-category for each of the groups, i.e., high and low (Appendix E), as was suggested by Edwards (5:211-212). Using each of these obtained distributions, the six-response categories were reduced to two categories by combining the . . . Strongly Disagree, Disagree, Mildly Disagree and Mildly Agree. . . etc., and by combining the Strongly Agree and Agree categories (Appendix F). For each statement there then existed for each group, an Agree and Disagree score.

From these scores phi coefficients were computed for each statement so that the relative discriminatory power of each could be established (5:214). Appendix F illustrates the calculation of a phi-value for item number 6.

The phi coefficients for the useable items obtained from the group of 54 statements ranged in value from .13 through 1.00, as were listed on Table I. Twenty-one of the statements not given in the table failed to yield phi coefficients greater than .00 and were immediately excluded from further consideration. The remaining 23 statements were then arranged according to scale-values and phi coefficients along the continuum 1 - 9, broken at one-half point intervals. Table II, page 31, illustrates the manner in which this was accomplished. Scale, ambiguity and phi-values of items, considered by most of the judges to express negative attitudes toward school psychologists, are located near the middle and favorable or more positive statements, toward the upper end.

Items numbered 9 and 7 were selected for inclusion in the scale primarily due to their low scale values. Items 2, 19, 20, 24, 42 and 48 were chosen from among the available favorable items due to combinations of relatively appropriate scale-values and relatively higher phi-values. Although more than eight statements could have been selected from the 23,

a greater number of favorable statements, without some balancing-by-unfavorable, seemed inappropriate for the final scale. Especially is this true if the eight items provide a reliable opinionnaire (stability coefficient = .76). Forty-eight respondents, who had placed a number on their first opinionnaire were asked to complete a second administration two weeks later. The same number, with personal identities unknown, was placed on the second form. A Pearson product-moment coefficient was calculated and an r of .76 was obtained. A reliability coefficient of such magnitude suggests that the consistency with which the 48 subjects responded to the attitude scale on the two administrations was sufficiently high to justify the use of the eight Likert-type items as a scale. The selected eight items together with an appropriate list of instructions, were used in the final form of the scale (Appendix G, Part I).

TABLE II

SCALE (MEDIAN), AMBIGUITY (Q), AND RHI VALUES OF STATEMENTS CHOSEN FOR INCLUSION IN FINAL FORM OF ATTITUDE SCALE

"UNFAVORABLE" ZONE			"NEUTRAL" SCALE ZONE										"FAVORABLE ZONE"		
1.0-	1.5-	2.0-	2.5-	3.0-	3.5-	4.0-	4.5-	5.0-	5.5-	6.0-	6.5-	7.0-	7.5-	8.0-	8.5-
1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0
9	1.25*	2.25					5.19						7.95	8.10	8.69
	.26**	7 .28					.13						20 .50	.14	2 .58
	1.45***	2.42					2.55						2.58	2.82	1.59
													7.75	8.42	8.50
													.63	.13	.48
													2.66	1.98	.14
													7.93	8.30	8.67
													.67	.50	.28
													2.57	2.25	1.91
													7.17	19 8.36	8.56
													1.00	.39	.40
													2.62	1.96	2.07
														8.36	8.67
														.63	.59
														1.89	1.33
														8.27	8.77
													24 .63	.16	
													2.28	1.03	
													8.33	8.79	
													.38	42 .38	
													1.96	.94	
															48 8.53
															.73
															2.14
															8.71
														31 .59	
															1.19

*scale value

**phi value

***ambiguity value

(Number to left represents number of statement on administration and indicates those to be chosen and included on final form of the scale)

Open-End Questions

It was expected that the addition of several short answer, open-ended completion-type items would give the respondents opportunity to express candidly their feelings pertaining to important areas of school psychology. Five phrases were chosen to be used for that portion of the opinionnaire (Appendix G, Part II). The phrases were:

9. When I refer children to the psychologist _____
10. School psychologists that I know _____
11. Psychological reports that I have read _____
12. After having conferred with the school psychologist

13. The psychologist's recommendations _____

Descriptive Information

The third page of the final scale was comprised of categories dealing with the following descriptive information:

1. Sex
2. Years of teaching experience
3. Number of referrals made to the psychologist
4. Grade level taught for the greatest number of years
5. Purpose for attending summer school
6. Geographic region in which now teaching
7. Number of school psychologists worked with
(Appendix G, Part III)

These data provided the description of the respondents. This was used in establishing testable hypotheses about possible sources of differences in opinions about school psychologists.

II. POPULATION AND SAMPLES USED

Population

The population was comprised of graduate students, most all of whom were teachers in Washington State, enrolled in 1966 summer session courses at Central Washington State College.

Sample

The results of this study were based upon the responses of 141 teachers and/or administrators who had at least one year of classroom teaching experience. Only those classes in which it was suspected a preponderance of experienced teachers would be enrolled were asked to participate in the study. The opinionnaires were distributed and collected during regular class sections by the writer. The cooperation of the instructors of the classes selected for participation was obtained in all cases.

Completion of Part III of the questionnaire by members of the sample revealed the following descriptive information:

	<u>Respondents</u>
Sex:	
	(Male) 45
	(Female) 60
Years of Experience:	
	(1 to 5 years) 81
	(6 or more) 60
Referrals made to the school psychologist:	
	(None) 30
	(1 to 5) 69
	(6 or more) 42
Grade taught for greatest number of years:	
	(Primary) 58
	(Intermediate) 42
	(Secondary) 41
Purpose in Attending Summer School:	
	(Fifth Academic year) 60
	(Master's Degree) 62
	(Study for own benefit) 19
Region where Employed:	
	(Eastern Washington) 31
	(Central Washington) 44
	(Western Washington) 60
	(Other) 6
Number of Psychologists whom each had worked with:	
	(No Psychologist) 28
	(One Psychologist) 40
	(More than one) 73

The number of subjects, the courses in which they were enrolled, and the corresponding percentage of the total sample of each group represented is presented in Table III.

TABLE III

NUMBER OF SUBJECTS, COURSE ENROLLED IN
WHEN SURVEYED AND PER CENT OF TOTAL
SAMPLE REPRESENTED BY EACH GROUP

COURSE		TITLE	NUMBER	PER CENT OF SAMPLE
Education	421	Modern Reading Program Primary	36	26
Education	422	Modern Reading Program Intermediate	28	20
Education	507	Introduction to Graduate Study	21	15
Education	428	Modern Arithmetic Program Intermediate-upper	5	4
Education	343	Educating Exceptional Children	6	4
Psychology	457	Psychology of Exceptional Children	9	6
Education	459	Teacher-Counseling	36	26
TOTAL			141	

Eight of the Education 421 subjects, thirty-four of the Education 459 subjects, and six of the Education 343 subjects participated in that portion of the study designed to determine the reliability (test-retest or temporal stability) of the attitude scale.

III. ANALYSIS OF DATA

In order to make judgments with some degree of certainty regarding the hypotheses which have been formulated, chi-square tests of independence were calculated. These were used to determine the significance of the differences which existed among the total response scores of the groups compared. Hypotheses involving more than one set of data, or combining descriptive values for the same scale, can be tested for significance with X^2 ; hence, this test of significance was used.

CHAPTER IV

RESULTS

I. GENERAL ATTITUDES TOWARD SCHOOL PSYCHOLOGISTS

The overall general hypothesis was that attitudes reflected by responses to the opinionnaire indicate that teachers have unfavorable attitudes toward school psychologists. This was not supported from the results of the study. Although, as stated in the Procedure, the general hypothesis can not be, statistically that is, accepted or rejected. Trends indicate overall favorable rather than unfavorable attitudes.

To facilitate the presentation of the distribution of responses to the attitude-scale-statements, Table IV was constructed. The rows indicate the weights assigned to statements, and the columns the numbers of the eight individual statements. The values within the cells are the frequencies with which a given response-weight was assigned to a particular item. Examination of the distributions and means and standard deviations in Table IV suggests generally how the sample responded to the specific items on the attitude scale. Larger numbers (5) showed

highly favorable attitudes toward school psychologists; and
(1) very unfavorable; with those near (3) as neutral:

1. The collective responses of members of the sample to item Number 1, i.e., "School psychologists have difficulty establishing rapport with parents," indicates a good deal of indecision. (As approximately 70 per cent of the respondents assigned to this statement, weights between two and four on the five-point continuum they expressed neutrality rather than agreement or disagreement.)
2. Statements 2, 3, 4, 5, 6, 7, were assigned response weights which indicated that members of the sample tended to agree with the statements.
 2. The School Psychologist is allied with Teachers in helping them develop further skills and understandings in their work with children.
 3. School Psychologists should be given greater opportunity to participate in the establishment and administration of the psychological services program.
 4. School Psychologists are capable of helping Teachers with children who display learning problems.
 5. Teachers respect the findings of School Psychologists.
 6. School Psychologists try to avoid conferencing Teachers and Principals.
 7. The School Psychologist provides vital services to the school.
3. Members of the sample were somewhat undecided in their opinions relative to the eighth statement: "School Psychologists are capable of defining their role."
4. As evidenced by the total scale-mean and standard deviation, members of the sample surveyed tend to hold favorable attitudes toward School Psychologists.

TABLE IV
 DISTRIBUTION OF RESPONSE WEIGHTS, MEANS
 AND STANDARD DEVIATIONS CALCULATED
 FROM TOTAL RESPONSE SCORES

		Item Number								Total Scale
		1	2	3	4	5	6	7	8	
SD	1	6	3				2			
D	2	49	13	7	6	27	18	7	21	
N	3	31	14	29	13	31	40	15	33	
A	4	52	87	61	83	69	58	67	69	
SA	5	3	24	44	39	14	23	52	18	
N=		141	141	141	141	141	141	141	141	
M		2.98	3.75	4.01	4.10	3.50	3.58	4.16	3.45	3.72
δ		1.00	1.20	0.80	0.70	0.90	1.00	0.80	1.40	1.00

II. OUTCOME OF SPECIFIC HYPOTHESES

Specific hypotheses purported to describe sex, experience, and other differences within the sample are testable for significance and chi-square was chosen to test whether teacher characteristics accounted for differences in opinion.

To determine the chi-square values, it was necessary to categorize the five-point continuum by means of which response-weights were assigned to the Likert-type items. Since the total response-scores were distributed from a low of 18 (unfavorable) to a high of 38 (favorable), there existed a twenty-point range of scores.

Since distributions were not normal and tended to be skewed favorably, three categories of responses adequately served for substitution into the chi-square formula. The categories contained intervals of seven total points each and were titled Favorable, Neutral and Least Favorable. An example of the manner in which chi-square was calculated in this study is shown in Appendix H.

Chi-square values, shown in Table V, were calculated to determine whether or not differences significant at the .05 level of confidence existed for the hypotheses as stated in Chapter I, and summarized below:

Sex: Male versus female.

Experience: One to five years versus six or more.

Number of Referrals: None versus one-to-five; versus six or more.

Grade Level: Primary versus Intermediate versus Secondary.

Level of Preparation: Fifth Year versus Other versus Master's Degree.

Number of Contacts with the School Psychologist: None versus One versus More than One.

No differences were found to be significant at the .05 level of confidence. (From the sample of teachers, none of the various characteristics of teachers was significantly different in accounting for attitudes toward School Psychologists.)

TABLE V
 CHI SQUARE VALUES RESULTING FROM TOTAL
 RESPONSE SCORE COMPARISONS
 WITH CERTAIN TEACHER
 VARIABLES

Category	df	χ^2	Needed for Significance at .05 level	Approximate Level of Signi- ficance Attained
Sex (Male vs Female)	2	1.9981	5.991	.5
Experience (1-5 yrs vs 6+)	2	2.1291	5.991	.3
Referrals (0 vs 1-5 vs 6+)	4	4.751	9.488	.3
Grade (Primary vs Int. vs Sec.)	4	4.8042	9.488	.3
Preparation (5th yr vs Other vs Master's)	4	3.2853	9.488	.5
Contacts (0 vs 1 vs 1+)	4	3.1725	9.488	.5

III. DISCUSSION

The most predominant attitude expressed in response to Item 12: After having conferred with the Psychologist- was one exhibiting confidence in and acceptance of school psychologists. Approximately 44 per cent of the responses edited were similar to the ones cited below:

" . . . I felt I understood the child much better."

" . . . test data has (sic) been more meaningful."

" . . . I feel relieved that there is an answer or solution to the problem. Often they are much more familiar with our students than are we, and can help immensely."

" I will carry out their suggestions if they are at all practical and possible within the framework of the classroom."

Eighteen per cent had never conferred personally with a school psychologist: some because they "hadn't had to;" some, because their school principals communicated with the psychologist; and others, for reasons not stated.

Twelve per cent of the responses to Item 12 were so difficult to interpret that they were not used.

"I find he is usually getting more money and wasting more time than he is worth," and similar criticisms were expressed by approximately 20 per cent of the sample, e.g.,

" . . . ideas too idealistic in scope--not practical in usage compared to time and understanding."

" . . . I never get any specific help."

" . . . one teacher was just given a psychology book and left on her own as to what to do with the child."

" . . . I don't know any more than I did before--and sometimes wonder if he isn't analyzing me?"

" . . . I feel confused."

Approximately 5 per cent of the responses to Item 12 expressed some concern with " . . . the obvious burden which they were carrying in work-load."

Responses to the phrase: The Psychologist's recommendations: . . . with rough grouping in fairly typical statements:

" . . . Many times are not practical within a classroom situation." (25 per cent)

" . . . Are usually helpful and lead to better understanding of the child." (25 per cent)

" . . . Are usually sound." (16 per cent)

" . . . I did not see any until the following year. They were not specific, just described the conditions, not any recommendations." (8 per cent)

" . . . usually very good but need more follow-up." (7 per cent)

Thirty-four per cent of the responses to Item 9 seemed to express confidence in the ability of school psychologists and desires for personal conferences with the psychologist after receiving the written report. Another 20 per cent of the respondents stated that they refer

children because: "I feel more confident that they will be helped than if I had not referred them and attempted to handle the problem myself." Approximately one-fourth of those who responded to Item 9: When I refer children to the Psychologist: either had not referred children because of a variety of circumstances or would do so only as a last resort since, "They find a child has a problem but do not know how to help solve the problem." Approximately 12 per cent of the respondents were critical of school psychologists. They felt: "It takes too long for any response and very little follow up." A variety of responses dealing with reasons for teacher referral, the nature of the school psychologist's work in specific instances, reports received, and other miscellaneous factors, constituted approximately 10 per cent of the responses to Item 9.

Responses to Item 10: School Psychologists that I know: were quite varied. Among the more charitable responses (33 per cent) to Statement 10 were comments such as:

" . . . are friendly, helpful and cooperative . . . really concerned with helping all people concerned: teacher, pupil, parents and administration."

" . . . a much needed addition to our school staff."

Twenty-three per cent of the responses to Statement 10 were so varied as to defy classification. A few subjects simply listed the names of psychologists they knew, while others had met "good and bad" psychologists or had known none. Some respondents were concerned with the work-load of school psychologists and their resulting effectiveness (21 per cent): ". . . have too many obligations and too little time to do most cases justice." Other respondents (20 per cent) were critical of their manner:

" . . . too diplomatic. . . indefinite about their findings . . . different from other school people (not all but an apparent high percentage)."

" . . . tend to be wordy . . . head's above the clouds . . . coldly impersonal."

" . . . act like they're God's answer to Education . . . actually incapable of any actual improvements in the child, no matter how they may show their proficiency in chartmaking, etc."

Responses to the phrase, Psychological reports that I have read were edited according to three general categories, i.e., Favorable, Ambiguous, or No Response and Unfavorable. Comprising approximately 45 per cent of the comments, were critical statements such as:

" . . . contain many highly technical terms and I find I am never quite sure what is meant."

" . . . point out many of the findings the teacher is already aware of."

- " . . . laden with psychological jargon."
- " . . . talk around what they're trying to say."
- " . . . Summaries that I have written have caused me to be very careful as to fact. . . psychological reports need to be more careful. We and/or they are not God."
- " . . . redundant and recommendations are seldom practical in a teaching situation with a 30:1 ratio."

Typical of the favorable comments elicited by Item 11 are the following, which comprised approximately 40 per cent of the responses:

- " . . . were very complete with specific findings and suggestions."
- " . . . gave much understanding of a child's problem so I could better deal with the problem."
- " . . . are well written in a language easily understood by teachers . . ."
- " . . . give very objective facts about a student both from testing and observation."

Approximately 15 per cent of the subjects either failed to respond to Item 11 or did so ambiguously.

No way has been specifically devised to convert qualitative comments so as to allow direct comparison with attitude scale total scores. However, a favorable attitude is discerned from the qualitative comments, but it would appear that this is somewhat less favorable than the highly favorable attitudes elicited on the Likert-type attitude scale responses.

CHAPTER V

SUMMARY

This study was conducted in an attempt to determine whether or not: (1) the responses of Washington State Elementary and Secondary Teachers, as reflected by their responses to an opinionnaire, would indicate that teachers have unfavorable attitudes toward school psychologists; (2) significantly different attitudes toward Psychologists exist among various groups of teachers.

Employing the Edwards-Kilpatrick Scale Discrimination Technique of Attitude Scale Construction, eight items were finally obtained for use in an opinionnaire used to assess teachers' opinions. Also included was one page of descriptive categories, designed to elicit pertinent information relative to the sample. Five completion-type items or phrases were contained in the questionnaire to provide respondents opportunities to make candid comments concerning school psychologists and their activities.

To determine the collective opinions of the sample in response to the attitude scale items, mean scores and standard deviations for each item and for the collection of items were calculated. A reliability coefficient

(two-week interval stability) of that portion of the questionnaire embodying the Likert items was found to be .76 (N=48)--sufficiently stable to justify use and analysis of results. The five completion-type items were evaluated according to logical categories determined by the nature of the statements.

Using total scores on the attitude scale, differences significant at the .05 level of confidence were not exhibited among the attitudes of those segments of the sample chosen for comparison purposes. It had been hypothesized that teachers with six or more years of experience would hold less favorable attitudes toward school psychologists than would those who had taught for less than six years. Computation of chi-square revealed that the difference in attitudes held by these two groups was not significant.

Again, no difference was found to exist in this study between the attitudes of men and women teachers toward school psychologists. The attitudes toward school psychologists held by teachers of primary, intermediate and secondary level classes did not differ significantly from one another. The number of times teachers had

referred children to the school psychologist did not significantly affect their attitudes toward psychologists.

The attitudes of the teachers in this study toward school psychologists was not dependent upon the number of contacts they may have had with school psychologists; nor their reasons for seeking post-graduate training.

As evidenced by their responses to the individual Likert-type statements, teachers tend to respect the findings of school psychologists and feel that school psychologists provide vital services to the schools. School psychologists are, in the opinion of those teachers sampled, capable of assisting teachers with children who display learning problems, and are allied with teachers in helping them develop further skills and understandings in their work with children. The teachers sampled were undecided as to whether or not school psychologists experienced difficulty establishing rapport with parents and whether or not psychologists were capable of defining their roles.

Experienced teachers tend to hold favorable attitudes toward school psychologists and feel that psychologists should be given more opportunities to participate in establishing and administering the psychological services program.

Responses to the open-end or sentence-completion items indicated that teachers are accepting of and willing to cooperate with school psychologists who offer specific and practical recommendations issued in personal conferences or reports which avoid technical jargon and redundancy. Many teachers were also concerned with a lack of follow-up following initial contact and delays in obtaining psychological services following referral. Among those expressing concern with psychological services delays, many felt that school psychologists were burdened with excessive case loads.

Although direct statistical comparisons cannot be made between the qualitative comments, the specific responses to the attitude scale items and the attitude scale totals, it seems that the results of the qualitative comments reflect somewhat less favorable attitudes toward school psychologists than do the attitude scale responses. However, all portions suggest general favorability of teachers' attitudes toward school psychologists. The teachers of this study seemed to feel that school psychologists should be given more opportunities to participate in the establishment and administration of psychological services programs. An examination should

be made of the extent to which school psychologists currently assist in these areas and the changes in their programs they would implement if given opportunities to do so. As this study was concerned only with "one side of the coin" it would be interesting to assess the attitudes of school psychologists toward teachers in a manner similar to that employed here. Perhaps such research would help to alleviate some of the misconceptions held by both groups.

Results of this study suggest that teachers' unfavorable attitudes toward school psychologists may be at least in part due to several routine activities of psychologists. Teachers seem to believe that written psychological reports, in spite of style, comprehensiveness and devotion to professional terminology, are redundant, jargon-filled "tributes to academia penned by omnipotent individuals . . . who occasionally breathe rarefied air." Perhaps the effectiveness of school psychologists would be enhanced if those of the "accused" would employ readily comprehensible vocabulary in reporting pertinent findings and practical recommendations to teachers.

The effectiveness of school psychologists may also be improved if psychologists would respond to referrals

without interminable delay. Teachers tend also to condemn school psychologists for not maintaining interest in referrals following one or two initial diagnostic sessions.

It seems that those who conscientiously practice psychology in the schools should be cognizant of these and other pertinent criticisms leveled by teachers if their efforts are to best serve worthwhile purposes.

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APPENDIX A

Initial Form of the Attitude Scale

INSTRUCTIONS FOR RATING OF ITEMS
(For item selection purposes)

1. If you find a statement which in your opinion expresses a very favorable attitude toward school psychologists encircle the letter "A".
2. If you find a statement which in your opinion expresses an attitude which is rather noncommittal or neutral toward school psychologists encircle the letter "E".
3. If you find a statement which in your opinion expresses a very unfavorable attitude toward school psychologists encircle the letter "I".
4. Other degrees of favorableness or unfavorableness may be indicated by encircling one of the several letters which represent the intermediate classifications.

The attitude continuum might, therefore, be represented as follows:

A	B	C	D	E	F	G	H	I
Favorable			Neutral			Unfavorable		

5. Note that you are asked to judge the statement. You are not asked to express your opinions toward school psychologists.
6. Do not omit any statements. If you were to do so, it would complicate the statistical analyses.
7. There has been no attempt to include statements with double or hidden meanings. Base your judgement upon the obvious meaning for the statement.

		<u>VERY FAVORABLE</u>			<u>NEUTRAL</u>			<u>VERY UNFAVORABLE</u>		
		A	B	C	D	E	F	G	H	I
A B C D E F G H I	1.	A competent psychologist can be expected to succeed in his work with all those referred to him.								
A B C D E F G H I	2.	School psychologists are qualified to administer and interpret projective tests.								
A B C D E F G H I	3.	School psychologists are qualified to give teachers special instruction in their construction of teacher-made tests.								
A B C D E F G H I	4.	School psychologists should be given greater opportunity to participate in the establishment and administration of the psychologist services program.								
A B C D E F G H I	5.	School psychologists tend to be noncommittal in their reports.								
A B C D E F G H I	6.	School psychologists should spend less time diagnosing.								
A B C D E F G H I	7.	I feel that psychological services in the school are becoming increasingly less important.								
A B C D E F G H I	8.	School psychologists should be permitted to counsel students.								
A B C D E F G H I	9.	The success of the school psychologist is partially determined by the degree of administrative support provided him.								
A B C D E F G H I	10.	School psychologists are aware of their limitations.								
A B C D E F G H I	11.	Teachers view the psychologist as an "outsider".								

<u>VERY FAVORABLE</u>					<u>NEUTRAL</u>	<u>VERY UNFAVORABLE</u>				
<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	<u>E</u>	<u>F</u>	<u>G</u>	<u>H</u>	<u>I</u>		
A	B	C	D	E	F	G	H	I	12.	School psychologists should report their findings to parents.
A	B	C	D	E	F	G	H	I	13.	School psychologists have difficulty establishing rapport with parents.
A	B	C	D	E	F	G	H	I	14.	School psychologists provide a valuable service to the school by attempting to enlist the cooperation of a child's father.
A	B	C	D	E	F	G	H	I	15.	Parents would rather speak with their child's teacher or principal, concerning his problems, than they would the school psychologist.
A	B	C	D	E	F	G	H	I	16.	School psychologists can function effectively without conferencing a child's parent.
A	B	C	D	E	F	G	H	I	17.	School psychologists try to avoid conferencing parents.
A	B	C	D	E	F	G	H	I	18.	School psychologists try to avoid conferencing teachers and principals.
A	B	C	D	E	F	G	H	I	19.	Principals view psychological services as being beneficial to the school program.
A	B	C	D	E	F	G	H	I	20.	Teachers view psychological services as being beneficial to the school program.
A	B	C	D	E	F	G	H	I	21.	Teachers are willing to participate in research projects promoted by the school psychologist.

<u>FAVORABLE</u>			<u>NEUTRAL</u>			<u>UNFAVORABLE</u>			
A	B	C	D	E	F	G	H	I	
A	B	C	D	E	F	G	H	I	22. Psychologists are capable of providing assistance to teachers who are interested in conducting research designed to improve the curriculum.
A	B	C	D	E	F	G	H	I	23. Once the psychologist has received a referral, the task of deciding the course of action to be followed in coping with the child referred, should be left to the school psychologist.
A	B	C	D	E	F	G	H	I	24. Principals are capable of interpreting the psychologist's written report to the referring teacher.
A	B	C	D	E	F	G	H	I	25. Principals are capable of interpreting the psychologist's written report to the referred child's parent.
A	B	C	D	E	F	G	H	I	26. School psychologists should try to become involved in the counseling of children.
A	B	C	D	E	F	G	H	I	27. Psychologists view children's problem more objectively than referring teachers do.
A	B	C	D	E	F	G	H	I	28. Principals welcome the confidential comments of school psychologists pertaining to inappropriate methods employed by teachers.
A	B	C	D	E	F	G	H	I	29. I feel that school psychologists can be trusted with confidential information.
A	B	C	D	E	F	G	H	I	30. School psychologists tend to be "gossips".

<u>VERY FAVORABLE</u>			<u>NEUTRAL</u>			<u>VERY UNFAVORABLE</u>			
A	B	C	D	E	F	G	H	I	
A	B	C	D	E	F	G	H	I	31. I feel that the school psychologist is as capable as a child's teacher, of determining the areas of the curriculum in which a given child is deficient.
A	B	C	D	E	F	G	H	I	32. I feel that school psychologists should know more about remedial practices.
A	B	C	D	E	F	G	H	I	33. I feel that teachers are better informed of remedial techniques than school psychologists are.
A	B	C	D	E	F	G	H	I	34. As far as I am concerned the school psychologist should confine his efforts to working with children in the special education program.
A	B	C	D	E	F	G	H	I	35. I feel that elementary school counselors are capable of functioning as school psychologists.
A	B	C	D	E	F	G	H	I	36. School psychologists refuse to consider many referrals.
A	B	C	D	E	F	G	H	I	37. School psychologists feel that many of the referrals made by teachers are unwarranted.
A	B	C	D	E	F	G	H	I	38. Teachers refer children to the school psychologist only to have their suspicions confirmed.
A	B	C	D	E	F	G	H	I	39. School psychologists feel that they should only be concerned with the emotional problems of children.
A	B	C	D	E	F	G	H	I	40. School psychologists are capable of helping teachers with children who display learning problems.

<u>VERY FAVORABLE</u>			<u>NEUTRAL</u>			<u>VERY UNFAVORABLE</u>			
A	B	C	D	E	F	G	H	I	
A	B	C	D	E	F	G	H	I	41. School psychologists are capable of defining their role.
A	B	C	D	E	F	G	H	I	42. Elementary principals should be permitted to determine the nature of the services the psychologist serving their particular building will provide.
A	B	C	D	E	F	G	H	I	43. School psychologists perceive themselves as being members of the regular school staff.
A	B	C	D	E	F	G	H	I	44. School psychologists strive to establish and maintain rapport with teachers.
A	B	C	D	E	F	G	H	I	45. School psychologists strive to establish and maintain rapport with principals.
A	B	C	D	E	F	G	H	I	46. The psychologist attempts to maintain a closer relationship with teachers than with principals.
A	B	C	D	E	F	G	H	I	47. The school psychologist has a great deal of respect for the recommendations of referring teachers.
A	B	C	D	E	F	G	H	I	48. Parents approve of having the school psychologist work with their children.
A	B	C	D	E	F	G	H	I	49. Parents respect the findings of school psychologists.
A	B	C	D	E	F	G	H	I	50. Teachers respect the findings of school psychologists.
A	B	C	D	E	F	G	H	I	51. Principals respect the findings of the school psychologist.

<u>VERY FAVORABLE</u>					<u>NEUTRAL</u>					<u>VERY UNFAVORABLE</u>					
A	B	C	D	E	F	G	H	I							
A	B	C	D	E	F	G	H	I	52.	I feel that the school psychologist is an "odd ball".					
A	B	C	D	E	F	G	H	I	53.	The school psychologist seems to be genuinely interested in the problems of children.					
A	B	C	D	E	F	G	H	I	54.	I feel that the school psychologist is interested in conducting research.					
A	B	C	D	E	F	G	H	I	55.	The school psychologist spends too much time conducting research.					
A	B	C	D	E	F	G	H	I	56.	The school psychologist refers emotionally disturbed children to other agencies.					
A	B	C	D	E	F	G	H	I	57.	The school psychologist tends to business.					
A	B	C	D	E	F	G	H	I	58.	The school psychologist spends too much time diagnosing.					
A	B	C	D	E	F	G	H	I	59.	I feel that the school psychologist is a necessary member of the staff.					
A	B	C	D	E	F	G	H	I	60.	Teachers refer children to the school psychologist reluctantly.					
A	B	C	D	E	F	G	H	I	61.	School psychologists are usually overworked.					
A	B	C	D	E	F	G	H	I	62.	School psychologists try to limit the number of children they work with.					
A	B	C	D	E	F	G	H	I	63.	Elementary school principals are more adequately qualified to serve as Directors of Special Education than are school psychologists.					

<u>VERY FAVORABLE</u>					<u>NEUTRAL</u>					<u>VERY UNFAVORABLE</u>								
A	B	C	D	E	F	G	H	I										
A	B	C	D	E	F	G	H	I	64.	I maintain that the school psychologist should have teaching experience.								
A	B	C	D	E	F	G	H	I	65.	I feel that any teacher who takes the necessary courses can become a competent school psychologist.								
A	B	C	D	E	F	G	H	I	66.	It is the responsibility of the psychologist to locate and report psychologically damaging aspects of the school program.								
A	B	C	D	E	F	G	H	I	67.	Research by the psychologist is seen as a threat to pet ideas.								
A	B	C	D	E	F	G	H	I	68.	The recommendations of school psychologists are seldom respected.								
A	B	C	D	E	F	G	H	I	69.	School psychologists are primarily diagnosticians.								
A	B	C	D	E	F	G	H	I	70.	School psychologists should act as consultants to the school system in all matters in which the knowledge and insight of psychology can further the aims of education.								
A	B	C	D	E	F	G	H	I	71.	I would consider a mental health program promoted by the psychologist to be just another burden to be borne by the teacher.								
A	B	C	D	E	F	G	H	I	72.	The duties of the school psychologist are vague.								
A	B	C	D	E	F	G	H	I	73.	Some ascribe great powers of omnipotence to the school psychologist.								
A	B	C	D	E	F	G	H	I	74.	School psychologists are advisors, not administrators.								

<u>VERY FAVORABLE</u>			<u>NEUTRAL</u>			<u>VERY UNFAVORABLE</u>			
A	B	C	D	E	F	G	H	I	
A	B	C	D	E	F	G	H	I	75. The school psychologist is continually perceived as representing a personal threat to his colleagues.
A	B	C	D	E	F	G	H	I	76. School psychologists often assume a superior attitude.
A	B	C	D	E	F	G	H	I	77. School psychologists often display a lack of tact.
A	B	C	D	E	F	G	H	I	78. The school psychologist's contribution to the solution of educational problems is only through the interpretation of individual and group testing data.
A	B	C	D	E	F	G	H	I	79. School psychologists are concerned with the recommendations of teachers.
A	B	C	D	E	F	G	H	I	80. The diagnostic services performed by the school psychologists merely serve to confirm the suspicions of teachers.
A	B	C	D	E	F	G	H	I	81. School psychologists tend to offer impractical recommendations.
A	B	C	D	E	F	G	H	I	82. School psychologists seem to feel that they have "all the answers".
A	B	C	D	E	F	G	H	I	83. School psychologists reports are clearly written.
A	B	C	D	E	F	G	H	I	84. School psychologists are basically concerned with the placement of children in special education.
A	B	C	D	E	F	G	H	I	85. It is sufficient for the school psychologist to report results of testing, theory or research, and leave the task of implementing these findings to teachers and administrators.

<u>VERY FAVORABLE</u>		<u>NEUTRAL</u>	<u>VERY UNFAVORABLE</u>
A	B	C	D E F G H I
A B C D E F G H I		86.	The recommendations of the school psychologist, if practical, are usually implemented by the school.
A B C D E F G H I		87.	The school psychologist provides vital services to the schools.
A B C D E F G H I		88.	The school psychologist often fails to communicate in any way with teachers after accepting a referral.
A B C D E F G H I		89.	The school psychologist offers many recommendations on helpful school procedure.
A B C D E F G H I		90.	Recommendations made by the school psychologist tend to be very general-ineffective.
A B C D E F G H I		91.	The school psychologist's reports include professional concepts above the level of the teacher's understanding.
A B C D E F G H I		92.	The school psychologist's reports carry implications of blame.
A B C D E F G H I		93.	Psychologists seem to be competent in their own field.
A B C D E F G H I		94.	Psychologists are well-informed of classroom procedures.
A B C D E F G H I		95.	Psychologists rely heavily upon written reports as a means of communicating with the school.
A B C D E F G H I		96.	School psychologists are often regarded by teachers as being omnipotent individuals capable of and subsequently possessed with, intentions of solving any and all problems brought to their attention.

<u>VERY FAVORABLE</u>		<u>NEUTRAL</u>	<u>VERY UNFAVORABLE</u>
A	B	C	E F G H I
A B C D E F G H I		97.	Teachers rely on the school psychologist for pat answers and magical diagnoses.
A B C D E F G H I		98.	The school psychologist is allied with teachers in helping them develop further skills and understandings in their work with children.
A B C D E F G H I		99.	School psychologists tend to be laws unto themselves in their daily activities.
A B C D E F G H I		100.	School psychologists give orders to principals.
A B C D E F G H I		101.	School psychologists expect teachers to meet for conferences at the psychologist's convenience.
A B C D E F G H I		102.	School psychologists ignore building schedules when working with children.
A B C D E F G H I		103.	Psychologists are inadequately skilled in human relations.
A B C D E F G H I		104.	Psychologists strive to be spectacular in dress, manner and conduct.
A B C D E F G H I		105.	School psychologists should play a key role in school planning.
A B C D E F G H I		106.	School psychologists need little preparation.
A B C D E F G H I		107.	Too much emphasis is placed upon the importance of psychological services in the elementary school.

WHEW!

THANK YOU VERY MUCH!

APPENDIX B

Tally Sheet Used In Item Selection Process

SUMMARY SHEET FOR ITEM SELECTION PROCESS

Item Number	28	TOTALS
A	111X 111X 1	11
B	111X 111X	10
C	111X 1	6
D	1111	4
E	111X 111X 11	12
F	1	1
G	111	3
H	1	1
I	111X 111X 11	12
Item Number	29	60
A	111X 111X 111X 111X 111X 111X 111X 111	38
B	111X 111X 11	12
C	11	2
D	11	2
E		0
F	11	2
G	1	1
H		0
I	111	3
Item Number	30	60
A	1	1
B	1	1
C	1	1
D		0
E	1111	4
F		0
G	11	2
H	11	2
I	111X 111X 111X 111X 111X 111X 111X 111X 111X 1111	49

Item #28 - Principals welcome the confidential comments of school psychologists pertaining to inappropriate methods employed by teachers.

Item #29 - I feel that school psychologists can be trusted w/ confidential information.

Item #30 - School psychologists tend to be "gossips."

APPENDIX C

Illustrative Computation of Scale
and Ambiguity Values

COMPUTATION OF SCALE AND AMBIGUITY VALUES FOR
STATEMENTS RATED BY JUDGES

Score Intervals	f	Cumf	Cum%	Item Number	<u>29</u>
A 8.5-9.5	<u>38</u>	<u>60</u>	<u>100</u>	Rate =	<u> </u>
B 7.5-8.5	<u>12</u>	<u>22</u>	<u>37</u>	Scale Value =	<u>8.71</u>
C 6.5-7.5	<u>2</u>	<u>10</u>	<u>17</u>	Ambiguity Value =	<u>1.19</u>
D 5.5-6.5	<u>2</u>	<u>8</u>	<u> </u>	(Q ₃ -Q ₁)	
E 4.5-5.5	<u>0</u>	<u>6</u>	<u> </u>		
F 3.5-4.5	<u>2</u>	<u>6</u>	<u> </u>		
G 2.5-3.5	<u>1</u>	<u>4</u>	<u> </u>		
H 1.5-2.5	<u>0</u>	<u>3</u>	<u> </u>		
I .5-1.5	<u>3</u>	<u>3</u>	<u> </u>		

$$Q_3 = Q_{3i} + \left[\frac{3/4N - fQ_{3i}}{fQ_{3i}} \right] \cdot i$$

$$8.5 + \left(\frac{45-22}{38} \right) \quad 8.5+.61=9.11$$

$$Q_2 = Q_{2i} + \left[\frac{1/2N - fQ_{2i}}{fQ_{2i}} \right] \cdot i$$

$$8.5 + \left(\frac{30-22}{38} \right) \quad 8.5+.21= 8.71$$

$$Q_1 = Q_{1i} + \left[\frac{1/4N - fQ_{1i}}{fQ_{1i}} \right] \cdot i$$

$$7.5 + \left(\frac{15-10}{12} \right) \quad 7.5+.42=7.92$$

Formulas from: Ruch (16:29-30)

APPENDIX D

Second Trial Form of the Attitude Scale

INSTRUCTIONS FOR COMPLETION OF INITIAL SCALE

1. Read each statement carefully, and then place a check mark in the column which most nearly describes your attitude to the statement.
2. Your attitude is expected to fall somewhere along the continuum represented by:
 - SA (Strongly Agree)
 - A (Agree)
 - MA (Mildly Agree)
 - MD (Mildly Disagree)
 - D (Disagree)
 - SD (Strongly Disagree)

In other words, you are being "forced" to express an opinion with respect to each item in the form.

3. Do not check any statement more than once and please do not omit statements. If you were to do so, the statistical analyses would be complicated.
4. There has been no attempt to include statements with double or hidden meanings. Base your response upon the obvious meaning for the statements.

THANK YOU FOR YOUR COOPERATION

- SA A MA MD D SD 1. School psychologists are qualified to administer and interpret projective tests.
- SA A MA MD D SD 2. School psychologists should be given greater opportunity to participate in the establishment and administration of the psychological services program.
- SA A MA MD D SD 3. School psychologists should spend less time diagnosing.
- SA A MA MD D SD 4. Psychological services in the school are becoming increasingly less important.
- SA A MA MD D SD 5. School psychologists should be permitted to counsel students.
- SA A MA MD D SD 6. School psychologists should report their findings to parents.
- SA A MA MD D SD 7. School psychologists have difficulty establishing rapport with parents.
- SA A MA MD D SD 8. School psychologists try to avoid conferencing parents.
- SA A MA MD D SD 9. School psychologists try to avoid conferencing teachers and principals.
- SA A MA MD D SD 10. Principals view psychological services as being beneficial to the school program.
- SA A MA MD D SD 11. Teachers view psychological services as being beneficial to the school program.
- SA A MA MD D SD 12. Psychologists are capable of providing assistance to teachers who are interested in conducting research designed to improve the curriculum.
- SA A MA MD D SD 13. Psychologists view children's problems more objectively than referring teachers do.

- SA A MA MD D SD 14. School psychologists can be trusted with confidential information.
- SA A MA MD D SD 15. School psychologists tend to be "gossips".
- SA A MA MD D SD 16. The school psychologist should confine his efforts to working with children in the special education program.
- SA A MA MD D SD 17. School psychologists refuse to consider many referrals.
- SA A MA MD D SD 18. School psychologists feel that they should only be concerned with the emotional problems of children.
- SA A MA MD D SD 19. School psychologists are capable of helping teachers with children who display learning problems.
- SA A MA MD D SD 20. School psychologists are capable of defining their role.
- SA A MA MD D SD 21. Elementary principals should be permitted to determine the nature of the services the psychologist serving their particular building will provide.
- SA A MA MD D SD 22. School psychologists strive to establish and maintain rapport with teachers.
- SA A MA MD D SD 23. School psychologists strive to establish and maintain rapport with principals.
- SA A MA MD D SD 24. Teachers respect the findings of school psychologists.
- SA A MA MD D SD 25. Principals respect the findings of the school psychologist.
- SA A MA MD D SD 26. The school psychologist is an "odd ball".

- SA A MA MD D SD 27. The school psychologist seems to be genuinely interested in the problems of children.
- SA A MA MD D SD 28. The school psychologist spends too much time conducting research.
- SA A MA MD D SD 29. The school psychologist spends too much time diagnosing.
- SA A MA MD D SD 30. The school psychologist is a necessary member of the staff.
- SA A MA MD D SD 31. Teachers refer children to the school psychologist reluctantly.
- SA A MA MD D SD 32. Any teacher who takes the necessary courses can become a competent school psychologist.
- SA A MA MD D SD 33. The recommendations of school psychologists are seldom respected.
- SA A MA MD D SD 34. School psychologists should act as consultants to the school system in all matters in which the knowledge and insight of psychology can further the aims of education.
- SA A MA MD D SD 35. A mental health program promoted by the psychologist is just another burden to be borne by the teacher.
- SA A MA MD D SD 36. School psychologists often assume a superior attitude.
- SA A MA MD D SD 37. School psychologists often display a lack of tact.
- SA A MA MD D SD 38. School psychologists are concerned with the recommendations of teachers.
- SA A MA MD D SD 39. The diagnostic services performed by the school psychologists merely serve to confirm the suspicions of teachers.

- SA A MA MD D SD 40. School psychologists tend to offer impractical recommendations.
- SA A MA MD D SD 41. School psychologists seem to feel that they have "all the answers".
- SA M MA MD D SD 42. The school psychologist provides vital services to the school.
- SA A MA MD D SD 43. The school psychologist often fails to communicate in any way with teachers after accepting a referral.
- SA A MA MD D SD 44. The school psychologist offers many recommendations on helpful school procedure.
- SA A MA MD D SD 45. Recommendations made by the school psychologist tend to be very general-ineffective.
- SA A MA MD D SD 46. The school psychologists's reports carry implications of blame.
- SA A MA MD D SD 47. School psychologists seem to be competent in their own field.
- SA A MA MD D SD 48. The school psychologist is allied with teachers in helping them develop further skills and understandings in their work with children.
- SA A MA MD D SD 49. School psychologists give orders to principals.
- SA A MA MD D SD 50. School psychologists expect teachers to meet for conferences at the psychologist's convenience.
- SA A MA MD D SD 51. School psychologists ignore building schedules when working with children.
- SA A MA MD D SD 52. Psychologists are inadequately skilled in human relations.

SA A MA MD D SD

53. School psychologists need little preparation.

SA A MA MD D SD

54. Too much emphasis is placed upon the importance of psychological services in the elementary school.

APPENDIX E

Illustrative Initial Tally On Second
Administration of Trial Form

ILLUSTRATIVE INITIAL TALLY ON SECOND
ADMINISTRATION OF TRIAL FORM

Item # 6

	<u>Respondents</u>	<u>High Group</u>	<u>Low Group</u>
Strongly Agree	5	/// 3	/// 2
Agree	4	/// 2	/// 2
Mildly Agree	3	/ 1	/// 3
Mildly Disagree	2	/ 1	
Disagree	1	/ 1	/ 1
Strongly Disagree	0		
		<u>(8)</u>	<u>(8)</u>
Agree		5	4
Disagree		3	4
		<u>8</u>	<u>8</u>

Item # 5

	<u>Respondents</u>	<u>High Group</u>	<u>Low Group</u>
Strongly Agree	5	/// 2	/// 2
Agree	4	/// 6	/// 3
Mildly Agree	3		/// 3
Mildly Disagree	2		
Disagree	1		
Strongly Disagree	0		
		<u>(8)</u>	<u>(8)</u>
Agree		8	5
Disagree		0	3
		<u>8</u>	<u>8</u>

APPENDIX F

Illustrative Calculation of Phi Coefficient To
Determine Discriminatory Power of Statements

CALCULATION OF PHI COEFFICIENT TO DETERMINE
DISCRIMINATORY POWER OF STATEMENTS
FOLLOWING SECOND ADMINISTRATION
OF TRIAL SCALE

	Low Group	High Group
Agree	4	5
	a	b
		9
		a+b

Disagree	4	3
	c	d
		7
		c+d

$$\frac{a+c}{8}$$

$$\frac{b+d}{8}$$

$$r\phi = \frac{bc-ad}{8}$$

$$\sqrt{(a+b)(b+d)(a+c)(c+d)}$$

$$r\phi = \frac{(5 \cdot 4) - (3 \cdot 4)}{8}$$

$$\sqrt{8 \cdot 8 \cdot 7 \cdot 9}$$

$$r\phi = \frac{8}{8}$$

$$\sqrt{4032}$$

$$r\phi = \frac{8}{63.6}$$

$$r\phi = .13$$

APPENDIX G

Final Form of the Attitude Scale

Instructions for Completion of Scale

1. Read each statement carefully, and then circle the letters which most nearly describe your attitude toward that statement.
2. Your attitude is expected to fall somewhere along the continuum represented by:
SA (strongly agree)
A (agree)
? (neutral or uncertain)
D (disagree)
SD (strongly disagree)

In other words, you are being asked to express an opinion with respect to each item.

3. Do not circle more than one set of letters and please do not omit any statements. If you were to do so, the statistical analyses would be complicated.
4. There has been no attempt to include statements with double or hidden meanings. Base your response upon the obvious meaning of the statements. (The eight statements which follow survived out of a list of 107 such statements which were statistically screened for ambiguity.)

- SA A ? D SD 1. School Psychologists have difficulty establishing rapport with parents.
- SA A ? D SD 2. The School Psychologist is allied with Teachers in helping them develop further skills and understandings in their work with children.
- SA A ? D SD 3. School Psychologists should be given greater opportunity to participate in the establishment and administration of the psychological services program.
- SA A ? D SD 4. School Psychologists are capable of helping Teachers with children who display learning problems.
- SA A ? D SD 5. Teachers respect the findings of School Psychologists.
- SA A ? D SD 6. School Psychologists try to avoid conferencing Teachers and Principals.
- SA A ? D SD 7. The School Psychologist provides vital services to the school.
- SA A ? D SD 8. School Psychologists are capable of defining their role.

Continued on the next page...

Part II (Sentence Completion Items)

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NOTE: It is hoped that your completion of the phrases or "stems" which follow will elicit comments indicative of your personal opinions relative to several general areas.

Please be as candid as you wish.....

9. When I refer children to the Psychologist:

10. School Psychologists that I know:

11. Psychological reports that I have read:

12. After having conferred with the School Psychologist:

13. The Psychologist's recommendations:

Continued on the next page.....

Part III (Descriptive Information)

PLEASE CHECK ONE OF EACH OF THE FOLLOWING CATEGORIES TO HELP IN ANALYSIS OF DATA:

79

1. Sex: Male _____ Female _____
2. Years of Teaching Experience: 1-5 _____ 6-10 _____ more than 10 years _____
3. Number of referrals made to the psychologist:
None _____ 1-5 _____ 6 or more _____
4. Grade level taught for greatest number of years:
Primary _____ Intermediate _____ Secondary _____
(Kdgn - 3rd) (4th-6th)
5. At Central I am seeking: 5th year requirement _____
Masters degree _____
Study primarily for own benefit _____
6. I teach in: Eastern Washington _____
Western Washington _____
Central Washington _____
Other _____
7. I have worked with: one Psychologist _____
more than one Psychologist _____
no psychologist

Thank You For Your Cooperation!

APPENDIX H

Illustrative Calculation of Chi-Square to Determine
Significance of the Difference

FORMULA AND ILLUSTRATION OF A CALCULATION OF
CHI-SQUARE (SIGNIFICANCE OF DIFFERENCE
BETWEEN TOTAL RESPONSE SCORES BY SEX)

 f_{rk}

Response Weight Category	Male	Female	f_r	f_{rk}^2	
Favorable 32-38	15	44	59		
Neutral 25-31	25	44	69	225	1936
Least Un-Favorable 18-24	5	8	13	625	1936
f_k	45	96	<u>141</u>	25	64
			141		

 $f_{rk} \cdot f_{rk}$

2655	5664
3105	6624
585	1248

 f_{rk}^2

f_{rk}^2	E_r		
$f_r f_k$			
	.0847	.3418	.4265
	.2013	.2923	.4936
	.0427	.0513	.0940
E_k	.3287	.6854	<u>1.0141</u>
			1.0141

$$\chi^2 = N \frac{f_{rk}^2}{f_r f_k} - 1$$

$$\chi^2 = N \quad 1.0141 - 1$$

$$\chi^2 = (141 \cdot .0141)$$

$$\chi^2 = 1.9881*$$

$$df = (r-1)(k-1)$$

$$df = (3-1)(2-1)$$

$$df = 2 \cdot 1$$

$$df = 2$$

*Value of 5.991 needed for significance at the .05 level of confidence w/2 degrees of freedom: Chi-square of 1.9881 is not significant.