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Graduate Research Experiences in School Psychology and Future Commitment to Conducting Research in Schools

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Graduate Research Experiences in School Psychology and Future Commitment to Conducting Research in the Schools

An Education Specialist Field Project

Presented to the

Department of Psychology

and the

Faculty of the Graduate College

University of Nebraska

In Partial Fulfillment

of the Requirements for the Degree

School Psychology

University of Nebraska at Omaha

by

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Education Specialist Field Project Acceptance

Acceptance for the faculty of the Graduate College, University of Nebraska, in partial fulfillment of the requirements for the degree Education Specialist, University of Nebraka at Omaha.

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Abstract

The execution of a research project is required by graduate training programs in school psychology. Yet little is known about the long-term consequences of completing a major research project on practitioner's attitudes towards research in the schools. This study surveyed Nebraska school psychologists regarding their research experiences in graduate school and what consequence it had on the daily practice of their profession. The survey itself contained three parts: (a) demographic data regarding their individual characteristics, (b) the quality of their research experience as a graduate student, and (c) whether their present day attitude towards research in the schools was related to their research experiences in graduate school.

Of the surveys returned from Nebraska school psychologists, three items were found to be significantly related to whether or not respondents would be willing to conduct research in the schools after their experience as a graduate student. These items included: the overall experience of completing their project; how helpful/cooperative faculty/staff were during the process, and how well their program of study prepared them to complete a major research project. There were indications that school psychology students feel somewhat negative toward conducting their required research project while simultaneously completing their internship, and, as school psychologists, they would more likely conduct research in the schools if they had the time.

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Graduate Research Experiences in School Psychology and Future Commitment to Conducting Research in the Schools

Research is an important facet of training in most graduate programs. Keith (1995) outlines the importance for practitioners of school psychology to be consumers, distributors, and conductors of research. Yet little is known about the long-term consequences of completing a major research project on those who later become practitioners of school psychology. As usually conceived, school psychology is an applied, rather than a research-oriented discipline. The Standards for the Credentialing of School Psychologists (1994) recommends that psychologists become "competent consumers of research and new knowledge" (p. 1180). The National Association of School Psychologists (NASP) does not formally require graduate programs to include a major research project as a prerequisite to national accreditation. Also, at the doctoral level in clinical psychology, there is a continuum of research training from the more applied Doctor of Psychology (PsyD) degree, which typically does not require a dissertation, to the more research-oriented Doctor of Philosophy (Ph.D.).

Nevertheless, psychology is a social science which is empirically based. New knowledge is generated through rigorously applied principles of research. The quality of research produced is highly dependent on the students' experience and ability in research design and statistics; indeed, content knowledge or a cognitive component is an important prerequisite to successful research at the graduate level. Another factor which determines students' success is their attitude or emotional disposition toward their research requirement. It is possible that students' willingness to conduct research after they graduate is related to their research experience in their graduate programs. If they receive negative impressions about research, they may not only have difficulties in completing their required project, but they may not be

interested in doing research in the schools after they graduate. Psychological health is as important to the success of a school psychologist as is the cognitive component (Thomas, 1995). The emotional experience of completing research in graduate school may be as important as cognitive skills in determining a practitioner's willingness to conduct research. It was the student's emotional feeling toward graduate research and it's relationship to present day practitioners' willingness to conduct research in the schools that was the focus of this study.

Unfortunately, few if any studies exist regarding students' attitudes toward completing a research requirement at the Education Specialist (Ed.S.) level in school psychology programs. Some relevant information was available at the doctoral level, however. Sanchez-Hucles and Cash (1992) completed a study of dissertation policies and practices at 40 clinical psychology training programs. Among their findings, they reported that 10% of all doctoral programs do not require the completion of a doctoral dissertation. Moreover, of the 90% that required a dissertation, only 25% had an explicit requirement that it be empirically based. They also found a surprisingly high proportion of graduate students who did not complete their degree. Within the graduate community, such a status is often referred to as "All but the dissertation" (ABD). Unfortunately, many students remain in the ABD status and never finish. The ABD rate at the 40 schools studied by Sanchez-Hulces and Cash was 24%. In other words, a significant number of clinical psychology students had not completed their dissertation two years after their expected date of graduation. Contributors to failure in completing their dissertation included: inadequate mentorship, poor program preparation to complete a dissertation, dissertations too large in scope, as well as dysfunctional political and interpersonal dynamics between the student and committee members. The factors contributing to failure in completion of the dissertation could clearly shape a graduate student's attitude about future experiences related to research.

Research requirements vary depending on the degree pursued. At the Masters' level (M. A.) of study, a thesis is required. At the midpoint between the Masters' and Ph.D. is the Ed. S. degree which requires a "Field Project". At the pinnacle is the Doctorate (Ph. D.) which requires completion of a dissertation. How many school psychology programs in the country train their students at each level? Reschly and McMaster-Beyer (1991) surveyed 231 school psychology programs and found 17% granted only Masters degrees, 63% had programs at the Specialist level, and 20% at the Doctoral level. By a considerable majority, most programs train students for the Ed. S. degree.

Mallott (1992) has raised the issue of scholar versus practitioner training at the graduate level: "Proponents of the experimental dissertation often argue that the Ph. D. degree is a degree for scholars, not practitioners. Therefore, the dissertation must demonstrate scholarship, not practical skills. These proponents of the experimental dissertation seem to imply that if students want to be merely practitioners, let them go get a PsyD" (p. 87). Mallott's discussion highlights the schism that exists between practitioners and scholars regarding scientific versus applied psychology.

Recent research indicates that present graduate psychology programs may be much more heterogeneous than once thought. Increasingly, present day students have a number of choices regarding program philosophy and degree sought. Mayne, Norcross, and Sayette (1994) surveyed 129 directors of clinical psychology programs and found wide variations in training. Directors rated their program's orientation toward research or practice on a 7-point Likert scale. After they had tabulated their results, four clusters appeared to emerge regarding program philosophy and structure. The first cluster was the PsyD degree which was practice-oriented. The second cluster was the Practice-oriented Ph. D. The first two groups comprised roughly 25% of the APA-accredited programs surveyed. The third cluster, was termed Equal Emphasis (between practice and research) Ph. D. which

represented 40% of programs, while the final cluster was the Research-oriented Ph. D. totaling 35% of the programs. The Mayne et al. study demonstrates that programs at the doctoral level emphasize the training of differing skills depending on the program's philosophy and academic intention.

Time constraints are usually a problem for those who attempt to complete major research project during their graduate training. Time pressures can be of particular concern for those completing the Ed. S. project since many must complete their research during their important internship year. Conoley and Bahns (1995) "Interns commonly report feeling overwhelmed by demands on their time" (p. 115) which is not difficult to understand considering that they are working 40-50 hours per week in the schools, as well as completing an Ed. S. project. This could easily push work weeks to over 60 hours, and graduate students completing both may be so stressed as to compromise either the internship experience, the project, or both.

This study surveyed practitioners of school psychology regarding their research experiences in graduate school and the consequences on the daily practice of their profession. A survey was sent out to all Nebraska school psychologists listed with the Department of Education. The survey itself contained three parts: (a) demographic data including information concerning their career as a school psychologist, (b) the quality of their research experience as a graduate student, and (c) whether their present day attitudes towards research in the schools was related to their research experience in graduate school. It was expected that those school psychologists who had a positive experience with research in graduate school would be more willing to conduct research after they graduated.

Methods

Participants

The participants in this study included all school psychologists practicing in the State of Nebraska who had completed a major research project as part of their training. Names and addresses of all Nebraska School psychologists were obtained from the Nebraska Department of Education.

Materials

Materials included in this study are the survey, a short letter of introduction to each school psychologist describing it, and an addressed, stamped envelope to return the survey. All data was recorded and analyzed on a computer.

As mentioned above, the survey consisted of three parts. First, demographic data was collected regarding the respondent's age, gender and career as a school psychologist. Secondly, the quality of the respondent's experience in research at the graduate level was explored. Personal satisfaction in completing the project, the scope of the project and how well their program of study prepared them to complete a major research project were some of the issues addressed. Finally, how the respondent's current attitude toward research had been shaped by their research experience in graduate school was explored. Issues such as, difficulties in conducting research, and overall attitudes toward research, were solicited. The actual survey is contained in Appendix A.

Procedure

All school psychologists practicing in the State of Nebraska were contacted in the first mailing. Those school psychologists not returning the survey within two weeks from the initial mailing were contacted a second time. Similarly, those not responding within four weeks from the first mailing were contacted a third and final time. Each survey returned was

assigned a number to protect the anonymity of the respondent - no names were included in the database. Responses were indicated on a seven-point scale ranging from, for example, "Very difficult" to "Not at all difficult". The instructions for completion of the survey indicated that respondents pay attention when answering as positive/negative direction changed from question to question. Analysis accounted for this reversal to ensure all data was unidirectional when studied and interpreted.

RESULTS

Fully, 68% of the surveys were completed and returned; specifically, of the 188 surveys sent 128 were received and could be used for analysis. In addition, seven more surveys were returned but could not be used due to incomplete data. Of the reporting sample, 43% were males and 57% were females. Median age for the entire group was 45 years, with 48% being between the ages of 40 to 50 inclusive. The survey population had a median experience level of 10 years, with over one-third having less than five years of experience. The average number of years since the survey population completed their research project was nine, with 44% of the respondents having completed their project in the past five years or less.

The sample of Nebraska school psychologists indicated that most practice at the Specialist and Doctoral level. Of the surveys returned, the majority of school psychologists practice at the Specialist's level. Only 2% practice with a Master's, while nearly 73% of the psychologists surveyed had a Specialist's or equivalent degree. Twenty-four percent practice with a Doctoral degree.

With regard to research requirements, the majority of respondents indicated they completed an applied research project related to the Specialist's degree. Specifically, 82% (n=76) of those with an Ed.S. degree or equivalent completed a research project as a

requirement of their degree program. Eighteen percent (n=17) of the respondents endorsed the category "No major research project required". The remainder of the sample was apparently composed of persons who completed coursework beyond their Master's, but were not required to execute a research project.

Attitude Toward Required Research Project

Table I presents data related to respondents' attitude toward completing their research requirements. Mean results from question 1 related to proposal preparation, data gathering, and completion of results/discussion section were generally neutral (neutral is defined in our analysis as a rating of 4.0 on the 7-point scale used), with mean scores around 4.0. In other words, respondents indicated neither strong positive or negative feelings regarding their experience in proposal preparation, data gathering, and composing their results/discussion sections for their projects. Ratings on the scope of the respondent's project and completion of the oral defense were more positive than negative. A z-test was used to determine if obtained mean values differed significantly from an expected mean value of 4.0. The z-test was used because z scores designate how many standard deviation units the corresponding raw score is above or below the mean (Pagano, 1981). The formula used to compute z scores was: (observed mean - expected mean) / observed standard deviation. As shown in Table I, the questions yield mean ratings of 5.174 and 4.904, respectively. However, a z-test performed on the overall mean of these items revealed that they did not significantly differ from a neutral rating of 4.0 ($z=.896$, $p > .05$, $z=.554$, $p > .05$, respectively). Finally, respondents appeared to be most negative about completing their research project during their internship year. In fact, fully 43% rated completing their project during their internship year with a 6 or 7 rating, suggesting that doing both may have been a negative experience for them. Apparently, working on both an internship and their research project was aversive.

However, a z-test performed on this item indicated that their ratings did not significantly differ from a neutral score of 4.0 (z=.-396, p > .05).

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Insert Table I Here

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Attitudes Toward Research Preparation and the Schools

In Table II, responses related to program preparation, faculty support, overall feelings toward research, along with their current employer's attitudes regarding research in the schools were examined. Generally, respondents indicated somewhat positive ratings about how well their program prepared them to complete a major research project, as well as the support they received from faculty in completing their research. But these comparisons did not reach statistical significance (Program preparation: z=.935, p > .05; Staff support: z=.739, p > .05). They have a somewhat neutral attitude about the importance of conducting research in the schools as revealed in the mean rating of 4.028 for the item.

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Insert Table II Here

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An interesting discrepancy was discovered when respondents were asked to reveal their own feelings towards research in the schools along with their employer's attitude. Specifically, Nebraska school psychologists were apparently positive about conducting research in their present positions if they had the time and were rewarded by their employer; however their mean ratings did not significantly differ from a neutral rating of 4.0. Also, their employers' attitude did not significantly differ from neutrality (z= 1.05, p > .05,

z=.914, $p > .05$, respectively). However, as shown in Table II, school psychologists rated their employers' attitude towards research somewhat lower than their own, but not significantly so (z=.198, $p > .05$). While the respondents feel research is an important function, there is suggestion that they do not view their employers' attitude to be as positive as theirs.

In order to calculate correlations with other items on the survey, reliability for question 1 was determined using Cronbach's alpha; a level of .5298 was found. A correlation was calculated between the respondents mean rating on question one (their overall satisfaction with their required research project), and question four (their willingness to conduct research immediately after completing their required research project). A significant correlation of .2405 (p=.013) was found between the two ratings. Hence, those respondents who were most dissatisfied with their required research projects were less willing to conduct research in the schools. A correlation was also calculated between question two (university staff were cooperative/helpful in the completion of my research project) and question four. A significant correlation of .2215 (p=.021) was found between the two ratings. Additionally, a third correlation was tabulated between question three (rate how well your program of study prepared you to complete your research project) and question four. A significant correlation of .4048 (p=.000) was found as well. From this sample it is shown that cooperative staff and adequate program preparation to complete a major research project will significantly impact one's willingness to conduct research in the future. The complete intercorelation matrix for survey questions one through nine may be found in Appendix B.

DISCUSSION

Fifty-seven percent of the school psychologists who responded to the survey were female. Apparently, both sexes are almost equally represented among school psychologists

in Nebraska. The median age for Nebraska practitioners was 45, indicating that most Nebraska school psychologists are in the middle of their careers; however, one-third have less than five years of on-the-job experience. These results apparently indicate a more recent fusion of younger practitioners into the profession. Nebraska school psychologists are well educated, as 97% practice with either a Specialist degree, Specialist's equivalent, or a Doctorate. Such a result was expected since Nebraska currently disallows new school psychologists to practice at the Master's level.

Nebraska school psychologists were generally neutral (e.g., average ratings about 4.0) on the issues proposal preparation, data gathering, and completing the results/discussion sections of their project report. However, with standard deviations in the range of 1.617, some did indicate more positive and others negative attitudes.

Respondents were slightly more positive about the scope of the project as well as their oral defense experience, but not significantly so. School psychologists indicated their most dissatisfaction with having to complete their major research project while completing their internship. While mean ratings did differ from neutrality, individual respondents did indicate both strongly negative and positive attitudes about their research projects. For example, one respondent described at the end of the survey: "My research experience was a good learning exercise and I would be willing to do applied research in my school setting if the topic would be helpful/useful to the students/parents/staff in the school and (was) interesting to me." However, another school psychologist wrote: "To put it bluntly, it was a bad experience. I think too much was expected of the project. I don't think some of the expectations are realistic considering the time involved when students are performing their internship. My committee was helpful and supportive, but the overall experience left a bad taste in my mouth and probably decreases the likelihood that I will perform research in the future." Most school psychologists would agree that their internship year is critical and to superimpose the

execution of their research project at the same time was apparently aversive to some. It may have been difficult to give the necessary attention to the research experience to produce a superior product while mastering the skills the school psychologist needs to succeed on a daily basis.

An interesting difference occurred regarding school psychologists' attitudes about the importance of conducting research in the schools when compared to their perception of their employers' attitude. While school psychologists indicated they would conduct research in the schools if they had the time and were rewarded for it, they rated their employers' attitudes as more ambivalent. However, the preceding is only a suggestion since the difference between psychologists' attitudes toward research did not differ significantly from the perception of their employer's attitudes. While it is true that national and state law require assessment to determine if special services are necessary, school psychologists should not be thought of as merely testers. What school psychologist learn during their training about research and the importance of good research methodology should be thought of as invaluable to school systems in solving problems at the student and district level (Woody, LaVoie & Epps, 1992).

The training of a school psychologist is a long, difficult process and many skills must be mastered before a person can practice in the schools. The internship and a major research project are two of the most important facets of that training. Completing them simultaneously may not be in the best interests of the school psychology trainee, and a separation of these two major components of training should be considered by school psychology programs. Furthermore, the overall mean ratings regarding research preparation were not found to be positive but neutral. One would have hoped that most Nebraska school psychologists would have felt positive about their required research project in their training programs. As revealed so well in the quote from one school psychologist and the significant correlations between

cooperative staff, their required research experience, and program preparation and their willingness to conduct it in the schools, negative or even neutral attitudes toward research projects may result in contemporary school psychologists de-emphasizing their role as researchers. If training programs are not changed, one of the most important roles of a psychologist in helping children in the schools will continue to be underutilized.

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Table 1

Attitudes Toward Required Research

	M	SD	n
Proposal Preparation	4.132	1.586	106
Data Gathering	4.324	1.617	108
Results/Discussion	3.841	1.524	107
Oral Defense	4.904	1.633	94
Scope of Project	5.174	1.311	109
Completing Project during Internship	3.236	1.931	89

Table II

Attitudes Toward Research Preparation and the Schools

	M	SD	n
University Staff Helpful	5.330	1.800	109
Did Program Prepare You	5.376	1.471	109
After Completing Project/Conducting Research	4.481	1.544	108
How Do You Feel Now about Conducting Research	4.697	1.537	109
Importance of Conducting Research in Schools	4.028	1.974	109
Would You Conduct Research if Time	5.606	1.528	109
Employers' Attitude about Research	4.308	1.557	107
Would You Conduct Research if Rewarded	5.537	1.682	108

Appendix A

A. Research Project Questionnaire

RESEARCH PROJECT QUESTIONNAIRE

This questionnaire was designed to gather information from practicing school psychologists about their research experiences at the graduate level and beyond. Information will be collected regarding two main topics: research experiences while in graduate school and your present attitude toward research in the schools. Completion of this survey will take no more than 10 minutes. Research is a fundamental aspect in the training of every school psychologist and any experiences, or insights you could provide would be greatly appreciated. Please be sure to complete **BOTH FRONT AND BACK** of the Major Research Project Data sheet. THANK YOU!!!!!!

DEMOGRAPHIC DATA

1. _____ Female _____ Male

2. Age: _____

3. Highest level of training:

   _____ Master's (less than 60 hours of training)

   _____ Specialist's or equivalent (60 hours or more)

   _____ Doctorate (_____ Ph. D. _____ Ed. D. _____ PsyD).

4. Years of experience as a School psychologist? _____

5. Which research project, if any, was required for the completion of your research requirement in your degree program?

   _____ M.A. (thesis) _____ Education Specialist's Field Project

   _____ Doctorate (dissertation) _____ No major research project was required * *

** **NOTE**: If no major research project was required to complete your graduate program of study, please stop here and return the survey in the postage paid envelope.

6. How many years has it been since you completed your research project? _____

MAJOR RESEARCH PROJECT DATA

As mentioned earlier, the data collected will include your experience with research during your graduate training and the outcomes of that experience. All questions will be on a 7-point continuum; please circle one number on this continuum. Please be aware of which direction you are indicating in your answer, as positive and negative may change from question to question. Please respond as honestly and fully as possible. THANK YOU AGAIN!!!!!

1. Rate from 1 to 7 the overall level of difficulty in completing each of the following activities. If any do not apply, indicate so by marking "N/A" in the space provided.

(a) Proposal preparation

Very difficult 1 2 3 4 5 6 7 Not at all difficult _____ N/A

(b) Data gathering

Very difficult 1 2 3 4 5 6 7 Not at all difficult _____ N/A

(c) Results/Discussion

Not at all difficult 1 2 3 4 5 6 7 Very difficult _____ N/A

(d) Oral defense

Very difficult 1 2 3 4 5 6 7 Not at all difficult _____ N/A

(e) Scope of project

Not at all reasonable 1 2 3 4 5 6 7 Very reasonable _____ N/A

(f) Completing project during internship

Not at all difficult 1 2 3 4 5 6 7 Very difficult _____ N/A

2. University faculty/staff were cooperative/helpful in the completion of my research project.

Not helpful Very helpful

1 2 3 4 5 6 7

3. Rate how well you feel your program of study prepared you to complete your research requirement.

Very poorly Very well

1 2 3 4 5 6 7

---------- **OVER PLEASE** ----------

4. Immediately after completion of your graduate research project, what was your attitude about the prospect of conducting your own research in the schools?

Very positive Very negative

1 2 3 4 5 6 7

5. How do you feel now about doing your own applied research in the schools?

Very negative Very positive

1 2 3 4 5 6 7

6. Rate the importance of conducting applied research in your present assignment.

Not at all important Very important

1 2 3 4 5 6 7

7. Would you conduct applied research in the schools if you had the time?

Not at all likely Very likely

1 2 3 4 5 6 7

8. What is your employer's attitude toward conducting research in the schools?

Very negative Very positive

1 2 3 4 5 6 7

9. Would you conduct a research project in the schools if your employer rewarded it?

Very likely Not at all likely

1 2 3 4 5 6 7

10. In a few short sentences, please put in your own words the impact that your research project in graduate school has had on your present willingness to conduct research in the schools.

_____

_____

_____

_____

_____

Appendix B

B. Intercorrelation between Survey Questions 1 through 9

Question	One	Two	Three	Four	Five	Six	Seven	Eight	Nine
One		.3067 (108) .001	.2762 (108) .004	.2405 (107) .013	.1216 (108) .210	-.0916 (108) .346	0510 (108) .600	.1619 (107) .096	.0428 (107) .662
Two			.4982 (109) .000	.2215 (108) .021	.0833 (109) .389	-.1459 (109) .130	.0343 (109) .723	-.0403 (107) .680	-.0529 (108) .587
Three				.4048 (108) .000	.2598 (109) .006	.0698 (109) .471	.2315 (109) .015	.0269 (107) .783	.1750 (108) .070
Four					.5747 (108) .000	.2900 (108) .002	.3651 (108) .000	.2383 (106) .014	.2614 (107) .007
Five						.3202 (109) .001	.4535 (109) .000	.3621 (107) .000	.3584 (108) .000
Six							.4949 (109) .000	.3236 (108) .001	.2634 (107) .006
Seven								.2174 (107) .024	.5473 (108) .000
Eight									.0080 (106) .935
Nine									