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Relationship Between Professional Development and Education

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Relationship Between Professional Development and Education

By

Christine A. Frederick

A THESIS

**Submitted to
Grand Valley State University
in partial fulfillment of the requirements for the
degree of**

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1998

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ABSTRACT

RELATIONSHIP BETWEEN PROFESSIONAL DEVELOPMENT AND EDUCATION

By

Christine A. Frederick

Nursing is a profession. It is important for nurses to know what impacts professional development. Educational preparation plays a large role in professional development.

Data were originally collected in 1995 through a survey of nurses from one chapter of Sigma Theta Tau International. The survey was sent to 544 members to determine their scores on professional development. The current study conducted a re-analysis of that data to determine if a relationship existed between professional development and education.

This thesis was based on Leddy and Pepper's (1993) theory of professional development modified from Eric Erikson's eight stages of the life cycle. They contend that professional development occurs in stages over time. The ultimate goal being to reach the final stage of development and appreciate full professionalism.

There is a correlation between professional development and education. The correlation is weak indicating there may be additional factors that influence professional development.

This thesis is dedicated to all nursing professionals. It is my hope that we as a profession will someday realize our collective importance and decide upon a single level of entry into practice. This would show real pride for our profession.

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CHAPTER 1

INTRODUCTION

The status of nursing as a profession has been controversial in the literature over the past 100 years, yet nurses continue in the pursuit of such status (Schutzenhofer, 1991). As health care changes and the role of the nurse becomes more vital to its position within the health care arena, clarification of the professional development process needs to be articulated. A key factor in clarifying professional development would be the role that educational preparation plays in this development process. Evidence that the process of developmental achievement provides unity within the profession would enable nurses to position themselves more cohesively in the emerging health care system. This study attempted to identify a relationship between achievement of professional development and educational preparation.

In order to decide if a relationship exists between education and professional development, professionalism must first be understood and defined. Webster has defined professionalism as; “the conduct, aims, or qualities that characterize or mark a profession or a professional person” (Webster, 1985, p. 939). Nursing literature has defined this more specifically as centering on specialized expertise, autonomy, and service on a scale

along which nurses may travel (Kelly, 1985). A few traits nurses use to describe a professional peer are: one who fosters and conducts research, thinks critically, makes decisions, follows a code of ethics, participates in professional organizations, uses theory, is autonomous, is accountable, is collaborative, maintains clinical competence and provides holistic care to clients (Miller, Adams & Beck, 1993 ; Behrend, Finch, Emerick & Scoble, 1986). Moore (1970) described professionalism using criteria that an occupation must possess to be judged professional. He viewed the criteria as a scale on which the more characteristics one possessed, the more professional he/she is. The following are Moore's five criteria: that the person must work full time and have the occupation as his/her primary source of income, that the person must accept appropriate norms and standards identified with professional peers, that the person must possess useful knowledge and skills, that the person needs to be perceptive and competent, and that the person needs to be autonomous. Clarification of professionalism from this nursing perspective provides the ground work for understanding how traits are developed within the individual nurse.

A goal of the novice nurse is to develop professionalism. The achievement of professionalism is viewed by nursing as a process with stages. Leddy and Pepper have described this process (1993) as occurring over time. The time needed is different for each individual. The novice nurse enters his or her practice with an idealized image of the profession and over time maneuvers his/her way through each developmental stage until personal self-transformation has occurred.

Professionalism in nursing is developed through numerous methods. The two main methods are through a formal educational process and through the positive example and influence of peers. Articulating the professional role of the nurse is sometimes difficult. It is the opinion of this researcher that education plays a significant role in the nurse's ability to articulate his/her professional role. Having a strong professional mentor is a valued gift of a nurse at any stage of development but is exceptionally valuable to the novice. The mentor with years of nursing experience and mature professional savvy can model appropriate professional behaviors for the novice. A nurses also learns professionalism through experiences of trial and error. Often nurses have experiences that test his/her values and beliefs as a nurse and it is through these that he/she become strong and confident in his/her professional quest. It can be helpful in development if the nurse has a theory of nursing on which to base his/her practice. This theory may serve as a guide and framework for the care he/she provides thus strengthening his/her development. Finally it is important in professional development for the nurse to be clear with his/her own definition of nursing, to be clear about the role of the nurse in health care, and to be clear when articulating it to others. This will strengthen his/her own professionalism.

Development, as previously described, is a process that occurs in stages over time, not an event that suddenly occurs. This was detailed by Eric Erikson (1982) as he described the developmental stages and tasks a person goes through in normal human development. Leddy and Pepper, (1993) expounded on his theory and described the way

in which a nurse, new to the profession, develops in a similar manner. The new nurse needs to address issues of trust with peers similar to the way in which an infant experiences trust with its parent. The development of the nurse continues with experiences that require self-reflection and growth in order for the nurse to achieve healthy professional development. It is the goal of the nurse to reach the adulthood of professionalism and appreciate the full life cycle of his/her professional self. The achievement of the various developmental stages may clarify the degree of professionalism that could be expected from the nurse. Nurses believe the development of professionalism is an expectation of their peers, managers, and nursing educators.

Formal education gives the nurse a starting point in which to begin his/her professional travel. Education provides the framework for which to add many future pieces of knowledge. It also gives the nurse knowledge of ideals and the tools to achieve them. Education plays a significant role in any profession. Education is a foundational criterion in the definition of a profession. "Profession is a calling requiring specialized knowledge and often long and intensive academic preparation" (Webster, 1985, p.938). The aspects of education that are important in professional development are; a) how much education one receives throughout his/her life span; b) the degree and depth of the education, for an example diploma versus a doctorate; c) the type of mentoring available throughout the educational process; and d) a broad, diverse and positive clinical educational experience. All of these factors will be influential in the development of the nurse as a professional.

Professional status for the nurse places him/ her in a pivotal role to operationalize the nurses' social mandate for optimizing health outcomes for his/her clients. The characteristics of professionalism previously listed are described in detail in the code for nurses as listed by the American Nurses' Association (1976) as a responsibility of every nurse. Thus, there becomes a professional obligation and an ethical responsibility for nurses to demonstrate professionalism and to uphold the code.

Purpose:

The purpose of this re-analysis was to determine if there was a relationship between stage of professional development and the educational level of nurses.

CHAPTER 2

CONCEPTUAL FRAMEWORK AND LITERATURE REVIEW

Clarifying the relationship between education and professional development would help nurses develop a common ground in which to articulate their role. It may in turn help in achieving a degree of professionalism because of clearly outlined variables. Clarifying the relationship between education and professional development would enhance the position that nursing is an established profession and that educational preparation is essential to the quality and maintenance of that position. This study looked at the variable, educational level and its relationship to professional development. The following is the conceptual framework on which this study was based as well as a thorough review of the literature. These lent support for the completion of this study.

Conceptual Framework:

Leddy and Pepper (1993) describe their theory of professional development as a modification of Eric Erikson's (1982) eight stages of the life cycle. Personal self-development as described by Erikson occurs in eight stages, with the individuals' goal being to successfully negotiate through every stage (1982). The eight stages are; infancy, toddlerhood, early childhood, middle childhood, adolescence, early adulthood, young and

middle adulthood, and later adulthood. A basic premise of Erikson's theory is that development occurs in a sequential manner. Individuals go through developmental stages and manage both positive and negative experiences as they occur.

Leddy and Pepper (1993) describe the process of nurses' professional development being influenced by education, practice and research. Professional development occurs in a similar way as personal self-development. How successful a nurse is at working through these eight stages of his/her self-development influences his/her success with completing one's professional development. "One's self-system determines one's personal characteristics, and these personal qualities enable one to carry out professional roles in more or less successful ways" (Leddy and Pepper, 1993, p.66). Personal and professional development affect each other. There may be positive and negative influences between the two.

A nurse's self-concept affects his or her professional development as described briefly above. If a person has a low self-concept and lacks trust, confidence, and autonomy, successful professional development may be difficult for him/her. A positive experience and mentorship during professional development may help the individual to become a healthier person. The ideal result would be that the nurse grows to become a healthy person and professional throughout the process. The stages the nurse goes through assist in that developmental process.

The description of this theory is that professional development has eight stages as

shown in Figure 1. Within each stage tasks and goals are described (See Appendix A). The overall goal of development is to satisfactorily negotiate through the stages. The degree of achievement of each goal influences what the nurse as a professional will be like. Satisfactory achievement of each goal results in many important values and behaviors that a nurse may possess. The outcome of the first stage is that the nurse will have developed trust with self and others. In the second stage he/she can view self and others as autonomous yet in need of team participation. In the third stage the nurse should be able to initiate nursing interventions and be accountable for them. The outcome of the fourth stage suggests the nurse will have developed competence in practice and have a sense of accomplishment within the profession. In the fifth stage the nurse will see him/herself within the profession. The outcome of the sixth stage is that the nurse can function collaboratively. In the seventh stage the nurse can contribute to the profession as a whole. In the eighth stage, the nurse will appreciate the full life cycle of the professional self and find pleasure in his/her accomplishments. As identified here the outcomes of each stage clearly display incremental development of professionalism.

Leddy and Pepper (1993) give clarity to the professional development of nurses. Development occurs over time and in stages. With the achievement of each stage the nurse gets closer to the ultimate goal-professionalism. The intention is to successfully reach the top stage of development. This theory worked well for this study because it described incremental stages of professional development and it showed that many things influence the achievement of that development.

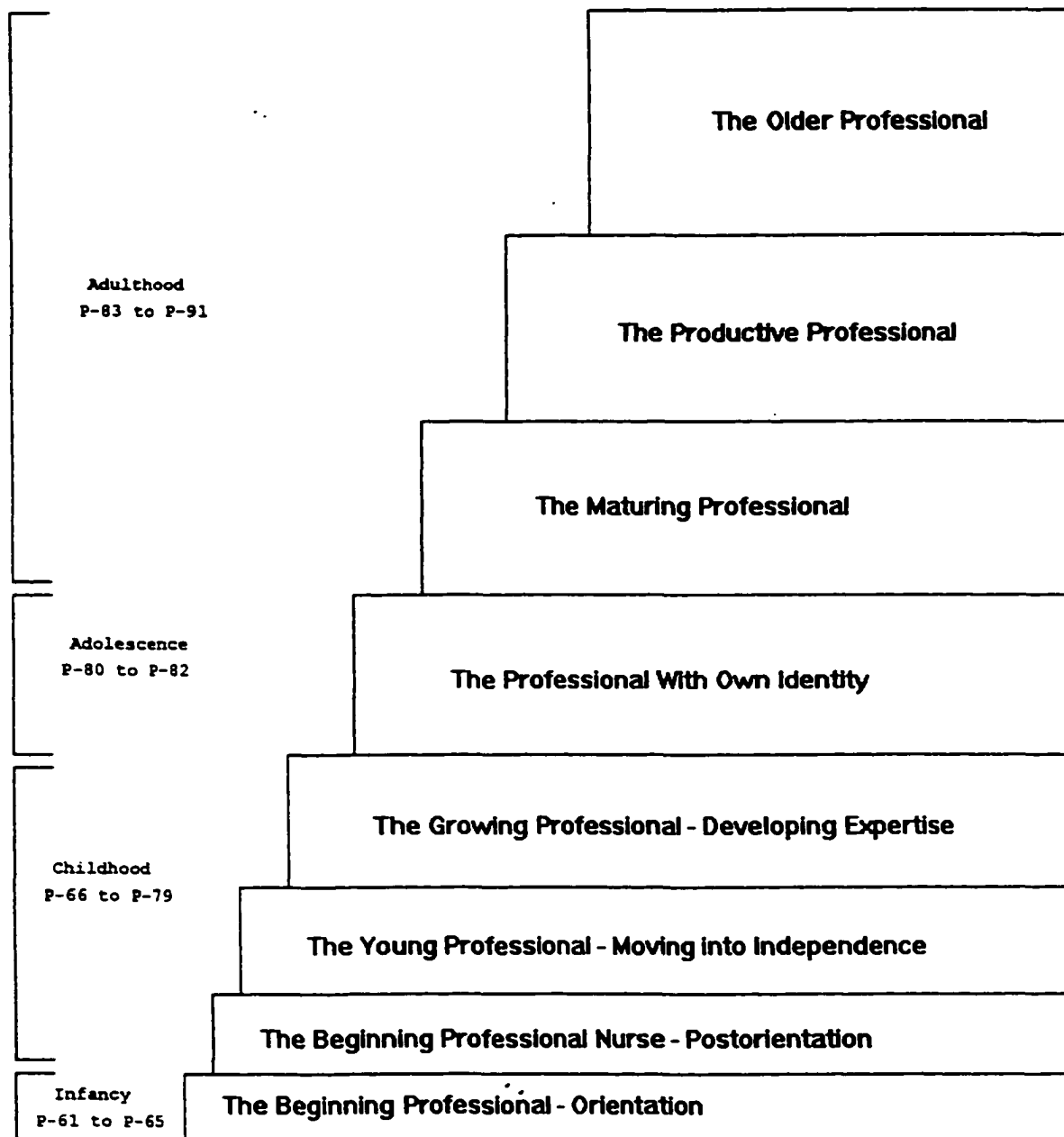


Figure 1. This is a visual description of the eight stages of professional development as described by Leddy & Pepper (1993). The “P # “ correlates with the “P # ” on the Professional Development tool (See Appendix B). Development occurs incrementally with each stage indicating a higher degree of professionalism evidenced.

Literature Review:

An extensive search of the literature revealed a limited number of studies evaluating the relationship between educational level and professional development. The literature review for this study will focus on professionalism, professional development, and education as it relates to professional development.

Miller, Adams, and Beck (1993) conducted a study to develop an evaluative behavioral inventory using Miller's Model for Professionalism in Nursing. Nine categories emerged that measured professional behaviors. In the study the results were organized into nine categories. The nine categories included were: competence; participation in public or community service; having a copy of the ANA's Code for Nurses With Interpretative Statements (1985); participation in professional organizations; autonomy with the ability to make decisions; involvement in research; use of the nursing process with nursing theory; having written and submitted an article for publication; and participation in quality assurance activities. Subjects included a random selection of 515 registered nurses in eight western states. A demographic questionnaire was used as well as a professionalism tool, The Professionalism in Nursing Inventory. The tool asked nurses to decide if they had displayed behaviors of professionalism over the past two years or if they had not. It did not determine the degree nor stages of professionalism they achieved. Test-retest showed a Cronbach's alpha of 0.82 to 0.87, showing stability of the instrument. The results indicated that the majority of respondents demonstrated professional behaviors in continuing education, autonomous quality

assurance participation, community service, and theory based nursing practice. The behaviors not considered priorities were publication, research, and participation in professional organizations. A limitation of this study is that there was no determination made on whether a nurse exhibited a higher or lower degree of professionalism. They either exhibited the behavior or did not. Also, the results did not show whether there was a relationship between level of education and reported professional behavior.

Wuest (1994) described the development of nursing knowledge and nursing as a discipline as having been stunted by its quest for professionalism. Wuest does not define professionalism but goes on to say that “professionalism is a patriarchal invention and by its very nature is alienating to women” (Wuest, 1994, p.365). Nurses have long attempted to gain recognition and a place in the professional world but have lost sight of the things that make them unique. A distinct uniqueness is that most nurses are women. This author believes that feminism offers something special to nursing and that nurses should focus on creating a new social order in which women are no longer subordinate to men. Nursing should concentrate its efforts on changing social policy through clinical-based research. So it is the opinion of Wuest that nursing must work on changing its place in society instead of fighting for its place in the realm of professionalism.

Coulon, Magdalena, Krause, & Anderson (1996) conducted a qualitative study exploring the meaning of excellence in nursing care held by nurses. Subjects included a convenience sample of 156 undergraduate and postgraduate nurses. Nurses were asked to reflect on practice that enabled a clear understanding of the meanings given to

excellence in nursing care. They did this by responding to a series of open-ended questions. Details of their nursing background, level of experience, and demographics were also identified. The written responses were content analyzed using line by line coding which resulted in emergence of the following themes: professionalism, holistic care, practice, and humanism. Responses revealed that excellence in nursing care means that the patient was always at the center of the nurses care. Examples provided by the nurses also suggested that professionalism was an all encompassing trait that most comprehensively represented excellence in nursing care. The responses consistently demonstrated the nurses' desire to provide excellent nursing care that was holistic, humanistic, and professional which leads to improved health outcomes. These responses were documented by the nurses with more experience. The study completed by Coulon, et. al. (1996) would give insight into professional development if it revealed more information on the difference between the novice and experienced nurse and which themes were unique to each.

McClosky and McCain (1987) conducted a longitudinal analysis of 150 nurses in their first year on a new job. Four instruments were used to gather data: McCloskey Reward/Satisfaction Scale (McCloskey, 1974); Organizational Commitment Questionnaire (Porter & Smith, 1970); Hall Professionalism Scale (Hall, 1968); and Kramer Professionalism Scale (Revised) (Kramer, 1974). Data were collected over a one year period. Each nurse was asked to complete two-parts of a questionnaire reviewing satisfaction, commitment, and professionalism during the first month, at six months, and

at the end of one year. Results showed that satisfaction declined over the first six months and remained steady over the second six months. Commitment to the organization declined over the first six months but recovered slightly by the end of 12 months. Professionalism declined slightly within six months and then held steady. The decline in satisfaction, commitment, and professionalism during the first six months of work was true for all nurses no matter what their educational background. The only exception was a small group of nurses with masters' degrees; they were more satisfied and had higher scores on the professionalism scale at the end of six months. The findings indicate that as nurses begin work they are relatively satisfied with most aspects of the job, have a modest commitment to the employer, and hold the nursing profession in relatively high regard. Nevertheless, when initial expectations are not met, the nurse becomes less attached to the job, the organization, and the profession. Master's prepared nurses appeared to cope with the realities of a new job better. The sample size of master's prepared nurses was too small to correlate educational level with level of professionalism and satisfaction. The study should be replicated using a larger more diverse sample of nurses.

Weis, Schank, Eddy, and Elfrink (1993) conducted a comparative study of program objectives and professional nursing behaviors using a process of deriving themes from objectives. They used a constant comparative method of analysis. The questions asked were a) do baccalaureate nursing program objectives reflect the seven values in the AACN document, and b) are value differences evidenced between public

and private baccalaureate nursing programs.

In the Weis et. al. (1993) study a random sample of 21 programs were stratified according to geographic region and program affiliation. The instruments used were an institutional profile questionnaire, a copy of the program objectives, and the Professional Nursing Behaviors (PNB's) developed by the AACN (1986). Included in the institutional questionnaire were the following demographics; type of school, type of programs, descriptors of students, enrollment, descriptors of faculty, and the use of the AACN document. The value indicators of the PNB served as indicators of professional nursing roles and was the analytic framework for this study. The seven values were: altruism, equality, esthetics, freedom, human dignity, justice, and truth. Findings from this study show that five of the essential values are present in the majority of the baccalaureate program objectives. The two values found not to be present the majority of the time were: truth and aesthetics. The values reported were linked more closely with the roles of a provider of care and coordinator of care than with the role of the member of a profession. This may suggest that there is a greater emphasis in baccalaureate education on patient care for beginning practitioners than the roles of the member of a profession. Future research needs to examine whether nurses at the baccalaureate level integrate the seven values into their practice post graduation.

Eddy, Elfrink, Weis, and Schank (1994) conducted a study attempting to determine if there were different perceptions about professional nursing values between senior baccalaureate nursing students and their faculty. The Professional Nursing

Behavior Instrument (PNB) was the tool used in this study. The sample size was 656 students and 350 faculty. The authors wanted to know how nurse educators and nursing students compared in their responses regarding professional values.

Eddy, et. al. (1994) used paired dependent t tests to answer the first and third research questions. The first research question was: Are there significant differences in the professional values of baccalaureate nurse educators and senior nursing students? The third research question was: Are there significant differences in the values of senior nursing students who have or have not had courses in theology, philosophy, or ethics? Multiple regression statistics were used to answer the second and fourth research questions. The second research question was: Are there significant differences in their values depending on employment or enrollment in public or private institutions? The fourth research question was: Are there any variables or combinations of variables that account for a significant amount of variance in the total professional value scores of students or faculty? The findings revealed that the value scores of faculty were significantly higher than those of students ($p < .045$). Faculty with more years of teaching experience had higher value scores ($p < .004$). The professional value scores of senior students and faculty in public institutions did not differ significantly from scores of those in private institutions. Students who had studied ethics, philosophy, and/or theology did not have significantly higher professional value scores than students who had not taken these courses. The lower scores on professionalism among students compared to faculty may point to a need for instructional strategies emphasizing professional role

responsibilities. Nurse educators may need to consider assignments that reinforce the importance of professionalism. Further study is recommended on teaching strategies that might encourage values development. This also lends support to the theory that there are stages of professional development that nurses achieve. The tool used may not be sufficient to obtain a true evaluation of professionalism nor the comparison of it among groups.

Brooks and Shepherd (1992) completed a descriptive study investigating the relationship between professionalism and critical thinking abilities of senior nursing students in four types of nursing educational programs: generic baccalaureate, RN completion baccalaureate, associate, and diploma. Fifty students from each type of program were conveniently selected for participation. Professionalism was measured by the Health Care Professional Attitude Inventory and critical thinking abilities were measured by the Watson-Glaser Critical Thinking Appraisal.

The study completed by Brooks, et. al. (1992) revealed that RN completion baccalaureate seniors showed a significantly higher level of professionalism than both associate and diploma program seniors. Professionalism exhibited by generic students in the sample was not significantly different from that of the seniors in the associate program. Also, associate and diploma seniors did not differ significantly. Critical thinking abilities for senior students in the RN completion baccalaureate and generic programs were significantly higher than those of the associate and diploma seniors. It is the opinion of these authors that a longer association with the nursing profession would

result in a more professional attitude. One might also say that longer association with the profession leads to higher achievement on the professional development scale. This study did show the longer the association with the profession the more professional the nurse's attitude. The sample size was too small to allow for generalization of the findings. The study should be replicated using a larger sample. The study viewed students in their senior years. It is not clear with this study if the educational program itself helped in the development of professionalism and critical thinking or if there were other factors involved ie: past or present work experience in the field, personal or professional mentors, family influence, etc. This study could be replicated comparing freshman and senior nursing student scores to determine the effects of the educational program on professionalism and critical thinking.

In summary, the literature reviewed reveals a few studies looking at professionalism, professional development and education as it relates to professional development. Unclear findings exist in the literature comparing education and professional development. This study will add to the limited research base regarding the relationship between educational level and professional development.

Research Question:

This study addressed the question: What is the relationship between the stages of professional development and educational level of nurses.

Definition of Terms:

Professionalism is the conduct, aims, or qualities that characterize or mark a

profession or professional person. (Webster, 1985 p.939)

Development is the gradual process of change and differentiation from a simple to a more advanced level of complexity. (Mosby, 1986, p.337)

Professional development is a sequential process occurring over an undefined period of time resulting in achievement of professional adulthood and appreciating the full life cycle of the professional self.

Stage of professional development is the actual level of professionalism the nurse is able to obtain (See Appendix A).

Educational level is the highest level of education that the nurse has achieved.

CHAPTER 3

METHODOLOGY

The following is a description of the methodology of the original study conducted by Kline (1995) followed by a description of the methodology of the re-analysis.

Design

In the original study by Kline (1995) a descriptive correlational method was used to determine professionalism levels. Professionalism levels were then compared with the stage of professional development and research behaviors using a variety of tools (Valiga's Views of Nursing; Hall's Professional Inventory; Kramer's Professionalism Scale Revised; Stages of Professional Development Scale; and Research Behavior Scale).

Sample and Setting

A list of 544 members of the Kappa Epsilon Chapter of Sigma Theta Tau International was obtained after permission to use the mailing list was granted by the executive board of Kappa Epsilon. A questionnaire was mailed to all subjects on the list. The return of the questionnaire indicated voluntary participation in the study.

Instruments

The original study used five tools to view professionalism, professional development and research behaviors. The questionnaire was divided into six sections. The five sections included one of the following tools: Valiga's Views of Nursing (Valiga, 1982), Hall's Professional Inventory (Snizek, 1972), Kramer's Professional Scale Revised (McCloskey & McCain, 1987), Stages of Professional Development Scale, and the Research Behavior Scale. The last two were designed for use in this study after a thorough review of the literature. The sixth section requests subjects to report demographic information.

Valiga's Views of Nursing. The Valiga's Views of Nursing Scale (Valiga, 1982) is a five point scale with subject responses ranging from strongly agree to strongly disagree when presented with a stated view about nursing. It was selected for administration because the variables resulted from characteristics of professional nursing found in the literature, and from the National League for Nursing's characteristics of baccalaureate graduates in nursing (1982). Valiga reported the coefficient alpha as 0.86 for the 50 item tool. The tool was then divided into parallel forms of 25 items each. The coefficient alpha for Form A was 0.68 and for Form B was 0.78.

Hall's Professional Inventory. Hall's professional Inventory (Snizek, 1972) was selected because the variables studied were those of established professions. It was designed for use by subjects within professions. It is a five point scale with responses ranging from very well to very poor for the subjects' agreement with statements. Hall's

tool measures professional attitudes and behaviors. The coefficient alpha was 0.65 for this tool.

Kramer's Professionalism Scale Revised. The Kramer professionalism Scale was reported by Kramer in 1974 and was revised and used by McCloskey and McClain (1987). The scale measures professional behavior by indicating the number of professional books purchased, subscriptions to professional journals, hours spent in professional reading and continuing education, participation in professional organizations, number of professional publications, speeches given, committee activity, and participation in research. The scale is ordinal with responses ranging from no activity to a great deal of activity for each behavior. A test-retest correlation coefficient of 0.99 was obtained by McCloskey and McClain (1987). The Cronbach alpha reliability coefficients obtained from McCloskey and McClain data were 0.62, 0.63, and 0.71 at 1, 6, and 12 months of experience as a newly employed nurse.

Stages of Professional Development Scale. Leddy and Pepper (1993) identified goals for each professional development stage, though a tool was not found which empirically measured the attainment of the stages. The stages of Professional Development Scale was designed by Kline (1995). Using the goals for each developmental stage Kline (1995) developed a statement to which the subjects could respond. Subjects were asked to place a vertical line through a 20-section horizontal line lying between the descriptors of disagree and agree. The tool was scored by counting the number of sections the subject moved toward the "agree" end of the line for each item.

The total score for the tool was the sum of individual line item scores. The tool was pilot tested by a peer group for readability prior to its use. The Cronbach's alpha coefficient was $r = 0.89$. Content validity of the tool was determined after a review of the literature was completed.

Research Behavior Scale. The Research Behavior Scale was developed for this study. It consists of statements which reflect the research behaviors of valuing, utilizing, and conducting research. It is based on the "Guidelines for RN research behaviors in organizations" that was developed by the Michigan Nurses Association (1993). The subject was asked to respond to each of the statements by indicating the number of times the behavior had been acted out during the past six months. This tool was pilot tested for readability prior to use in the study.

Demographic Tool. The fifth section of the questionnaire was for obtaining demographic data. Demographic data was sought to describe the subject group and to determine the highest level of educational degree received. It was also used to determine the length of time the nurse had been a member of Sigma Theta Tau International. Items D-109 thru D-113 describe demographic characteristics of the study sample and includes: subject gender, marital status, age, highest level of education achieved, year degree obtained, and year in which the subject was inducted into Sigma Theta Tau International.

Procedure

Following approval by the Research and Development Committee of Grand Valley State University a list of members of the Kappa Epsilon Chapter was obtained

from Sigma Theta Tau International. The study was exempted by 46.101 of the Federal Register 4616:8336, January 26, 1981, section (b) (3), research involving survey procedures. A booklet format was used for the data collection questionnaire to make it attractive, well organized, and easy to complete, thus encouraging participation in the study. The questionnaire was mailed to subjects on the list received from the headquarters of Sigma Theta Tau International. A cover letter was included to explain the study and indicate that return of the questionnaire indicated voluntary participation in the study. A stamped addressed envelope was included for return of the completed questionnaire. To encourage responses, a numbered ticket was included with the questionnaire as a gift for completion of the questionnaire. The ticket was used for a door prize drawing at the annual meeting of Kappa Epsilon. A pencil was also included to facilitate participation in the study. Of the 544 questionnaires mailed out, responses were received from 262 members (48%).

Subjects were protected because there was no numbering of the questionnaire for successive mailings so that responses were not linked to the subjects. There were no identified risks from participating in the study. Subjects may have benefited from the study in three ways: (1) they received a pencil to keep, (2) they received a ticket for a door prize drawing at the annual meeting, and (3) they may have felt a sense of pride in contributing to the body of knowledge for nursing professionalism. Subjects were given the name and phone number of the researcher for any questions they may have had.

The following is a description of the methodology of the re-analysis.

Design

This study was a re-analysis of data collected by Kline, (1995). This study re-analyzed the results of two tools: Stages of Professional Development Scale and educational level found in the demographics section. The purpose was to see if there was a correlation between educational level and stages of professional development.

Sample and Setting

The re-analysis utilized 241 of the 262 responses from the original study. The sample consisted of baccalaureate degree and masters degree nurses. The associate, diploma, and doctoral degree nurses were eliminated from the sample due to the small number of responses. Their results were not statistically significant thus not included in the re-analysis.

Instruments

The re-analysis reviewed the results of one tool: Stages of Professional Development and compared that tool with information obtained on the demographic survey, namely the educational level.

Stages of Professional Development Scale. The tool was used in its original form as described earlier in the original study (See Appendix B).

Demographic Tool. The main component of the demographic tool utilized was educational level. Educational level was response D-112 on the tool (See Appendix C).

Procedure

The procedure for this study included seeking approval from Grand Valley State University for human subjects review (See Appendix D). This study was also exempted by 46.101 of the Federal Register 4616:8338, January 26, 1981, section (b) (3), research involving survey procedures. The data was obtained with permission from Kay Kline, Ph. D., RN for use in the re-analysis. The data was then re-analyzed using the statistical package for the Social Studies (SPSS) to determine if a relationship existed between educational level and stage of professional development.

CHAPTER 4

RESULTS

The research question for this study was: What is the relationship between the stages of professional development and educational level of nurses. The following will be a description of the results of that question.

There were 544 questionnaires mailed to Sigma Theta Tau International members. The total received and usable was 262, a 48% return rate. See table 1 for a description of the demographics of the respondents. The respondents received their degree ranging from the year 1958 to 1996. The mode year was 1994. The original study was conducted at the end of 1995. Some of the respondents were receiving their degrees in early 1996 thus the degrees ranged from the year 1958 to 1996.

The following is a description of how the scores were obtained from the tool. The total possible score for professional development was 620. Questions P-61 thru P-65 were indicative of the stage of infancy and had a total possible score of 100. Questions P-66 thru P-79 were indicative of the stage of childhood and had a total possible score of 280. Questions P-80 thru P-82 were indicative of the stage of adolescence and had a total possible score of 60. Questions P-83 to P-91 were indicative of the stage of

Table 1

Age, Education, Sex, and Marital Status of Respondents

<u>Variables</u>	<u>Total Number / Percent</u>
Age (yrs)	
21-23	6 / 2.3%
24-26	19 / 7.3%
27-29	21 / 8.0%
30-34	24 / 9.2%
35-39	43 / 16.4%
40-49	91 / 34.7%
50-59	51 / 19.5%
>60	6 / 2.3%
Education	
Diploma	1 / 0.4%
Associate	2 / 0.8%
Baccalaureate	126 / 48.1%
Masters	115 / 43.9%
Doctorate	17 / 6.5%
Other	1 / 0.4%
Sex	
Male	9 / 3.4%
Female	253 / 96.6%
Marital Status	
Married	204 / 77.9%
Never Married	36 / 13.7%
Divorced	15 / 5.7%
Separated	4 / 1.5%
Widowed	2 / 0.8%

adulthood and had a total possible score of 180.

There were 126 (48.1%) out of 262 nurse respondents that had baccalaureate degrees and 115 (43.9%) out of 262 nurse respondents that had masters degrees. See table 2 for the comparative scores of the baccalaureate and masters degree nurses in all stages of professional development.

The research question asked if there was a relationship between educational level and stage of professional development. The statistical tests completed to assist with the answer were Spearman's Correlation Coefficient and a two-tailed t-test. The baccalaureate and masters degree nurses were the two groups compared. Using Spearman Correlation Coefficient, the total professional development score as compared to educational level showed a weak correlation with $r = 0.269$. The results are however, statistically significant at a $p = 0.000$. The infancy score as compared to educational level showed no correlation with $r = -0.087$. The infancy results are not significant at a $p = 0.162$. The childhood score as compared to educational level showed a weak correlation with $r = 0.212$. The childhood results are significant at a $p = 0.001$. The adolescence score as compared to educational level showed a stronger yet weak correlation with $r = 0.329$. The results are significant at a $p = 0.000$. The adult score as compared to educational level showed a stronger yet weak correlation with $r = 0.311$. The results are significant at a $p = 0.000$.

A two-tailed t-test measured the statistical significance of the scores of the baccalaureate and masters degree nurses as compared to total professional development

Table 2

Comparative Scores of the Baccalaureate and Masters Degree Nurses in Each Stage of Professional Development

<u>Stages of Development</u>	<u>Range</u>	<u>Mean</u>	<u>Standard Deviation</u>
Infancy			
Nursing Degree			
Baccalaureate	22.00-94.00	59.82	13.35
Masters	23.00-90.00	58.26	14.20
Childhood			
Nursing Degree			
Baccalaureate	131.00-260.00	197.42	27.31
Masters	118.00-263.00	207.33	29.58
Adolescence			
Nursing Degree			
Baccalaureate	8.00-60.00	38.48	10.50
Masters	24.00-60.00	45.02	9.58
Adulthood			
Nursing Degree			
Baccalaureate	68.00-176.00	124.16	22.23
Masters	70.00-179.00	137.55	25.26
Total Professional Development			
Nursing Degree			
Baccalaureate	245.00-565.00	419.73	57.50
Masters	269.00-560.00	447.61	62.15

scores. It also measured statistical significance of each of the four stages of professional development. The results revealed a difference in scores between the baccalaureate and masters degree nurses in total professional development. The masters degree nurses scored higher than the baccalaureate degree nurses. There was minimal difference in scores between the baccalaureate degree nurses and the masters degree nurses in the stage of infancy. The baccalaureate degree nurses scored higher than the masters degree nurses in infancy though the result was not statistically significant. The baccalaureate degree nurses and masters degree nurses did show some difference in scores in the stage of childhood, adolescence and adulthood with the masters degree nurses scoring higher. See table 3 for a description of the t-test for equality of means and the difference in scores between the baccalaureate and masters degree nurses.

Table 3

T-test for Equality of Means to Show the Difference in Scores Between Nurses with Baccalaureate and Masters Degrees

<u>Stage of Development</u>	<u>T-Value</u>	<u>Degrees of Freedom</u>	<u>2-Tailed Significance</u>
Infancy	0.87	234	0.384
Childhood	-2.65	230	0.009
Adolescence	-5.01	237	0.000
Adulthood	-4.28	229	0.000
Total Professional Development	-3.44	216	0.001

CHAPTER FIVE

DISCUSSION AND APPLICATION OF FINDINGS

The purpose of this study was to re-analyze data and answer the question: What is the relationship between stages of professional development and the educational level of nurses? The following will be a discussion of those findings.

The results revealed that there is a correlation between education and professional development. In other words the more educated the nurse the higher his/her level of professional development. The correlation was weak indicating that professional development increases slower than educational preparation occurs. Leddy and Pepper (1993) believe that professional development occurs over time and that it is a process. The results of this study lend support to their theory. Based on this study one can not infer that education alone caused the higher degree of professional development.

Professional development may be weakly correlated with education because there are additional factors that go into professional development. Leddy and Pepper (1993) describe education, practice and research as affecting professional development. Other nursing scholars describe length of time in practice, mentors, type of nursing experiences, etc. as impacting professional development (Kelly, 1985).

The results of this study lend support to the study conducted by Eddy, et. al.

(1994) that showed that nursing faculty with more years of teaching experience and higher educational levels revealed higher professional value scores than did the bachelor of science in nursing students. The results of this study also lend support to the study completed by Brooks, et. al. (1992) that indicated the longer the association with the nursing profession the more professional the nurse's attitude.

Practice

How do the results of this study apply to nursing practice? The results may help to strengthen the belief that there are job classifications appropriate for certain educational levels based on higher professional development. This is described below. As well this study may strengthen the belief that there should be a single level of entry into practice for the nursing profession. Based on the professional development scores in this study the baccalaureate degree nurse may be most beneficial in providing direct patient care. He/she could complete case management tasks for patients with predictable outcomes. These patients would have simple diagnoses that follow critical pathways. The baccalaureate degree nurse could appropriately handle accountability for limited outcomes. He/she could be the shift manager verses unit managers. The baccalaureate degree nurse could be a preceptor for the baccalaureate degree, associate degree and diploma nurse while educating them about tasks as well as be a mentor for them regarding professionalism.

The masters degree nurse has the ability to exhibit higher professional development and would be most appropriate for job classifications somewhat different than that of the baccalaureate degree nurse. The masters degree nurse could complete

complex case management tasks with patients that have multiple or complex diagnoses. These patients may not follow a critical pathway. For patients with multiple or complex functional health pattern alterations the masters degree nurse may be the best choice to provide the care. The masters degree nurse could manage a health care organization. The nurse with professional development could be a leader among peers. He/she could educate others in the profession about tasks and outcomes. The masters degree nurse may be the best to complete clinical based research. Quality assurance is most appropriately done by the masters degree nurse. Based on the results of this study an appropriate mentor to assist others in professional development would be the masters degree nurse due to his/her ability to develop higher professionalism.

Education

How do the results of this study apply to nursing education? The results may indicate that the baccalaureate degree nurse is already being educated at an appropriate professional level and that nothing further need be done. It may also indicate that the baccalaureate curriculum needs to be adjusted to enhance the professional development of nurses at that level. If the baccalaureate degree is going to be the entry into nursing practice then there may need to be more schools available for nurses to obtain this degree as well as more educators to complete the education. Having the bachelors degree as the entry into practice may also increase the cost of education because; a) cost may be incurred to make curriculum changes and b) the adjustments made in curriculum may in fact lengthen the program.

Administration

How do the results of this study apply to nursing administration? The results may lend support to the masters degree as an entry requirement for administration. If that is the case more masters degree nurses will be needed. Also, more doctoral prepared nurses may be needed to supervise the masters prepared nurse at higher levels. More schools would be needed to provide education for the masters prepared nurse. There may also need to be curriculum changes at the masters level to support higher professional development expectations. And finally, if a masters degree is required for nursing administration then the entire management team of the organization would also need to be educated at a higher level.

Limitations

It is difficult to generalize these findings to include all nurses due to the fact that the study was completed with nurses from one chapter of Sigma Theta Tau International. There may be some professional bias with this group because in order for them to belong to this organization they had to have either a higher educational degree, demonstrate professional behaviors, be a leader among peers, demonstrate outstanding clinical practice, or have done something to add to the profession of nursing. This group by nature may score higher on the professional development scale. This may not give a true picture of the strength of the correlation between education and professional development and the difference between scores of other educational levels. Also, it is difficult to generalize because the sample did not represent all educational levels equally. The sample needs to be more diverse representing all levels of entry into practice.

Of the respondents, most were in the 40–49 age category. This may indicate that they have had more life experiences that influence their professional development. It may also indicate they have been in the profession longer thus elevating their scores. This may not give a true picture of how educational preparation influences professional development.

The length of time the respondents had been in nursing indicated an average of eight years. It is difficult to determine if experience influenced their scores or not. If professional development was scored at the time the baccalaureate degree and masters degree nurse finished their education there may be a larger difference in scores. This may give stronger support to the belief that the higher the education the more professionally developed the nurse.

The results also revealed that the masters degree nurses scored higher than the baccalaureate degree nurses on total professional development and three out of four of the stages of professional development. The area in which the baccalaureate degree nurse scored higher was the stage of infancy. The results were not statistically significant. This may be due to the fact that both the baccalaureate degree and the masters degree nurse have moved beyond this stage of development and the tool was unable to measure a difference.

Recommendations for Research

A few recommendations can be made based on this re-analysis:

1. Replicate the original study using a larger more diverse sample that is not connected with a professional organization. This may help to remove some professional bias the respondents may have. It may help to compare scores and determine if a correlation exists between professional development the other educational levels. This may also lend further support to the argument that nursing needs a single level of entry into practice.
2. Conduct further studies to conclude which variables impact professional development and to what degree: type of education, type of experience, mentorship, length of time in practice, etc. This may help nursing organize its educational system and orientation programs differently.
3. Complete a factor analysis to better clarify the interrelationships among variables and identify which variables go together to test for individual stages and total scores of professional development.

APPENDICES

APPENDIX A

STAGES OF PROFESSIONAL DEVELOPMENT

STAGE	TASK	GOALS
Infancy- The Beginning Professional-Orientation	Trust	<ul style="list-style-type: none"> • To trust one's own mentors and polestars to effectively guide oneself to develop abilities to fulfill professional role requirements. • To count on others to assist in the pursuit of professional objectives. • To experience gratification in a new role. • To count on recognition from employers and clients for effectively delivering a needed service.
Childhood- The Beginning Professional Nurse-Postorientation	Autonomy	<ul style="list-style-type: none"> • To depend on more mature professionals for guidance some of the time. • To view self as autonomous in practice some of the time, a professional in one's own right, able to stand on own competence in meeting role responsibilities. • To view nursing as an independent body, determining its own policies and regulations, effectively using its power, and in control of its own practice.
The young Professional- Moving into Independence	Initiative	<ul style="list-style-type: none"> • To find rewards in using one's own initiative and imagination to test the realities of nursing roles. • To independently anticipate professional role responsibilities while being held accountable for own actions.
The Growing Professional-Developing Expertise	Industry	<ul style="list-style-type: none"> • To experience competence in independently performing the tasks of the profession • To expand one's own knowledge of nursing. • To integrate a sense of accomplishment in one's own work in the profession.

STAGE	TASK	GOALS
Adolescence- The Professional With Own Identity	Identity	<ul style="list-style-type: none"> • To feel self-certain in one's role as a professional nurse. • To feel competent in role experimentation. • To clearly articulate one's own ideological commitment to the profession.
Adulthood- The Maturing Professional	Intimacy	<ul style="list-style-type: none"> • To develop the capacity to commit oneself to collaborative relationships with clients, professional peers, and other colleagues in the health care delivery system as an interdependent professional.
The Productive Professional	Generativity	<ul style="list-style-type: none"> • To be productive for self and others in a professional nursing role, contributing to society through own efforts in nursing education, practice, and research.
The Older Professional	Integrity	<ul style="list-style-type: none"> • To find pleasure in the accomplishments of oneself and others in professional pursuits. • To appreciate the full life cycle of the professional self.

Adapted from Leddy & pepper, 1993, p.69 and Kline, 1995, p.10

APPENDIX B

STAGES OF PROFESSIONAL DEVELOPMENT SCALE

Please indicate the degree to which you agree with the following statements by placing a vertical mark on the line. Example: Disagree -----|----- Agree

- | | | |
|------|--|----------------------|
| P-61 | I trust my mentors to effectively guide me in developing abilities to fulfill professional role components | Disagree ----- Agree |
| P-62 | I count on others to assist in the pursuit of professional objectives | Disagree ----- Agree |
| P-63 | I experience gratification in a new role | Disagree ----- Agree |
| P-64 | I count on recognition from employers for effectively delivering a needed service | Disagree ----- Agree |
| P-65 | I count on recognition from clients for effectively delivering a needed service | Disagree ----- Agree |
| P-66 | I depend on more mature professionals for guidance some of the time | Disagree ----- Agree |
| P-67 | I view myself as autonomous in practice some of the time | Disagree ----- Agree |
| P-68 | I view myself as a professional in my own right | Disagree ----- Agree |
| P-69 | I view myself as able to stand on my own competence in meeting role responsibilities | Disagree ----- Agree |
| P-70 | I view nursing as an independent body | Disagree ----- Agree |
| P-71 | I view nursing as determining its own policies and regulations | Disagree ----- Agree |

P-72	I view nursing as effectively using its power	Disagree ----- Agree
P-73	I view nursing as being in control of its own practice	Disagree ----- Agree
P-74	I find rewards in using my initiative to test the realities of nursing roles	Disagree ----- Agree
P-75	I find rewards in using my imagination to test the realities of nursing roles	Disagree ----- Agree
P-76	I independently anticipate professional role responsibilities while being held accountable for my own actions	Disagree ----- Agree
P-77	I experience competence in independently performing the tasks of the profession	Disagree ----- Agree
P-78	I expand my knowledge of nursing	Disagree ----- Agree
P-79	I integrate a sense of accomplishment in my work in the profession	Disagree ----- Agree
P-80	I feel self-certain in my role as a professional nurse	Disagree ----- Agree
P-81	I feel competent in role experimentation	Disagree ----- Agree
P-82	I clearly articulate my ideological commitment to the profession	Disagree ----- Agree
P-83	I commit myself to collaborative relationships with clients as an independent professional	Disagree ----- Agree
P-84	I commit myself to collaborative relationships with professional peers as an independent professional	Disagree ----- Agree

- | | | |
|------|--|----------------------|
| P-85 | I commit myself to collaborative relationships with other colleagues in the health care delivery system as an independent professional | Disagree ----- Agree |
| P-86 | I contribute to society through my efforts in nursing education | Disagree ----- Agree |
| P-87 | I contribute to society through my efforts in nursing practice | Disagree ----- Agree |
| P-88 | I contribute to society through my efforts in nursing research | Disagree ----- Agree |
| P-89 | I find pleasure in my accomplishment in professional pursuits | Disagree ----- Agree |
| P-90 | I find pleasure in the accomplishments of others in professional pursuits | Disagree ----- Agree |
| P-91 | I appreciate the full life cycle of the professional self | Disagree ----- Agree |

APPENDIX C

DEMOGRAPHIC SURVEY

In order to be able to determine group characteristics of persons completing the survey, I would like to ask you some background questions.

Directions: Please select each answer that applies to your situation.

D-109 Gender. (Optional)

- ☐ Male
☐ Female

D-110 Your present marital status. (Optional)

- ☐ Never Married
☐ Married
☐ Divorced
☐ Separated
☐ Widowed

D-111 Age to nearest birthday. (Optional)

- | | |
|---|---|
| <input type="checkbox"/> Under 21 years | <input type="checkbox"/> 30-34 years |
| <input type="checkbox"/> 21-23 years | <input type="checkbox"/> 35-39 years |
| <input type="checkbox"/> 24-26 years | <input type="checkbox"/> 40-49 years |
| <input type="checkbox"/> 27-29 years | <input type="checkbox"/> 50-59 years |
| | <input type="checkbox"/> 60 years or more |

D-112 What is your highest level of education, and in which major?

<u>Level</u>	<u>Major (List all majors)</u>	<u>Year Obtained</u>
<input type="checkbox"/> Diploma in Nursing		
<input type="checkbox"/> Associate degree		
<input type="checkbox"/> Baccalaureate degree		
<input type="checkbox"/> Masters degree		
<input type="checkbox"/> Doctoral degree		
<input type="checkbox"/> Other (Please specify)		

D-113 Please indicate the year you were inducted into Sigma Theta Tau International.

- | | |
|-------------------------------|--------------------------------|
| <input type="checkbox"/> 1988 | <input type="checkbox"/> 1992 |
| <input type="checkbox"/> 1989 | <input type="checkbox"/> 1993 |
| <input type="checkbox"/> 1990 | <input type="checkbox"/> 1994 |
| <input type="checkbox"/> 1991 | <input type="checkbox"/> Other |

(For transfer and dual members, please write in date of induction _____)



APPENDIX D

HUMAN RESEARCH REVIEW COMMITTEE LETTER

1 CAMPUS DRIVE • ALLENDALE MICHIGAN 49401-9403 • 616/895-6611

March 5, 1998

Christine Frederick
300 Madison Ave. SE
Grand Rapids, MI 49503

Dear Christine:

Your proposed project entitled "***Is There a Relationship Between Professional Development and Education?***" has been reviewed. It has been approved as a study which is exempt from the regulations by section 46.101 of the Federal Register 46(16):8336, January 26, 1981.

Sincerely,

Paul Huizenga, Chair
Human Research Review Committee

LIST OF REFERENCES

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