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The Abortion Attitudes of Counselor, Social Worker, and Nursing Trainees

Mary J. Ball
Western Michigan University

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THE ABORTION ATTITUDES OF COUNSELOR, SOCIAL WORK, AND NURSING TRAINEES

by

Mary J. Ball

A Dissertation
Submitted to the
Faculty of The Graduate College
in partial fulfillment of the
requirements for the
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Advisor: Alan J. Hovestadt, Ed.D.

Western Michigan University
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THE ABORTION ATTITUDES OF COUNSELOR, SOCIAL WORK, AND NURSING TRAINEES

Mary J. Ball, Ph.D.
Western Michigan University, 2010

This study examined the similarities and dissimilarities in abortion attitudes among counselors (CTs, $n = 51$), social workers (SWTs, $n = 42$), and nurses in training (NTs, $n = 78$), based on profession, age, race, gender, and religion. Data were analyzed using analysis of variance and standard multiple regression. It was predicted that profession, religion, age, gender, and race would predict the abortion attitudes of CTs, SWTs, and NTs in training. It was also predicted that the attitudes of CTs and SWTs would be most similar, and that both of these groups would hold more positive abortion attitudes than NTs. The results indicated that religion, age, gender, and race do not significantly predict abortion attitudes in CTs, SWTs, and NTs. The abortion attitudes of CTs, SWTs, and NTs in this study were too similar to reveal the unique contribution of professional socialization on abortion attitudes. The majority of the CTs, SWTs, and NTs were “pro-choice,” as measured by self-report and the RAQ (Parsons et al., 1990). This study provides preliminary information on CT, SWT, and NT abortion attitudes, abortion knowledge, and professional ethical positions related to abortion that might be useful to counseling, social work, and nurse training programs.
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CHAPTER I

INTRODUCTION

Statement of the Problem

Research has addressed how the process of socialization and self-selection into a profession can influence abortion attitudes (Kade, Kumar, Polis, & Schaffer, 2004; Norup, 1998; Poggenpoel, Myburgh, & Gmeiner, 1998; Rosen, Werley, Ager, & Shea, 1974; Shotorbani, Zimmerman, Bell, Ward, & Assefi, 2004). The literature on the abortion attitudes of mental health professionals, however, is limited (Millner & Hanks, 2002), with a paucity of attention paid to those in training programs. The value of studying students in training lies in the potential to gauge the abortion attitudes of the next wave of professionals to enter the field. The majority of research done on abortion attitudes among human service professionals has examined physicians and nurses. It may be assumed that the abortion attitudes of nonmedical mental health professionals are similar to medical professionals', in part, based on research that has addressed the impact of higher education on abortion attitudes (Hedderson, Hodgson, Bogan, & Crowley, 1972; Johansson & Fink, 1974; Knoke & Isaac, 1976). It is unknown, however, as to how similar or dissimilar the attitudes of nonmedical mental health care professionals are to medical professionals. Examining the abortion attitudes of counselors, social workers, and nurses in training provided data that helped answer the aforementioned question.
In addition to their professional identities, nonmedical mental health and medical professionals in training represent varied individual characteristics, group affiliations, and cultural memberships that may be related to their abortion attitudes. Research suggests that race/ethnicity (Bolks, Evans, Polinard, & Wrinkle, 2000; Walzer, 1994), religion (Fawcett, Andrews, & Lester, 2000; Remennick & Hetsroni, 2001; Rosen et al., 1974; Wall et al., 1999), gender (Agresti Finlay, 1981; Rosenblatt, Robinson, Larson, & Dobie, 1999; Walzer, 1994), and age (Francome & Freeman, 2000; Remennick & Hetsroni, 2001; Rosenblatt et al., 1999; Schnell & McConatha, 1996) are important factors influencing these attitudes. Self-perception of abortion knowledge has been an underrepresented variable in the research on abortion attitudes and for this reason was included in this study. Due to the gap in research on abortion attitudes, a critical review of the literature by profession, religion, age, gender, race, and abortion knowledge will be helpful in gaining a clearer picture of the abortion attitudes of nonmedical mental health and medical professionals in training.

Purpose of the Study

There are several reasons why this study might impact nonmedical and medical mental health professionals who are currently practicing, conducting research, and teaching. It might also be of interest to those who are in training. As previously mentioned, there is a gap in the literature in regard to the abortion attitudes of nonmedical mental health professionals in general (Millner & Hanks, 2002), and especially those in training. This paucity of research is in contrast to a relatively larger foundation of studies on the abortion attitudes of medical professionals and medical professionals in training.
Reproductive behavior and fertility regulations have long been considered fundamental to the work of specialists in sexual behavior, while many research psychologists and nonmedical mental health practitioners have lagged in their study and attention paid to these issues (Apt, Hurlbert, & Clark, 1994). Most mental health professionals in the United States will have the opportunity to work with clients on abortion-related concerns (Limber & Pagliocca, 2000). Therefore, abortion is a highly relevant issue for the work of nonmedical mental health and medical practitioners. For this reason, the primary purpose of this study was to fill this gap in the literature by examining abortion attitudes of nonmedical mental health and medical professionals in training.

Since self-selection and socialization into a profession have been shown to impact abortion attitudes (Kade et al., 2004; Norup, 1998; Poggenpoel et al., 1998; Rosen et al., 1974; Shotorbani et al., 2004), a particular focus on professionals in training provided the most recent information on the abortion attitudes of the next wave of medical and nonmedical mental health professionals who intend to enter into professional practice, and of the potential influence of professional training atmospheres on abortion attitudes. This study also helped provide a more comprehensive view of the factors that contribute to abortion attitudes in these professionals, including profession, age, gender, race, and religion.

The results of this study also have implications for those who educate counselors, social workers, and nurses in training. For example, training programs need to consider the potential benefit of encouraging more self-exploration of values and individualized thought processes by their trainees, who are considering their own abortion attitudes and how this might impact their practice. Millner and Hanks (2002) state that due to the
prevalence of abortion, counselor educators should provide trainees with the opportunity to explore abortion-related issues, including a purposeful and thorough self-assessment of their own abortion attitudes. Of course it is acceptable for practitioners to feel confused or ambivalent over their feelings regarding abortion; however, when these feelings begin to interfere with practice, an ethical referral must be made.

Additionally, this study highlights that more attention needs to be paid to the general issue of abortion in training programs, including encouraging dialogue, and more emphasis on the ethics of abortion according to profession. The lack of literature that considers counselor values when working with clients and their abortion concerns may reflect the power of the ethical dilemmas that might occur when working with clients on this issue (Millner & Hanks, 2002). Published recommendations for nonmedical mental health practitioners that specifically address abortion as it relates to practice are scarce (Millner & Hanks, 2002). Therefore, educators have the ability to capitalize on the findings of this study and tailor their use to their particular program, in order to enhance the training they provide.

Another potential manner in which this study could be used in the nonmedical mental health and medical fields is by stimulating dialogue and personal exploration regarding abortion attitudes among those already practicing in the fields of counseling, social work, and nursing. While abortion is one of the most controversial issues in United States culture, the counseling literature rarely addresses how counselors struggle with their abortion attitudes in the work that they do (Millner & Hanks, 2002). Additionally, clients and patients are met with the task of sorting through their own abortion attitudes in the context of society's conflicted values over abortion, which are then also reflected in
the professional with whom they choose to consult (Millner & Hanks, 2002). In order for practitioners to stay current, and therefore competent and ethical, they need to be aware of the most recent laws and cultural values surrounding abortion (Millner & Hanks, 2002). Of course, a clear understanding of individual client and practitioner abortion attitudes is vital as well in any nonmedical mental health or medical dyad. Studies such as the one proposed contribute to keeping this dialogue alive and fresh. Another unique contribution of this study was the additional self-exploration questions raised by considering self-perception of abortion knowledge, and its potential impact on abortion attitudes.

Further potential use of this study lies in what the future clients and patients of counselors, social workers, and nurses who have abortion concerns might be able to glean from its contents. Abortion attitude information by profession might also be disseminated to clients via a trickle-down effect from professionals familiar with the literature. For example, if a woman considering abortion would like to consult with a professional, she might be interested in consulting with a professional who is likely to hold similar views to hers, if only based on a generalization made by virtue of profession.

In summation, this study identifies the similarities and dissimilarities in abortion attitudes among counselors, social workers, and nurses in training, based on profession, age, race, gender, and religion. In particular, this study fills a gap in the literature by examining counselors in training. Since abortion is prevalent in the United States, abortion-related issues are highly relevant to nonmedical and medical mental health practitioners (Millner & Hanks, 2002). In order to support previous research that shows the professional self-selection and socialization process to influence abortion attitudes (Kade et al., 2004; Norup, 1998; Poggenpoel et al., 1998; Rosen et al., 1974; Shotorbani
et al., 2004), focusing on professionals in training provided the most recent information on the potential influence of these environments on the abortion attitudes of their members. Additionally, this study has the potential to keep the topic of abortion in nonmedical and medical mental health training programs on the radar of educators, with the hope that more emphasis will be placed on the training of professional ethics and abortion. This study served to spur participants to further explore their own abortion attitudes, especially as they pertain to their work with clients and patients. Lastly, this research was also conducted with the hope that future clients and patients of counselors, social workers, and nurses might somehow benefit from any generalizations that can be made about the abortion attitudes of members of these professions. In this way, clients and patients with abortion-related concerns might have the greatest chance of consulting with a professional who is most open and able to work with them from their own point of view.

Statement of the Research Hypotheses

This study was designed to address the following four hypotheses:

1. Counselor Trainee (CT) (a) race, (b) religion, (c) gender, (d) profession, and (e) age will predict CT abortion attitudes.

2. Social Work Trainee (SWT) (a) race, (b) religion, (c) gender, (d) profession, and (e) age will predict SWT abortion attitudes.

3. Nurse Trainee (NT) (a) race, (b) religion, (c) gender, (d) profession, and (e) age will predict SWT abortion attitudes.
4. CTs, SWTs, and NTs (a) race, (b) religion, (c) gender, (d) profession, and (e) age will predict the extent to which the abortion attitudes of CTs, SWTs, and NTs are similar or dissimilar.

Definition of Terms

Aborti on: For the purpose of this study, a procedure requiring surgery or medication that is performed to end a pregnancy. While abortion is also used to indicate a miscarriage in the medical literature (Stotland, 1998), it will not be used in that manner for this study.

Aborti on Knowledge: For the purpose of this study, it is assumed that abortion knowledge impacts abortion attitudes. Since the relationship between abortion knowledge and abortion attitudes is not addressed in the literature, the intricacies of this relationship are unknown. At the very least, it could be assumed that abortion knowledge would impact the magnitude and stability of abortion attitudes over time.

Client/Patient: The term client will be used in the data collection materials for counselor and social work trainees, while the term patient will be used in the data collection materials for nurse trainees, in an effort to adhere to the common usage of each profession. The term client only will be used in the reporting of this study to apply to both clients and patients, as a way to standardize the report of the data.

Counselor Trainee (CT): An individual who is seeking a Master of Arts degree in Community Counseling, Art Therapy Counseling, or Clinical Psychology, or a Master of Education degree in Community Agency Counseling from University “A,” University “B,” or College “C.”
Medication Abortion: A procedure intended to end a pregnancy (up to 49 days) by the administration of a medication, one of which is called “Mifeprex,” that is used in combination with another medication called misoprostal. Mifeprex is the name of this medication in the United States; elsewhere it is referred to as “RU-486.” “Medication abortion” is also sometimes referred to as a “medical abortion,” while “medical abortion” also refers to an abortion that is performed for medical reasons.

Nurse Trainee (NT): An individual who is seeking a Bachelor of Science in Nursing degree from University B or College C.

Pro-Choice (PC): For the purpose of this study, an individual who is supportive of a woman’s choice to exercise her reproductive right and terminate her pregnancy, under at least some conditions or any condition. “Pro-Choice” is used as a means of convention, and not to imply that Pro-Choice participants do not also value life.

Pro-Life (PL): For the purpose of this study, an individual who is not supportive of a woman’s choice to exercise her reproductive right and terminate a pregnancy under most conditions or any condition.

Social Work Trainee (SWT): An individual who is seeking a Master of Social Work degree from University B.

Surgical Abortion: All other procedures that are not medication abortions and are intended to end a pregnancy.
Organization of the Remainder of the Study

The relevant literature is reviewed in Chapter II, followed by a description of the methodology in Chapter III. Analyses of the data is reported in Chapter IV, with discussion and recommendations for future research in Chapter V.
Any discussion of abortion attitudes takes place in the context of the history of the legalization of abortion in the United States. The most well-known and significant abortion-related court case in recent history is *Roe v. Wade*, which was decided by the Supreme Court in 1973. This case made the decision of whether or not to have an abortion a constitutionally protected right (Wardle & Wood, 1982, p. 52). The judicial opinion in *Roe v. Wade* has had a radical impact on life and law in the United States like few other judicial opinions have (Wardle & Wood, 1982, p. 50) and has been called one of the most divisive judicial decisions of the 20th century (Hull & Hoffer, 2001, p. 3). The right to abortion privacy that the Supreme Court created in 1973 has been the target of considerable litigation since then (Wardle & Wood, 1982, p. 53).

The origins of *Roe v. Wade* (1973) began in 1970, when a pregnant woman in Texas challenged the constitutionality of the Texas laws that restricted abortion (Wardle & Wood, 1982, p. 47). Roe stated in her complaint that her life was not in danger by her pregnancy, but that she wanted an abortion performed by a doctor and could not afford to travel to another state where her abortion would be legal. Thus, “Jane Roe” (a pseudonym) and Wade, the local district attorney, became the names attached to this case.
Other parties would eventually join Roe in her suit. Attorneys Linda Coffee and Sarah Weddington represented the plaintiffs, although Weddington got most of the credit for Roe's outcome because she eventually argued the case before the Supreme Court. Weddington had a broad vision and felt the case was a class action for all women who might one day want the option of legal abortion to be available (Dellapena, 2006, p. 679).

The three-judge federal district court in Dallas ruled in favor of Roe, based on their interpretation of the Texas abortion laws being too broad and unconstitutionally vague. Both the plaintiffs and the defendant appealed this decision to the United States Supreme Court (Wardle & Wood, 1982, p. 47), which also ruled in favor of Roe. Justice Harry Blackmun wrote the opinion for the Court, which outlined the circumstances under which abortion would be legal (nationwide) according to each trimester of a pregnancy (Wardle & Wood, 1982, p. 52). Roe (1973) did not happen in isolation; comparable changes to abortion law were happening in most industrialized countries at the same time as Roe (Dellapena, 2006, p. 698).

The Court's decision in Roe (1973) overturned at least 46 states' abortion laws (Dellapena, 2006, p. 697). This served to invalidate traditionally used state power to make abortion a crime and shifted state policies on abortion to a legal stance that was more in sync with current public opinion (Rubin, 1982, p. 57). Despite its revolutionary nature, the decision in Roe was, in reality, middle-of-the-road. Supporters of abortion law reform had won a victory, but were dissatisfied with limitations still placed on abortion. Opponents of abortion law reform were disappointed in that they had been hoping for most abortions to be outlawed, or at least states being allowed to continue regulating abortion as they chose (Rubin, 1982, p. 67). The Roe decision notwithstanding, in 1974
many hospitals still refused to perform the procedure (Dellapena, 2006, p. 699). Almost 37 years later, abortion is still not widely available in many areas.

The abortion attitudes of all participants in the studies reviewed below, as well as the current study on abortion attitudes, were formed and maintained in a particular abortion "zeitgeist," comprised of legal decisions and various social influences. Therefore, study results must be interpreted in the context of the abortion climate in which each participant came of age, was trained, and will practice. The first study in this review of the literature was published in 1974 (Rosen et al., 1974) with data collected in 1971. Imbedded in its completion was the 1973 Roe decision, therefore capturing this moment in abortion history as reflected in the abortion attitudes of nurse, medical, and social work students and faculty.

**Abortion Attitude Factors**

Approximately 37 years ago, Rosen et al. (1974) examined the data from 1971 regarding the attitudes toward abortion by profession and religion among nurse students ($n = 6,333$), nurse faculty ($n = 712$), medical students ($n = 2,347$), medical faculty ($n = 1,198$), social work students ($n = 1,958$), and social work faculty ($n = 349$). The authors gathered quantitative data in 1971 from a nationwide survey on family planning (Shea, Werley, Rosen, & Ager, 1973; Werley, Ager, Rosen, & Shea, 1973a, 1973b). Participants in this survey (Shea et al., 1973; Werley et al., 1973a, 1973b) included enrolled students and paid full-time faculty from randomly selected professional schools of nursing, medicine, and social work. These schools were selected from published listings of schools approved by the National League for Nursing (NLN, 1971), the American
The nurse school sample was selected from about 1,300 schools and guided by four variables using the Bureau of the Budget Standard Metropolitan Statistical Areas criteria for 1967 (Bureau of the Budget, 1967). These four guiding variables were type of program (diploma, associate or baccalaureate degree); religious affiliation (non-Catholic or Catholic); school size (more or less than 150 students enrolled); and community size (more or less than 50,000). Less stringent criteria were used for selecting the medical school and social work school samples (Shea et al., 1973; Werley et al., 1973a, 1973b).

The medical and social work samples were selected from 94 medical schools and 67 social work schools (Shea et al., 1973; Werley et al., 1973a, 1973b). The selection of these samples was not guided by the same variables as the nurse school sample, as the authors believed medical schools were more homogenous with regard to these variables (Rosen et al., 1974). Medical and social work schools were simply randomly selected from their respective lists, with the one guiding variable being that Catholic schools were included in each sample.

The final sample from this 1971 nationwide survey on family planning (Shea et al., 1973; Werley et al., 1973a, 1973b) included 47 nurse schools (20 diploma programs, 13 associate degree programs, and 14 baccalaureate degree programs); 11 medical schools (8 non-Catholic, 3 Catholic); and 15 social work schools (12 non-Catholic, 3 Catholic).

Based on an examination of quantitative data the authors gathered from this 1971 survey on family planning (Shea et al., 1973; Werley et al., 1973a, 1973b), Rosen et al.
(1974) adopted seven attitudinal items, five which dealt with conditions under which an abortion could be performed, and two with whether the participant would help a client obtain an abortion. Participants in the 1971 study responded using a modified Likert scale with six alternatives ranging from *strongly agree* to *strongly disagree* with no *undecided* option. These categories were collapsed into *agree* and *disagree* for much of the analyses, in order to add clarity to the results. These data were compared to a 1972 study (Pomeroy & Landman, 1972) of abortion opinions in the general population conducted by the Gallup Organization for Planned Parenthood–World Population. Respondents from this sample \( (n = 1,574) \) were categorized by level of education and religion and represented national proportions of various political and religious affiliations, as well as age, gender, income, educational attainment, and geographic location. They were asked an assortment of questions on population and family size preferences, including questions on abortion. In regard to abortion, participants were first asked the extent to which they agree that the decision to have an abortion should be made solely by a woman and her physician. They responded using a modified Likert scale with five alternatives ranging from *strongly agree* to *strongly disagree*, with a *don't know* option. If participants responded to this question with *disagree*, *strongly disagree*, or *don't know*, they were asked a multiple-choice question regarding circumstances under which they think a legal abortion should be made available to a woman. If participants responded that none of the provided circumstances warranted a legal abortion being made available to a woman, they were asked an open-ended question regarding whether there were any circumstances under which they thought abortion should be legal or whether they thought abortion should not be legal under any circumstances. Data were analyzed using chi-square analyses.
Abortion Attitude and Occupation

In Rosen et al. (1974), students and faculty expressed similar attitudes within each occupation, which the authors cite as an indication that occupational identity overrides educational status (which the authors defined as “some college,” “high school,” or “grade school”) and age in relation to abortion attitudes. This similarity in student and faculty attitudes by occupation was maintained when groups were compared by age. Overall, nurse students and faculty, medical students and faculty, and social work students and faculty held favorable attitudes toward abortion under certain conditions, especially when protecting the health of the mother was an issue. In each professional category, more than two thirds agreed that they would help clients obtain a legal abortion under some circumstances.

Social Work and Nurse

The group found to be most positive toward abortion was social workers, while the least favorable group was nurses. Nurse faculty were most similar to the general population as a whole in their abortion attitudes, although they were less favorable toward freely accessible abortion than the general public. The authors (Rosen et al., 1974) attribute this finding to the differential professional contact that social workers and nurses have with pregnancy. In addition, they cite the occupational socialization of nurses, which they describe as emphasizing the preservation rather than the quality of life.
The attitudes of medical students and medical faculty toward abortion were most like that of the general population who had completed some college education, and fell between the social work and nursing attitudes. Rosen et al. (1974) speculate that this similarity in attitude may be due to the upbringing of medical professionals, since medical students typically are raised in households in which both parents had more education than the parents of social workers or nurses. Medical faculty on average also had fathers with more education than the social workers or nurses. The authors propose that one might expect physicians to have a more favorable attitude toward abortion than the general population with some college education, if education is positively correlated with favorable abortion attitudes. They state that perhaps beyond a certain level, education may not make a difference. Rosen et al. also speculate that like the other two professional groups in this study, the abortion attitudes of physicians may be moderated by their degree of professional involvement with abortion and their professional socialization. Additional factors that may impact physicians' abortion attitudes may include contact with fetuses, training in regard to the preservation of life, and possible paternalistic or authoritarian roles and attitudes.

Abortion Attitude and Religion

Rosen et al. (1974) also obtained data on the influence of participants' religious affiliations and the religious affiliations of their schools on abortion attitudes. Religion categories were Catholic, Protestant, and Other/No religion, in which Jews were included
due to the low number of participants who were Jewish. Compared to the Catholic general public at each educational level ("some college," "high school," "grade school"), fewer Catholic health professionals favored elective abortion. The authors propose that this may be due to the necessity of these professionals having to face their abortion-related feelings and therefore having a clearer understanding of their own attitudes. In each of the three health fields, Catholic students held more favorable abortion attitudes than Catholic faculty. Among Catholic students in non-Catholic schools, attitudes were even more favorable, with more than a third of medical and social work students willing to help a client obtain an illegal abortion under certain circumstances. Catholic nurse students were least favorable toward abortion of all Catholic students. This finding led the authors (Rosen et al., 1974) to recommend that these students may require more educational preparation and screening so that they are not unwillingly working with abortion patients and therefore sacrificing the quality of care that these patients receive.

Results indicated that non-Catholic social workers and most non-Catholic medical professionals would provide the most "liberal" abortion-related services. Among nurse professionals, three quarters or more of non-Catholics would be supportive of patients seeking abortion under certain circumstances. Protestants, however, held less favorable attitudes toward providing abortion-related services than other non-Catholics, especially participants who were Jewish or had no religious affiliation.

Although overall response rates to the survey used in this study were high, ranging from 60% for social work students to 84% for nurse faculty, there was a wide discrepancy in the number of participants in each group (Rosen et al., 1974). For example, there were 349 social work faculty participants compared to 1,198 medical faculty. The authors
attribute the difference in response rates to the method of administration. Most participants in the nurse groups completed the surveys in a group setting and returned them to a trained staff member. Most participants in the medical groups were surveyed by mail due to the rarity of group gatherings and geographical dispersion. The social work groups were administered the survey through a mixture of these two methods.

There were areas where Rosen et al. (1974) employed questionable methods in data analysis. The authors acknowledge that the differences in wording between the general population survey and the health professionals’ survey may have led to the difference between Catholic physicians and the Catholic general population, but they add that if this were the case, then this difference would be apparent between other groups. However, since two different instruments were used, any comparison of data is inherently flawed to some extent, since it is unknown what the effect each instrument had on participants’ responses. Additionally, although due to low numbers in these categories, it seems inappropriate to group Jewish participants in with other non-Catholic and non-Protestant participants as well as participants with no identified religion. Perhaps it would have been better not to include any non-Protestant or non-Catholic participants in the analyses of religion. Lastly, there is no mention of the race of participants in this study, no information is provided as to how the sample was selected, and there is no detailed information of data analyses by gender.

Rosen et al. (1974) in this study attribute much of the difference in abortion attitudes among these three types of professionals to professional socialization and the type of professional contact with abortion. As opposed to nurses and physicians, social workers are more likely to play a consultative and supportive role to a woman
contemplating abortion, or to a woman who has had an abortion. Social workers are not involved in any medical procedure or contact with the fetus, and often have greater insight into the experience of a woman who is exploring pregnancy termination or who has done so already. Since the nature of the role that nonmedical mental health care providers may have with abortion issues is likely most similar to that of social workers, it may be most useful to contemplate this piece of the data when considering the abortion attitudes of nonmedical mental health providers and those in training. The authors also attribute the differences in attitudes toward abortion between Catholic physicians and the general Catholic population to the necessity of the medical professionals examining their personal beliefs about abortion. With the emphasis on self-reflection and awareness in the nonmedical mental health care professions, it may be that this factor would influence comparisons of abortion attitudes between nonmedical mental health care providers and medical health professionals. These data are also important in terms of becoming more aware of where clients may seek or receive the most adequate support for their reproductive decisions.

While this study was conducted in the 1970s, it is still useful in gaining some perspective on where nonmedical mental health care providers may stand in comparison to other health professionals in regard to abortion attitudes. The year of the study likely influenced results, since data were collected in close proximity to Roe v. Wade (1973). For example, issues such as whether health professionals would be willing to discuss an illegal abortion with clients, or help clients seek an illegal abortion, would perhaps be more acceptable to participants then than it would be now.
Rosenblatt et al. (1999) conducted a more recent study of the abortion attitudes of medical students. The authors write that one indicator of future physicians’ attitudes toward abortion may be the attitudes of medical students, and state that little research has been done on medical students’ attitudes toward abortion. The authors predicted that age and gender would be associated with abortion attitudes, and that rural backgrounds or future intentions to practice rural medicine would be associated with lower support for abortion and other reproductive services.

Participants were 219 first- and second-year medical students at the Seattle campus of the University of Washington, a large, primary care-oriented medical school (Rosenblatt et al., 1999). An anonymous survey, which had been pilot tested and revised after being given to medical students who were not members of the surveyed classes, was distributed by one of the authors to classes early in the fall semester. This survey had been pretested and revised on medical students not involved in the study and included three parts: demographic information, career intentions, and attitudes toward specific women’s health care services ranging in controversy from Pap smears to second-trimester abortions.

These quantitative data were analyzed using univariate and chi-square analyses. The survey return rate was 76.6%, with an overrepresentation of women at 58%. Results indicated that for every type of abortion described, for example, medication or surgical abortions, the majority of participants thought it should be available under most circumstances or with some limitations. Students in their 30s of both genders were more than twice as likely to support the use of surgical abortions up to the second trimester and the use of RU-486 than students under 24, and women were more likely than men to
broadly support abortion services. The authors offer that this age difference may be due to the effects of life experience on older medical students or the unique characteristics of the medical students in this sample. Rural backgrounds and practice intentions were not associated with differences in abortion attitudes (Rosenblatt et al., 1999).

Rosenblatt et al. (1999) acknowledge certain limitations to their study. For example, nonrespondents may hold less favorable attitudes toward abortion than participants, as well as the possibility that the students at this school may not be a representative sample of medical students in the United States. Lastly, they state that changing circumstances, including intentions regarding field of medicine and practice setting, may change.

There were other limitations to this study that Rosenblatt et al. (1999) did not include in their article, including information on the race of participants. The lack of information about the racial identity of participants leaves unanswered the question of whether racial identity would override occupational identity in its influence on abortion attitudes. It would also have been useful for the authors to have provided information on what type of physicians actually provide the most abortions, since predictions were being made on the future availability of abortions based primarily on the attitudes of primary care physicians in training. Lastly, the authors cite that the career paths of these participants may change. This seems especially true in light of fact that these participants were very early on in their training.

Rosenblatt et al. (1999) indicate that little consideration has been given to the abortion attitudes of physicians in training, not unlike the study of abortion attitudes of nonmedical mental health care providers in training. Their study gives support to the
notion that predicting the abortion attitudes of future professionals can be done in part by examining the attitudes of students in professional training programs. A direction for future research would be to conduct longitudinal studies to help determine whether these attitudes hold true across training and into practice.

Researchers in Denmark have also examined the abortion attitudes of physicians (Norup, 1998). The Danish Abortion Act of 1973 allows for abortion on request for women living in Denmark up to the end of 12 weeks gestation, with a social council in place that may sanction abortion beyond this time, for example, in cases of severe fetal defect. Norup attempted to describe the attitudes toward abortion for social reasons or because of prenatal diagnoses among perinatal physicians. Questionnaires were mailed to all physicians in Denmark registered as working in a neonatal capacity. The questionnaires consisted of six vignettes describing possible scenarios in which a woman might request an abortion, including for age or socioeconomic reasons, or for fetal abnormality. Demographic data were also collected, including information on whether participants had children, years in practice, religion, political affiliation, specialist qualifications, and years since graduation from medical school. A 69% return rate was obtained, which resulted in a sample of 687. Statistically significantly higher proportions of interns (medical residents) were nonrespondents (42%) than were respondents (35%).

Chi-square analyses were conducted on this quantitative data set. Participants were divided into three groups, with the obstetrical group expressing the most liberal abortion attitudes, the pediatric group expressing relatively moderate attitudes, and the “other” group the most conservative attitudes toward abortion (Norup, 1998). Results suggest that a high proportion of these Danish physicians accept first-trimester abortions
for teenagers and fetuses with severe handicaps. Significantly lower support was found for minor fetal conditions, late-onset disease, or any condition with increasing fetal age. The author states that it is surprising that no statistically significant associations between abortion attitudes and age, gender, or political affiliation were revealed, but blames the precision of the instrument used. Norup (1998) also proposes that since no such associations were found, the differences found between groups could be due to a selection effect, but points out that specialists in the pediatric group were more liberal in their abortion attitudes than nonspecialists. He states that this may be an effect of day-to-day contact with neonatal problems. Norup also reports that the participants in this study who were the most religious (Norup defined level of religiosity by religious affiliation and "importance attached to religion") held the most unfavorable attitudes toward abortion, but adds that very few physicians in the study attached much importance to religion. Therefore, Norup concludes that religion does not seem to play an important role in influencing the abortion attitudes of physicians in Denmark. The author did not, however, indicate that culture may be a stronger influence on abortion attitudes than religion.

There were other limitations to this study that Norup (1998) did not identify. When surveys were returned by mail to the researcher, he states that they were separated from their envelopes and therefore no longer identifiable. It seems as if the initial risk of identifiability may have impacted the type of respondent or nature of response. Additionally, the author describes that a pilot study was conducted, in which 20 people from each group were contacted to participate, with 23 surveys returned. Based on this pilot study, "minor revisions" were made to the questionnaire. These surveys were
included in the final study, but more specific information needs to be provided on the type of revisions that were made.

The results of this study (Norup, 1998) are valuable for future research on the abortion attitudes of nonmedical mental health care providers in training, in that they indicate abortion attitudes may be influenced by the reason for the abortion and the time of gestation. These results also indicate an effect based on the nature of professional experience regarding the patient/client population served. Lastly, this study raises the possibility that trainees may not be as willing (or able due to training-related time constraints) to participate in studies of abortion attitudes.

In 2000, Francome and Freeman also conducted a study of the attitudes of medical professionals toward abortion by surveying British physicians. The authors mailed a survey on abortion attitudes to 1,000 primary care physicians listed in the British Medical Association’s membership. After three contacts by mail, they got a response rate of 75% (n = 702). Of this sample, 25% were women, 92% had children, and 75% were aged 36-55.

The 1967 British Abortion Act states that a woman may obtain an abortion when two physicians certify that an abortion is necessary because the woman’s life, physical, or mental health is in danger, for socioeconomic reasons, or if the fetus is impaired. She may obtain the abortion in a designated hospital for no fee, or in government-approved commercial or private clinics (Francome & Freeman, 2000). The authors chose to study this physician population’s attitudes on abortion due to their “gatekeeper” role for the procedure. Although these physicians do not perform abortions, women seeking abortion must first visit them to receive a referral.
The results indicate that primary care physicians in Britain hold mostly positive attitudes toward the current abortion law and women's access to abortion. Four in five participants identified as broadly pro-choice, and three in five reported that they feel abortion should be available regardless of reason, in contrast to current law. Three quarters favored government-funded, free abortions (Francome & Freeman, 2000).

Physicians demonstrated different abortion attitudes based on the length of gestation of the fetus. Francome and Freeman (2000) asked separately about pregnancies up to 12 weeks gestation and those after 12 weeks. Physicians' opinions on whether women should be able to make an abortion decision without the involvement of a physician became more restrictive after 12 weeks gestation.

This study also addressed the issue of self-disclosure of abortion attitudes to patients (Francome & Freeman, 2000). Eighty-five percent of the physicians in this study agreed that if a primary care physician objects to abortion, the physician should be required to inform the patient. Ten percent disagreed with this statement, including 8% of pro-choice physicians and 27% of anti-abortion physicians.

An age-related result was obtained in this study as well. When asked whether they thought women should be able to have an abortion for any reason up to 14 weeks gestation, 60% of participants were in support of such a change in the law. Sixty-seven percent of physicians younger than 36, and 67% of them over 55 agreed with this statement, as opposed to 59% of those aged 36-55 (Francome & Freeman, 2000).

Although no information was provided on the method of data analysis in this quantitative study, Francome and Freeman (2000) appear to have paid careful attention to design. They phrased some survey statements both positively and negatively in order to
help confirm their results. Attention to wording is especially important when addressing the issue of abortion, as wording may affect participants’ interpretation and responses (Francome & Freeman, 2000).

The results of Francome and Freeman’s (2000) study can be applied to better understand the abortion attitudes of nonmedical mental health care providers in training. The data on self-disclosure of abortion attitudes to patients are a particularly meaningful piece of information concerning nonmedical mental health care providers. The authors point out that the British Family Planning Association receives many complaints from women who state that anti-abortion physicians have created roadblocks to abortion for them. These women report that their physicians made them wait for the results of pregnancy tests or told them inaccurately that they were too far along in their pregnancies for an abortion. Although nonmedical mental health care providers do not function in this same capacity in regard to abortion, this finding indicates that professionals do act unethically according to their personal attitudes toward abortion and underscores the notion that attitudes do influence behavior. This is further indication that perhaps self-disclosure is an issue that needs to be examined more closely among nonmedical mental health care providers when addressing the issue of abortion with clients. As the authors point out, this is especially meaningful when the client exploring abortion is a younger or more vulnerable person and not fully aware of her rights.

A study of abortion providers (Joffe, 1999) also gives us insight into the possible attitudes of nonmedical mental health care providers toward abortion. Joffe conducted exploratory interviews with 25 providers of surgical abortion drawn from the National Abortion Federation membership base, including physicians, mid-level practitioners
(physician assistants and nurse practitioners), and clinic counselors. Two Canadian providers were among the other participants, who were from the United States. The level of involvement with medication abortion ranged from several months of the use of this technique to opposition to its use, thus providing a broader picture of abortion providers based on experience as well as training and professional role than other studies. The purpose of Joffe's study was to examine providers’ attitudes toward medication-induced abortion, as opposed to a surgical procedure.

Although the method of data analysis is not reported for this study, the results have several implications for nonmedical mental health care providers. Some participants in this study reported that in the process of counseling their medication abortion patients, they discovered that some women do not think that a medication abortion is a “real” abortion, since it seems to induce a miscarriage (Joffe, 1999). This anecdotal evidence raises the question of the implications for nonmedical mental health care providers and their clients around abortion. It is possible that a medication abortion may impact the attitudes of clients and their counselors and their work with abortion. The manner in which an abortion takes place may activate different attitudes in nonmedical mental health care providers, much the same as in the patients mentioned anecdotally in this study.

This study (Joffe, 1999) also addressed the issue of providers of medication but not surgical abortions, and their need to have a back-up provider of surgical abortion in the case of complications. Joffe states that most participants felt that the abortion climate in their communities would intrude on their professional relationships with these referral physicians, and because of this they would take this climate into consideration when
making a referral. This ethical implication applies to the referrals that nonmedical mental health care providers may make as well when working with clients considering abortion. As with the providers in this study, nonmedical mental health care providers are responsible for the quality of their referrals.

Within the medical field, the abortion attitudes of nurses have also been studied. In February 1997, legal abortion was implemented in South Africa. The large and unexpected demand for abortion services overwhelmed the health care system (Poggenpoel et al., 1998). Poggenpoel et al. conducted a study whose purpose was to explore and describe how nurses in South Africa experience abortion, and to offer guidelines for supporting nurses. Qualitative data were collected through open-ended questionnaires, participant observation with field notes, and focus group interviews for a total of 1,223 participants. Data were analyzed using a descriptive method and the use of an independent coder. Themes were identified by consensus between the coder and the authors.

From the analysis, five major themes emerged. First, nurses in South Africa wanted freedom of choice concerning whether they are involved in abortion procedures and to what extent (Poggenpoel et al., 1998). The authors state that the majority of nurses in the study saw women seeking abortion and the abortion providers as “murderers.” These nurses also desired more information about the abortion procedure, more information provided to women in the community regarding contraception, and support services available to them regarding their experiences in working with abortion. An additional theme was the conflict these nurses felt working in settings where both full-term deliveries and abortions took place. Lastly, these nurses believed that separate
clinics should be established for abortions where special training would be provided for
the nurses working there.

Based on their findings, Poggenpoel et al. (1998) recommend that nurses should
be offered the choice of participation in abortion procedures, but if they do not make their
wishes known, they are still ethically responsible for providing care to the woman seeking
an abortion. Among the additional recommendations made by the authors was that nurses
adopt a policy of unconditional acceptance toward women seeking an abortion.

There are several areas of limitation in the Poggenpoel et al. (1998) study. Although the various methods of data collection employed suggest on the surface that this
allowed for a richness to the data, upon closer inspection it is revealed that only one
participant was given a phenomenological interview, while 1,200 completed
questionnaires and 22 were involved in group interviews. The phenomenological
interview was given to a nurse services manager who coordinates abortion services at a
clinic that provides health services to women and children. Poggenpoel et al. (1998)
described this phenomenological interview and the group interviews as focusing on the
experience of each participant, with the central question being, "How did you experience
the abortion?" Equal weight was given to the responses of all participants across data
collection formats, as the data were reported in the article by categorizing it under the
aforementioned five major themes. Under each theme, summaries of the interviews and
quotes from individuals were provided, without an indication of the method of data
collection used. Perhaps if the same participants had been given all of these measures,
more thorough and balanced results would have been obtained. The authors did, however,
exercise care in their data analyses, for example, by employing an outside coder and providing a good description of analyses in their article.

The use of loaded language in this article indicates a possible researcher bias, however. For example, the authors frequently referred to the nurses' use of "murderer" in reference to women seeking abortion and abortion providers, but did not use quotation marks or in any way distance themselves from the use of this language while still honoring the language of the participants. What appears to be missing from this article (Poggenpoel et al., 1998) is the racial identity data of the patients, nurses, and abortion providers. If racial identity information were provided, data could be interpreted within the context of the history of race relations in South Africa. For example, the biased language used by the participants and the researchers would be more easily understood if they felt that abortions were being used as a tool of genocide.

More recently, Kade et al. (2004) also studied nurses' abortion attitudes and the effects of these attitudes on patient care. This qualitative study sought to obtain information from physicians and nurse managers about how the abortion attitudes of nurses affect abortion services provided by hospitals in Massachusetts. Of the 12 hospitals in this state that offer abortion services to any woman that requests them, 23 potential participants were identified. Of the 23 surveys sent by mail, 20 were returned. First, a letter of invitation was sent to potential participants, then a short questionnaire, with follow-up phone calls as necessary to retrieve missing data. The questionnaire consisted of a 12-item survey for nurse managers including open-ended questions and Likert-type scaled responses. Nurse managers' surveys addressed how abortion services are staffed and structured, the frequency of cancelled or postponed appointments, and the
general workplace environment in regard to abortion. Providers were asked how frequently abortion procedures were cancelled or delayed due to nurses' unwillingness to assist, and their perception of the magnitude of this problem. Providers were also asked how nurses' abortion attitudes affect abortion services. No demographic data were collected. The final sample consisted of 17 physicians (response rate 85%) and 3 nurse managers (response rate 100%). Despite lack of demographic data, some participants identified their hospital affiliation, indicating to the authors a minimal response rate of 67% from hospitals.

Results showed that over half of the physician participants indicated that the unavailability or unwillingness of nurses to participate in abortion services is a slight or moderate problem, while nearly a quarter of physicians in this study indicated that it is a large or very large problem. Some participants reported that patients have had abortions postponed due to nurse unavailability (Kade et al., 2004).

Kade et al. (2004) identified limits to their study in addition to its small sample size. They acknowledged that they did not pilot-test their questionnaires before administration, and that comparison of interviews was challenging due to some participants responding orally and some in written format. They also cited self-selection and the lack of demographic data as limiting.

The themes that were unearthed from the Poggenpoel et al. (1998) and Kade et al. (2004) studies are parallel to the possible experiences of nonmedical mental health care providers working with the issue of abortion. In particular, the Poggenpoel et al. study suggests that the number of abortions a woman has had affects the attitudes of her care providers toward her. It also highlights the importance of unconditional positive regard.
Additionally, it seems as if the type of training and information that professionals have around abortion affects their abortion attitudes in some way. The Kade et al. study highlights the impact of abortion attitudes on access and care, with the authors noting that despite their findings, abortion services in New England are largely considered to be more accessible than in other regions. Lastly, these studies clearly demonstrate through self report (Poggenpoel et al., 1998) and secondary report (Kade et al., 2004) that the abortion attitudes of nurses likely affect the care that they give to their patients seeking abortion. These studies indicate that these findings may hold true across helping professions involved in abortion concerns, with professionals’ attitudes impacting service delivery.

Other recent research has explored the attitudes of nurse midwives toward abortion (Musgrave & Soudry, 2000). The purpose of this study was to assess the attitudes of nurse midwives to euthanasia and its legalization, and to determine the relationship between these attitudes and attitudes toward abortion. The authors predicted a positive relationship between euthanasia and abortion attitudes. A convenience sample of midwives was recruited at an international midwifery conference. A response rate of 69% resulted in a sample of 139 participants. Four midwives attending the conference distributed anonymous questionnaires, which were either returned to them or to a drop box.

Descriptive statistics were used to analyze these quantitative data, and Spearman’s rank-order correlation and chi-square analysis were used to determine relationships (Musgrave & Soudry, 2000). All but one participant was a woman, and 65.6% were involved in direct patient care. The participants represented 27 countries, with most participants coming from the U.K. (20.1%), the U.S. (18.7%), and Australia (12.7%). The
average age was 42.6 years with a range of 28-80 years, with an average of 14.3 years of experience as a midwife with a range of 0-28 years. The abortion-related results of this study indicate that 5.1% of the midwives sampled did not support abortion under any circumstance; 38.7% supported abortion for incest, rape, fetal abnormality, or risk to mother’s health; 29.2% supported abortion under all circumstances; and 27% chose “Other.” The most common category represented in “Other” regarded the right of the woman to choose.

A positive relationship was found between attitudes toward abortion and attitudes toward euthanasia (Musgrave & Soudry, 2000). Midwives who held more positive attitudes toward abortion were more likely to support euthanasia and its legalization. More negative attitudes toward abortion were associated with a greater likelihood of disagreement with euthanasia and its legalization.

Musgrave and Soudry (2000) acknowledge that their study was limited by a small, nonrandomized sample. In addition, they state that due to time constraints, the reliability and validity of their survey was not obtained prior to its use. The self-selection that occurred due to conference attendance and decision to participate in the study also likely contributed to the limitation of generalizability. In their report of this study, the authors could have been more descriptive regarding their “Other” category, especially considering the proportion of their participants who chose it. They also did not analyze within-group differences regarding country of origin, which could have provided additional relevant data. While Musgrave and Soudry alluded to a relationship between the abortion laws in the countries of origin of these midwives and their abortion attitudes, they did not provide detailed information. They did pose the question, however, as to whether abortion laws
influence attitudes or abortion attitudes influence laws, which could be a direction for future research.

Although the primary focus of the Musgrave and Soudry (2000) study was on the attitudes of midwives toward euthanasia, it also helped to shed more light on the factors contributing to abortion attitudes. For example, personal characteristics and beliefs that influence attitudes toward euthanasia also seem to be activated in the formation of abortion attitudes. As has been addressed in other studies (Poggenpoel et al., 1998), however, the nature of professional contact with abortion can influence attitudes. Nurse midwives’ abortion attitudes may be influenced by their role in the birthing process. Therefore, while nonmedical mental health care providers may interact with abortion in a different way, it is possible that they may hold the same positive relationship between abortion and euthanasia attitudes.

A study published in 2004 (Shotorbani et al., 2004) assessed the attitudes and intentions of both medical students and nurse students toward providing abortion. The authors were aiming to determine the intentions of future health care providers at the University of Washington to incorporate abortion into their practice, as well as their willingness to seek abortion training, and their attitude toward advanced clinical practitioners providing abortion services.

Shotorbani et al.’s (2004) sample consisted of 312 students, with a response rate of 86%. Participants included medical students (47%), physician assistant students (44%), and nurse students (9%). Family nurse practitioner and midwifery students were combined into one category called “nursing,” due to the few participants in these categories. A significantly greater number of physician assistant and nurse students than
medical students planned to specialize in family practice, while a greater proportion of nurse students than other groups planned to specialize in women’s health. About half (52%) of the sample was younger than 30 years old, with medical students tending to be the youngest group. About half (55%) of the sample consisted of women, with more women in the nurse group than other groups. Shotorbani et al. (2004) collected data on the religious identity of participants, but did not incorporate these data into analyses. The majority of the sample claimed a religious affiliation, with 27% identifying as Protestant, 20% as Catholic, 22% as “Other Religion,” and 32% not reporting a religious affiliation.

Shotorbani et al. (2004) created a survey for use in this study that was informed by previous research on abortion attitudes. Their survey was reviewed by other University of Washington faculty members, including representatives from the advanced clinical practitioner community. The survey was again refined after it was administered in a pilot study to 10 allied health students. There were four parts to the 22-item survey, including demographic information, attitudes toward abortion, abortion training, and advanced clinical practitioners providing abortion, intention to provide abortion services, and willingness to seek training in abortion. Participants used a 5-point Likert scale to respond to items indicating the strength of their agreement with eight statements related to the availability and accessibility of abortion. Response options ranged from strongly agree to strongly disagree. To assess their intent to provide medication abortions and surgical abortions, or to seek abortion training, Shotorbani et al. used a 5-point scale ranging from definitely yes to definitely no. The majority of the data was collected from students at the Seattle campus of the university. Surveys were administered by the lead author during students’ class time. Two volunteer faculty instructors collected data from
first-year physician assistant students at the Yakima and Spokane campuses in the same manner. These participants were provided with self-addressed, stamped envelopes to return their own surveys.

Univariate analysis and frequency distributions were used to reflect the overall pattern of survey responses, bivariate analysis was used to describe attitudes and intentions by program type, and Pearson’s chi-square tests were used to compare among programs for categorical variables (Shotorbani et al., 2004). Seventy percent of participants agreed that legal abortion should be available under any circumstance, with 31% of the sample intending to provide medication abortion in their practice, and 18% planning to provide surgical abortion. The belief that advanced clinical practitioners should be allowed to provide medication abortion was supported by 52% of the sample, and 37% agreed to this group’s provision of surgical abortion. More advanced clinical practitioner students than medical students supported this belief, which is likely attributable to feelings related to clinical territory (Shotorbani et al., 2004). Almost half (43%) of the sample neither agreed nor disagreed that they prefer medication abortion to surgical abortion. Of all respondents, 64% were willing to attend a university whose program required abortion training, with no difference in opinion by participant group. Ninety percent of all participants agreed that they would refer patients to another provider if they were unwilling or unable to provide abortion services.

Shotorbani et al. (2004) framed their results in the context of their perception of the relatively more liberal laws governing abortion in Washington State, and the relatively lower level of violence by extremists against abortion providers in this state as well. The authors also acknowledged the limitations of their study. They pointed out that
the intention of students to provide abortion does not translate into actual provision, whether due to personal choice or the ever-changing policies regarding abortion provision and scope of practice. Additionally, they acknowledge the constraints of generalizing the results from a sample that is limited geographically. Lastly, a limitation of this study is that the group of nurse students in this sample was smaller than the physician assistant or medical student groups. The nurse students were also highly specialized, coming from nurse practitioner and nurse midwifery programs. Additionally, family nurse practitioner and midwifery students were added to the nurse students category based on fewer participants in these categories. The nature of professional contact with abortion is different for those in what might be called the “traditional” nurse role, versus nurse practitioners or midwives. Since previous research shows that professional contact with abortion can impact abortion attitudes (Norup, 1998; Rosen et al., 1974), any statements Shotorbani et al. make about the abortion attitudes of nurses are actually not reflective of individuals in this particular profession.

Their result that 43% of participants did not indicate a preference for medication abortion or surgical abortion may be indicated since medication abortion is a newer and less familiar technique, or because they do not see a qualitative difference between the procedures (Shotorbani et al., 2004). If this proportion of the sample does not, indeed, attach different meaning to a medication versus surgical abortion, this is in contrast to one perception of medication abortion that was raised by some participant physicians in Joffe’s (1999) study. Some physicians interviewed in Joffe believed that some of their patients preferred medication abortion, because they did not see it as a “real” abortion, but rather more like a miscarriage. It does not seem unlikely, though, that the perception of a
medication abortion could differ between those who have received medical education and members of the “lay” public.

This study (Shotorbani et al., 2004) is also relevant to the proposed study, in its use of a student sample to predict future practitioner behavior. However, Shotorbani et al. also highlight the importance of acknowledging a possible gap between self-reported abortion-related attitudes and actual future practitioner behavior, as well as the potential influence of geography on abortion attitudes. Lastly, their finding that 90% of students expressed agreement to refer to another provider for abortion if they were unwilling or unable to provide it may be reflective of a general movement toward ethics-related referrals in all training programs across medical and nonmedical mental health care providers.

Religion and ethnicity, in addition to profession, are also factors that merit consideration when examining attitudes toward abortion. Religion has been shown to be related to abortion attitudes (Wall et al., 1999; Wetstein, as cited in Bolks et al., 2000). Bolks et al. examined the three largest Latino/a groups (Mexican Americans, Puerto Ricans, and Cubans) to help determine the variables that influence attitudes in support of abortion. Quantitative data from 2,418 participants were taken from the Latino National Political Survey. Selected variables related to abortion attitudes were analyzed using multivariate statistics.

A statistically significant relationship between abortion attitudes and three types of variables was found: religiosity, feminism, and the demographic variables of education, gender, and income (Bolks et al., 2000). The religious profile of a woman who had more restrictive attitudes toward abortion included someone who rated religion high
as a daily living guide, reported a born-again experience, and was "very Catholic" (as defined by the authors). A greater support for feminism was related to a greater support for pro-choice beliefs. In addition, an increased probability of a pro-choice attitude was related to being a woman, having a higher income, and a higher level of education. In summation, the authors found that the variables that influence the abortion attitudes of Latinos/as are the same as those that influence non-Latinos/as, although Latinos/as showed a slightly higher tendency to oppose abortion. There were, however, intraethnic differences, with Cubans 4.4 % more likely than Mexican Americans to be pro-choice after controlling for more education and lower religiosity. Based on their findings, though, Bolks et al. declared abortion to be a nonethnic issue. With the intraethnic difference that emerged from the data, however, perhaps their statement is premature.

Remennick and Hetsroni (2001) conducted a study examining the relationship between ethnicity, religion, and abortion attitudes. They examined a randomized sample of 546 Israeli Jews and compared these data with data from the 1972-1996 General Social Surveys in the United States conducted by the National Opinion Research Center. The gender of the Israeli sample was equal to the national sex ratio in Israel, and older age groups were underrepresented, with a participant mean age of 39. To correct for this age bias, the authors weighted the age distribution of their sample to make it more reflective of the general population.

Interviewers trained by a polling company distributed door-to-door questionnaires. The questionnaires contained two Likert-type items stating that abortion should be prohibited unless the mother’s life is at risk, and abortion performed when the mother’s life is not at risk is like murder (Remennick & Hetsroni, 2001). The mean of these two
items was used to determine the index of abortion attitudes. Full agreement participants were labeled as holding an extreme pro-life position and participants in full disagreement were labeled as holding an extreme pro-choice position. This index was then correlated with demographic and socioeconomic characteristics using multiple regression analysis.

Results indicated that Israeli Jews in this sample were more pro-choice than Americans (Remennick & Hetsroni, 2001). When gender was considered with age, race/ethnicity, socioeconomic status (SES), and religiosity, there was a trend toward some women in these stratas being more pro-choice or pro-life than men, but not to the point of statistical significance. Older women and women who did not work outside the home opposed abortion more than younger women and those employed outside the home in the U.S. and Israel. Americans and Israelis of lower SES were more typically pro-life. Ethnicity was not a statistically significant variable, and greater religiosity was associated with opposition to abortion in Israel, especially among Ultra-Orthodox Jews.

Remennick and Hetsroni (2001) concluded that the profiles of abortion supporters and opponents in the United States and Israel have remained comparable and fixed over the past 25 years, although they acknowledge that some Israeli population groups were underrepresented in their sample. These results are supportive of attending to factors such as gender, occupation, religion, and SES in the prediction of abortion attitudes in any population, including nonmedical mental health care providers.

Further evidence of the influence of religion on abortion attitudes is contained in a brief report on whether religiosity is associated with abortion attitudes. Fawcett et al. (2000) administered a religiosity scale and statements about abortion to 36 women and 19 men enrolled in undergraduate psychology courses. The mean age of the sample was 24.9
years, with 84% identifying as Christian. After controlling for age and gender using partial correlation coefficients, religiosity was found to be associated with more restrictive abortion attitudes. Although the format of the report of these results provided limited information and the sample size was small, this study lends more support to identifying religion as a factor related to abortion attitudes.

Walzer (1994), in a study examining the role of gender in predicting abortion attitudes, also looked at how religion and race play roles in abortion beliefs. The researcher used least squares regression analysis to examine data from the 1990 General Social Survey. Abortion attitudes were assessed using six questions about possible conditions surrounding the ability to obtain a legal abortion. African-American women, more educated women, and women living in nonrural environments were more supportive of abortion.

As with women in this sample, men in nonrural areas with more education were more supportive of abortion (Walzer, 1994). Having a partner who did not work outside the home did not significantly impact men’s abortion attitudes. In men but not women, the number of children was associated with negative abortion attitudes. There was also a small effect of age on men’s abortion attitudes.

The results regarding religion showed that support for legalized abortion was associated with being Jewish for women but not for men (Walzer, 1994). Catholicism and fundamentalist Protestantism as well as more frequent attendance at religious services was associated with less support for abortion. This study suggests that while religion may be an important determining factor in abortion attitudes for both genders, women and men may differ overall in the factors that influence their abortion attitudes (Walzer,
1994). The author cites the differing impacts of an unwanted pregnancy on women and men, and highlights the possible significance of gender in predicting abortion attitudes. Since nonmedical mental health care providers in training vary broadly across the abortion attitude-related factors in this study, it is likely that similar results could be found in a sample of these professionals.

In addition to factors such as gender, race, and religion, the value differences in abortion attitudes across generations has also been studied. Schnell and McConatha (1996) studied 153 women from a nonrandom sample of the Eastern United States. Psychology students recruited volunteer participants to complete a values survey, an attitudinal questionnaire on abortion, and demographic questions.

Participants were 94% European-American with an average age of 37.5 years. Forty-seven percent had completed 4 or more years of college, with 37% of these completing a bachelor’s or professional degree, and 24.7% had completed some college. The sample was 36.2% Protestant, 39.5% Catholic, 5% Jewish, and 8.6% nonreligious. One limitation of this study that Schnell and McConatha (1996) cite is an underrepresentation of African Americans and an overrepresentation of higher income households.

The authors divided the participants into four generational groups according to when they “came of age” (18 years old). Generations were defined by “Reagan/Bush Conservatism” (1980-1992), “Women’s Liberation Movement” (1967-1979), the “Sixties” (1957-1966), and “Feminine Mystique, War, and Depression” (1936-1956), with each of these eras reflecting various climates concerning abortion support. Schnell and McConatha (1996) predicted that these climates would influence the abortion
attitudes of the women who grew up in them, and that, consequently, women socialized during the 1960s and 1970s would be most supportive of legalized abortion. The results did not support their age-related differences in attitudes hypothesis, although there did appear to be differences between generations in terms of the values that influence abortion attitudes. The oldest group of women’s attitudes was strongly influenced by their religious values and the value of equality. Valuing equality in this group was positively related to liberal abortion rights attitudes. The finding for equality was opposite in the three other generations. Favorable attitudes toward abortion rights decreased as the value of equality increased. The authors suggest that the results indicate that younger women rely less on their values to inform their abortion attitudes.

In regard to the unexpected relationship between the value of equality and abortion attitudes in three of the groups, the authors speculate that perhaps as these women matured, equality was used more in reference to equality in the work place rather than social equality (Schnitt & McConatha, 1996). The authors therefore state that results could be more reflective of historical periods in time rather than generational differences. Since many of today’s nonmedical mental health care providers in training are likely women who came of age at the same time as the youngest group in this sample, perhaps this group’s results are most informative regarding their possible abortion attitudes.

Measurement of Abortion Attitudes

Assessing abortion attitudes can be a complex process. Stets and Leik (1993) point out that research findings can differ on whether the content or structure of the attitude is studied. They examined 309 undergraduate students by distributing a survey
that addressed attitudes toward abortion, morality, politics, religion, and other social issues. They found that the structure of abortion attitudes appears to differ for those taking pro-choice or pro-life positions. This is problematic, in that some studies treat their measures of abortion attitudes as unidimensional (Tenvergert, Gillespie, Kingma, & Klasen, 1992). The results of the work of Stets and Leik indicate that a tendency toward a pro-life attitude reflects a unified attitude structure, implying a basic, underlying ideology. Conversely, the tendency toward a pro-choice position reflects a less unified attitude structure that does not demonstrate a single, underlying ideology. Thus, abortion attitudes, and those that are pro-choice in particular, are more intricate than simply being in support of abortion or not. Therefore, this study lends more support to the inclusion of multiple variables, such as those included in the proposed study, in order to better reflect the complexity of abortion attitudes.

Other researchers have studied the effect of question order on measures of abortion attitudes (Schuman, Presser, & Ludwig, 1981). In March of 1979, Schuman et al. were looking for a general question on abortion attitudes for a national telephone survey (not related to Schuman et al., 1981), and borrowed one from the 1978 National Opinion Research Center’s (NORC) General Social Survey (GSS). The question asked whether participants thought it should be legal for a married woman who is pregnant and does not want any more children to have an abortion (NORC). Schuman et al. discovered a statistically significant difference of 18.1% in “yes” and “no” responses on this abortion attitude item between their result (yes = 58.4%, no = 41.6%) and the NORC result (yes = 40.3%, no = 59.7%). The authors attributed some of the difference to an underrepresentation of less educated participants in their sample relative to the NORC
sample, since lower education is associated with abortion opposition (Schuman et al., 1981). They also acknowledged that the difference could be attributed to true change in abortion attitudes over time, as well as the effect of in-person interviews (NORC) versus telephone interviews (Schuman et al., 1981). However, the authors stated that a large enough difference (14.6%) remained between the NORC results and their own after standardizing education level, to indicate a context effect created by the surveys in which the abortion attitude question was embedded. As part of the Schuman et al. telephone survey, only this one abortion attitude question was asked. In the NORC survey, this abortion attitude question was preceded by another abortion attitude question that inquired about abortion in the case of a fetal defect (which Schuman et al. labeled the “specific” question, as opposed to their previous “general” question).

Schuman et al. (1981) decided to investigate the effects of question order on abortion attitude items further, by conducting another telephone survey in June 1979, which they wrote about as part of their 1981 study. They designed two questionnaires, one with the “general” abortion item preceded by the “specific” item, and one with the “general” abortion item preceded by an item related to labor unions (with no other abortion attitude items earlier in the survey), then followed by the “specific” item. Results showed that the “general” abortion item garnered 13% more “yes” responses when asked before the “specific” item than when asked after the “specific” item. They stated that asking the “general” item before the “specific” item is equivalent to asking the item alone, as in their March 1979 survey. The “specific” item was unaffected by its placement in the survey.
Schuman et al. (1981) replicated the results of their second survey in another survey administered in August 1979. The effect of question order on abortion attitude items appeared larger in this survey, with 17.4% more “yes” responses to the “general” abortion item when the “general” abortion item came before the “specific” abortion item. Again, no order effect was found for the “specific” item.

Schuman et al. (1981) call their results a part-whole effect, because agreement to the “general” item might imply agreement to the “specific” item in the minds of participants, but this agreement would not occur in the reverse. Schuman et al. state that effects resulting from question order can be especially robust when investigators try to summarize a complex issue by measuring it with one item. The authors highlight that question order effects can be especially important to consider when comparing survey results, and acknowledge that while question order effect is always a concern, it becomes especially important when surveys are being used to monitor social change, as in the measurement of abortion attitudes.

Other researchers (Bishop, Oldendick, & Tuchfarber, 1985), however, have failed to replicate the results of Schuman et al. (1981). Bishop et al. emphasized the importance of replicating research and stressed that they did not expect to fail to replicate the Schuman et al. study, as it demonstrated a sizable question order effect, and was replicated twice by Schuman et al. in their national surveys.

Bishop et al. (1985) conducted two experiments. In the first experiment, they imitated the June 1979 survey of Schuman et al., in which two questionnaires were used. Bishop et al. included their abortion attitude items as part of the Greater Cincinnati Survey, a randomly selected telephone survey conducted by the Behavioral Sciences
Laboratory at the University of Cincinnati, which was conducted in November and December of 1981. Participants were randomly assigned to three conditions: the "specific" question followed by the "general" question, the "general" question followed by the "specific" question, and the "specific" question followed by 40 questions on topics unrelated to abortion followed by the "general" question. In the first condition, a small but statistically insignificant difference (4.6%) was found in "yes" responses when the "general" question was asked first ("yes" to "general" = 51.4%) than when the "specific" item was asked first ("yes" to "general" = 46.8%). Although the results of Bishop et al. were in the same direction, the size of their question order effect (4.6%) was smaller than that of Schuman et al. (15.6%). Bishop et al. also had results that are in line with Schuman et al. (1981). Both authors found that question order had no statistically significant effect on the "specific" item.

Bishop et al. (1985) acknowledge that the differences in results that were found between the two experiments (Bishop et al., 1985; Schuman et al., 1981) could be attributed to random error, or because both research groups conducted their studies at different times and locations. However, they write that they had been able to replicate other question order experiments by Schuman et al. in the same geographic area at various points in time. Bishop et al. did, though, point out that their failure to replicate all of the results of Schuman et al. could be due to the difference in questions immediately preceding the questions on abortion in both studies. In the Schuman et al. study, the questions preceding the abortion items in their first experiment dealt with labor unions, and in their second experiment dealt with beliefs about the Soviet Union. Bishop et al. used questions regarding welfare aid and whether participants identify politically as
liberals, moderates, or conservatives. Bishop et al. (1985) stated that the questions on abortion could have led some participants to feel as if they were being asked another question on how “liberal” or “conservative” they are. For this reason, Bishop et al. conducted another experiment.

In July of 1982, Bishop et al. (1985) conducted another randomly-selected telephone survey of the greater Cincinnati area, to see if they could replicate their failure to replicate Schuman et al. (1981). Participants were randomly assigned to one of four conditions. The first two conditions were identical to their first experiment, with questions on welfare aid and political identity preceding the “specific” question followed by the “general” question, and then preceding the “general” question followed by the “specific” question. Additionally, all participants who answered yes or no to the “general” question were then asked to explain why they believe or do not believe in a woman’s right to choose to abort as described in the “general” question. The final two conditions were identical to the first two, except that the questions on welfare aid and political identity came after the abortion questions.

Bishop et al. (1985) stated that the results of their second experiment are an example of the importance of attempting to replicate a failure to replicate, in that the results differed from their first experiment. When the “general” abortion item was asked first in two of the four conditions, more participants supported a woman’s right to choose an abortion under this circumstance than when this question came after the “specific” item, at a statistically significant level. However, the authors’ hypothesis that the questions that surround the abortion attitude questions have an effect on participants’ abortion attitude ratings was supported.
When Bishop et al. (1985) posed the abortion questions before the questions about welfare beliefs and political identification, 59.6% supported the choice of abortion in both questions when the "specific" question came before the "general" question, and 39.6% supported the choice of abortion in both questions when their order was reversed. These "yes" responses were not statistically significant, but were greater than when (as in Schuman et al., 1981) the abortion questions were asked after the welfare and political identity question ("general" first = 54.4%, "specific" first = 43.4%). Although in the predicted direction, the results did not explain the failure to replicate Schuman et al. The authors suggest that this failure may be due to chance, and recommend repeating this experiment with a larger sample.

An additional replication by Bishop et al. (1985) was that question order had no statistically significant effect on responses to the "specific" item in either of their experiments or those of Schuman et al. (1981). Bishop et al. stated that perhaps this is because a birth defect is a more socially acceptable reason for an abortion, and therefore less susceptible to order effect. They further explain the order effect in this way. The authors state that when the "general" question is asked first, there is no point of comparison in terms of reasons to choose abortion, so therefore this seems more acceptable to participants. When the "general"/woman’s right question occurs after the "specific"/birth defect question, it may no longer seem as "legitimate" of a reason to choose abortion as it does in the case of a birth defect. Therefore, Bishop et al. stated that this order effect may be the result of the implicit contrast between justifications for choosing abortion that are provided in the two questions.
Another study (Cook, Jelen, & Wilcox, 1993) has looked at the effect of survey design on the support for legal positions on abortion. Cook et al. stated that public opinion polls routinely include questions on abortion, but the formats vary, and that few empirical studies have been done to assess the effect of format and wording on measures of abortion attitudes. The authors also reference the General Social Survey (GSS), describing it as including six specific items that ask about whether abortion should be legal under different circumstances, and then a more general item asking if abortion should always be legal. Cook et al. state that most other surveys that include measures of abortion attitudes will include one general item that will offer three or four abortion policy options. The authors wanted to answer two questions. The first question addressed how responses to specific, GSS-type abortion items correlate with more general abortion items, and the second question addressed how other types of abortion questions contribute to our understanding of attitudes toward abortion.

To answer these questions, Cook et al. (1993) used data from the 1989 CBS News/New York Times survey, which polled six states as well as nationwide on abortion attitudes. A variety of abortion-related questions were responded to by national participants \((n = 1,347)\), as well as participants in California \((n = 747)\), Florida \((n = 630)\), Illinois \((n = 760)\), Ohio \((n = 744)\), Pennsylvania \((n = 879)\), and Texas \((n = 742)\). The average number of abortion-related questions in each state poll was 34. The authors chose to examine the questions common across states and most relevant to the type of specific and general questions they described as used most often in the measure of abortion attitudes.
There were 16 questions chosen, with the first two questions general in nature (Cook et al., 1993). Participants were first asked if abortion should be legal as it is now, or only in cases of rape, incest, to save the mother’s life, or if it should not be legal at all. The second question asked if a woman should be allowed to have an abortion if her doctor agrees to it. Cook et al. described that after these two questions, there were some intervening items, although they do not describe these items. Then, participants were asked to answer seven GSS-type specific questions. Five of these questions asked about whether participants thought abortion should be legal: if the woman’s health is in danger, if the woman is single and does not want to marry, if the family cannot financially support more children, if there is a fetal defect, and if the pregnancy was a result of rape. The next two questions asked participants whether abortion should be legal for a teenager who would drop out of school due to the pregnancy, or for a professional woman who would have to interrupt her career to have a child.

After these seven GSS-type specific questions, two general questions were posed (Cook et al., 1993). Participants were asked whether they agreed or not that the government should not be involved in banning abortion regardless of the circumstances surrounding the abortion. They were then given an item where they chose one response with which they agreed: abortion should be available to all who want it, it should be available but harder to get, or it should not be available. Lastly, participants were asked a series of items about their opinions on restrictions that would make a legal abortion harder to obtain, including parent notification, parent consent, viability tests after 20 weeks, more restrictions on private clinic abortions, and the banning of abortion in public.
hospitals. Participants could only indicate whether they supported or opposed these restrictions on legal abortion.

Cook et al. (1993) found that participants provided more all-or-none responses to the general questions than to the specific questions. In their study, the general questions that provide only two or three response choices tended to produce more all-or-none responses. From their results, Cook et al. drew two methodological conclusions. The first is that general abortion questions that offer only one middle category of response result in higher estimates of liberal and conservative views on abortion than do GSS-type specific items. Therefore, the authors view the GSS-type questions as more reliable estimates of abortion attitudes. Although more desirable to use, the GSS-type questions provide response options that are irrelevant to abortion law (Cook et al., 1993). For example, allowing single women who would drop out of school to obtain an abortion but not professional women who would interrupt their careers.

Although there have been few empirical studies on the effect of format and wording on measures of abortion attitudes (Cook et al., 1993), some authors have attempted to address and emphasize the complexity of abortion attitudes and their measurement (Bishop et al., 1985; Cook et al., 1993; Schuman et al., 1981). These authors have highlighted the importance of attending to certain aspects of the measurement of abortion attitudes, including the benefit of asking specific questions on abortion attitudes, and offering participants multiple response choices (Cook et al., 1993). Schuman et al. brought to researchers’ attention that the order in which abortion attitude questions are posed can have an impact on results, which is especially important when comparing survey results or measuring social change. Additionally, Schuman et al. wrote
of the need to measure complex issues, such as abortion attitudes, with more than one item. Lastly, Bishop et al. point out the value in considering the context of other questions that are asked on surveys in addition to abortion attitude items. Though few in number, these studies (Bishop et al., 1985; Cook et al., 1993; Schuman et al., 1981) on the measurement of abortion attitudes have provided researchers with key considerations when selecting measures of abortion attitudes.

Professional Ethics and Abortion

Most nonmedical mental health care providers will work with clients on abortion-related issues at some point in their careers (Limber & Pagliocca, 2000). Since abortion attitudes have been shown to influence ethical issues such as self-disclosure of said attitudes to patients (Francome & Freeman, 2000), the quality of abortion-related referrals among professionals (Joffe, 1999), and the quality of care for women seeking abortion (Francome & Freeman, 2000; Huntington, 2001; Kade et al., 2004; Poggenpoel et al., 1998), further addressing the ethics of abortion for medical providers and nonmedical mental health care providers is warranted.

The attitudes of society toward abortion color the experiences of clients and the significant people in their lives, as well as their medical providers and nonmedical mental health care providers (Armsworth, 1991). A negative cultural bias, combined with the rigidity of political positions, may create the impression that objectivity cannot exist in regard to abortion, and lead clients to avoid seeking help from professionals as they make abortion decisions (Armsworth, 1991; Millner & Hanks, 2002). This ongoing debate is unlikely to find public resolution and is more apt to be the kind of issue that clients
approach medical providers and nonmedical mental health care providers with in private
(Armsworth, 1991). Due to this debate, the attitudes of professionals involved in
providing abortion-related services become more meaningful (Rosen et al., 1974).
Regardless of their position on abortion, medical care providers and nonmedical mental
health care providers must consider the ethical and legal consequences of their
professional behavior (Angelone, 1979).

There is great overlap between legal and ethical issues, especially in regard to
abortion. Some unethical behaviors are not illegal, and specific laws that impact
nonmedical mental health care professionals vary by state (Angelone, 1979). When no
legal precedent exists, the courts have determined that professional codes of ethics can be
used to guide clinical behavior (Angelone, 1979). The ethical code of the American
Psychological Association (APA, 2002) dictates that if an ethical standard of behavior
exceeds that required by law, then the ethical standard must be achieved. In the
nonmedical mental health care literature, ethical considerations regarding abortion
counseling may be purposely ignored, and providers’ struggles regarding abortion are
rarely discussed. This may be a reflection of the intensity of the possible ethical dilemmas
involved in working with a client considering abortion (Millner & Hanks, 2002). Limited
information does, however, exist regarding the ethical issues that may arise when working
with a client who is seeking an abortion.

In 1979, Angelone identified three legal and ethical areas of concern for
nonmedical mental health care providers dealing with abortion issues. Approximately 23
years later, Millner and Hanks (2002) recommend that nonmedical mental health care
providers educate themselves on these same potential legal and ethical pitfalls in regard to
abortion. The first identified area involves a nonmedical mental health care provider giving false or inaccurate information to a client. Secondly, nonmedical mental health care providers could fail to refer clients, and lastly, mental health care providers could make an inadequate referral (Angelone, 1979; Millner & Hanks, 2002). These same ethical and legal issues related to abortion could apply to medical professionals as well.

Psychologists who knowingly or unknowingly mislead clients are not only behaving unethically (APA, 2002), but can be subject to a lawsuit (Angelone, 1979). For example, a psychologist could advise a client outside the area of her or his expertise or in a manner that is inconsistent with the client’s stated abortion choice (Millner & Hanks, 2002). In addition to not possessing adequate knowledge to help a client with abortion, nonmedical mental health care providers could have an attitude toward abortion that is inconsistent with the client’s and are unable to objectively help her. As with any conflict of interest with a client (APA), mental health care providers are obligated to refer the client to someone knowledgeable and unbiased. Referrals need to reflect the client’s, not the mental health care provider’s values, and nonmedical mental health care providers are responsible for the quality of medical and emotional help that their clients receive from this referral source (Angelone, 1979). By remaining mindful of these three areas of ethical/legal concern related to abortion, nonmedical mental health care providers can more effectively balance their needs and rights, as well as those of their clients and significant others in clients’ lives.

A medical provider’s and nonmedical mental health care professional’s careful consideration of her or his own rights and needs regarding working with a client who seeks abortion can also honor the client’s rights and needs, by helping to ensure ethical
behavior on the part of the medical and mental health care providers. However, there is
the potential for a nonmedical mental health care provider's personal opinions regarding
abortion to alter client outcome (Millner & Hanks, 2002). Beyond training and
supervision, continuous self-monitoring is required in order to identify areas in need of
further skill development. Consulting the literature can help nonmedical mental health
care providers to better clarify their own values and biases by comparing and contrasting
them to those of the author (Armsworth, 1991).

Other ways in which nonmedical mental health care providers can explore their
thinking on clients seeking abortion is through a thorough examination of their personal
ethical perspective on abortion (Armsworth, 1991; Millner & Hanks, 2002). This would
be a valuable exercise for medical care providers as well. Millner and Hanks offer several
suggestions to guide this process. It is helpful for nonmedical mental health care
providers to consider under what circumstances they feel abortion is acceptable. Self-
disclosure on a mental health care provider's abortion stance is not required, but if done,
Millner and Hanks suggest that the values are clearly defined as a mental health care
professional's own, and that the disclosure cannot be interpreted as coercion. Nonmedical
mental health care providers should also become familiar with laws pertaining to abortion
at the state and federal level, and consider consulting an attorney with this expertise.
Lastly, the authors suggest that if nonmedical mental health care providers find
themselves experiencing intense distress over a great period of time related to working
with a client seeking abortion, they should seek their own counseling.

If nonmedical mental health care providers see a fetus as a child, they may feel an
ethical obligation regarding a dual relationship, or their duty to warn about a planned
abortion. In most cases, the intended outcome would not be attained, but many serious consequences could, including legal action against the mental health care provider, license revocation, professional censure, and increased stress to the client (Millner & Hanks, 2002). If mental health care providers decide to refer a client, special attention needs to be paid to the way the referral is communicated, in order to avoid eliciting feelings of rejection or abandonment in the client (Millner & Hanks, 2002). By knowing ethically where they stand on the issue of abortion, medical care providers and nonmedical mental health care providers can more ethically approach their work with clients considering abortion. This, in turn, can help them attend to the rights and needs of the client.

Nonmedical mental health care providers play a critical role in ensuring that the counseling a woman seeking abortion receives is not aimed at a political agenda but at a client’s personal needs. In regard to the type of therapy that may help this type of client, one view of nonmedical mental health care states that there are no specialized techniques or interventions required, and mental health care providers can approach unwanted pregnancy in the same manner as any other stressful life event (Limber & Pagliocca, 2000). However, some authors, such as Stone Joy (1985) and Tentoni (1995), suggest that mental health care providers approach clients who have had abortions in terms of their grief response.

Other ways in which medical providers and nonmedical mental health care providers can help clients seeking abortion is by encouraging them to seek social support. Social and psychological support is vital once a woman has made a decision regarding her pregnancy (Tentoni, 1995). Medical and nonmedical mental health care providers should
not, however, issue a blanket statement to clients suggesting that they seek support from all close contacts. Whether or not to seek support and from whom should be issues addressed with each individual client, considering that under some circumstances it may be in a woman’s best interest to withhold this information, for example, from a violent person (Limber & Pagliocca, 2000). In general, effective nonmedical mental health care of a woman seeking abortion will involve helping her to further develop ways to cope with both the emotional and practical concerns surrounding abortion (Limber & Pagliocca, 2000). If medical and nonmedical mental health care providers carefully consider their own values and biases regarding abortion and do not refer a client, both their needs and the client’s can be met through informed care.

Balancing the rights and needs of significant others with a client’s in mental health care is a particularly sensitive issue with regard to abortion, especially when working with minors. When at all possible, nonmedical mental health care providers should discuss the limits of confidentiality at the beginning of a mental health care relationship and as the need arises. Parents are legally entitled to all of the information given by a minor during therapy with a psychologist (APA, 2002). It is possible, though, that complete disclosure could negatively affect therapy. Deciding what kinds of information will and will not be disclosed before therapy starts may be helpful, although not necessarily legally binding (Association for Advanced Training in the Behavioral Sciences, 2000).

Laws pertaining to minors and mental health vary by state. For example, a minor in Michigan who is at least 14 years old may receive up to 12 sessions or 4 months of outpatient mental health services without consent of a parent, guardian, or person in loco
parentis (Legislative Council, State of Michigan, 2003). Exceptions to this Act include pregnancy termination referral services. Since a mental health care provider could work with a minor seeking an abortion and not make such a referral, it is conceivable that most abortion-related mental health care, at least for a time, could be kept confidential for the minor. As for the actual abortion procedure, each state can require parental consent, but must also provide a way in which minors can bypass this consent (Levick, 2000).

Medical and nonmedical mental health care providers need to familiarize themselves with their state medical and mental health laws regarding work with minors, including aspects of various custody arrangements (Levick, 2000). In conjunction with legal requirements, it is important for nonmedical mental health care professionals to weigh the potential positive and negative ramifications of involving parents in this important decision (Levick, 2000). Minors may have legitimate reasons for leaving parents out, and typically seek support from other sources when they do (Levick, 2000). Honoring a minor's rights in nonmedical mental health care involves navigating a tangled web of legal and ethical concerns, and depending on a mental health care provider's work site, including schools, she or he may be under added restrictions (Stone, 2002). Minors are not the only clients with significant others in their lives, and medical providers and nonmedical mental health care providers need to consider this issue with their adult clients as well.

Although the majority of women who obtain abortions have never been married (Henshaw & Kost, 1996), medical and nonmedical mental health care providers will work with women seeking abortion who have significant romantic partners in their lives. There are 10 states that have unenforceable spousal consent or notice laws in regard to abortion
Psychologists ethically cannot disclose client’s information to a partner without a client’s consent (APA, 2002). When working with a family or couple, a nonmedical mental health care provider needs to identify the client or client unit as early as possible in the relationship and discuss limits to confidentiality. A nonmedical mental health care provider needs prior written permission from an individual to reveal her or his information to another member of the client unit (American Association for Marriage and Family Therapy [AAMFT], 2001). Research has shown that women who have had an abortion are more likely to have a violent partner than women who have not (Russo & Denious, 2001). Additionally, there are consistent findings that women routinely inform their partners of their pregnancy decisions, as well as consult significant others in their lives (Limber & Pagliocca, 2000). With a nonmedical mental health care provider’s responsibility to the identified client seeking an abortion, considering significant others in the equation falls into treacherous ethical and legal territory. By examining their own biases and values, and familiarizing themselves with abortion-related ethical guidelines, information, and law, medical and mental health care providers can hope to ethically enter into helping relationships with their clients that are in their and their clients’ best interest.

**Summary**

*Profession*

The literature regarding the possible effects of profession on abortion attitudes appears to demonstrate that such an effect does exist. Faculty and students within
occupations have been shown to hold similar abortion attitudes, suggesting that professional identity can be a factor that influences abortion attitudes and overrides other factors (Rosen et al., 1974). It is likely that differences found among professions can be attributed to the nature of professional involvement with abortion issues and professional socialization (Norup, 1998; Rosen et al., 1974). Additionally, it is also likely that professional contact with the issue of abortion inspires greater self-reflection on personal attitudes regarding abortion (Rosen et al., 1974). When comparing specific occupations to the general public, comparable abortion attitudes have been attributed to similar levels of individual and parental education, although education may be a factor in abortion attitudes to a certain extent only (Rosen et al., 1974). Since becoming a nonmedical mental health care provider generally involves graduate study, education level could be expected to influence abortion attitudes in this group.

Research of abortion attitudes by profession has also shown that these attitudes may be influenced by circumstances surrounding abortion, such as gestation at the time of the procedure (Norup, 1998), the manner in which the abortion in induced (Joffe, 1999), or advances in fetal/infant medicine (Wyatt, 2001). As previously mentioned, abortion attitudes have also been shown to influence ethical issues such as self-disclosure of attitudes to patients (Francome & Freeman, 2000), the quality of abortion-related referrals among professionals (Joffe, 1999), and the quality of care for women seeking abortion (Francome & Freeman, 2000; Huntington, 2001; Kade et al., 2004; Poggenpoel et al., 1998). The effect of abortion attitudes on quality of care provided is the most significant finding of the research on abortion attitudes by profession, because it indicates that those who are responsible for the care of women seeking abortion, including nonmedical
mental health care providers, may act unethically based on these attitudes. The research on abortion attitudes by profession clearly demonstrates the link between attitudes impacting behavior.

Race/Ethnicity

Mixed effects of race on abortion attitudes have emerged in the literature. Some researchers have gone as far as to declare race a nonissue in regard to abortion attitudes (Bolks et al., 2000). Within studies of racial groups, however, cultural differences have emerged (Bolks et al., 2000). Comparisons of abortion attitudes between countries have suggested that differences in abortion attitudes may be more attributable to factors other than race and ethnicity (Remennick & Hetsroni, 2001).

Religion

Religion has consistently been shown to be related to abortion attitudes (Norup, 1998; Wall et al., 1999; Wetstein, as cited in Bolks et al., 2000). However, one study suggests that, while religion may be an important determining factor in abortion attitudes for both genders, women and men may differ in the constellation of factors that influence abortion attitudes (Walzer, 1994).

Gender

Mixed results have also been found regarding the impact of gender role on abortion attitudes. Some studies propose gender-related abortion attitude differences (Rosenblatt et al., 1999; Walzer, 1994), while some propose comparable abortion
attitudes across genders regardless of race and ethnicity (Remennick & Hetsroni, 2001). At this time, the literature does not seem to reflect a clear position on the effects of gender on abortion attitudes, in much the same way as it does not toward other abortion attitude related factors.

Future Research

The literature on abortion attitudes, especially attitudinal factors such as profession, race/ethnicity, religion, and gender, indicates that these factors do influence the abortion attitudes of individuals. Although there is limited research on the abortion attitudes of medical professionals, in comparison to other professions, such as nonmedical mental health care providers, we have learned more about their attitudes. This is likely due to the primary contact role that medical professionals play in provision of abortion. Nonmedical mental health care providers, however, also address abortion concerns in their work. There has been a lack of research examining, even at a basic level, the attitudes of nonmedical mental health care providers toward abortion (Millner & Hanks, 2002). Literature from the fields of psychology and medicine points toward a rare occurrence of significant psychological problems related to abortion (Tentoni, 1995). Despite these findings, and due to the prevalence of abortion in the United States (Millner & Hanks, 2002), most nonmedical mental health care providers will work with clients on abortion-related issues at some point in their careers (Limber & Pagliocca, 2000). It makes sense, then, to continue contributing to the literature on the abortion attitudes of nonmedical mental health care providers, through better understanding the abortion
attitudes of nonmedical mental health care providers in training. In this way, we can gain a clearer picture of the future abortion attitudes in the field of nonmedical mental health.
CHAPTER III

METHODOLOGY AND DESIGN

Overview

The primary purpose of this study was to examine the potential similarities and differences that may exist among the abortion attitudes of counselor, social work, and nurse trainees on the variables profession, religion, age, gender, and race. It was predicted that the attitudes of counselor and social work trainees would be most similar, and that both of these groups would hold more positive abortion attitudes than nurse trainees. It was also predicted that abortion attitudes across groups would vary by profession, religion, age, gender, and race.

Statistical Analysis

The dependent variable was abortion attitude as measured by the Reasoning About Abortion Questionnaire (Appendix E). The independent variables were profession, religion, age, gender, and race as measured by the demographic form (Appendix D) created for use in this study. Abortion knowledge was measured by the Abortion Knowledge Scale (Appendix F), created for use in this study. Abortion knowledge was also measured by six Likert-type rating items and one ranking item. The Statistical Package for the Social Sciences (SPSS) was used for all data analyses. All variables and measurement instruments are listed in Table 1.
Table 1  
*Variables and Measurement Instruments*

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<th>Variable</th>
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<td><strong>Dependent Variable</strong></td>
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<td>1. Abortion Attitude</td>
<td>Reasoning About Abortion Questionnaire (Appendix E)</td>
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<td><strong>Independent Variables</strong></td>
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<td>1. Abortion Knowledge</td>
<td>Abortion Knowledge Scale (Appendix F)</td>
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<td>2. Profession</td>
<td>Demographic Form (Appendix D)</td>
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<td>3. Race</td>
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<td>4. Gender</td>
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The data collected in this study was analyzed using one-way analyses of variance (ANOVA) and standard multiple regression. The first three research hypotheses were analyzed using multiple regression analyses conducted separately on the three groups in order to help explain which independent variables predict the abortion attitudes of counselor, social work, and nurse trainees. Multiple regression showed the extent to which the independent variables—(a) profession, (b) religion, (c) age, (d) gender, (e) race—predicted the dependent variable—abortion attitude.

The last research hypothesis was analyzed using an ANOVA conducted between the three groups: counselor trainees, social work trainees, and nurse trainees, on the one
dependent measure: Reasoning About Abortion Questionnaire (RAQ; Parsons, Richards, & Kanter, 1990; Appendix E). This helped determine whether there was a statistically significant difference between counselor, social work, and nurse trainees in their abortion attitudes.

Six additional analyses were also conducted using ANOVA, with participants divided into groups by professional training program (counselor trainees, social work trainees, nurse trainees). A one-way between-groups ANOVA was conducted to explore the differences in professional training programs on abortion knowledge, as measured by each of the 12 semantic differential items on the Abortion Knowledge Scale (AKS). A one-way between-groups ANOVA was conducted to explore the differences in professional training program on sources of abortion knowledge, as measured by six Likert-type response items designed for this study.

A one-way between-groups ANOVA was conducted to explore the differences in professional training programs on trainees’ perceptions of how their programs have enhanced their abortion knowledge, as measured by one Likert-type response item designed for this study. A one-way between-groups ANOVA was conducted to explore the difference in professional training programs on sources of abortion beliefs, as measured by seven Likert-type response items designed for use in this study. A one-way between-groups ANOVA was conducted to explore the difference in professional training programs on sources of abortion knowledge that might help trainees feel better prepared to enter their professions, as measured by four Likert-type response items designed for use in this study. Lastly, a one-way between-groups ANOVA was conducted to explore
the difference in professional training programs on professional ethics related to abortion, as measured by three Likert-type response items designed for use in this study.

Procedures

The researcher contacted professors at the two universities and one college in order to obtain their permission to enter their classrooms and request that their students participate in the study. The rationale, purpose of the study, and methods were explained when permission was requested. Student participation in this study was voluntary and open to students enrolled in relevant courses within targeted degree programs. All responses were anonymous. The researcher applied for and received approval from the Institutional Review Boards at each of the three targeted schools.

Participants were contacted in person in the context of their classrooms by the researcher. The researcher gave a brief oral description of the study and instructions for the study, read aloud from a standard script. Participants read and signed the consent form (Appendices A, B, C) before they began the study. Class members who choose not to participate were informed that they may stay in the classroom and sit quietly during data collection or leave the classroom. They were asked to return their blank assessment packet to the envelope that also contained the completed assessment packets of their classmates. Participants completed the demographic form (Appendix D), the Reasoning About Abortion Questionnaire (Appendix E), and the Abortion Knowledge Scale (Appendix F).

Data collection took approximately 20 minutes in each classroom. With the permission of their instructors, students in counseling, social work, and nurse classes
were approached to participate during their regularly scheduled class time until the desired amount of participants were obtained from each profession. All participants were invited to use the contact information provided on the consent form (Appendices A, B, C) to request information from the researcher on the outcome of the study after they returned their completed measures.

All participants were told that their participation was voluntary, and that they would experience no penalty if they decided at any time to withdraw from the study for any reason. No names were obtained on the self-report instruments or the demographic form (Appendix D). A participant number code was assigned to each data packet by the researcher for the purpose of data analysis.

Participants had the opportunity to enter a drawing to win a $50 Amazon.com gift card. One gift card was awarded for each group of participants: the nurse group, the social work group, and the counseling group. All participants were provided a slip of paper with their packet of data collection instruments that served as their drawing entry. If they chose to enter the drawing, they wrote only their email address and their academic program on the entry slip, and placed it in an envelope provided by the researcher that was separate from the other data that they provided. After all data for this study were collected, one entry slip was drawn for each group (counseling, social work, nurse) and the winners were contacted by email so that they could provide a surface mail address to which the Amazon.com certificate was mailed.
Instruments

The instruments used in this study consisted of the Reasoning About Abortion Questionnaire (Appendix E), a demographic instrument (Appendix D) created by the researcher, and the Abortion Knowledge Scale (Appendix F) created by the researcher for use in this study. All instruments were self-report. The Reasoning About Abortion Questionnaire (Appendix E), the Abortion Knowledge Scale (Appendix F), and demographic form (Appendix D) are described below.

Demographic Form

Participants completed a demographic form (Appendix D) developed by the researcher for the purpose of this study. The form included the following information: age, gender, race, marital/partner status, degree sought, year in program, years in practice, religion, and whether they considered themselves to be pro-choice, pro-life, undecided, or no opinion (in regard to their views on abortion).

Reasoning About Abortion Questionnaire (RAQ)

Background Information

The RAQ (Parsons et al., 1990; Appendix E) is a 20-item, 5-point Likert-type rating scale designed to measure the reasoning behind abortion attitudes, with response options including “strongly agree,” “agree,” “mixed feelings,” “disagree,” and “strongly disagree.” The scale was initially developed through pilot-testing an undergraduate and graduate student population at the University of Virginia in the summer of 1986. At this
time the authors (Parsons et al.) had designed a 30-item preliminary questionnaire based on the research of Smetana (1981, 1982; Smetana & Adler, 1979, 1980), whose work they identified as having helped illuminate the thinking behind pro-choice and pro-life attitudes.

Smetana and Adler (1979) wrote that beliefs about abortion vary along a continuum that ends in two separate attitudes. They described these two ends of the continuum as reflecting abortion attitudes that are either constructed in “moral” or “personal” terms. Parsons et al. (1990) described the “moral” construction of abortion attitudes as being synonymous with the pro-life viewpoint, and containing three interrelated core beliefs. These core beliefs include the idea that a fetus is a viable human being, that abortion is murder, and that only God can make life and death decisions. Parsons et al. refer to those who adhere to this position as “moral reasoners.” In regard to clarity and consistency in this study, “pro-life” is used interchangeably with “moral reasoners.”

The “personal” construction of abortion attitudes, as described by Parsons et al. (1990) is synonymous with the pro-choice viewpoint and is also characterized by three interrelated beliefs. These core beliefs include the idea that human life begins at birth, the fetus is part of the mother, and abortion is vital to women’s rights to self-determination. Parsons et al. refer to those who adhere to this position as “personal reasoners.” Again, in regard to clarity and consistency in this study, “pro-choice” is used interchangeably with “personal reasoners.”

Smetana (1981, 1982) further examined the underlying “moral” and “personal” structure of abortion attitudes by using semistructured interviews with women
considering whether to terminate a pregnancy. She explored these women’s “moral” and “personal” reasoning behind their abortion attitudes. Through her interviews, Smetana found that 35% of her sample were “personal reasoners” and 25% were “moral reasoners.” She classified 24% of the sample as “coordinated reasoners,” or those whose abortion attitudes reflected “personal” reasoning until the later stages of pregnancy, when their attitudes were more in line with “moral” reasoning. The last 16% of the sample were labeled as “uncoordinated reasoners,” in that their attitudes toward abortion were not stated clearly enough to be categorized.

Parsons et al. (1990) stated that the research of Smetana (1981, 1982) helped to illuminate the thought processes behind the pro-life and pro-choice movements. Parsons et al. (1990) stated clearly, however, that more research is vitally important regarding understanding abortion attitudes, for the purpose of making informed and enlightened counseling and clinical interventions. Parsons et al. cite that a major challenge for counselors is to help clients facing an abortion decision to find clarity in their beliefs and to make peace with their decisions. The authors (Parsons et al., 1990) wrote that the research regarding abortion attitudes is impeded by a lack of adequate instruments to measure these attitudes, and cited the lack of psychometric data to support the instruments that did exist at the time of their writing. Parsons et al. designed their study in order to develop and validate a measure of reasoning about abortion. The authors wanted to construct a scale that could measure the reasoning underlying attitudes toward abortion, as Smetana did in her semistructured interviews.
Pilot Study for the RAQ

On the basis of Smetana’s (1982) research, Parsons et al. (1990) developed a 30-item preliminary questionnaire. This questionnaire included 10 items that represented the pro-life attitude toward abortion, 10 that represented the pro-choice attitude, and 10 items that represented some concerns regarding abortion that have been reflected in the research literature but do not necessarily reflect either pro-life or pro-choice attitudes. An example of one such item is, “Abortion could destroy the sanctity of motherhood.” A 5-point Likert-type scale was used to reflect respondents’ views ranging from strongly agree to strongly disagree. In order to avoid possible response bias, three of each item type was worded negatively so that when respondents disagreed with those items, they were actually endorsing the abortion attitude reflected in that item.

Approximately 300 copies of the preliminary version of the RAQ (Parsons et al., 1990) were distributed to undergraduate and graduate students at the University of Virginia in 1986. Undergraduate students were approached to participate in their psychology classes, and graduate students were solicited for participation through their university mailboxes. There was a total response rate of approximately 45%, with 134 completed questionnaires from 89 women and 45 men. The age range of participants was 19 years to 45 years, with a mean age of 25 years. There were 41 undergraduate participants and 93 graduate participants (Parsons et al., 1990).

In order to analyze their pilot data, Parsons et al. (1990) generated a 30 × 30 correlation matrix and obtained eigenvalues. Results showed that a single factor accounted for 49% of the variance in responses, with no other single factor accounting for
more than 5% of the variance in responses. A one-dimensional space was assumed to conduct a factor analysis with iterations for communalities. Two- and three-factor solutions were also generated and rotated in accordance with varimax and direct oblimin criteria. These additional manipulations did not reveal additional interpretable factors beyond the first, single factor (Parsons et al., 1990).

Results showed that the first, single factor was bipolar, whose loadings reflected the previously established origin of the items (pro-choice attitude, pro-life attitude, neither; Parsons et al., 1990). The 10 pro-choice items were negatively associated with the factor, with loading ranging from −.46 to −.88. The 10 pro-life items were positively associated with the factor, with loadings ranging from .66 to .88. The 10 items that were neither pro-choice nor pro-life were positively associated with the factor, with loadings of .29 to .75. This initial factor analysis resulted in revision of the RAQ, in addition to a review by the authors (Parsons et al.) of the item content, based in part on comments written on the questionnaires by the pilot sample participants.

From this initial analysis, Parsons et al. (1990) retained the items with the highest positive and negative loadings. Some of these items were rewritten for clarity. They removed items of relatively smaller positive and negative loadings. They also removed two items with relatively high positive loadings, one due to the strong “emotional” versus “reasoned” response by participants, and one due to many respondents’ confusion regarding the item (Parsons et al., 1990). Due to the bipolarity of the factor, all of the items that were worded negatively were changed once again to be positively worded. Parsons et al. interpreted the midrange responses to reflect ambivalent responses as
opposed to respondents having no opinion. For this reason, the “neither agree nor disagree” response was changed to “mixed feelings.”

The revised RAQ (Parsons et al., 1990), a product of the aforementioned pilot study, contained 20 remaining items (10 pro-choice and 10 pro-life). Another factor analysis was conducted on these 20 items, with the first unrotated factor accounting for 58% of the total variance, and no subsequent factor accounting for more than 7% of the total variance. As Parsons et al. predicted, the 10 pro-choice items loaded negatively on the factor and the 10 pro-life items loaded positively on the factor. They state that it is evident from these results that there is a single underlying construct to the RAQ that exists on a bipolar continuum.

Parsons et al. (1990) originally obtained two scores for each participant. The 10 personal reasoning items were summed to result in a personal reasoning score (P), and the 10 moral items were summed to result in a moral reasoning score (M). On each scale, scores ranged from 10 to 50. For the personal reasoning scale, the coefficient alpha was .91 (n = 134), and for the moral reasoning scale the coefficient alpha was .93 (n = 134). In line with the authors’ conceptualization of a single bipolar factor underlying the personal reasoning and moral reasoning scores, the P and M scores were negatively intercorrelated, with a coefficient alpha of .92 (n = 134). Due to the extent of the negative correlation between the P and the M scores, Parsons et al. chose to assess reasoning about abortion on a single continuum. Therefore, abortion reasoning scores from this point on would be calculated by subtracting P from M. This change resulted in potential scores ranging from -40 to +40. In their pilot study, the polarity of sample scores ranged from -40 to +38. Parsons et al. assessed the validity of their instrument through unprompted written
comments by some participants, which supported the authors' position that polarity scores are likely representative of reasoning about abortion.

**Final Developmental Study for the RAQ**

Parsons et al. (1990) then proceeded to conduct the study that was the main focus of their article. They administered their revised RAQ to 230 undergraduate students, 115 women and 115 men. About two thirds of the sample were students in education courses (mostly women participants), and one third of the sample were students in introductory psychology courses (all men). The women were significantly older than the men (\( p < .01 \)), with the mean age of the women 22.0 years and the mean age of the men 19.7 years. Ninety-five percent of the participants were not married. Participants were informed of the nature of the study and given directions on how to complete the questionnaire.

Analyses of the 20-item revised RAQ was conducted using the same factor analysis method from the pilot study (Parsons et al., 1990). Sixty-seven percent of the variance was accounted for by the first unrotated factor, with no other factor accounting for more than 4.5% of the variance. As in the pilot study, the first unrotated factor was bipolar in nature. The personal reasoning item loadings ranged from \(-.59\) to \(-.90\). The moral reasoning item loadings ranged from \(.70\) to \(.85\). The coefficient of congruence was \(.99\) between the factor loadings in the pilot sample and this main study, with the pattern of factors closely resembling each other in both studies (Parsons et al., 1990).

The P and M scores in the main study were calculated in the way that had been determined to make the most sense after the pilot study (Parsons et al., 1990). Internal consistencies were high once again, with a coefficient alpha of \(.95\) for the P scale and a
coefficient of .96 for the M scale. Again, the P and M scales were negatively intercorrelated, with a coefficient alpha of -.88. The authors calculated RAQ polarity scores by subtracting P scores from M scores.

**Validity of the RAQ**

In order to assess the validity of the RAQ, Parsons et al. (1990) conducted follow-up interviews with some participants. The participants who agreed to do interviews were rank ordered according to their RAQ score (Parsons et al., 1990). Semistructured interviews were then conducted with 20 men and 20 women who scored at the positive (extreme moral reasoners) and negative (extreme personal reasoners) ends of the RAQ scoring continuum. Interviewees received $4 for their extra participation. The interview participants were probed for their views on morality issues regarding abortion and personal choice issues regarding abortion.

The authors (Parsons et al., 1990) conducted content analysis on the interview data. The extreme moral reasoners’ major argument against abortion was an extension of the belief that human life begins at conception. Although the wording of this argument varied, these participants almost always framed their argument in moral terms, and repeatedly emphasized moral justifications for someone considering abortion. Many but not all extreme moral reasoners stated that their religious beliefs were central to their views on abortion. The extreme personal reasoners’ major considerations were related to personal choice and autonomy. Most of these interviewees did not view a fetus as a human life, at least in the first trimester. Most of these participants also cited belief in
self-determination, and all believed that a woman should have ultimate control over her body (Parsons et al., 1990).

Parsons et al. (1990) stated that these interviews supported the validity of the RAQ, by showing that the participants who scored on each extreme end of the RAQ scoring continuum exhibited reasoning that the RAQ was intended to assess. They reported that their interview probes resulted in arguments that were congruent with those reported in the work of Smetana (1981, 1982). Parsons et al. stated that the interview results were consistent with the theoretical framework on which they designed the RAQ, with the major arguments of the extreme moral reasoners and the extreme personal reasoners being easily associated with those typical of right to life or pro-choice supporters.

Reliability of the RAQ

In order to assess the reliability of the RAQ (Parsons et al., 1990), the authors conducted a follow-up study with 38 graduate students (31 women, 7 men). Age of the participants ranged from 20 to 50 years, with a mean age of 32.9 years. Sixteen participants were enrolled in an adolescent development course and 22 were enrolled in a tests and measurements course. The participants were assured of their anonymity and were administered the RAQ twice, 8 days apart. Using a two-way analysis of variance, no significant differences were found as a function of gender or course type, or in the interaction of these two variables.

The P and M scores for this administration of the RAQ were calculated in the same manner as the previous two administrations (Parsons et al., 1990), and again were
negatively intercorrelated, with a correlation alpha of −.94 for the first administration and −.93 for the second administration. The RAQ polarity scores were computed in the same manner as before, by subtracting P from M. Parsons et al. determined test-retest reliability by correlating the RAQ scores across the two assessments, with a correlation coefficient for the polarity scores of .98.

As in the previous two administrations of the RAQ, the polarity scores ranged from −40 to +40, and both distributions were skewed positively. Two-way analysis of variance did not reveal a significant difference for pre- or posttest polarity scores as a function of gender, course, or their interaction. Additionally, age was not significantly correlated with polarity (r = .10 for the pretest, r = .09 for the posttest).

**Summary and Limitations of the RAQ**

Parsons et al. (1990) summed up their study of the RAQ by stating that it draws on a continuum of belief about abortion that is factor-analytically stable, bipolar, internally consistent, and highly reliable over time (at least in the short term). The robust and negative correlation between pro-life and pro-choice reasoning fits well with the common belief that these arguments tend to be mutually exclusive. Additionally, their semistructured interview data support the idea that the RAQ polarity scores are valid indicators of the relative strength of the two arguments.

Parsons et al. (1990) also discussed the limitations of the RAQ. First, they stated that it cannot be assumed that the RAQ captures everything participants will think is important about abortion. For example, pro-life and pro-choice views toward abortion are multifaceted and subtle, with likely more common ground than is assessed by the RAQ
(Parsons et al., 1990). Additionally, the RAQ does not parcel out participants who are morally opposed to abortion, but do not believe that morality should be legislated. The RAQ also does not discriminate in a useful way between participants thinking about abortion in personal terms or participants thinking about abortion in an abstract manner (Parsons et al., 1990).

**Abortion Knowledge Scale (AKS)**

**Scale Development for This Study**

The initial step in developing a semantic differential scale (Osgood, Suci, & Tannenbaum, 1976) is to choose the “concept” to be assessed. The authors (Osgood et al., 1978) applied the term concept in a general sense, using it in reference to the stimulus (adjective pair) to which the participant’s selection (check mark on the line) is a response. The concept chosen for this study was participants’ perception of their own abortion knowledge.

When designing the semantic differential scale, Osgood et al. (1978) conducted factor analysis on adjective pairs, and extracted and rotated four particular factors into a simple structure (while maintaining orthogonality). They identified the three main factors or clusters of adjectives as being “evaluative,” “potency,” and “activity.” All adjective pairs chosen for this study were selected for their factor loadings on the evaluative, potency, or activity factor, as well as their relevance to the concept chosen for measurement. Twelve adjective pairs were selected to create 12 scales, with 4 scales each for evaluative, potency, and activity. The evaluative adjective pairs chosen were:
(a) informative-uninformative, (b) valuable-worthless, (c) meaningless-meaningful, (d) complex-simple. The potency adjective pairs chosen were: (a) strong-weak, (b) superficial-profound, (c) deep-shallow, (d) vague-precise. The activity adjective pairs chosen were: (a) motivated-aimless, (b) static-dynamic, (c) active-passive, (d) intentional-unintentional.

For the design of the semantic differential scale (Osgood et al., 1978) utilized in this study, random selection was used. The order of the 12 total scales was randomly chosen. Additionally, the order of “positive” and “negative” adjectives in each scale was randomly selected, so that each subset of four scales for evaluative, potency, and activity had two scales beginning with a positive adjective and two scales beginning with a negative adjective.

The semantic differential scale (Osgood et al., 1978) is scored by arbitrarily assigning a digit to each of the positions on each scale. For this study, the “negative” pole of each scale (weak, worthless, uninformative, superficial, meaningless, aimless, static, shallow, passive, vague, unintentional, simple) was assigned a value of 1, and the “positive” pole of each scale (strong, valuable, informative, profound, meaningful, motivated, dynamic, deep, active, precise, intentional, complex) was assigned a value of 7. Osgood et al. acknowledged that the tendency for power and action to be associated with a positive semantic value may be reflective of cultural bias.

Validity of Semantic Differential Scales

Osgood et al. (1978) chose to report on the face validity of the semantic differential scale for several reasons. They argued that this type of scale does not fit with
"traditional" methods of validity testing, because a semantic differential scale measures meaning, and there is no universally accepted quantitative criterion of meaning. Face validity represents the extent to which the distinctions that the semantic differential scale provides correspond to those that most observers would make without the help of the instrument. The authors cited several examples of readers making "reasonable" groupings of the adjective pairs according to the evaluative, potency, and activity factors without the benefit of the semantic differential scale. They state that they had found no reason to doubt the validity of the semantic differential scale based on its similarity to results that you would expect by virtue of "common sense."

Osgood et al. (1978) also discussed the validity of certain scaling assumptions and wrote that using the semantic differential involves making assumptions about the individual scales of which the differential is comprised. For example, when assigning integers to a scale for the purpose of scoring, the assumption of equal intervals is made. Additionally, factor analysis of meaning for each individual scale assumes that the zero point is located at the centroid of each scale. Based on further study, the authors concluded that assumptions about the scaling properties with the semantic differential have an additional base in something other than just assumption.

Other assumptions about the semantic differential (Osgood et al., 1978) include that all individual scales have a common origin and intersect at some point in the semantic space. Linearity is also assumed, in that the line representing each scale in semantic space is a straight line, and the two polar terms are in opposite and equidistant directions for the origin. The authors stated that they had not yet figured out a way to test these particular assumptions.
Osgood et al. (1978) also reported on three ways that the above mentioned assumptions could be tested. They stated that one such method would be to check on the relationship between the direction of the points in the semantic space and the mediating elements elicited by the adjectives used in that scale. Another method would be to measure the correlation between the way that a participant would assign meaning to a scale and some measure of the participant's overt behavior. Lastly, the authors wrote of other measures of "behavioral" validity, in that a participant's behavior should be predictable from the meaning that they make of a semantic differential scale.

Reliability of Semantic Differential Scales

Osgood et al. (1978) wrote of three types of reliability in regard to the semantic differential scale. The first is "item reliability," which refers to the reliability of each individual scale that is comprised of one adjective pair. The second is "factor-score reliability," which refers to the score that results from the averaging of the individual scale scores from all items measuring a particular factor for one concept. The third is "concept-meaning reliability," which refers to all of the factor scores for a particular concept. They concluded by stating that the "concept-meaning reliability" and the "reliability of semantic distances" will be just as reliable as the factor scores of which they are comprised.

Additional Self-Assessment of Abortion Knowledge in This Study

Each participant completed an Abortion Knowledge Scale (Appendix F) developed by the researcher for the purpose of this study. This scale allowed comparison
of the degree to which the meaning that participants made about their abortion knowledge was similar or dissimilar by participant group type. In addition to the semantic differential scale, participants were asked a Likert-type question as to whether they thought their training program enhanced their overall knowledge of abortion, six Likert-type questions regarding sources of their abortion knowledge, and one abortion knowledge ranking item.

Demographics of the Entire Sample

Characteristics of the sample will be described as a whole, and then made more specific by professional training group.

Participants

The participants consisted of 171 women and men who were master’s of arts students in counseling, master’s students in social work, and undergraduate students in nurse training programs. Age, race, sexual orientation, marital/partner status, and parenthood status of participants varied. The participants included first-time college students, nontraditional students, and transfer students from another major or another college or university. At the time of data collection, participants were enrolled in their respective programs and were age 18 years or older. Participants were recruited in person, from training programs at the following Midwestern college and universities: University A, University B, and College C.
Data Collection Sites

The following two universities and one college in the Midwest were approached to participate in this study. University A is a small, private Catholic and Jesuit liberal arts university in a suburban setting. This university is administered by the Roman Catholic religious order of priests known as the Society of Jesus, often called the Jesuits. University A is also the university where the researcher is employed. Participants (n = 13) were sampled from the Master of Arts program in Community Counseling. This program is accredited by the Council on Accreditation of Counseling and Related Educational Programs (CACREP).

While University A is a Catholic and Jesuit university, not all students who attend University A identify as Catholic, and there are fewer Catholic graduate students than undergraduate students. In 2007, of the 691 graduate students in all programs at University A, 25.6% identified as Catholic (67.1% did not identify a religious affiliation). While it is possible that some of the graduate students who did not identify a religion are Catholic, it is clear that Catholic graduate students at University A are not in the majority. In contrast to the graduate student population, 68% of undergraduate students in 2007 identified as Catholic. The potential impact of identifying as Catholic on abortion attitudes for this sample is addressed in Chapter V.

University B is a moderately-sized, public university in an urban setting. Participants (n = 100) were sampled from the Master of Social Work program, the Master of Education in Community Agency Counseling program, the Master of Arts in Clinical Psychology program, and the Bachelor of Science in Nursing (B.S.N.) program. The
Social Work program at University B is accredited by the Council on Social Work Education (CSWE), the Community Counseling Program is accredited by CACREP, the Clinical Psychology program is accredited by Council of Graduate Departments of Psychology, and the Nursing program is accredited by the Commission on Collegiate Nursing Education (CCNE).

The B.S.N. program at University B allows students to begin their clinical work in the second semester of their second year. University B’s nursing program enables students who have no prior nursing degree to earn their Bachelor of Science in Nursing, which is referred to as their “four-year” or “basic” B.S.N. program. Additionally, students who have a bachelor’s degree in another field, have completed prerequisite courses, and can attend school full-time may earn their B.S.N. in an accelerated program. Students who have an associate’s degree or a diploma in the nursing field may also earn their B.S.N. in an accelerated program.

The Master of Arts in Clinical Psychology at University B is a terminal degree program. Students in this program have the option of two tracks: the Practitioner Track or the Doctoral Preparation Track. Students in the Practitioner Track plan to enter clinical practice after graduation, while students in the Doctoral Preparation Track hope to enter doctoral programs after graduation. The training is identical in both programs, except that students in the Practitioner Track take electives relevant to their career goals, and students in the Doctoral Preparation Track write a thesis. All participants in this study reported that they were in the Doctoral Preparation Track.

College C is a small, private Catholic liberal arts college in a suburban setting. This university is administered by the Roman Catholic religious order of nuns called the
Ursuline sisters. Participants (n = 58) were sampled from the Bachelor of Science in Nursing program, accredited by the CCNE, and the Master of Arts in Art Therapy Counseling, accredited by the American Art Therapy and Counseling Association and the Art Therapy Credentials Board. The Art Therapy degree provides students with the option to seek licensure as a counselor. All participants in this study were seeking counselor licensure.

While College C is a Catholic college, not all students who attend College C identify as Catholic, and there are fewer Catholic graduate students than undergraduate students (similar to University A). In 2007, of the 348 graduate students in all programs at College C, 54% identified as Catholic (of the 188 who reported a religious affiliation). While it is possible that some of the graduate students who did not identify a religion are Catholic, Catholic graduate students at College C are not in the majority. In contrast to the graduate student population, 48% of undergraduate and graduate students in 2006 identified as Catholic (of those who reported a religious affiliation).

The B.S.N. program at College C allows students to begin their clinical work in the second semester of their sophomore year. College C’s nursing program enables students who have no prior nursing degree to earn their Bachelor of Science in Nursing. Additionally, students who have a bachelor’s degree in another field and students who have an associate’s degree or a diploma in the nursing field may earn their B.S.N. in an accelerated program.
**Profession**

The target populations at these institutions were master's students in counseling (counselor trainees, CTs), master's students in social work (social work trainees, SWTs), and undergraduate nurse students (nurse trainees, NTs). Of the 171 total participants, 51 were CTs, 42 were SWTs, and 78 were NTs.

**Race**

On the demographic questionnaire, participants were given the opportunity to identify their race/ethnicity among seven options: African American/Black, European American/White, Native American, Asian/Pacific Islander, Latino (a)/Chicano (a)/Hispanic, Bi-Racial, and Other. In this sample, 11 participants did not identify their race. Due to the geographic region and the racial make-up of the college and universities where data were collected, the majority of participants (n = 128) identified their race identified as White (80%). The next largest racial group in this sample (n = 24) was Black (15%). Other racial groups identified were: Asian/Pacific Islander (n = 3), Biracial (n = 2; 1 participant identified as White and Latina/Chicana, 1 participant identified as Native American and White), Native American (n = 1), Latina or Chicana (n = 1), and Other (n = 1, Arab). Due to an oversight in the design of the demographic questionnaire, there was no category available to for participants to identify as being of Middle Eastern decent. Overall, of the participants who identified their race (n = 160), 80% (n = 128) of the sample identified as White, and 20% (n = 32) of the sample identified as people of color.
Gender

Of the 171 total participants, 140 (85%) identified as women, and 25 (15%) identified as men. Six participants chose not to identify their sex/gender. The gender of the sample is primarily homogeneous (women), due to the traditionally women-centered nature of the counseling, social work, and nurse professions.

Religion

On the demographic questionnaire, participants were also given the opportunity to identify whether they participate in an organized religion/spiritual tradition. Of the 171 total participants in this sample, 3 participants did not identify whether or not they participate in an organized religion/spiritual tradition, 115 indicated “yes” (68%), and 53 indicated “no” (32%). Participants were asked to fill-in-the-blank to identify their religion/spiritual tradition. Of those participants who indicated that they do participate in a religion/spiritual tradition, 9 (8%) chose not to identify it. The majority of participants (n = 53) who did choose to identify their religion/spiritual tradition, identified religions that could be categorized as Protestant (50%). The next largest identified religion/spiritual tradition (n = 48) was Catholic (45%). Other identified religions/spiritual traditions included Jewish (n = 4, 4%) and Islam (n = 1, 1%). If participants indicated that they do participate in a religion/spiritual tradition, they were asked, “Please quantify the approximate frequency of your participation: more than once per week, once per week, once per month, once per year, or more than once per year.” The range of reported frequency of participation in religion/spiritual tradition for all participants who identified
a religion/spiritual tradition was “more than once per week” to “more than once per year.” For Protestants, 1 participant did not report frequency of religion/spiritual tradition participation. The mean reported frequency of Protestant participation was “once per month,” and the median reported frequency of participation was “once per week.” For Catholics, 2 participants did not report frequency of religion/spiritual tradition participation. The range of reported frequency of Catholic participation was “more than once per week” to “more than once per year.” The mean reported frequency of participation was “once per month,” and the median reported frequency of participation was “once per week.”

The self-reported religious identification and frequency of participation information across the CT, SWT, and NT groups is fairly similar. In all three training groups, approximately 1/4 (CTs) to 1/3 (SWTs and NTs) of each group did not participate in a religious/spiritual tradition, and approximately 3/4 (CTs) to 2/3 (SWTs and NTs) did participate in a religious/spiritual tradition. Relatively more of the CTs did participate in a religious/spiritual tradition compared to SWTs and NTs. There were more Catholics in the CT (49%) and NT (55%) groups, and more Protestants (68%) in the SWT group. The mean reported frequency of participation in a religious/spiritual tradition for all three groups, regardless of Protestant or Catholic identity, was “once per month,” except for SWT Catholics, which was “once per year.”

**Age**

The age range for this sample ($n = 171$) was 21 years to 58 years, with a mean age of 29 years ($n = 6$), and a median age of 25 years ($n = 16$).
Demographics by Profession

Counselor Trainees

The CT group included 51 participants who attend either University A (n = 13), University B (n = 22), or College C (n = 16). CT participants were asked to identify the nature of their counseling training program: 18 reported that they were in a Clinical Psychology, doctoral preparation track program (35%); 16 reported that they were in a Counseling and Art Therapy program (31%); 13 reported that they were in a Community Counseling program (25%); and 4 reported that they were in a Community Agency Counseling program (8%).

Counselor Trainee Race, Gender, Age, Relationship Status

In this group, 2 participants did not report their race. The majority (n = 45) of CTs identified as White (92%). Other races reported in the CT group include: Black (n = 2, 4%), Asian/Pacific Islander (n = 1, 2%), Latina or Chicana (n = 1, 2%). On the demographic form, participants were asked to report their “sex.” All reported results refer to “gender.” One participant did not report her/his gender. The majority (n = 46) of CT participants identified as women (92%) and 4 participants identified as men (8%). The reported age range for the CT group is 21 years to 58 years, with a mean age of 30 years, a median age of 26 years, and a mode age of 23 years. Participants were asked to identify their relationship status, choosing from the following options: single, in a committed relationship, married, divorced, widowed. Of the CT participants, 18 (36%) identified as
being in a committed relationship, 15 (29%) identified as single, 14 (27%) identified as married, 4 (8%) identified as divorced, and 1 identified as widowed.

_Counselor Trainee Religion/Spiritual Tradition_

One CT woman participant did not identify whether or not she participated in an organized religion/spiritual tradition, 37 indicated “yes” (74%), and 13 indicated “no” (26%). Of those CT participants who indicated that they do participate in a religion/spiritual tradition, 2 did not identify which religion/spiritual tradition, 17 identified as Catholic (49%), 16 identified as Protestant (46%), and 2 identified as Jewish (5%). If participants indicated that they do participate in a religion/spiritual tradition, they were asked, “Please quantify the approximate frequency of your participation: more than once per week, once per week, once per month, once per year, or more than once per year.” The range of reported frequency of participation in religion/spiritual tradition for CT Protestants and CT Catholics was “more than once per week” to “more than once per year.” For both CT Protestants and CT Catholics, the mean reported frequency of participation was “once per month,” and the median reported frequency of participation was “once per week.”

_Status of Progress in the Counseling Training Program_

Participants were asked to report their year of study in their training programs. In the CT group, 8 participants did not report their year of study. The range for year of study in training program for the CT group was 1 year to 6 years, with a mean of 2 years, and a median of 2 years. The majority of CT participants ($n = 34, 77\%$) reported that they have
full-time status in their programs, 10 participants reported part-time status (23%), and 7 participants did not report their status. All participants were also asked to report whether they were in the 1st, 2nd, 3rd, or 4th quarter of completion of their entire training programs. The range of stage of completion of training program for the CT group was 1st through 4th quarter of entire training program completion, the mean fell into the 2nd quarter of entire training program completion \( n = 18, 40\% \), and the median fell into the 2nd quarter of entire training program completion. Forty-three participants (84%) reported that they had not practiced in their field prior to their current training program, and 8 reported that they had practiced in their field. Of those CT participants who reported previous practice, the range of experience was 1/2 year to 12 years.

_Pro-Choice/Pro-Life Counselor Trainees_

Participants were given the opportunity to report whether they identify as "pro-choice," "pro-life," "undecided," or "no opinion," based on provided definitions. "Pro-choice" was defined, for the purpose of this study, as individuals who are supportive of a woman's choice to exercise her reproductive right and terminate her pregnancy, under at least some conditions or any condition. "Pro-choice" is used as a means of convention, and not to imply that pro-choice participants do not also value life. "Pro-life" was defined, for the purpose of this study, as individuals who are not supportive of a woman's choice to exercise her reproductive right and terminate a pregnancy under most conditions or any condition. "Undecided" was defined, for the purpose of this study, as individuals who have not yet decided whether their views regarding abortion are better defined by "pro-choice" or "pro-life" positions. "No opinion" was defined, for the purpose of this
study, as individuals who at this time choose not to form an opinion as to whether their views regarding abortion are better defined by “pro-choice” or “pro-life” positions. Of the CT participants, 36 (71%) identified as pro-choice, 11 (22%) identified as pro-life, and 4 (9%) identified as undecided. In contrast, of the entire sample, 114 (67%) identified as pro-choice, 41 (24%) identified as pro-life, 13 (8%) identified as undecided, 2 (1%) identified as no opinion, and 1 SWT participant did not respond to this item.

In addition to the self-reported abortion attitude item on the demographic form, the abortion attitudes of participants in this study were also measured by the RAQ (Parsons et al., 1990). The RAQ score identified participants as either “moral” or “personal” reasoners. Moral reasoners can be equated with pro-life abortion attitudes, and personal reasoners can be associated with pro-choice abortion attitudes. Of the CT participants, 14 (28%) were moral reasoners/pro-life and 36 (72%) were personal reasoners/pro-choice. One CT participant’s score on the RAQ was such that, according to scoring criteria outlined by Parsons et al., it was not able to be categorized as either moral or personal. For the purpose of analyses of the RAQ, this participant was not included. In contrast, of the entire sample, 52 (31%) scored in the direction of a moral reasoning/pro-life attitude, and 116 (69%) scored in the direction of a personal reasoning/pro-choice attitude.

Social Work Trainees

The SWT group included 42 participants, who all attend University B. SWT participants were asked to identify the nature of their social work training program. All 42
participants reported that they are in a traditional Master's of Social Work (M.S.W.) program.

*Social Work Trainee Race, Gender, Age, Relationship Status*

In this group, 4 participants did not report their race. The majority ($n = 27$) of SWTs identified as White (71%). Other races reported in the SWT group include: Black ($n = 9$, 2%), Biracial ($n = 1$; 1 participant identified as Native American and White), Other ($n = 1$; Arab). Three participants did not report their gender. The majority ($n = 31$) of SWT participants identified as women (80%) and 8 participants identified as men (20%). The reported age range for the SWT group was 22 years to 57 years, with a mean age of 36 years, a median age of 32 years, and a mode age of 25 years. Four SWTs did not report their ages. Of the SWT participants, 16 (29%) identified as being in a committed relationship, 12 (29%) identified as single, 11 (26%) identified as married, and 3 (7%) identified as divorced.

*Religion/Spiritual Tradition*

One SWT participant did not identify whether he or she (also did not report gender) participated in an organized religion/spiritual tradition, 28 indicated "yes" (68%), and 13 indicated "no" (32%). Of those SWT participants who indicated that they do participate in a religion/spiritual tradition, 3 did not identify which religion/spiritual tradition, 17 identified as Protestant (68%), 6 identified as Catholic (24%), 1 identified as Jewish, and 1 identified as Islamic. One woman participant did not identify her religion/spiritual tradition but did identify her frequency of participation. One Protestant
and 1 Catholic did not identify their frequency of participation. The range of reported frequency of participation in a religion/spiritual tradition for SWT Protestants \((n = 16)\) was “more than once per week” to “more than once per year.” The mean reported frequency of participation was “once per month,” and the median reported frequency of participation was “once per week.” The range of reported frequency of participation in a religion/spiritual tradition for SWT Catholics \((n = 5)\) was “once per week” to “more than once per year.” The mean reported frequency of participation was “once per year,” and the median reported frequency of participation was “once per month.”

**Status of Progress in the Social Work Training Program**

Participants were asked to report their year of study in their training program. In the SWT group, 4 participants did not report their year of study. The range for the SWT group was 1 year to 4 years, with a mean of 2 years \((n = 22, 58\%)\), and a median of 2 years. The majority of SWT participants \((n = 33, 83\%)\) reported that they have full-time status in their programs, 7 \((18\%)\) participants reported part-time status, and 2 participants did not report their status. SWT participants were also asked to report whether they were in the 1st, 2nd, 3rd, or 4th quarter of completion of their programs. The range of stage of completion of training program for the SWT group was 1st through 4th quarter of entire training program completion, the mean was 3rd quarter of entire training program completion \((n = 6, 15\%)\), and the median was 4th quarter of entire training program completion. Thirty participants \((73\%)\) reported that they had not practiced in their field prior to their current training program, and 11 \((27\%)\) reported that they had practiced in
their field. Of those SWT participants who reported previous practice, the range of experience was 1/2 year to 17 years.

Pro-Choice/Pro-Life Social Work Trainees

Participants were given the opportunity to report whether they identify as pro-choice, pro-life, undecided, or no opinion, based on provided definitions. Of the SWT participants, 31 (74%) identified as pro-choice, 8 (19%) identified as pro-life, 2 (5%) identified as undecided, and 1 participant did not report on this item. In contrast, of the entire sample, 114 (67%) identified as pro-choice, 41 (24%) identified as pro-life, 13 (8%) identified as undecided, 2 (1%) identified as no opinion.

In addition to the self-reported abortion attitude item on the demographic form, the abortion attitudes of participants in this study were also measured by the RAQ (Parsons et al., 1990). Based on RAQ scores for SWT participants, 11 (27%) were moral reasoners/pro-life, and 30 (73%) were personal reasoners/pro-choice. One SWT participant’s score on the RAQ was such that, according to scoring criteria outlined by Parsons et al., it was not able to be categorized as either moral or personal. For the purpose of analyses of the RAQ, this participant was not included. In contrast, of the entire sample, 52 (31%) scored in the direction of a moral reasoning/pro-life attitude, and 116 (69%) scored in the direction of a personal reasoning/pro-choice attitude.

Nurse Trainees

The NT group included 78 participants, who attended University B (n = 36) or College C (n = 42). NT participants were asked to identify the nature of their nurse
training program: 38 reported that they have no prior nurse degree (49%), and 35 reporting that they have a bachelor’s degree in another field (45%). Of those participants with a prior bachelor’s degree, 25 could be categorized as a prior degree in “life sciences,” and 10 as a prior degree in a “non-life sciences” field.

Nurse Trainee Race, Gender, Age, Relationship Status

In this group, 5 participants did not report their race. The majority (n = 56) of NT identified as White (77%). Other races reported in the NT group include: Black (n = 13, 18%), Asian/Pacific Islander (n = 3), Native American (n = 1), Biracial (n = 1, 1 participant identified as White and Latina). Two participants did not report their gender. The majority (n = 63) of NT participants identified as women (83%) and 13 participants identified as men (17%). The reported age range for the NT group was 21 years to 50 years, with a mean age of 25 years (n = 7), a median age of 23 years (n = 14), and a mode age of 22 years (n = 18). Three NTs did not report their ages. Predictably, due to the undergraduate nature of traditional nurse training programs, the mean age of this participant group was younger than the mean age of the CTs and SWTs, and therefore served to lower the mean age of the study’s sample as a whole. Of the NT participants, 35 (45%) identified as being in a committed relationship, 28 (36%) identified as single, 13 (17%) identified as married, and 2 (3%) identified as divorced.

Religion/Spiritual Tradition

One NT participant did not identify whether or not she participated in an organized religion/spiritual tradition, 49 indicated “yes” (64%), and 28 indicated “no”
(36%). Of those NT participants who indicated that they do participate in a religion/spiritual tradition, 26 identified as Catholic (55%), 20 identified as Protestant (43%), and 1 identified as Jewish. One Catholic NT participant did not report her frequency of participation in a religion/spiritual tradition. The range of reported frequency of participation in a religion/spiritual tradition for NT Catholics was “more than once per week” to “more than once per year.” The mean reported frequency of participation was “once per month,” and the median reported frequency of participation was “once per month.” The range of reported frequency of participation in a religion/spiritual tradition for NT Protestants was “more than once per week” to “more than once per year.” The mean reported frequency of participation was “once per month,” and the median reported frequency of participation was “once per month.”

Status of Progress in the Nurse Training Program

Participants were asked to report their year of study in their training program. In the NT group, 3 participants did not report their year of study. The range for the NT group was 1 year to 4 years, with a mean of 3 years (n = 4), and a median of 4 years (n = 43, 57%). The majority of NT participants (n = 42, 56%) reported that they had started the clinical work integrated into their training program, 32 (43%) participants reported that they had not started their clinical work, and 4 participants did not report whether they had started their clinical work.
Pro-Choice/Pro-Life Nurse Trainees

Participants were given the opportunity to report whether they identify as pro-choice, pro-life, undecided, or no opinion, based on provided definitions. Of the NT participants, 47 (60%) identified as pro-choice, 22 (28%) identified as pro-life, 7 (9%) identified as undecided, and 2 (3%) identified as no opinion. In contrast, of the entire sample, 114 (67%) identified as pro-choice, 41 (24%) identified as pro-life, 13 (8%) identified as undecided, 2 (1%) identified as no opinion, and 1 SWT participant did not report on this item.

In addition to the self-reported abortion attitude item on the demographic form, the abortion attitudes of participants in this study were also measured by the RAQ (Parsons et al., 1990). Based on RAQ scores for NT participants, 27 (35%) were moral reasoners/pro-life, and 50 (65%) were personal reasoners/pro-choice. One NT participant’s score on the RAQ was such that, according to scoring criteria outlined by Parsons et al., it was not able to be categorized as either moral or personal. For the purpose of analyses of the RAQ, this participant was not included. In contrast, of the entire sample, 52 (31%) scored in the direction of a moral reasoning/pro-life attitude, and 116 (69%) scored in the direction of a personal reasoning/pro-choice attitude.

Chapter IV will present the results of the four research hypotheses addressed in this study. Additionally, results will be presented on the abortion knowledge of counselor, social work, and nurse trainees.
CHAPTER IV

RESULTS

Overview

The purpose of this study was to examine the similarities and differences in abortion attitudes between counselors, social workers, and nurses in training. This chapter presents the results of the four research hypotheses addressed in this study, as well as the predictor variables regarding demographic characteristics and abortion attitudes.

Statement of the Research Hypotheses

Hypothesis 1: Counselor Trainees

The first research hypothesis was: Counselor Trainee (CT) (a) race, (b) religion, (c) gender, (d) profession, and (e) age will predict CT abortion attitudes. A standard multiple regression analysis (see Table 2) was conducted to evaluate how well counselor trainee demographics predicted abortion attitudes. The predictors were race, religion, gender, and age, while the criterion variable was the total Reasoning About Abortion Questionnaire (RAQ) raw score. In order to transform religion and race into dichotomous variables for the multiple regression, the religion variable was defined by counselor trainee participants who identified as Catholic ($n = 17$) or Protestant ($n = 16$). Of those CT participants who identified a religion/spiritual tradition, this only eliminated 2
participants, who identified as Jewish. Due to the geographic region and the racial make-up of the college and universities where data were collected, the majority of participants (n = 128) who identified their race identified as White (80%). Therefore, for the purpose of analyses, the racial make-up of participants in this study was divided into White and people of color (20%, n = 32). This was necessary due to the racial homogeneity of the sample, and not to imply that all people of color are homogeneous. The linear combination of the counselor trainee demographic variables was not significantly related to the total RAQ raw score, $R^2 = .06$, adjusted $R^2 = -.09$, $F(4, 30) = .398$, $p = .81$.

Table 2

**Summary of Standard Multiple Regression Analyses for Variables Predicting Abortion Attitudes in Counselor Trainees**

<table>
<thead>
<tr>
<th>Variable</th>
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</table>

**Hypothesis 2: Social Work Trainees**

The second research hypothesis was: Social Work Trainee (SWT) (a) race, (b) religion, (c) gender, (d) profession, and (e) age will predict SWT abortion attitudes. A standard multiple regression analysis (see Table 3) was conducted to evaluate how well social work trainee demographics predicted abortion attitude. The predictors were race, religion, gender, and age, while the criterion variable was the overall Reasoning About
Abortion Questionnaire (RAQ) raw score. The religion variable was defined by social
work trainee participants who identified as Protestant (n = 17) or Catholic (n = 6). Of
those SWT participants who identified a religion/spiritual tradition, this only eliminated 2
participants, 1 who identified as Jewish and 1 who identified as Islamic. The race variable
was defined by White participants and participants of color. The linear combination of the
social work trainee demographic variables was not significantly related to the total RAQ
raw score, $R^2 = .111$, adjusted $R^2 = -.112$, $F(4, 20) = .498, p = .74$.

Table 3

Summary of Standard Multiple Regression Analyses for Variables Predicting Abortion
Attitudes in Social Work Trainees

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>SE B</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Race</td>
<td>12.63</td>
<td>11.91</td>
<td>.30</td>
</tr>
<tr>
<td>Religion</td>
<td>-4.05</td>
<td>11.88</td>
<td>-.10</td>
</tr>
<tr>
<td>Gender</td>
<td>5.00</td>
<td>11.68</td>
<td>.12</td>
</tr>
<tr>
<td>Age</td>
<td>.439</td>
<td>.50</td>
<td>.24</td>
</tr>
</tbody>
</table>

Hypothesis 3: Nurse Trainees

The third research hypothesis was: Nurse Trainee (NT) (a) race, (b) religion,
(c) gender, (d) profession, and (e) age will predict NT abortion attitudes. A standard
multiple regression analysis (see Table 4) was conducted to evaluate how well nurse
trainee demographics predicted abortion attitude. The predictors were race, religion,
gender, and age, while the criterion variable was the overall Reasoning About Abortion
Questionnaire (RAQ) raw score. The religion variable was defined by nurse trainee
participants who identified as Catholic \((n = 26)\) or Protestant \((n = 20)\). Of those NT participants who identified a religion/spiritual tradition, this only eliminated 1 participant, who identified as Jewish. The race variable was defined by White participants and participants of color. The linear combination of the nurse trainee demographic variables was not significantly related to the total RAQ raw score, \(R^2 = .06\), adjusted \(R^2 = -.03\), \(F(4, 42) = .652, p = .63\).

Table 4

Summary of Standard Multiple Regression Analyses for Variables Predicting Abortion Attitudes in Nurse Trainees

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>SE B</th>
<th>(\beta)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Race</td>
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<td>10.41</td>
<td>.024</td>
</tr>
<tr>
<td>Religion</td>
<td>7.23</td>
<td>9.10</td>
<td>.166</td>
</tr>
<tr>
<td>Gender</td>
<td>-5.11</td>
<td>9.30</td>
<td>-.089</td>
</tr>
<tr>
<td>Age</td>
<td>-0.37</td>
<td>.65</td>
<td>-.094</td>
</tr>
</tbody>
</table>

Multicolinearity of Professional Training Groups

The results of the multiple regression analyses were impacted by the multicolinearity of the professional training groups. An independent samples \(t\) test was conducted to compare the total RAQ raw scores for counselor trainees and non-counselor trainees (the social work trainees and nurse trainees). There was no significant difference in scores for counselor trainees \((M = -8.65, SD = 21.19)\) and non-counselor trainees \((M = -5.91, SD = 21.17, t(169) = .77, p = .87)\). The magnitude of the differences in the means
was very small (eta squared = .003). Only .3% of the variance in the total RAQ raw score is explained by being a counselor trainee or a non-counselor trainee.

An independent samples *t* test was conducted to compare the total RAQ raw scores for social work trainees and non-social work trainees (the counselor trainees and nurse trainees). There was no significant difference in scores for social work trainees \( (M = -10.71, SD = 19.14) \) and non-social work trainees \( (M = -5.43, SD = 21.68, t(169) = 1.41, p = .22) \). The magnitude of the differences in the means was small (eta squared = .011), with 1% of the variance in the total RAQ raw score explained by being a social work trainee or a non-social work trainee.

An independent samples *t* test was conducted to compare the total RAQ raw scores for nurse trainees and non-nurse trainees (the counselor trainees and social work trainees). There was no significant difference in scores for nurse trainees \( (M = -3.32, SD = 21.87) \) and non-nurse trainees \( (M = -9.89, SD = 20.01, t(141) = -1.86, p = .21) \). The magnitude of the differences in the means was moderate to large (eta squared = .027), with 3% of the variance in the total RAQ raw score explained by being a nurse trainee or a non-nurse trainee.

The relationship between counselor trainees, social work trainees, and nurse trainees on the total RAQ raw score was investigated using Pearson product-moment correlation coefficients. There was a strong, negative correlation between counselor trainees and nurse trainees \( (r = -.75, n = 143, p < .01) \). There was a moderate, negative correlation between counselor trainees and social work trainees \( (r = -.37, n = 171, p < .01) \). There was a moderate, negative correlation between nurse trainees and social work trainees \( (r = -.43, n = 143, p < .01) \).
Hypothesis 4: Between-Groups Comparisons on Abortion Attitudes and Abortion Knowledge

The fourth research hypothesis was: CTs, SWTs, and NTs (a) race, (b) religion, (c) gender, (d) profession, and (e) age will predict the extent to which the abortion attitudes of CTs, SWTs, and NTs are similar or dissimilar. One-way between-groups analyses of variance (ANOVAs; see Appendix G, Table G) were conducted between the CT, SWT, and NT groups ([d], profession) on (a) abortion knowledge and abortion attitudes. These results are described below. Due to the homogeneity of race and gender in the entire sample, the homogeneity of age within-groups, and the number of participants identifying a religion within-groups, the differences within and between CTs, SWTs, and NTs by (a) race (b) religion, and (c) gender data did not lend itself to ANOVA.

Trainees' Attitudes Toward Abortion

Reasoning About Abortion Questionnaire: Training Groups Comparison

The authors of the Reasoning About Abortion Questionnaire (Parsons et al., 1990) designed the scoring of this scale in a way that results in a “personal reasoning” score (equated with a pro-choice attitude) and a “moral reasoning” score (equated with a pro-life abortion attitude). The personal reasoning score is then subtracted from the moral reasoning score to produce the overall RAQ score. If this score is a negative number, it represents personal reasoning/pro-choice; if this score is a positive number, it represents moral reasoning/pro-life. The authors (Parsons et al.) did not intend the mean score on
each item of the 20 items to be interpreted. However, for the purpose of analysis in this study, some meaning can be derived from mean comparisons between groups on each of the 20 items of the RAQ. In this way, further information is provided on the potential differences between CTs, SWTs, and NTs on specific statements related to reasoning about abortion.

A one-way between-groups analysis of variance (ANOVA) was conducted on each item of the RAQ to explore the differences in professional training programs on trainees' reasoning about abortion (Appendix G, Table G). Participants were divided into groups by professional training program (counselor trainees, social work trainees, nurse trainees) and compared on each of the 20 RAQ items. The variance in scores was the same for each of the three groups. There was a statistically significant difference at the $p < .05$ level for item 7 ("A woman should be able to exercise her rights to self-determination by choosing to have an abortion"), $F(2, 170) = 3.41, p = .04$; and item 15 ("Abortion can be described as taking a life unjustly"), $F(2, 170) = 4.72, p = .01$. The effect size, calculated using eta squared, was .04 (a medium effect according to Cohen's [1988] classification of effect sizes) for item 7 and .05 (a medium effect) for item 15. Post-hoc comparisons using the Tukey HSD test indicated that the mean score for SWTs ($M = 4.10, SD = 1.12$) on item 7 was significantly different from the mean score for NTs ($M = 3.47, SD = 1.35$). The mean score on item 7 for CTs ($M = 3.82, SD = 1.30$) did not differ significantly from the mean scores for SWTs or NTs. The mean score on item 15 for NTs ($M = 2.72, SD = 1.26$) was significantly different than the mean score for CTs ($M = 2.20, SD = 1.10$) and SWTs ($M = 2.12, SD = 1.17$). The mean score for CTs and SWTs were not significantly different from each other on item 15.
Self-Reported Abortion Attitude for the Sample

Participants were given the opportunity on the demographic questionnaire to report whether they identify as pro-choice, pro-life, undecided, or no opinion, based on provided definitions. Of the CT participants, 36 (71%) identified as pro-choice; of the SWT participants, 31 (74%) identified as pro-choice; and of the NT participants, 47 (60%) identified as pro-choice. Of the CT participants, 11 (22%) identified as pro-life; of the SWT participants, 8 (19%) identified as pro-life; and of the NT participants, 22 (28%) identified as pro-life. Of the CT participants, 4 (9%) identified as undecided; of the SWT participants, 8 (19%) identified as undecided; and of the NTs, 7 (9%) identified as undecided. Of the NTs, 2 (3%) identified as no opinion. No CTs or SWTs identified as no opinion.

Trainees’ Abortion Knowledge

Counselor Trainee Abortion Knowledge

Counselor Trainee Program Influence on Abortion Knowledge.

Participants were asked to describe their abortion knowledge in multiple ways. On a Likert scale of 1 (strongly disagree) to 5 (strongly agree), participants were asked to respond to the statement, “My training program (or nurse major) has enhanced my overall knowledge of abortion.” For CT participants, the mean response to this question was (1.84) disagree, and the median response was (2.00) disagree.
Sources of Abortion Knowledge for Counselor Trainees.

CT participants were also asked about their sources of abortion knowledge (Appendix I, Table I-1). They were provided with the statement, "I have learned about abortion from . . . ," and then asked to rate on a Likert scale of 1 (strongly disagree) to 5 (strongly agree) seven potential sources of abortion knowledge (The media, My religious/spiritual practice, My political beliefs, My past or current paid or volunteer work, My own abortion or the abortion of someone close to me, Family and/or friends, and Other). When asked to rate the extent to which they had learned about abortion from these sources, the mean CT responses were as follows: The media ($M = 3.76$, agree), My religious/spiritual practice ($M = 3.04$, neutral), My political beliefs ($M = 3.31$, neutral), My past or current paid or volunteer work ($M = 2.63$, neutral), My own abortion or the abortion of someone close to me ($M = 2.78$, neutral), Family and/or friends ($M = 3.37$, neutral). When asked about learning about abortion from other sources, 9 participants indicated that they had learned about abortion from other sources by filling in the name of the source. For the sake of analyses, these fill-in responses were categorized as formal learning (at any age) or “school,” and informal learning or “personal research.” Six participants reported that they had learned about abortion from personal research, and 3 indicated that they had learned about abortion from school.

Ranking of the Top Three Sources of Abortion Knowledge for Counselor Trainees

CT participants were also asked to rank the top three sources of their abortion knowledge from the previous seven options (Appendix I, Table I-2). For the number 1
ranking source of abortion knowledge, the most frequently cited source was “The media” 
\(n = 15\). For the number 2 ranking source of abortion knowledge, the most frequently 
cited sources were “My religious/spiritual practice” \(n = 12\) and “My political beliefs” \(n 
= 12\). For the number 3 ranking source of abortion knowledge, the most frequently cited 
source was “The media” \(n = 15\).

**Sources of Abortion Beliefs for Counselor Trainees**

CT participants were also asked about their sources of abortion beliefs (Appendix 
J, Table J-1). They were provided with the statement, “My abortion beliefs have been 
influenced by . . . ,” and then asked to rate on a Likert scale of 1 (strongly disagree) to 5 
(strongly agree) seven potential sources of abortion beliefs (My family and/or friends, My 
political beliefs, My sex/gender, My religious/spiritual beliefs, My age/generation, My 
race/ethnicity, The media). When asked to rate the extent to which their abortion beliefs 
have been influenced by these sources, the mean CT responses were as follows: My 
family and/or friends \(M = 3.50, \text{neutral to agree}\), My political beliefs \(M = 2.94, 
neutral\), My sex/gender \(M = 3.92, \text{agree}\), My religious/spiritual beliefs \(M = 3.12, 
neutral\), My age/generation \(M = 3.88, \text{agree}\), My race/ethnicity \(M = 2.75, \text{neutral}\), The 
media \(M = 3.61, \text{agree}\).

**Ranking of the Top Three Sources of Abortion Beliefs for Counselor Trainees**

CT participants were also asked to rank the top three sources of their abortion 
beliefs from the previous seven options (Appendix J, Table J-2). For the number 1 
ranking source of abortion beliefs, the most frequently cited source was “My sex/gender”
For the number 2 ranking source of abortion beliefs, the most frequently cited source was “Family and/or friends” \((n = 15)\). For the number 3 ranking source of abortion beliefs, the most frequently cited sources were “My family and/or friends” \((n = 13)\) and “The media” \((n = 13)\).

**Abortion-Related Professional Preparation for Counselor Trainees**

CT participants were then asked about information related to abortion that might help them feel better prepared to enter their profession (Appendix K, Table K-1). They were provided with the statement, “In order to feel better prepared to enter into my profession, I would need more information on . . . ,” and then asked to rate on a Likert scale of 1 (strongly disagree) to 5 (strongly agree) the extent to which four types of information related to abortion would be helpful as they enter their professions (“The specific ethical guidelines for my profession related to abortion, The emotional outcomes related to abortion, The laws related to abortion, The medical outcomes related to abortion”). When asked to rate the extent to which more information on these professional areas related to abortion would be helpful, the mean CT responses were as follows: ethical guidelines \((M = 3.61, \text{agree})\), emotional outcomes \((M = 4.06, \text{agree})\), laws \((M = 3.78, \text{agree})\), medical outcomes \((M = 3.82, \text{agree})\).

**Ranking of the Top Three Sources of Abortion Information Needed to Feel Better Prepared to Enter Profession for Counselor Trainees**

CT participants were also asked to rank the top three pieces of information that would help them feel better prepared to enter their profession from the previous four
options (Appendix K, Table K-2). For the number 1 ranking piece of information, the most frequently cited was “emotional outcomes” ($n = 34$). For the number 2 ranking piece of information, the most frequently cited piece was “ethical guidelines” ($n = 19$). For the number 3 ranking piece of information, the most frequently cited piece was “medical outcomes” ($n = 17$).

_Professional Ethics and Abortion for Counselor Trainees_

CT participants were also asked about their professional ethics and abortion (Appendix L, Table L). They were provided with the statement, “The appropriate ethical position on abortion related to my role as a professional is . . . ,” and then asked to rate on a Likert scale of 1 (strongly disagree) to 5 (strongly agree) the extent to which they agreed or disagreed with three types of ethical positions related to abortion (“I should promote pro-life beliefs with my client/patient, I should not promote any beliefs related to abortion with my client/patient, I should promote pro-choice beliefs with my client/patient”). When asked to rate the extent to which they should promote pro-life beliefs with their client/patient, the mean CT responses were as follows: promote pro-life beliefs ($M = 3.98$, agree), promote no beliefs ($M = 4.12$, agree), promote pro-choice beliefs ($M = 3.94$, agree).
Social Work Trainee Abortion Knowledge

Social Work Trainee Program Influence on Abortion Knowledge

SWT participants were asked to respond to the statement, "My training program (or nursing major) has enhanced my overall knowledge of abortion." For SWT participants, the mean response to this question was (2.54) disagree to neutral, and the median response was disagree to neutral.

Sources of Abortion Knowledge for Social Work Trainees

SWT participants were also asked about their sources of abortion knowledge (Appendix I, Table I-1). They were provided with the statement, "I have learned about abortion from . . . ," and then asked to rate on a Likert scale of 1 (strongly disagree) to 5 (strongly agree) seven potential sources of abortion knowledge (The media, My religious/spiritual practice, My political beliefs, My past or current paid or volunteer work, My own abortion or the abortion of someone close to me, Family and/or friends, and Other). When asked to rate the extent to which they had learned about abortion from these sources, the mean SWTs responses were as follows: The media ($M = 3.68$, agree), My religious/spiritual practice ($M = 2.90$, neutral), My political beliefs ($M = 3.27$, neutral), My past or current paid or volunteer work ($M = 3.07$, neutral), My own abortion or the abortion of someone close to me ($M = 3.02$, neutral), Family and/or friends ($M = 3.46$, neutral to agree). When asked about learning about abortion from other sources, 3 participants indicated that they had learned about abortion from other sources by filling in the name of the source. Two participants reported that they had learned about abortion
from personal research, and 1 indicated that she/he had learned about abortion from school.

**Ranking of the Top Three Sources of Abortion Knowledge for Social Work Trainees**

SWT participants were also asked to rank the top three sources of their abortion knowledge from the previous seven options (Appendix I, Table I-2). For the number 1 ranking source of abortion knowledge, the most frequently cited source was “The media” (n = 13). For the number 2 ranking source of abortion knowledge, the most frequently cited source was “Family and/or friends” (n = 12). For the number 3 ranking source of abortion knowledge, the most frequently cited sources were “The media” (n = 9) and “Family and/or friends” (n = 9).

**Sources of Abortion Beliefs for Social Work Trainees**

SWT participants were also asked about their sources of abortion beliefs (Appendix J, Table J-1). They were provided with the statement, “My abortion beliefs have been influenced by . . . ,” and then asked to rate on a Likert scale of 1 (strongly disagree) to 5 (strongly agree) seven potential sources of abortion beliefs (My family and/or friends, My political beliefs, My sex/gender, My religious/spiritual beliefs, My age/generation, My race/ethnicity, The media). When asked to rate the extent to which their abortion beliefs have been influenced by these sources, the mean SWT responses were as follows: My family and/or friends (M = 3.34, neutral), My political beliefs (M = 3.29, neutral), My sex/gender (M = 3.51, neutral to agree), My religious/spiritual beliefs
(M = 2.98, neutral), My age/generation (M = 3.51, neutral to agree), My race/ethnicity (M = 3.15, neutral), The media (M = 3.41, neutral).

*Ranking of the Top Three Sources of Abortion Beliefs for Social Work Trainees*

SWT participants were also asked to rank the top three sources of their abortion beliefs from the previous seven options (Appendix J, Table J-2). For the number 1 ranking source of abortion beliefs, the most frequently cited source was “My sex/gender” (n = 11). For the number 2 ranking source of abortion beliefs, the most frequently cited source was “Family and/or friends” (n = 11). For the number 3 ranking source of abortion beliefs, the most frequently cited source was “Family and/or friends” (n = 11).

*Abortion-Related Professional Preparation for Social Work Trainees*

SWT participants were then asked about information related to abortion that might help them feel better prepared to enter their profession (Appendix K, Table K-1). They were provided with the statement, “In order to feel better prepared to enter into my profession, I would need more information on . . . ,” and then asked to rate on a Likert scale of 1 (strongly disagree) to 5 (strongly agree) the extent to which four types of information related to abortion would be helpful as they enter their professions (“The specific ethical guidelines for my profession related to abortion, The emotional outcomes related to abortion, The laws related to abortion, The medical outcomes related to abortion”). When asked to rate the extent to which more information on these professional areas related to abortion would be helpful, the mean SWT responses were as
follows: ethical guidelines ($M = 3.50$, neutral to agree), emotional outcomes ($M = 3.50$, neutral to agree), laws (3.78, agree), medical outcomes ($M = 3.80$, agree).

**Ranking of the Top Three Sources of Information Needed to Feel Better Prepared to Enter Profession for Social Work Trainees**

SWT participants were also asked to rank the top three pieces of information that would help them feel better prepared to enter their profession from the previous four options (Appendix K, Table K-2). Two participants did not report rankings for this item. For the number 1 ranking piece of information, the most frequently cited were “ethical guidelines” ($n = 15$) and “emotional outcomes” ($n = 15$). For the number 2 ranking piece of information, the most frequently cited pieces were “relevant laws” ($n = 12$) and “medical outcomes” ($n = 12$). For the number 3 ranking piece of information, the most frequently cited piece was “medical outcomes” ($n = 15$).

**Professional Ethics and Abortion for Social Work Trainees**

SWT participants were also asked about their professional ethics and abortion (Appendix L, Table L). They were provided with the statement, “The appropriate ethical position on abortion related to my role as a professional is . . . ,” and then asked to rate on a Likert scale of 1 (strongly disagree) to 5 (strongly agree) the extent to which they agreed or disagreed with three types of ethical positions related to abortion (“I should promote pro-life beliefs with my client/patient, I should not promote any beliefs related to abortion with my client/patient, I should promote pro-choice beliefs with my client/patient”). When asked to rate the extent to which they should promote pro-life
beliefs with their client/patient, the mean SWT responses were as follows: promote pro-life beliefs (\(M = 4.07, \text{agree}\)), promote no beliefs (\(M = 4.12, \text{agree}\)), promote pro-choice beliefs (\(M = 3.90, \text{agree}\)).

*Nurse Trainee Abortion Knowledge*

*Nurse Trainee Program Influence on Abortion Knowledge*

NT participants were asked to respond to the statement, “My training program (or nursing major) has enhanced my overall knowledge of abortion.” For NT participants, the mean response to this question was (3.28) neutral, and the median response was neutral.

*Sources of Abortion Knowledge for Nurse Trainees*

NT participants were also asked about their sources of abortion knowledge (Appendix I, Table I-1). They were provided with the statement, “I have learned about abortion from . . . ,” and then asked to rate on a Likert scale of 1 (strongly disagree) to 5 (strongly agree) seven potential sources of abortion knowledge (The media, My religious/spiritual practice, My political beliefs, My past or current paid or volunteer work, My own abortion or the abortion of someone close to me, Family and/or friends, and Other). When asked to rate the extent to which they had learned about abortion from these sources, the mean NTs responses were as follows: The media (\(M = 3.88, \text{agree}\)), My religious/spiritual practice (\(M = 2.96, \text{neutral}\)), My political beliefs (\(M = 3.24, \text{neutral}\)), My past or current paid or volunteer work (\(M = 2.58, \text{neutral}\)), My own abortion or the abortion of someone close to me (\(M = 2.29, \text{neutral}\)), Family and/or friends (\(M = 2.00, \text{neutral}\)).
When asked about learning about abortion from other sources, 12 participants indicated that they had learned about abortion from other sources by filling in the name of the source. Ten participants reported that they had learned about abortion from school, and two indicated that they had learned about abortion from personal research.

**Ranking of the Top Three Sources of Abortion Knowledge for Nurse Trainees**

NT participants were also asked to rank the top three sources of their abortion knowledge from the previous seven options (Appendix I, Table I-2). For the number 1 ranking source of abortion knowledge, the most frequently cited source was “The media” ($n = 23$). For the number 2 ranking source of abortion knowledge, the most frequently cited source was “Family and/or friends” ($n = 23$). For the number 3 ranking source of abortion knowledge, the most frequently cited source was “My political beliefs” ($n = 21$).

**Sources of Abortion Beliefs for Nurse Trainees**

NT participants were also asked about their sources of abortion beliefs (Appendix J, Table J-1). They were provided with the statement, “My abortion beliefs have been influenced by . . . ,” and then asked to rate on a Likert scale of 1 (strongly disagree) to 5 (strongly agree) seven potential sources of abortion beliefs (My family and/or friends, My political beliefs, My sex/gender, My religious/spiritual beliefs, My age/generation, My race/ethnicity, The media). When asked to rate the extent to which their abortion beliefs have been influenced by these sources, the mean NT responses were as follows: My family and/or friends ($M = 3.33$, neutral), My political beliefs ($M = 3.12$, neutral), My sex/gender ($M = 3.97$, agree), My religious/spiritual beliefs ($M = 3.31$, neutral), My
Ranking of the Top Three Sources of Abortion Beliefs for Nurse Trainees

NT participants were also asked to rank the top three sources of their abortion beliefs from the previous seven options (Appendix J, Table J-2). For the number 1 ranking source of abortion beliefs, the most frequently cited source was “My religious/spiritual beliefs” \(n = 20\). For the number 2 ranking source of abortion beliefs, the most frequently cited source was “My sex/gender” \(n = 21\). For the number 3 ranking source of abortion beliefs, the most frequently cited sources were “My sex/gender” \(n = 17\) and “My age/generation” \(n = 17\).

Abortion-Related Professional Preparation for Nurse Trainees

NT participants were then asked about information related to abortion that might help them feel better prepared to enter their profession (Appendix K, Table K-1). They were provided with the statement, “In order to feel better prepared to enter into my profession, I would need more information on . . .,” and then asked to rate on a Likert scale of 1 (strongly disagree) to 5 (strongly agree) the extent to which four types of information related to abortion would be helpful as they enter their professions (“The specific ethical guidelines for my profession related to abortion, The emotional outcomes related to abortion, The laws related to abortion, The medical outcomes related to abortion”). When asked to rate the extent to which more information on these professional areas related to abortion would be helpful, the mean NT responses were as
follows: ethical guidelines ($M = 3.55$, agree), emotional outcomes ($M = 3.91$, agree), laws ($M = 3.90$, agree), medical outcomes ($M = 4.00$, agree).

*Ranking of the Top Three Sources of Information Needed to Feel Better Prepared to Enter Profession for Nurse Trainees*

NT participants were also asked to rank the top three pieces of information that would help them feel better prepared to enter their profession from the previous four options (Appendix K, Table K-2). Two participants did not report rankings for this item. For the number 1 ranking piece of information, the most frequently cited was “medical outcomes” ($n = 35$). For the number 2 ranking piece of information, the most frequently cited piece was “emotional outcomes” ($n = 31$). For the number 3 ranking piece of information, the most frequently cited piece was “ethical guidelines” ($n = 24$).

*Professional Ethics and Abortion for Nurse Trainees*

NT participants were also asked about their professional ethics and abortion (Appendix L, Table L). They were provided with the statement, “The appropriate ethical position on abortion related to my role as a professional is . . . ,” and then asked to rate on a Likert scale of 1 (*strongly disagree*) to 5 (*strongly agree*) the extent to which they agreed or disagreed with three types of ethical positions related to abortion (“I should promote pro-life beliefs with my client/patient, I should not promote any beliefs related to abortion with my client/patient, I should promote pro-choice beliefs with my client/patient”). When asked to rate the extent to which they should promote pro-life beliefs with their client/patient, the mean CT responses were as follows: promote pro-life
beliefs ($M = 3.96$, agree), promote no beliefs ($M = 4.25$, agree), promote pro-choice beliefs ($M = 3.83$, strongly agree).

Sample Abortion Knowledge

*Abortion Knowledge Scale: Training Groups Comparison*

Using semantic differential scaling, participants were asked to report their perception of abortion knowledge using a 12-item semantic differential scale titled the Abortion Knowledge Scale (Appendix H, Table H). Items on this scale were intended to capture the “Evaluative,” “Potent,” and “Active” nature of abortion knowledge. It is assumed that abortion knowledge impacts abortion attitudes, although since the relationship between abortion knowledge and abortion attitudes is not addressed in the literature, the intricacies of this relationship are unknown. At the very least, it could be assumed that abortion knowledge would impact the magnitude and stability of abortion attitudes over time.

A one-way between-groups ANOVA (see Appendix H, Table H) was conducted to explore the differences in professional training programs on abortion knowledge, as measured by each of the 12 semantic differential items on the Abortion Knowledge Scale (AKS). CT, SWT, and NT participants rated on a continuum the extent to which adjectives in each semantic pair reflected their perception of their abortion knowledge using the following options: very, somewhat, a little, neutral, somewhat, very. Participants were divided into groups by professional training program (counselor trainees, social work trainees, nurse trainees) and compared on each item. There was a
statistically significant difference at the \( p < .05 \) level in AKS scores for item 2
(“Strong/Weak”) \( F(2, 158) = 3.7, p = .01 \); item 3 (“Passive/Active”) \( F(2, 158) = 5.4, p = .01 \); and item 5 (“Unintentional/Intentional”) \( F(2, 154) = 5.3, p = .01 \) for the counselor, social work, and nurse groups. The effect size, calculated using eta squared, was .04 (a small effect) for item 2, .06 (a medium effect) for item 3, and .01 (a small effect) for item 5. Post-hoc comparisons using the Tukey HSD test indicated that the mean score for the CTs \( (M = 4.60, SD = 1.07) \) was different than the mean score for SWTs \( (M = 4.00, SD = 1.29) \) and NTs \( (M = 4.55, SD = 1.08) \) on item 2. The mean scores for SWTs and NTs did not differ significantly from each other on item 2. The mean response for CTs (4.60) indicated that they perceived their abortion knowledge as somewhat “Strong” compared to SWTs’ (4.00) perception of their abortion knowledge as a little “Strong” and NTs’ (4.55) perception of their abortion knowledge as somewhat “Strong” (although slightly less than CTs). On item 3, the mean score for CTs \( (M = 4.60, SD = 1.62) \) was significantly different from the mean score for SWTs \( (M = 3.87, SD = 1.32) \) and the mean score for NTs \( (M = 3.93, SD = 1.21) \). SWTs and NTs did not differ significantly from each other on item 3. The mean response for CTs (4.60) indicated that they perceived their abortion knowledge as neutral on the “Passive/Active” continuum compared to NTs’ (3.93) perception of their abortion knowledge as neutral (although slightly less than CTs) and SWTs’ (3.87) perception of their abortion knowledge as neutral (although slightly less than CTs and NTs). On item 5, the mean score for CTs \( (M = 4.84, SD = 1.08) \) was significantly different than the mean score for SWTs \( (M = 4.06, SD = 1.23) \). NTs \( (M = 4.49, SD = .99) \) did not differ significantly from either CTs or SWTs on item 5. The mean response for CTs (4.84) indicated that they perceived their abortion knowledge as
somewhat “Intentional” compared to SWTs’ (4.06) perception of their abortion knowledge as somewhat “Intentional” (although only slightly less than CTs). The NTs’ response (4.49) was not significantly different from the CTs or SWTs on this item. The nine other semantic differential pair mean scores for each training group were not significantly different from each other.

*Training Program Influence on Trainees’ Perceptions of Programs Enhancing Abortion Knowledge*

A one-way between-groups ANOVA was conducted to explore the differences in professional training programs on trainees’ perceptions of how their programs have enhanced their abortion knowledge, as measured by one Likert-type response item designed for this study. Participants were divided into groups by professional training program (counselor trainees, social work trainees, nurse trainees) and compared on this item. They were asked to respond to the statement, “My training program (or nursing major) has enhanced my overall knowledge of abortion.” The variance in scores was the same for each of the three groups. There was a statistically significant difference at the \( p < .05 \) level, \( F(2, 162) = 33.72, p = .00 \). The effect size, calculated using eta squared, was .01 (a small effect). Post-hoc comparisons using the Tukey HSD test indicated that the mean score for CTs (\( M = 1.84, SD = .89 \)) on this item was significantly different from the mean score for SWTs (\( M = 2.54, SD = 1.00 \)) and the mean score for NTs (\( M = 3.28, SD = 1.00 \)) on this item, the mean score for SWTs on this item was significantly different from the mean score for CTs and NTs on this item, and the mean score for NTs was significantly different from CTs and SWTs on this item.
Sources of Abortion Knowledge for the Entire Sample of CTs, SWTs, and NTs

A one-way between-groups ANOVA was conducted to explore the differences in professional training programs on sources of abortion knowledge, as measured by six Likert-type response items designed for this study (Appendix I, Table I-1). Participants were divided into groups by professional training program (counselor trainees, social work trainees, nurse trainees) and compared on each item. The variance in scores was the same for each of the three groups. There was a statistically significant difference at the $p < .05$ level, $F(2, 166) = 4.3$, $p = .02$, for the item assessing sources of abortion knowledge that asked participants to respond to the statement, "I have learned about abortion from my own abortion or the abortion of someone close to me" (item 5) between the counselor, social work, and nurse groups. The effect size, calculated using eta squared, was .01 (a small effect). Post-hoc comparisons using the Tukey HSD test indicated that the mean score for SWTs ($M = 3.02$, $SD = 1.31$) on item 5 was significantly different from the mean score for NTs ($M = 2.29$, $SD = 1.39$) on item 5. The CTs mean score did not differ significantly from SWTs or NTs mean scores on item 5. The other five items measuring sources of abortion knowledge were not significant.

Comparison of the Ranking of the Top Three Sources of Abortion Knowledge for the Entire Sample of CTs, SWTs, and NTs

Participants were asked to rank the top three sources of their abortion knowledge from seven options ("The media, My religious/spiritual practice, My political beliefs, My past or current paid or volunteer work, My own abortion or the abortion of someone close
Sources of Abortion Beliefs for the Entire Sample of CTs, SWTs, and NTs

A one-way between-groups ANOVA was conducted to explore the difference in professional training programs on sources of abortion beliefs, as measured by seven Likert-type response items designed for use in this study (Appendix J, Table J-1). Participants were divided into groups by professional training program (counselor trainees, social work trainees, nurse trainees) and compared on each item. Homogeneity of variance was violated, and there were no statistically significant differences at the \( p < .05 \) level on any of the seven items for the counselor, social work, and nurse groups.

Comparison of the Ranking of the Top Three Sources of Abortion Beliefs for the Entire Sample of CTs, SWTs, and NTs

Participants were asked to rank the top three sources of their abortion beliefs from seven options (Family and/or friends, My political beliefs, My sex/gender, My religious/spiritual beliefs, My age/generation, My race/ethnicity, The media; [Appendix J, Table J-2]). For CTs, the number 1 ranking source of abortion knowledge was “My sex/gender.” For SWTs, the number 1 ranking source of abortion knowledge was “My sex/gender.” For NTs, the number 1 ranking source of abortion knowledge was “My religious/spiritual tradition.”
Abortion-Related Professional Preparation for the Entire Sample of CTs, SWTs, and NTs

A one-way between-groups ANOVA was conducted to explore the difference in professional training programs on sources of abortion knowledge that might help trainees feel better prepared to enter their professions, as measured by four Likert-type response items designed for use in this study (Appendix K, Table K-11). Participants were divided into groups by professional training program (counselor trainees, social work trainees, nurse trainees) and compared on each item. Homogeneity of variance was violated, and there were no statistically significant differences at the $p < .05$ level on any of the four items for the counselor, social work, and nurse groups.

Comparison of the Ranking of the Top Three Sources of Information Needed to Feel Better Prepared to Enter Profession for the Entire Sample of CTs, SWTs, and NTs

Participants were asked to rank the top three sources of information they needed to feel better prepared to enter their professions from four options (“Specific ethical guidelines for my profession related to abortion, Emotional outcomes related to abortion, Laws related to abortion, Medical outcomes related to abortion”; [Appendix K, Table K-2]). For CTs, the number 1 ranking source of abortion knowledge was “Specific ethical guidelines for my profession related to abortion.” For SWTs, the number 1 ranking sources of abortion knowledge were “Specific ethical guidelines for my profession related to abortion” and “Emotional outcomes related to abortion.” For NTs, the number 1 ranking source of abortion knowledge was “Medical outcomes related to abortion.”
A one-way between-groups ANOVA was conducted to explore the difference in professional training programs on professional ethics related to abortion, as measured by three Likert-type response items designed for use in this study (Appendix L, Table L). Participants were divided into groups by professional training program (counselor trainees, social work trainees, nurse trainees) and compared on each item. Homogeneity of variance was violated, and there were no statistically significant differences at the \( p < .05 \) level on all items.
CHAPTER V

DISCUSSION AND INTERPRETATION

Self-selection into a profession and professional socialization can influence abortion attitudes (Kade et al., 2004; Norup, 1998; Poggenpoel et al., 1998; Rosen et al., 1974; Shotorbani et al., 2004). There has been a paucity of attention paid to the abortion attitudes of mental health professionals (Millner & Hanks, 2002), with the majority of research done on abortion attitudes among human service professionals having examined physicians and nurses. The value of studying students in training lay in the potential to gauge the abortion attitudes of the next professionals to enter the field.

The sample of the present study was comprised primarily of White (80%) women (85%), with an average age of 29 years, who identified as pro-choice (67%). Most participants in the sample were in a committed relationship or married (63%) and participated in a religious tradition (68%), mostly Protestant (50%) or Catholic (45%). Data in this study were analyzed to determine whether there were differences in abortion attitudes according to profession, race, religion, gender, and age. No meaningful differences in abortion attitudes were found according to profession, and because of the narrow range of race, religion, gender, and age demographics, no differences in abortion attitudes were found according to these variables.

The remainder of this chapter will include a discussion of the age of the sample and a summary of the research hypotheses. Additionally, data on participants’ abortion
knowledge, professional ethics related to abortion, and abortion-related professional preparation will be summarized. Lastly, the limitations of the study, implications for training programs, and directions for future research will be discussed.

Relevant Demographics

Age

The age range for the sample (N = 171) was 21 years to 58 years, with a mean age of 29 years (n = 6), and a median age of 25 years (n = 16), and a mode age of 22 years (n = 26). Previous research (Schnell & McConatha, 1996) has identified some impact of generation (in terms of the moment in history when a certain generation comes of age [18 years old]), but not age, on abortion attitudes, in terms of the values that influence abortion attitudes. Schnell and McConatha’s results indicated that younger women rely less on their values to inform their abortion attitudes than older women. The authors (Schnell and McConatha) stated, though, that their results are likely more reflective of historical periods in time and when a woman comes of age rather than generational differences based on age alone.

In terms of historical social movements or moments in time that might have influenced a generational impact in the current study, women and men in this sample who were approximately 54 years old at the time of data collection would have been approximately 18 years old at the time Roe v. Wade (1973) was being argued in the Supreme Court. However, the number of participants of this age in the sample is small, with only 12 participants over age 50 years. While speculative, another potential recent
social movement that theoretically could have influenced a generational impact on the current study is the conservative nature of the George W. Bush presidential years (2000-2008). Women and men who were approximately 22 years old at the time of data collection would have been about 18 years old in the middle of the George W. Bush presidency. The number of participants in this sample that fit this category is larger, with 57 participants between the ages of 21 and 23 years. While there are a substantial number of participants in this study who are in their 20s, and further exploration of this potential generational impact might be interesting, there were not a substantial number of participants in another historically meaningful (in regard to abortion attitudes) generation in this sample as a point of comparison.

Other researchers have discussed age-related effects on abortion attitudes. For example, Francome and Freeman (2000) found that 67% of physicians younger than 36, and 67% of them over 55 agreed that women should be able to have an abortion for any reason up to 14 weeks gestation, as opposed to 59% of those aged 36-55 who disagreed with this statement (Francome & Freeman, 2000). Remennick and Hetsroni (2001) found that older Jewish women in the U.S. and Israel opposed abortion more than younger Jewish women in the U.S. and Israel. Lastly, Rosenblatt et al. (1999) found that first- and second-year medical students in their 30s of both genders were more than twice as likely to support the use of surgical abortions up to the second trimester and the use of RU-486 than students under 24.

In summation, the literature (Schnell & McConatha, 1996; Francome & Freeman, 2000; Remennick & Hetsroni, 2001) either does not demonstrate a strong relationship between age and abortion attitudes, or the age-related results that are found were not
replicable in this study. The composition of the current sample did not lend itself to this type of analysis, and the self-perception of CT, SWT, and NT participants of the extent to which their age/generation influences their abortion beliefs was neutral to agree. Therefore, while further research in this direction is indicated, more in-depth analysis of the relationship between age and abortion attitudes was not possible in this study, or even strongly supported by the self-report of participants in this study.

Research Hypotheses

The results of this study did not indicate clear differences between counselor trainees, social work trainees, and nurse trainees in regard to abortion attitudes. This study was designed to address four research hypotheses. The first research hypothesis was: Counselor Trainee (CT) (a) race, (b) religion, (c) gender, (d) profession, and (e) age will predict CT abortion attitudes. A standard multiple regression analysis was conducted to evaluate how well counselor trainee demographics predict abortion attitude (Table 2). The linear combination of counselor trainee demographic variables (race, religion, gender, age) was not significantly related to abortion attitudes (as measured by the total RAQ raw score).

The second research hypothesis was: Social Work Trainee (SWT) (a) race, (b) religion, (c) gender, (d) profession, and (e) age will predict SWT abortion attitudes. A standard multiple regression analysis was conducted to evaluate how well social work trainee demographics predict abortion attitude (Table 3). The linear combination of social work trainee demographic variables (race, religion, gender, age) was not significantly related to abortion attitudes (as defined by the total RAQ raw score).
The third research hypothesis was: Nurse Trainee (NT) (a) race, (b) religion, (c) gender, (d) profession, and (e) age will predict NT abortion attitudes. A standard multiple regression analysis was conducted to evaluate how well nurse trainee demographics predict abortion attitude (Table 4). The linear combination of nurse trainee demographic variables (race, religion, gender, age) was not significantly related to abortion attitudes (as defined by the total RAQ raw score).

Multicolinearity of Professional Training Groups

The results of the standard multiple regression analyses that evaluated how well demographic variables (race, religion, gender, age) predicted abortion attitudes (as defined by the total RAQ raw score) in the CT, SWT, and NT groups were impacted by multicolinearity. Independent samples $t$ tests demonstrated that there were no significant differences between counselor trainees versus social work and nurse trainees, social work trainees versus counselor and nurse trainees, and nurse trainees versus counselor and social work trainees on their total RAQ raw scores. Additionally, the relationship between counselor trainees, social work trainees, and nurse trainees on the total RAQ raw score was investigated using Pearson product-moment correlation coefficients. There was a high negative correlation between counselor trainees and nurse trainees on the total RAQ raw score. There was a moderate negative correlation between counselor trainees and social work trainees on the total RAQ raw score, and there was a moderate negative correlation between nurse trainees and social work trainees on the total RAQ raw score. Thus, the multiple regression analyses were impacted by the moderate to high correlation between the three training groups on the total RAQ raw score. Therefore, in this study,
the unique contribution of professional training program to abortion attitude (as measured by the total RAQ) was not demonstrated.

These results raise the issue of whether the overarching category of “helping profession” contributes more to abortion attitudes than distinct professions within the helping professions (counselors, social workers, nurses). Additionally, the results indicate that perhaps professional socialization is a process that continues at a higher level of intensity once one enters one’s profession than the study could have assessed. Further evidence of the limited extent to which professional training program socialization in this study impacts abortion attitudes is demonstrated by the between-groups comparisons made on the RAQ score and self-reported abortion attitude score discussed below. Data show largely similar abortion attitudes between the CT, SWT, and NT professional training groups.

The fourth research hypothesis was: CTs, SWTs, and NTs (a) race, (b) religion, (c) gender, (d) profession, and (e) age will predict the extent to which the abortion attitudes of CTs, SWTs, and NTs are similar or dissimilar. This hypothesis was analyzed using frequencies, means, medians, and ANOVA. The results of the ANOVA between professional training groups, as measured by the 20 individual RAQ items, are discussed below.
Between-Groups Comparison: Attitudes Toward Abortion

*Reasoning About Abortion Questionnaire*

Although the RAQ authors (Parsons et al., 1990) did not intend for the mean score on each item or the overall mean score on the 20 items to be interpreted, some meaning can be derived from mean comparisons between professional training groups on each of the 20 RAQ items, as the mean group responses to each item provide further detail regarding the content of abortion attitudes (Appendix G, Table G). Statistically significant differences were found between professional training groups on two of the RAQ items. In regard to the item 7, “A woman should be able to exercise her right to self-determination by choosing to have an abortion” (a personal reasoning/pro-choice item), the mean response for SWTs (in the agree category) was different from the mean response for NTs (in the neutral category). The mean CTs response on this item was not significantly different than the SWTs or NTs mean responses. In regard to the item 15, “Abortion could destroy the sanctity of motherhood” (a moral reasoning/pro-life item), the mean response for CTs and SWTs fell in the disagree category, while the mean response for nurses fell in the neutral category. This difference was in the expected direction, with CTs and SWTs scoring in a more pro-choice manner than NTs.

On the RAQ items (1, 3, 7, 8, 9, 11, 13, 14, 17, 20) labeled personal reasoning (pro-choice) by the authors (Parsons et al., 1990), all three training groups responses fell in the agree category for items 1, 3, 7 (statistically significant), 8, 9, and 13, indicating a tendency toward a pro-choice attitude toward abortion. On items 14 (“If a woman feels that having a child might ruin her life, she should consider an abortion”) and 17 (“If a
woman feels she can’t care for a baby, she should be able to have an abortion”) the mean response for all three training groups fell in the neutral category. On item 11 (“In my reasoning, the notion that an unborn fetus may be a human life is not a deciding issue in considering abortion”), the mean CTs and SWTs response fell in the neutral category and the mean NTs response fell in the agree category. This is a particularly unexpected result (although not statistically significant), due to the prediction that nurse trainees would be more pro-life in part due to the nature of their (potential) contact with fetuses (Poggenpoel et al., 1998; Rosen et al., 1974). On item 20 (“Even if one believes that there are times when abortion is immoral, it is still basically the woman’s own choice”), the mean CTs and SWTs response fell in the agree category, and the mean NTs response fell in the neutral category.

According to the existing literature (Norup, 1998; Rosen et al., 1974), the mean responses for the three professional training groups on the personal reasoning/pro-choice items on the RAQ would tend toward SWTs scoring in a more pro-choice direction than NTs. While there is a paucity of literature on the abortion attitudes of CTs, one would expect their attitudes to be more like SWTs than NTs. The results of this study, based on RAQ scores, are largely not in the expected direction, in that the CT and SWT groups did not strongly endorse a tendency toward a pro-choice position, and that the NT group scored almost identically to the CT and SWT groups. The three training groups scored nearly identically on the majority of personal reasoning/pro-choice items, and in the direction of a tendency toward pro-choice attitudes toward abortion. The exceptions were items 11 and 20, which do indicate scores in the expected direction, with mean SWTs and CTs scores tending toward more pro-choice than the mean NTs score.
In regard to the moral reasoning/pro-life items (2, 4, 5, 6, 10, 12, 15, 16, 18, 19), the mean scores for the three professional training groups are largely not in the expected direction. On the majority of moral reasoning/pro-life items, the mean response for all three groups fell in the neutral category (not clearly pro-choice or pro-life). Based on the literature, (Rosen et al., 1974) one would have expected a mean response in the disagree or strongly disagree categories for the CTs and SWTs, and the agree or strongly agree categories for the NTs. The exceptions are items 2, 10, and 15 (statistically significant difference). Mean scores for CTs and SWTs on item 2 ("Abortion is a threat to our society") were in the disagree category, and the mean score for NTs was in the neutral category, which were in the expected direction. Mean scores for SWTs and NTs on item 10 ("Abortion is morally unacceptable and unjustified") were in the neutral category, and the mean score for the CTs was in the disagree category, which was in the expected direction for CTs and perhaps NTs but not SWTs. Mean scores on item 15 (statistically significant difference between the CTs, SWTs, and NTs; "Abortion could destroy the sanctity of motherhood") were in the expected direction, with the mean scores for CTs and SWTs in the disagree category, and the mean score for NTs in the neutral category.

In summary, based on the literature (Norup, 1998; Rosen et al., 1974) one would have expected there to be statistically significant differences between the CTs and SWTs and the NTs on all 20 RAQ items. However, the majority of mean responses to the pro-choice items for all three professional training groups was in the agree category, tending toward a pro-choice attitude toward abortion. The majority of mean responses to the pro-life items for all three professional training groups was in the neutral category, indicating no clear distinction between pro-choice and pro-life attitudes. The results of this ANOVA
provided further support for the multicollinearity of the professional training group variable on the RAQ raw score and its impact on the standard multiple regressions used to analyze the data in this study. The CT, SWT, and NT groups scored similarly (primarily tending toward a pro-choice attitude), thus making difficult a determination regarding the unique contribution of profession on abortion attitudes in this study. Whether the mean score responses on the 20 RAQ items were in the expected direction or not, what is striking is the overwhelmingly statistically non-significant results from the analyses of the RAQ. Statistically significant results between the CTs, SWTs, and NTs on the 20 RAQ items were very rare. Additionally, since the ANOVA run on the RAQ data did not implement group-wise corrections, one would expect at least some statistically significant results merely by chance when comparing three participant groups on 20 items.

Self-Report of Abortion Attitudes

Discussion of Self-Report Abortion Attitudes Compared to RAQ Score

Previously discussed analyses on the data in this study indicate that, as measured by the RAQ score, the abortion attitudes of CTs, SWTs, and NTs were more similar than expected, not as strong as expected, and often not in the expected direction based on the available scholarly literature. The literature (Rosen et al., 1974) would indicate that the abortion attitudes of CTs and SWTs would be most similar, and tend more toward pro-choice than those of the NTs. However standard multiple regression analyses, t tests, and Pearson product-moment correlations have demonstrated that RAQ scores, which can be
equated with abortion attitudes, were similar among the CTs, SWTs, and NTs. In fact, 72% of CTs, 73% of SWTs, and 65% of NTs scored in the personal reasoners/pro-choice direction on the RAQ. While slightly more CTs and SWTs scored as pro-choice than NTs, the majority of participants in each professional training group had pro-choice RAQ scores.

Despite these suggested limitations of the RAQ, the self-report abortion attitude item in this study appears to validate the RAQ scores. Fully 71% (72% according to RAQ score) of CT identified as pro-choice, 74% (73% according to RAQ score) of SWTs identified as pro-choice, and 60% (65% according to RAQ score) of NTs identified as pro-choice. The self-reported abortion attitudes of the CTs, SWTs, and NTs correlated almost identically with RAQ score.

Between-Groups Comparisons: Abortion Knowledge

Abortion Knowledge Scale

Again, the results of the AKS (a measure of perceptions of abortion knowledge) validate the multiple regression analyses and other analyses that indicate the CT, SWT, and NT groups in this study hold similar abortion attitudes. The mean differences between the three professional training groups on the semantic differential items were very small and not meaningful, even when the differences were statistically significant. The results of this analysis are confirmatory of previous results that demonstrate more similarities than differences between counselor, social work, and nurse trainees on
abortion attitudes and knowledge than would be predicted by the literature (Norup, 1998; Rosen et al., 1974).

**Sources of Abortion Knowledge**

Participants were asked to respond to Likert-type response items that inquired about the extent to which they agreed or disagreed that they had learned about abortion from the following sources: media, religious/spiritual practice, political beliefs, past or current paid or volunteer work, personal experience with abortion, family and/or friends, and other. There were then asked to rank the top three sources of their abortion knowledge.

Of note in the results related to sources of abortion knowledge, is the similarity between the CT, SWT, and NT groups on four of the six response items and the rankings of the most important sources of abortion knowledge. The limited research appears to support a tendency toward differing abortion attitudes of CTs, SWTs, and NTs (Norup, 1998; Rosen et al., 1974). An important distinction is between sources of abortion knowledge, which could occur outside or within the context of the training program, and abortion attitudes. In this study, it is assumed that abortion knowledge impacts abortion attitudes. That the self-reported sources of abortion knowledge are very similar between the CT, SWT, and NT groups lends more credence to the impact of factors outside of the training program influencing perceived sources of abortion knowledge. All three training groups mean scores fell in the agree category, in that they would like more information on the laws related to abortion and the medical outcomes related to abortion. CTs and NTs mean scores fell in the agree category in that they wanted more information on the
specific ethical guidelines related to abortion for their professions and more information on the emotional outcomes related to abortion, while SWTs mean score fell in the neutral to agree categories.

Sources of Abortion Beliefs

Participants were asked to respond to Likert-type response items that inquired about the extent to which they agreed or disagreed that their abortion beliefs had been influenced by the following sources: family and/or friends, political beliefs, sex/gender, religious/spiritual beliefs, age/generation, race/ethnicity, and the media. They were then asked to rank the top three sources of their abortion beliefs.

The results indicate that none of the differences in mean responses regarding sources of abortion knowledge between the CT, SWT, and NT groups were statistically significant. There was a statistically significant difference according to the ANOVA at the $p < .05$ level $F(2, 166) = 4.3, p = .02$ for the item assessing sources of abortion knowledge that asked participants to respond to the statement, “I have learned about abortion from my own abortion or the abortion of someone close to me” (item 5) for the social work and nurse groups. The effect size, calculated using eta squared, was .01 (a small effect) for item 5. The meaningful difference between the SWT and NT groups on a 5-point Likert-type scale between a mean score in the disagree category and a mean score in the neutral category on this item is not great. The difference between these two groups in their perceptions of their personal experience with abortion as a source of abortion knowledge could be influenced by their professional socialization in their training program. However, it is more likely that personal experience with abortion, and its
potential impact on the perception of trainees as to whether it is a source of abortion knowledge, is out of the control (rightly so) of the training program. While the participants in the CT, SWT, and NT groups who indicated “other” sources of abortion knowledge are incomparable, that 10 NT participants identified “school” as a source of abortion knowledge would be in the predicted direction, given the medical nature of their education.

What is of note regarding the results related to influences on abortion beliefs is the similarity between the CT, SWT, and NT groups on the seven Likert-type response items. Based on previous research (Norup, 1998; Rosen et al., 1974), one would expect to see more of a clear difference between CTs and SWTs in comparison to NTs. In this study, a relationship between abortion beliefs and attitudes is assumed.

Previous research (Rosenblatt et al., 1999; Walzer, 1994) has shown gender-related abortion attitude differences. In the current study, gender was not shown to be a predictor of abortion attitudes in multiple regression analyses; however, participants in all three training groups ranked gender in their top three influences on their abortion beliefs. The fact that gender did not predict abortion attitudes in this study might be due in part to the relatively small training group samples and the small number of male participants.

*Professional Ethics and Abortion*

Participants were asked about their professional ethical beliefs related to abortion. The CT group, SWT group, and NT group were all asked the extent to which they agreed or disagreed with whether they should promote pro-life beliefs with their clients/patients, whether they should not promote any beliefs related to abortion with their clients/patients,
and whether they should promote pro-choice beliefs with their clients/patients.

Unexpectedly, for all three participant groups, the mean response was in the agree category for each of the previous three statements.

Included in a group of questions regarding what information might help trainees feel better prepared to enter their professions, participants were asked the extent to which they agreed or disagreed with needing more information on the specific ethical guidelines for their professions related to abortion. On this item, the mean response for the CT and NT groups was in the agree category, and the mean response for the SWT group was in the neutral category.

Participants were also asked to rank the top three pieces of information that would help them feel better prepared to enter their profession. Their choices included information on ethical guidelines, emotional outcomes, laws, and medical outcomes related to abortion. For each participant group, more information on the specific ethical guidelines for their profession was included in the top three choices for CTs, SWTs, and NTs.

These results need to be considered in the context of where participants were in their training programs with respect to whether they had yet done clinical work or taken an ethics course. The CT, SWT, and NT training groups' perceptions of what, if any, abortion-related beliefs are appropriate to promote with clients/patients appear contradictory. The mean response for each group fell in the agree category, in that they should be able to promote both pro-life and pro-choice beliefs with their clients/patients, while at the same time their mean scores also falling in the agree category in that they should not promote any beliefs related to abortion with their clients/patients. Another
item assessing the extent to which participants desired more information about the specific ethical guidelines related to abortion for their profession, with a mean score falling in the *agree* category (CTs, NTs), indicates a desire or at least an openness (SWTs mean response was in the *neutral* category) to learning more about the ethics of their profession and abortion. One interpretation of these results is that CTs, SWTs, and NTs intended to follow their clients'/patients' leads, and validate whatever beliefs that their clients/patients hold toward abortion. However, perhaps it is more likely that the contradictory results, in combination with all three groups indicating that at least to some extent they desire more information about their profession's ethics and abortion, are reflective of either their limited exposure to and/or level of sophistication with the ethical codes of their professions. Ultimately, the data from this study regarding participants' professional ethical beliefs related to abortion are uninterpretable, due to the aforementioned reasons, as well as the reporting of data in the aggregate. While at first glance these data might appear contradictory, it is important to remember that the mean represents an aggregate response. Thus, the findings do not necessarily suggest that, for example, the same individual participant responded to all three questions with *agree*. Analyses done using the mean responses to the ethics-related Likert items for each professional training group do not capture the complete range of participants' responses. Clearly, reporting that the mean response for each training group fell into the *agree* to *strongly agree* category does not indicate that every participant in this study lacks clarity in their understanding of their professional ethical position related to abortion.

The ethical codes for psychologists, counselors, social workers, and nurses all contain language supportive of a client/patient's right to choose abortion. In the American

Abortion-Related Professional Preparation

As previously mentioned, participants were also asked, in addition to the extent to which they desire more information about ethics and abortion, about other abortion-related information that might help them feel better prepared to enter their professions. When asked the extent to which more information on the laws related to abortion and the medical outcomes related to abortion would help them feel better prepared to enter their professions, the mean response for the CT, SWT, and NT groups was in the agree category. When asked the extent to which more information on the emotional outcomes
related to abortion would help them feel better prepared, the mean response for the CT and NT groups was in the agree category, while the mean response for the SWT group was in the neutral category.

The CT and NT groups seem relatively more closely aligned on their responses to all ethics-related items in this study, as reflected by their mean responses in the agree category on all items. While the two items (wanting more information on the specific ethical guidelines related to abortion for their profession and emotional outcomes related to abortion) that the mean SWTs responded in the neutral category to are likely reflective of an openness to learning more about the ethics of their profession related to abortion, this might also be indicative of previous research (Rosen et al., 1974) that showed social work faculty and social work students to have more liberal abortion attitudes than nurse faculty and nurse students, and medical faculty and medical students. Although no follow-up questions were included in this study to clarify why the response between the CT and NT groups and the SWT group differed, there are some explanations worth exploring in future research. Perhaps SWTs in the present study have been socialized in their professional training program in a way that has helped them to feel clearer about their professional role as it relates to abortion. For example, perhaps more abortion-related information is being shared with them in their training. Additionally, while one might expect there to be a difference in mean response to the items addressing participants’ desire for more knowledge on the emotional outcomes related to abortion between the CT and SWT groups and the NT group, the CT and NT groups responded with a mean score in the agree category. One could assume that CT and SWT participants, with their mental health training, might feel less of a need for information on
emotional outcomes related to abortion, and that NT participants, with their medical training, might feel less of a need for information on medical outcomes related to abortion. It appears that all three training groups would like more professional preparation in their training programs in regard to the laws, medical outcomes, and emotional outcomes related to abortion. The professional preparation results are again confirmatory of the vast similarities, rather than differences, between these three groups.

Summary

While some statistically significant differences were found in this study in abortion attitudes and knowledge between the CT, SWT, and NT groups, it is likely that these differences have little practical significance. The research has shown that professionals' abortion attitudes translate into behavior toward clients/patients (Joffe, 1999), and the quality of care for women seeking abortion (Francome & Freeman, 2000; Huntington, 2001; Kade et al., 2004; Poggenpoel et al., 1998). Given the pre-degree similarities in abortion attitudes across professional training groups it is likely that clients/patients interacting with these future professionals will not experience a difference across professional contacts in their quality of abortion-related care. This study suggests that clients/patients presenting with abortion concerns will likely have a consistent experience across potential professional contacts. It is likely that pre-degree abortion attitudes will translate into post-degree behaviors toward clients/patients that will be similar across professions.

Some of the most meaningful results to come out of this study are reflected in the data on CTs, SWTs, and NTs perceptions of their training programs' impact on their
abortion knowledge, and their ethical positions on abortion in regard to client/patient contact (e.g., to promote or not promote particular abortion attitudes with clients/patients). The meaningfulness of this data lies in the potential for CT, SWT, and NT training programs to pay more attention to their students’ perceptions of their level of preparedness to work with clients/patients regarding abortion issues. This is especially true in regard to abortion knowledge, their professional ethics related to abortion, and abortion attitudes. While there were some statistically significant results in this study, in most instances the mean differences do not appear to be meaningful. Although the general expectation might be that there would be clear differences in abortion attitudes between these groups, the data suggest pervasive similarities between them.

Study Limitations

The primary limitation of this study was its use of self-report measures, which might be especially significant in light of the socialization process that may exist in academic programs in regard to abortion attitudes. This study’s measures being administered in a classroom setting might have caused participants to be more likely to respond in a manner that indicates that they are in line with the generalized abortion attitudes of their chosen profession. If there is a professional atmosphere present regarding abortion attitudes, participants may have felt more inhibited in their expression of abortion attitudes because they were in a classroom setting. Even though this study’s measures were administered confidentially, the potential influence of the classroom environment may have been especially salient since participants were cognizant of the focus of this study on abortion attitudes by profession, and may have felt representative of
their profession, although results did not necessarily support this supposition.

Additionally, that the study's participants were students, and that they were requested to participate during their 2nd or 3rd year of their training programs, captures only a snapshot in time of the broad scope of their professional careers.

Another limitation of this study was the homogeneity of the sample in regard to gender, race, and religion. Since traditionally the majority of students in counseling, social work, and nurse programs are women, the sample was underrepresentative of men. Additionally, the majority of students in northeastern Ohio are of European-American decent, and the majority are natives of Ohio. Due to the homogeneity of the sample, participants were divided into “white” and “people of color” racial categories for the purpose of analyses. This was not to imply that all people of color are homogeneous. Additionally, for the purpose of analyses, the religion variable was defined by only those participants who identified as “Protestant” or “Catholic.” Consequently, in this way the religion variable ended up being more narrowly defined in this study than originally hoped. This lack of gender, racial, cultural/geographic, and religious diversity was a limitation of this study. For these reasons, the most accurate generalizations of the results of this study might best be applied to Midwestern women of European-American decent in counseling, social work, and nurse training programs.

Implications for Training Programs

This study provides preliminary information on student abortion attitudes, abortion knowledge, and professional ethical positions related to abortion that might be useful to counselor, social work, and nurse training programs. While the similar abortion
attitudes across training groups could be reflective of improvements in training since the relevant literature was published (Francome & Freeman, 2000; Huntington, 2001; Joffe, 1999; Kade et al., 2004; Norup, 1998; Poggenpoel et al., 1998; Rosen et al., 1974; Wyatt, 2001), upon further exploration, the CTs, SWTs, and NTs were explicitly asking for more training in regard to abortion as it relates to their future professions. Participants in this study clearly identified what information about abortion might be helpful for them to learn before they entered their professions. All three professional training groups indicated that they would have liked more information on the ethical guidelines related to abortion for their profession, the emotional outcomes related to abortion, the laws related to abortion, and the medical outcomes related to abortion. When asked whether their training program had enhanced their overall knowledge of abortion, all three training group members responded with mean scores in the disagree or neutral categories. These results may indicate that abortion may not be a topic directly addressed in training programs, especially in ethics courses, and that this presents an opportunity for those professionals involved in training to be more intentional about teaching their students about abortion and ethics as they relate to their profession. This also raises the question, though, as to the extent that counseling, social work, or nurse training programs feel responsible for providing the type of information about abortion that participants in this study were requesting. Additionally, to what extent are these training programs willing to intentionally professionally socialize their students in regard to abortion? What is clear, however, is that further research and discussion in regard to how counselor, social work, and nurse programs address abortion is warranted.
Directions for Future Research

This study also has implications for other future research. The results of this study provide preliminary information on student abortion attitudes, abortion knowledge, and professional ethical positions related to abortion. In particular, information on the abortion attitudes of counselors in the literature has been severely lacking. This study could not confirm the contribution of race, gender, age, and religion to abortion attitudes in counseling, social work, and nurse trainees. Therefore, further exploration of the impact of these factors on abortion attitudes is still needed.

This study also raises more questions in regard to whether professional socialization does impact abortion attitudes; however, it is not professional socialization that matters most. The results of this study demonstrate that perhaps professional socialization regarding abortion does matter, but that this socialization is much more similar than different among counseling, social work, and nurse trainees than predicted. It is not clear, however, that professional socialization matters most in regard to influencing abortion attitudes, when CTs, SWTs, and NTs say that their sex/gender, family and friends, the media, and their religious/spiritual tradition are also strong influences on their abortion attitudes. What this study has brought to light, is the extent to which the homogeneity of the gender and race of the sample may have impacted the similarity of abortion attitudes across training groups. This similarity in abortion attitudes could be attributed to the entire sample being comprised mostly of middle-class White women.

One variable that was not considered in this study was geographic location. Are there other variables, not measured in this study, that are perhaps more influential on abortion
attitudes than the variables that were measured? This question could be addressed with further research. While quiet clearly the three training groups are getting professional socialization that impacts their abortion attitudes, the participants’ strong endorsement of other factors that influence their abortion knowledge and beliefs indicate that professional socialization is an influence in addition to other influences. If professional socialization is truly a contributing factor to abortion attitudes, at what point in a counseling, social work, or nurse professional’s career does it matter most? This study made the assumption that professional socialization of the three training groups and self-selection into training programs would be salient enough in training to demonstrate influence on abortion attitudes. This was not borne out in the data. Future research could further explore whether professional socialization most impacts abortion attitudes in counselors, social workers, and nurses in training, or in early/middle/late career. Further investigation of abortion attitudes could measure whether there are differences among counseling, social work, and nurse professionals’ abortion attitudes as they advance through their careers. Of additional interest, would be whether professional practice setting magnifies or modifies the impact of professional socialization on abortion attitudes in these professions.
REFERENCES


Appendix A

Participant Informed Consent
John Carroll University
CONSENT FORM

Principal Investigator: Dr. Alan Hovestadt
Student Investigator: Mary Ball

You have been asked to participate in a research project entitled, The Abortion Attitudes of Counseling, Social Work, and Nursing Trainees. The purpose of this study is to examine similarities and differences in abortion attitudes between counseling, social work, and nursing students. This study is Mary Ball's dissertation project.

If you choose to participate, you will fill out questionnaires related to your abortion attitudes. One example is: "Has your training program enhanced your overall knowledge of abortion?". You are free to skip any question that you do not want to respond to or to stop your participation in the study at any time without any penalty. It will take about 15 minutes to fill out. Your name will not appear on any form, instead, a research code will be used.

Your participation in this study will not affect your status in your program in any way. Your name will not be on the questionnaires or demographic information forms. The researcher will use a code number instead. Your faculty will not see the results of your questionnaires. Your information will be identified with a number so the researchers will not know your name. The results of this study will be presented in aggregate form, and will not identify individuals.

As in all research, there may be unforeseen risks to the participant. If an accidental injury occurs, appropriate emergency measures will be taken; however, no compensation or additional treatment will be made available to you as a participant except as otherwise stated in this consent form. Some of the questions may be emotionally upsetting to you or bring up other thoughts that are upsetting. If you find that you become upset or have any questions, you can contact researcher Mary Ball, who is a counselor, or any other mental health professional.

There is no direct benefit to you from participating in this study. However, the results may contribute to the body of knowledge on individuals in your profession regarding abortion attitudes.

Due to the use of a research code, the information you provide, if you choose to participate, will be confidential. Your choice to participate will not affect your standing in your program in any way. Your faculty will not know if you participated or not.

If you have any questions or concerns about this study, you may contact the researchers, Dr. Alan Hovestadt (269) 387-5117 or Mary Ball (216) 397-4283, the Human Subjects Institutional Review Board at Western Michigan University 269-387-8293, or the Vice President for Research at Western Michigan University 269-387-8298.
You may also contact the Chair of the Human Subjects Institutional Review Board at John Carroll University (216) 397-4205 or the Assistant Chair of the Institutional Review Board at John Carroll University (216) 397-4520.

The Human Subjects Institutional Review Board at John Carroll University as indicated has approved this consent document for one year by the stamped date and signature of the Board Chair in the upper right corner. Participants should not sign this document if the corner does not have a stamped date and signature.

Your signature below indicates that you have read and/or had explained to you the purpose and requirements of this study and that you agree to participate.

__________________________________________
Participant’s Signature Date

__________________________________________
Initials of Researcher Date
Appendix B

Participant Informed Consent
Ursuline College
CONSENT FORM

Principal Investigator: Dr. Alan Hovestadt
Student Investigator: Mary Ball

You have been asked to participate in a research project entitled, *The Abortion Attitudes of Counseling, Social Work, and Nursing Trainees*. The purpose of this study is to examine similarities and differences in abortion attitudes between counseling, social work, and nursing students. This study is Mary Ball's dissertation project.

If you choose to participate, you will fill out questionnaires related to your abortion attitudes. One example is: “Has your training program enhanced your overall knowledge of abortion?” You are free to skip any question that you do not want to respond to or to stop your participation in the study at any time without any penalty. It will take about 15 minutes to fill out. Your name will not appear on any form, instead, a research code will be used.

Your participation in this study will not affect your status in your program in any way. Your name will not be on the questionnaires or demographic information forms. The researcher will use a code number instead. Your faculty will not see the results of your questionnaires. Your information will be identified with a number so the researchers will not know your name. The results of this study will be presented in aggregate form, and will not identify individuals.

As in all research, there may be unforeseen risks to the participant. If an accidental injury occurs, appropriate emergency measures will be taken; however, no compensation or additional treatment will be made available to you as a participant except as otherwise stated in this consent form. Some of the questions may be emotionally upsetting to you or bring up other thoughts that are upsetting. If you find that you become upset or have any questions, you can contact researcher Mary Ball, who is a counselor, or any other mental health professional.

There is no direct benefit to you from participating in this study. However, the results may contribute to the body of knowledge on individuals in your profession regarding abortion attitudes.

Due to the use of a research code, the information you provide, if you choose to participate, will be confidential. Your choice to participate will not affect your standing in your program in any way. Your faculty will not know if you participated or not.

If you have any questions or concerns about this study, you may contact the researchers, Dr. Alan Hovestadt (269) 387-5117 or Mary Ball (216) 397-4283, the Human Subjects Institutional Review Board at Western Michigan University 269-387-8293, or the Vice President for Research at Western Michigan University 269-387-8298.
You may also contact the Chair of the Human Subjects Institutional Review Board at Ursuline College (440) 646-8393.

The Human Subjects Institutional Review Board at Ursuline College as indicated has approved this consent document for one year by the stamped date and signature of the Board Chair in the upper right corner. Participants should not sign this document if the corner does not have a stamped date and signature.

Your signature below indicates that you have read and/or had explained to you the purpose and requirements of this study and that you agree to participate.

________________________________________
Participant's Signature                    Date

________________________________________
Initials of Researcher                    Date
Appendix C

Participant Informed Consent
Cleveland State University
CONSENT FORM

Principal Investigator: Dr. Alan Hovestadt
Student Investigator: Mary Ball

You have been asked to participate in a research project entitled, *The Abortion Attitudes of Counseling, Social Work, and Nursing Trainees*. The purpose of this study is to examine similarities and differences in abortion attitudes between counseling, social work, and nursing students. This study is Mary Ball's dissertation project.

If you choose to participate, you will fill out questionnaires related to your abortion attitudes. Some examples are: "Has your training program enhanced your overall knowledge of abortion?". You are free to skip any question that you do not want to respond to or to stop your participation in the study at any time without any penalty. It will take about 15 minutes to fill out. Your name will not appear on any form, instead, a research code will be used.

Your participation in this study will not affect your status in your program in any way. Your name will not be on the questionnaires or demographic information forms. The researcher will use a code number instead. Your faculty will not see the results of your questionnaires. Your information will be identified with a number so the researchers will not know your name. The results of this study will be presented in aggregate form, and will not identify individuals.

As in all research, there may be unforeseen risks to the participant. If an accidental injury occurs, appropriate emergency measures will be taken; however, no compensation or additional treatment will be made available to you as a participant except as otherwise stated in this consent form. Some of the questions may be emotionally upsetting to you or bring up other thoughts that are upsetting. If you find that you become upset or have any questions, you can contact researcher Mary Ball, who is a counselor, or any other mental health professional.

There is no direct benefit to you from participating in this study. However, the results may contribute to the body of knowledge on individuals in your profession regarding abortion attitudes.

Due to the use of a research code, the information you provide, if you choose to participate, will be confidential. Your choice to participate will not affect your standing in your program in any way. Your faculty will not know if you participated or not.

If you have any questions or concerns about this study, you may contact the researchers, Dr. Alan Hovestadt (269) 387-5117 or Mary Ball (216) 397-4283, the Human Subjects Institutional Review Board at Western Michigan University 269-387-8293, or the Vice President for Research at Western Michigan University 269-387-8298. You may also contact the Chair of the Institutional Review Board at Cleveland State
The Human Subjects Institutional Review Board at Cleveland State University as indicated has approved this consent document for one year by the stamped date and signature of the Board Chair in the upper right corner. Participants should not sign this document if the corner does not have a stamped date and signature.

Your signature below indicates that you have read and/or had explained to you the purpose and requirements of this study and that you agree to participate.

Participant's Signature Date

Initials of Researcher Date
Appendix D

Participant Demographic Form
Demographic Form
DO NOT PUT YOUR NAME ON THIS FORM

Are you currently 18 years old or older? ___yes ___no

Please circle the institution that you currently attend:
Cleveland State University
John Carroll University
Ursuline College

Training Program:
____ Counseling or Psychology
   Please circle one: Community Counseling
   Community Agency Counseling
   Clinical Psychology
   Please check one: ___Practitioner Track
                    ___Doctoral Preparation Track
   Art Therapy Counseling
   Please check one: ___Counselor Track
                    ___Counselor and Art Therapy Track
                    ___Art Therapy Track
                    ___Certificate Program (my prior Master’s
degree is in ____________)

____ Social Work
   Please circle one: M.S.W.
   M.S. in Social Administration, Direct Practice Concentration
   M. S. in Social Administration, Other Concentration

____ Nursing
   Please check one: ___1st year ___2nd year ___3rd year ___4th year
   Please check one: I have started my clinical work ___yes ___no
   Please circle one: No prior degree
   Prior nursing degree (e.g. associate or diploma program [even if
   you have a prior nursing degree but are currently
   seeking one of the aforementioned degrees])
   Prior Bachelor’s Degree in another field (please indicate major field
   of study ____________)

Code: ____________
If you are currently seeking a Nursing degree, please skip the following three questions. If you are seeking a Master’s degree, please answer the following three questions:

Year of Study in Your Training Program: ____

Full or Part Time: Full Time____ Part Time____

At what stage of completion are you in your training program?:

1st ¼____ 2nd ¼____ 3rd ¼____ final ¼____

Have you practiced in your field prior to entering your current program?:

*Yes____ No____

*If Yes, for what length of time?: ____

Your Age:____

Your Sex: Woman____ Man____ Transgender____

Ethnic/Racial Background: (If you are multiracial, please check multiple categories.)

African-American/Black____ Asian/Pacific Islander____

European American/White____ Latino(a)/Chicano(a)/Hispanic____

Native American____ Bi-racial (please specify):____ Other (please specify): ______
Current Relationship Status:

Single _____ In a committed relationship _____ Married _____
Divorced _____ Widowed _____

Please Check One:

_____ I participate in an organized religion/spiritual tradition*

*Please identify your religion/spiritual tradition: _____________
*Please quantify the approximate frequency of your participation:
  more than once per week _____
  once per week _____
  once per month _____
  once per year _____
  more than once per year _____

_____ I do not participate in an organized religion/spiritual tradition

Definitions of Terms:

"PRO-CHOICE"- for the purpose of this study, individuals who are supportive of a woman's choice to exercise her reproductive right and terminate her pregnancy, under at least some conditions or any condition. "Pro-choice" is used as a means of convention, and not to imply that pro-choice participants do not also value life.

"PRO-LIFE"- for the purpose of this study, individuals who are not supportive of a woman's choice to exercise her reproductive right and terminate a pregnancy under most conditions or any condition.

UNDECIDED- for the purpose of this study, individuals who have not yet decided whether their views regarding abortion are better defined by “pro-choice” or “pro-life” positions

NO OPINION- for the purpose of this study, individuals who at this time choose to not form an opinion as to whether their views regarding abortion are better defined by “pro-choice” or “pro-life” positions

Based on the definitions provided, do you consider yourself to be:

     “Pro-Choice” _____ “Pro-Life” _____ Undecided _____ No Opinion _____
Appendix E

Reasoning About Abortion Questionnaire
Reasoning About Abortion Questionnaire

The following statements are about the issue of abortion. Please read each statement carefully and circle the letter indicating whether you “strongly agree” (SA), “agree” (A), have “mixed feelings” (M), “disagree” (D), or “strongly disagree” (SD). There are no right or wrong answers. Please don’t skip any items.

1. Abortion is a matter of personal choice. SD D M A SA
2. Abortion is a threat to our society. SD D M A SA
3. A woman should have control over what is happening to her own body by having the option to choose abortion. SD D M A SA
4. Only God, not people, can decide if a fetus should live. SD D M A SA
5. Even if one believes that there may be some exceptions, abortion is still basically wrong. SD D M A SA
6. Abortion violates an unborn person’s fundamental right to life. SD D M A SA
7. A woman should be able to exercise her rights to self-determination by choosing to have an abortion. SD D M A SA
8. Outlawing abortion could take away a woman’s sense of self and personal autonomy. SD D M A SA
9. Outlawing abortion violates a woman’s civil rights. SD D M A SA
10. Abortion is morally unacceptable and unjustified. SD D M A SA
11. In my reasoning, the notion that an unborn fetus may be a human life is not a deciding issue in considering abortion. SD D M A SA
12. Abortion can be described as taking a life unjustly.  
SD  D  M  A  SA

13. A woman should have the right to decide to have an abortion based on her own life circumstances.  
SD  D  M  A  SA

14. If a woman feels that having a child might ruin her life, she should consider an abortion.  
SD  D  M  A  SA

15. Abortion could destroy the sanctity of motherhood.  
SD  D  M  A  SA

16. An unborn fetus is a viable human being with rights.  
SD  D  M  A  SA

17. If a woman feels she can’t care for a baby, she should be able to have an abortion.  
SD  D  M  A  SA

18. Even if one believes that there are times when abortion is immoral, it is still basically the woman’s own choice.  
SD  D  M  A  SA
Appendix F

Abortion Knowledge Scale
The following questions will ask you to think about your abortion knowledge and beliefs.

The following statement is about your knowledge of abortion as it relates to your training program or major. Please read the statement carefully and circle the response indicating whether you “strongly agree”, “agree”, are “neutral”, “disagree”, or “strongly disagree”. There is no right or wrong answer.

1. My training program (or nursing major) has enhanced my overall knowledge of abortion.

   Strongly Disagree  Disagree  Neutral  Agree  Strongly Agree
The following statements are about your sources of abortion knowledge. Please read the statements carefully and circle a response using the same scale as in question 1 above.

2. I have learned about abortion from:

(a) The media (movies, television, books, newspapers, magazines, etc.)

Strongly Disagree Disagree Neutral Agree Strongly Agree

(b) My religious/spiritual practice

Strongly Disagree Disagree Neutral Agree Strongly Agree

(c) My political beliefs

Strongly Disagree Disagree Neutral Agree Strongly Agree

(d) My past or current paid or volunteer work

Strongly Disagree Disagree Neutral Agree Strongly Agree
(e) My own abortion or the abortion of someone close to me

Strongly Disagree  Disagree  Neutral  Agree  Strongly Agree

(f) My family and/or friends

Strongly Disagree  Disagree  Neutral  Agree  Strongly Agree

(g) Other (please indicate) ___________

Now please rank order the top three sources of your abortion knowledge. Please place a number “1” next to the item that is the most important source, a number “2” next to the item that is the second most important source, and a number “3” next to the item that is the third most important source.

___ The media

___ My religious/spiritual practice

___ My political beliefs
The following statements are about sources of your abortion beliefs. Please read the statements carefully and circle a response using the same scale as in questions 1 and 2 above.

3. My abortion beliefs have been influenced by:

   (a) My family and/or friends

   Strongly Disagree  Disagree  Neutral  Agree  Strongly Agree

   (b) My political beliefs

   Strongly Disagree  Disagree  Neutral  Agree  Strongly Agree
(c) My sex/gender

Strongly Disagree  Disagree  Neutral  Agree  Strongly Agree

(d) My religious/spiritual beliefs

Strongly Disagree  Disagree  Neutral  Agree  Strongly Agree

(e) My age/generation

Strongly Disagree  Disagree  Neutral  Agree  Strongly Agree

(f) My race/ethnicity

Strongly Disagree  Disagree  Neutral  Agree  Strongly Agree

(g) The media (movies, television, books, newspapers, magazines, etc.)

Strongly Disagree  Disagree  Neutral  Agree  Strongly Agree
Now please rank order the top three sources of your abortion beliefs. Please place a number “1” next to the item that is the most important source, a number “2” next to the item that is the second most important source, and a number “3” next to the item that is the third most important source.

___ Family and/or friends

___ My political beliefs

___ My sex/gender

___ My religious/spiritual beliefs

___ My age/generation

___ My race/ethnicity

___ The media
The following statements are about information that might help people feel better prepared to enter their profession. Please read the statements carefully and circle a response using the same scale as in questions 1, 2, and 3 above.

4. In order to feel better prepared to enter in to my profession, I would need more information on:

(a) The specific ethical guidelines for my profession related to abortion

   Strongly Disagree  Disagree  Neutral  Agree  Strongly Agree

(b) The emotional outcomes related to abortion

   Strongly Disagree  Disagree  Neutral  Agree  Strongly Agree

(c) The laws related to abortion

   Strongly Disagree  Disagree  Neutral  Agree  Strongly Agree

(d) The medical outcomes related to abortion

   Strongly Disagree  Disagree  Neutral  Agree  Strongly Agree
Now please rank order the top three pieces of information that would help you feel better prepared to enter your profession. Please place a number “1” next to the item that would be the most useful in helping you feel prepared to enter your profession, a number “2” next to the item that would be the second most helpful, and a number “3” next to the item that would be the third most helpful.

___ Specific ethical guidelines for my profession related to abortion

___ Emotional outcomes related to abortion

___ Laws related to abortion

___ Medical outcomes related to abortion
The following statements are about professional ethics and abortion. Please read the statements carefully and circle a response using the same scale as in questions 1, 2, 3, and 4 above.

5. The appropriate ethical position on abortion related to my role as a professional is:

(a) I should promote pro-life beliefs with my client/patient

Strongly Disagree  Disagree  Neutral  Agree  Strongly Agree

(a) I should not promote any beliefs related to abortion with my client/patient

Strongly Disagree  Disagree  Neutral  Agree  Strongly Agree

(c) I should promote pro-choice beliefs with my client/patient

Strongly Disagree  Disagree  Neutral  Agree  Strongly Agree
ABORTION KNOWLEDGE

Instructions

The purpose of this scale is to assess your perception of abortion knowledge by having you judge your knowledge of abortion against a series of descriptive continuums. Please make your judgment on the basis of what your own abortion knowledge means. For example:

If you were being assessed on what "graduation" means to you, you could check:

useful ___ ___ x___ ___ ___ ___ useless
slow _x___ ___ ___ ___ ___ ___ fast
weak ___ ___ ___ x___ ___ ___ strong

If that were how you felt about it, or check any other scale position to reflect your perceptions. One check to a line.

It is not necessary to look back and forth trying to remember how you checked similar items earlier. Make each item a separate and independent judgment.

It is your first impression (the immediate reaction to items) that is most useful, so work at a fairly high speed. On the other hand, please do not be careless, as we need your true impressions.
**ABORTION KNOWLEDGE**

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```
V S A N S V
E O E
R M L U M R
Y E I T E Y
W T R W
H T A H
A L L A
T E T
```
Appendix G

Analysis of Variance for Reasoning About Abortion Questionnaire
Table G

*Analysis of Variance for Reasoning About Abortion Questionnaire*

<table>
<thead>
<tr>
<th>RAQ Item</th>
<th>CT Means</th>
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<th>NT Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>RAQ1</td>
<td>3.98 (1.23)</td>
<td>4.02 (1.30)</td>
<td>3.82 (1.34)</td>
</tr>
<tr>
<td>RAQ2</td>
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<td>2.45 (2.10)</td>
<td>2.51 (1.21)</td>
</tr>
<tr>
<td>RAQ3</td>
<td>3.90 (1.25)</td>
<td>4.02 (1.28)</td>
<td>3.68 (1.33)</td>
</tr>
<tr>
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<td>2.59 (1.32)</td>
<td>2.73 (1.25)</td>
</tr>
<tr>
<td>RAQ5</td>
<td>2.73 (1.36)</td>
<td>2.78 (1.44)</td>
<td>3.17 (1.31)</td>
</tr>
<tr>
<td>RAQ6</td>
<td>3.02 (1.29)</td>
<td>2.98 (1.22)</td>
<td>3.40 (1.27)</td>
</tr>
<tr>
<td>RAQ7</td>
<td>3.82 (1.29)</td>
<td>4.10* (1.12)</td>
<td>3.47* (1.35)</td>
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<tr>
<td>RAQ8</td>
<td>3.69 (1.30)</td>
<td>4.00 (1.17)</td>
<td>3.54 (1.33)</td>
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<td>3.76 (1.41)</td>
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<td>3.46 (1.28)</td>
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<td>2.90 (1.27)</td>
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<td>2.79 (1.34)</td>
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</tr>
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<td>4.10 (1.06)</td>
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</tr>
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<td>2.73 (1.27)</td>
<td>2.72 (1.25)</td>
</tr>
<tr>
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<td>2.12* (1.73)</td>
<td>2.72* (1.26)</td>
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</tr>
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<td>3.13 (1.34)</td>
</tr>
<tr>
<td>RAQ19</td>
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<td>RAQ20</td>
<td>3.84 (1.32)</td>
<td>3.93 (1.19)</td>
<td>3.49 (1.34)</td>
</tr>
</tbody>
</table>

*Note.* Numbers in parentheses are standard deviations.

* Statistically significant difference at the $p \leq .05$ level.
Appendix H

Analysis of Variance for Abortion Knowledge Scale
Table H

*Analysis of Variance for Abortion Knowledge Scale*

<table>
<thead>
<tr>
<th>AK Item</th>
<th>CT Means</th>
<th>SWT Means</th>
<th>NT Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>AK1</td>
<td>5.16 (1.00)</td>
<td>4.43 (1.46)</td>
<td>4.73 (1.12)</td>
</tr>
<tr>
<td>AK2</td>
<td>4.60 *(1.07)</td>
<td>4.00* (1.29)</td>
<td>4.55* (1.08)</td>
</tr>
<tr>
<td>AK3</td>
<td>4.60* (1.16)</td>
<td>3.87 *(1.32)</td>
<td>3.93* (1.21)</td>
</tr>
<tr>
<td>AK4</td>
<td>4.31 (1.14)</td>
<td>3.95 (1.03)</td>
<td>4.13 (1.16)</td>
</tr>
<tr>
<td>AK5</td>
<td>4.84 *(1.07)</td>
<td>4.06* (1.28)</td>
<td>4.49 (1.00)</td>
</tr>
<tr>
<td>AK6</td>
<td>4.61 (1.17)</td>
<td>4.14 (1.03)</td>
<td>4.55 (0.94)</td>
</tr>
<tr>
<td>AK7</td>
<td>4.85 (.74)</td>
<td>4.24 (1.01)</td>
<td>4.51 (0.95)</td>
</tr>
<tr>
<td>AK8</td>
<td>4.69 (1.01)</td>
<td>4.47 (1.18)</td>
<td>4.79 (0.93)</td>
</tr>
<tr>
<td>AK9</td>
<td>4.17 (1.18)</td>
<td>4.06 (1.17)</td>
<td>4.16 (1.24)</td>
</tr>
<tr>
<td>AK10</td>
<td>4.87 (0.80)</td>
<td>4.35 (1.27)</td>
<td>4.74 (1.45)</td>
</tr>
<tr>
<td>AK11</td>
<td>5.17 (0.80)</td>
<td>4.78 (1.21)</td>
<td>4.92 (1.19)</td>
</tr>
<tr>
<td>AK12</td>
<td>5.13 (0.96)</td>
<td>4.94 (1.04)</td>
<td>4.92 (1.24)</td>
</tr>
</tbody>
</table>

*Note.* Numbers in parentheses are standard deviations.

* Statistically significant difference at the $p \leq .05$ level.
Appendix I

Sources of Abortion Knowledge
### Table I-1

**Mean Scores for Sources of Abortion Knowledge**

<table>
<thead>
<tr>
<th>Item</th>
<th>CT</th>
<th>Median</th>
<th>SWT</th>
<th>Median</th>
<th>NT</th>
<th>Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>Media</td>
<td>3.76</td>
<td>4.00</td>
<td>3.68</td>
<td>4.00</td>
<td>3.88</td>
<td>4.00</td>
</tr>
<tr>
<td>Religious/Spiritual</td>
<td>3.04</td>
<td>3.00</td>
<td>2.90</td>
<td>3.00</td>
<td>2.96</td>
<td>3.00</td>
</tr>
<tr>
<td>Political Beliefs</td>
<td>3.31</td>
<td>4.00</td>
<td>3.27</td>
<td>3.00</td>
<td>3.24</td>
<td>4.00</td>
</tr>
<tr>
<td>Paid/Volunteer Work</td>
<td>2.63</td>
<td>2.00</td>
<td>3.07</td>
<td>3.00</td>
<td>2.58</td>
<td>2.00</td>
</tr>
<tr>
<td>Own/Other Abortion</td>
<td>2.78</td>
<td>3.00</td>
<td>3.02</td>
<td>3.00</td>
<td>2.29</td>
<td>2.00</td>
</tr>
<tr>
<td>Family/Friends</td>
<td>3.37</td>
<td>4.00</td>
<td>3.46</td>
<td>4.00</td>
<td>3.33</td>
<td>4.00</td>
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Table 1-2

*Ranking of the Top Three Sources of Abortion Knowledge*

<table>
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<tr>
<th>Rank</th>
<th>CT</th>
<th>SWT</th>
<th>NT</th>
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</thead>
<tbody>
<tr>
<td>Rank 1</td>
<td>Media</td>
<td>Media</td>
<td>Media</td>
</tr>
<tr>
<td>Rank 1a</td>
<td>Religious/Spiritual</td>
<td>Own/Other Abortion</td>
<td>Other</td>
</tr>
<tr>
<td>Rank 1b</td>
<td>Family/Friends, Other</td>
<td>Religious/Spiritual</td>
<td>Religious/Spiritual</td>
</tr>
<tr>
<td>Rank 2</td>
<td>Religious/Spiritual, Political Beliefs</td>
<td>Family/Friends</td>
<td>Family/Friends</td>
</tr>
<tr>
<td>Rank 2a</td>
<td>Family/Friends</td>
<td>Own/Other Abortion</td>
<td>Media</td>
</tr>
<tr>
<td>Rank 2b</td>
<td>Media</td>
<td>Political Beliefs</td>
<td>Political Beliefs</td>
</tr>
<tr>
<td>Rank 3</td>
<td>Media</td>
<td>Media, Family/Friends</td>
<td>Political Beliefs</td>
</tr>
<tr>
<td>Rank 3a</td>
<td>Family/Friends</td>
<td>Political Beliefs</td>
<td>Family/Friends</td>
</tr>
<tr>
<td>Rank 3b</td>
<td>Political Beliefs</td>
<td>Religious/Spiritual</td>
<td>Media</td>
</tr>
</tbody>
</table>

*Note.* Sources of abortion knowledge that were endorsed 2nd and 3rd for that particular ranking position by each training group are indicated in rows “a” and “b.” Some ranking positions contain two entries because they were equally endorsed by participants for that position.
Appendix J

Sources of Abortion Beliefs
Table J-1

*Mean Scores for Sources of Abortion Beliefs*

<table>
<thead>
<tr>
<th>Item</th>
<th>CT Mean</th>
<th>CT Median</th>
<th>SWT Mean</th>
<th>SWT Median</th>
<th>NT Mean</th>
<th>NT Median</th>
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</thead>
<tbody>
<tr>
<td>Family/Friends</td>
<td>3.50</td>
<td>4.00</td>
<td>3.34</td>
<td>4.00</td>
<td>3.33</td>
<td>4.00</td>
</tr>
<tr>
<td>Political Beliefs</td>
<td>2.94</td>
<td>3.00</td>
<td>3.29</td>
<td>4.00</td>
<td>3.12</td>
<td>3.00</td>
</tr>
<tr>
<td>My sex/gender</td>
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<td>3.51</td>
<td>4.00</td>
<td>3.97</td>
<td>4.00</td>
</tr>
<tr>
<td>Religious/Spiritual</td>
<td>3.12</td>
<td>3.50</td>
<td>2.98</td>
<td>3.00</td>
<td>3.31</td>
<td>3.00</td>
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<tr>
<td>My age/generation</td>
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<td>3.51</td>
<td>4.00</td>
<td>3.65</td>
<td>4.00</td>
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<tr>
<td>My race/ethnicity</td>
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<td>3.00</td>
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<td>The Media</td>
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<td>4.00</td>
<td>3.41</td>
<td>4.00</td>
<td>3.32</td>
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</tbody>
</table>
Table J-2

*Ranking of the Top Three Sources of Abortion Beliefs*

<table>
<thead>
<tr>
<th>Rank</th>
<th>CT</th>
<th>SWT</th>
<th>NT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rank 1</td>
<td>Sex/Gender</td>
<td>Sex/Gender</td>
<td>Religious/Spiritual</td>
</tr>
<tr>
<td>Rank 1a</td>
<td>Religious/Spiritual</td>
<td>Political Beliefs</td>
<td>Sex/Gender</td>
</tr>
<tr>
<td>Rank 1b</td>
<td>Age/Generation</td>
<td>Family/Friends, Religious/Spiritual</td>
<td>Family/Friends</td>
</tr>
<tr>
<td>Rank 2</td>
<td>Family/Friends</td>
<td>Family/Friends</td>
<td>Sex/Gender</td>
</tr>
<tr>
<td>Rank 2a</td>
<td>Age/Generation</td>
<td>Age/Generation</td>
<td>Family/Friends</td>
</tr>
<tr>
<td>Rank 2b</td>
<td>Political Beliefs</td>
<td>Religious/Spiritual</td>
<td>Age/Generation</td>
</tr>
<tr>
<td>Rank 3</td>
<td>Family/Friends, Media</td>
<td>Family/Friends</td>
<td>Sex/Gender, Age/Generation</td>
</tr>
<tr>
<td>Rank 3a</td>
<td>Age/Generation</td>
<td>Political Beliefs</td>
<td>Family/Friends, Media</td>
</tr>
<tr>
<td>Rank 3b</td>
<td>Sex/Gender</td>
<td>Age/Generation</td>
<td>Political Beliefs, Religious/Spiritual</td>
</tr>
</tbody>
</table>

*Note.* Sources of abortion knowledge that were endorsed 2nd and 3rd for that particular ranking position by each training group are indicated in rows “a” and “b.” Some ranking positions contain two entries because they were equally endorsed by participants for that position.
Appendix K

Abortion-Related Professional Preparation
Table K-1

*Mean Scores for Abortion-Related Professional Preparation*

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<tr>
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<th>NT Median</th>
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<td>4.00</td>
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<tr>
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<td>3.80</td>
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</table>
Table K-2

*Ranking of the Top Three Sources of Abortion Information Needed to Feel Better Prepared to Enter Profession*

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</tr>
</thead>
<tbody>
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<td>Rank 1</td>
<td>Emotional Outcomes</td>
<td>Ethics, Emotional Outcomes</td>
<td>Medical Outcomes</td>
</tr>
<tr>
<td>Rank 1a</td>
<td>Ethics</td>
<td>Laws</td>
<td>Ethics</td>
</tr>
<tr>
<td>Rank 1b</td>
<td>Laws</td>
<td>Medical Outcomes</td>
<td>Laws</td>
</tr>
<tr>
<td>Rank 2</td>
<td>Ethics</td>
<td>Laws, Medical Outcomes</td>
<td>Emotional Outcomes</td>
</tr>
<tr>
<td>Rank 2a</td>
<td>Medical Outcomes</td>
<td>Ethics</td>
<td>Ethics</td>
</tr>
<tr>
<td>Rank 2b</td>
<td>Laws</td>
<td>Emotional Outcomes</td>
<td>Medical Outcomes</td>
</tr>
<tr>
<td>Rank 3</td>
<td>Medical Outcomes</td>
<td>Medical Outcomes</td>
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<td>Rank 3a</td>
<td>Ethics, Laws</td>
<td>Emotional Outcomes</td>
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</tr>
<tr>
<td>Rank 3b</td>
<td>Emotional Outcomes</td>
<td>Ethics, Laws</td>
<td>Laws</td>
</tr>
</tbody>
</table>

*Note.* Sources of abortion knowledge that were endorsed 2nd and 3rd for that particular ranking position by each training group are indicated in rows “a” and “b.” Some ranking positions contain two entries because they were equally endorsed by participants for that position.
Appendix L

Mean Scores for Professional Ethics and Abortion
Table L

*Mean Scores for Professional Ethics and Abortion*

<table>
<thead>
<tr>
<th>Item</th>
<th>CT</th>
<th>SWT</th>
<th>NT</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Median</td>
<td>Mean</td>
</tr>
<tr>
<td>Promote Pro-Life Beliefs</td>
<td>3.98</td>
<td>4.00</td>
<td>4.07</td>
</tr>
<tr>
<td>Promote No Beliefs</td>
<td>4.12</td>
<td>5.00</td>
<td>4.12</td>
</tr>
<tr>
<td>Promote Pro-Choice Beliefs</td>
<td>3.94</td>
<td>4.00</td>
<td>3.90</td>
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</tbody>
</table>
Appendix M

Human Subjects Institutional Review Board Approval
From Western Michigan University
Date: August 7, 2008

To: Alan Hovestadt, Principal Investigator
Mary Ball, Student Investigator for dissertation

From: Amy Naugle, Ph.D., Chair

Re: HSIRB Project Number: 08-06-19

This letter will serve as confirmation that your research project entitled "The Abortion Attitudes of Counselor, Social Work, and Nursing Trainees" has been approved under the expedited category of review by the Human Subjects Institutional Review Board. The conditions and duration of this approval are specified in the Policies of Western Michigan University. You may now begin to implement the research as described in the application.

Please note that you may only conduct this research exactly in the form it was approved. You must seek specific board approval for any changes in this project. You must also seek reapproval if the project extends beyond the termination date noted below. In addition if there are any unanticipated adverse reactions or unanticipated events associated with the conduct of this research, you should immediately suspend the project and contact the Chair of the HSIRB for consultation.

The Board wishes you success in the pursuit of your research goals.

Approval Termination: August 7, 2009
Appendix N

Human Subjects Institutional Review Board Approval
From John Carroll University
NOTICE OF APPROVAL

Responsible Investigator: Mary Ball, MS, MA
Department: University Counseling Center
IRB Log Number: 2009008
Title: The Abortion Attitudes of Counseling, Social Work, and Nursing Trainees

Approval Date: 9/2/2008
Continuing Review Notice Due: 8/2/2009
Expiration Date: 9/1/2009

Thank you for submitting the IRB Application for Human Subject Research for your project. Your application has been reviewed and approved under Expedited Category 7.

Please adhere to the following IRB policies as appropriate:

- If changes are made in the method of handling human subjects, please inform the IRB Administrator immediately. Changes may not be initiated prior to receiving IRB approval.
- Any adverse reactions/incidents should be reported immediately to your department chair/supervisor and the IRB Administrator.
- IRB approval is given for not more than 12 months. If your project will be active for longer than one year, please submit a memo to the IRB chair requesting a continuation prior to the end of the 12 month period along with current consent forms and research instruments.
- Consent forms should be kept for a period of three years after the end of the project.

You can access the IRB web site at http://www.jcu.edu/research/irb for additional information. If you have questions, please contact:

Elizabeth Parsons, IRB Administrator
(216) 397-1527 or eparsons@jcu.edu

Dr. Elizabeth Swenson, IRB Chair
(216) 397-4434 or swenson@jcu.edu
Appendix O

Human Subjects Institutional Review Board Approval
From Ursuline College
TO: Mary Ball, M.S., M.A.

RE: Project # 6-08/09

DATE: November 13, 2008

The Ursuline College Human Subjects Committee has reviewed your proposal, consent forms and request to conduct research on our campus.

Your project has been approved as submitted and you are authorized to contact our students until 5/4/2009. At the end of that time, if your project is not complete, you must submit a request for an extension in order to continue the project beyond that date.

This approval for use of human subjects is contingent upon you following the research plan presented in your submitted proposal, and using the consent forms as provided. You are not permitted to undertake any actions involving human subjects that are not specified in your proposal. If you must make changes, resubmit those changes for review by this committee.

If any unexpected or adverse outcomes should develop in the course of your research with human subjects, you must suspend the project temporarily, and notify this committee immediately.

Please complete and submit the attached Certificates of Compliance at the end of your research. Thank you very much for your cooperation, and good luck with your research project.

Sincerely,

Cecile Brennan, Ph.D.
Assistant Professor of Art Therapy & Counseling
Chair, Human Subjects Committee
cc: HSC files
Appendix P

Human Subjects Institutional Review Board Approval
From Cleveland State University
Memorandum

To: John Roper
John Carroll University Counseling Center

From: Blake Hodges
Institutional Review Board
Office of Sponsored Programs & Research

Date: 22 May 2009
Re: Results of IRB Review of your project number: 38322-ROP-HS
Co-Investigator: Mary Ball
Entitled: The abortion attitudes of counselors, social workers, and nurses in training

The IRB has reviewed and approved your application for the above named project, under the category noted below. Approval for use of human subjects in this research is for one year from the approval date listed below. If your study extends beyond this approval period, please contact this office to initiate an annual review of the project. This approval expires at 11:59 pm on 10/16/09.

By accepting this decision, you agree to notify the IRB of: (1) any additions to or changes in procedures for your study that modify the subjects' risk in any way; and (2) any events that affect subjects' safety or well-being.

Thank you for your efforts to maintain compliance with the federal regulations for the protection of human subjects.

Approval Category: Exempt Status: Project is exempt from further review under 45 CFR 46.101
B2 Expedited Review: Project approved, Expedited

cc: Project file
Appendix Q

Raffle Entry
AMAZON.COM GIFT CARD DRAWING

EMAIL ADDRESS: ___________________________

ACADEMIC PROGRAM OR MAJOR: ________________
Appendix R

Participant Recruitment Script
PARTICIPANT RECRUITMENT SCRIPT:

You are invited to participate in a research project designed to investigate the abortion attitudes of counselor, social work, and nursing students. The title of this study is, "The Abortion Attitudes of Counseling, Social Work, and Nursing Trainees." This study is my dissertation project.

If you choose to participate, you will fill out questionnaires related to your abortion attitudes. You are free to skip any question that you do not want to respond to or to stop your participation in the study at any time without any penalty. It will take about 15 minutes to fill out. Your name will not appear on any form; instead, a research code will be used.

Your participation in this study will not affect your status in your program in any way. Your name will not be on the questionnaires or demographic information forms. I will use a code number instead. Your faculty will not see the results of your questionnaires or know whether you participated or not. Your information will be identified with a number so that I will not know your name. The results of this study will be presented in aggregate form, and will not identify individuals.

If you choose to participate, please complete the scales and put them in the envelope provided by me at the front of the classroom. If you choose not to participate in this study, please put the uncompleted scales in the same envelope as the completed scales.

Participants will have the opportunity to enter a drawing to win a $50 Amazon.com gift card. One gift card will be awarded for each group of participants: the nursing group, the social work group, and the counseling group. You have been provided
a slip of paper with your packet of data collection instruments that will serve as your
drawing entry. If you choose to enter the drawing, write only your email address and your
academic program on the entry slip, and place it in another envelope provided by me that
is separate from the other envelopes provided. After all data for this study are collected,
one entry slip will be drawn for each group (nursing, social work, counseling) and the
winners will be contacted by email so that you can provide a surface mail address to
which the Amazon.com certificate can be mailed.

I will now hand out two copies of a consent form to each person in class. Please
read the consent form carefully and sign it. When you turn in your data packets, place one
copy of the consent form in the envelope provided at the front of the classroom. Keep one
copy of the consent form for your records.

I will also hand out the data packets, which if you choose to participate, are to be
completed after you read and sign the consent form.

Are there any questions? Thank you for your time. My contact information is
included in the consent form.
Appendix S

Permission to Use the Reasoning About Abortion Questionnaire
Dear Ms. Ball:

In response to your request, please consider this letter formal permission to utilize and reprint the questionnaire published in my article, "Validation of a scale to measure reasoning about abortion. Journal of Counseling Psychology, 1990, 37, 107-112."

I wish you all the best in your career.

Sincerely,

Nancy Parsons, Ph.D.

Licensed Psychologist

License #: PY 4793

Comprehensive MedPsych Systems, Inc.

3/26/2010

Mary Ball
Hello Mary,

Thanks for letting me know where Nancy and Geoffiey are these days. It has been many years since we were in touch. My last contact with them was in 1995.

I have attached the questionnaire to this reply. Hopefully, it will reach you this time.

Over the last 15 years, I received many requests for the RAQ. Two authors with book contracts requested permission to use these materials. I have no idea if there is anything for you in either of these sources (most likely, you already know about them), but here are the references (with projected publication dates):


Herb Richards