Sexuality among older adults: A comparative study of perceptions of undergraduate nursing and social work students.

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SEXUALITY AMONG OLDER ADULTS:

A COMPARATIVE STUDY OF PERCEPTIONS OF UNDERGRADUATE

NURSING AND SOCIAL WORK STUDENTS

by

Kelly-Ann Spezowka, B.S.W.

A Thesis
submitted to the
Faculty of Graduate Studies and Research
through the School of Social Work
in Partial Fulfilment of the requirements for the
Degree of Master of Social Work
at the University of Windsor

Windsor, Ontario, Canada

1991
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Dedication

This thesis is dedicated to those, young and old, who challenge societal expectations in their efforts for personal sexual health.
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ABSTRACT

This exploratory-descriptive study compared the perceptions of sexuality among older adults of University of Windsor undergraduate nursing and social work students. Questionnaires were administered to forty nursing students and fifty-six social work students (N=96). The sample responded to questions in the areas of geriatric knowledge and attitude (perceptions), socio-demographics, gerontology education history, geriatric employment and volunteer experiences, and interactions with elderly family members and friends.

Major findings revealed that: 1) the socio-demographic profile of the sample was similar to those in other studies reported in the literature; 2) the sample had limited knowledge about sexuality among older adults; 3) the sample had similar permissive attitudes toward sexuality among older adults; 4) in the sample, there was positive relationship between having higher knowledge about sexuality among the elderly and having permissive attitudes about sexuality among the elderly; 5) the sample had fewer relationships with higher knowledge than permissive attitude; 6) the sample had more relationships with permissive attitude than higher knowledge; 7) the social work students had more relationships with higher knowledge than the nursing students; and, 8) the nursing students had more relationships with permissive attitude than social work students.
Primarily socio-demographic data, gerontological education (courses), elderly family, and elderly friends provided significant relationships with perceptions of sexuality among older adults in the sample.

It is recommended that further research on factors which influence perceptions of sexuality among older adults be conducted. Further, public awareness programs are also recommended to educate the general public, helping professionals, policy-makers, significant others (family and friends), and older adults themselves about sexuality as one ages.
ACKNOWLEDGEMENTS

Many individuals contributed to the completion of this research project. First and foremost, I would like to thank my thesis advisor, Dr. M. J. Holosko. His knowledge and humour guided me through this sometime seemingly insurmountable research process. I would also like to thank my two readers, Dr. Eve Smith, School of Social Work and Dr. Janet Rosenbaum, School of Nursing, for their assistance in the preparation of this document.

My appreciation also goes out to all those nursing and social work students who completed my research questionnaire. Their input into this project was essential. A thank you goes to Robyn Nease for assisting me with the statistical analysis.

I would also like to thank family, friends, and colleagues who supported me in many different ways during this endeavour. I would particularly like to thank two other important people. I wish to thank my brother Patrick, for providing countless favours during this research process - thanks Spike! And, to my partner Edward Hickey. His encouragement and yielding sacrifices made this project achievable.

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INTRODUCTION

The increasing number of older people in the Canadian population will create inordinate demands on social and health care services. The United Nations categorizes demographic data in various countries by the proportion of populations aged 65 years old and over. It defines a nation as "young" if it has less than 4% of its population aged 65 and over; "mature" if it has between 4% and 7% of its population 65 and over; and, "aged" if it has more than 7% of its population 65 and over (Novak, 1988). In this regard, Canada has aged gradually through the first part of this century and is now considered an old nation (by UN standards) since 9.7% of its population was 65 years or older in 1981 (Statistics Canada, 1984). Further, it is estimated that by 1991, 11% of Canada's population will be 65 years or older, and, by the year 2021, Canada's population aged 65 and over will make up between 14% and 17% of the population (Health and Welfare Canada, 1983).

In 1981, the National Advisory Council on Aging published Priorities for Action which cited the most urgent problems facing elderly people in Canada: 1) public education and learning opportunities; 2) health and social services; 3) retirement; and, 4) income. The following are some of the recommendations identified to meet these concerns: 1) begin a public information program to replace myths about old age with facts and to present a positive view of older people to
professionals and aged; 2) health care and social work students should learn the facts about aging and how to care for older people's unique needs; 3) professionals should learn how to communicate with older people; and, 4) governments should conduct inventories of the numbers of people working in jobs related to aging and projections of future job openings (p. 4 to p. 7).

Since people are living longer, they are interested in the extension not only of the duration of life but also their quality of life. There are a variety of factors that bring about quality of life. These may include financial security, good health, supportive family and friends, and freedom of expression, all of which provide the basis of personal independence. Some of these are identified as more important than others during different periods of one's life. The recognition for the need of older adults to continue sexual expression requires a liberation from traditional restrictive attitudes prevalent in North American society.

Sexual expression is generally considered in the overall context of successful aging (Solnick, 1978). As older adults have more varied lifestyles and personal demands for fulfilment, there is an expectation that interpersonal issues including intimacy and sexuality will also be acknowledged. Besides basic physiological information, the elderly also need supportive counselling to increase their self-esteem and understanding for their special needs (if they exist),
desires, and attitudes. Many people have historically attached strong emotions to the norms of sexual expression. Many of today's older adults were sexually socialized with influences from the Victorian era. During this period, it was expected that men and women be rigid and have control over all sexual impulses and activity - a doctrine prescribed and reinforced by many prevailing religious institutions.

However, events which transpired during the 1960s such as medical advances, new theoretical insights, and research studies have provided a more liberalizing of attitudes toward sexuality which have greatly influenced some of the sexual values in society for both young and old persons. The most profound effect in this change occurred during the 1960s and the 1970s, as the young people in North America became more outspoken about politics and sex which significantly impacted societal sexual mores, attitudes, and behaviours. As these 'baby boomers' are aging, traditional sexual values are to be replaced with new attitudes about continued sexual expression.

It has been predicted that sexual counselling of the aged will become more common as the perception of total health (which incorporates one's sexual feelings, behaviours, attitudes and knowledge) has been adopted by an increasing number of health care policy-makers (Mims & Swenson, 1980). As such, there will be increased pressure for helping professionals in health and social services to become better trained in the area of sexuality of older adults in order to
adequately educate and dispel myths (Hays, 1984), and also encourage open attitudes that will allow for appropriate interventions. In this context, both nurses and social workers play an important role in educating and dispelling myths in health care settings most often encountered by many older adults. Further, both the nursing and social work professions can play an important role in helping break down the existing social and psychological barriers preventing sexual expression among older people, as these professions are involved in everything from providing direct services to influencing or shaping public policy. They are confronted with a variety of settings in which they can educate the public to understand, accept, and support the sexual interests and needs of the elderly (Hobson, 1984).

Statement of Purpose

Despite the increasing focus on human sexuality over the past 15 years, until recently, minimal consideration has been given to the subject of sexuality among the elderly. As the elderly population continues to increase in rapid proportions, further knowledge about sexuality and issues about it is becoming a necessity for professionals working in this field. Specific areas of need for knowledge include: sexual adjustment in illness and with disability; sexual self-image as the body changes; family adjustment to sexual expression; policy and procedures in institutions which address sexuality
issues among aged residents. A review of the related
literature in this field indicates that studies have primarily
focused on assessing the impact education has had on knowledge
and attitudes of those working with the elderly. Despite some
gains made in this area, professionals working in this field
continue to have misconceptions, misinformation, and
stereotypical values regarding sexuality among the elderly
(Mims & Swenson, 1980).

The purpose of exploratory research is to clarify
concepts for testing for further research. The purpose of
this exploratory-descriptive study is to develop hypotheses
about variables which influence how undergraduate nursing and
social work students perceive sexuality among older adults.
More specifically, this study will focus on the premise that
education, employment and volunteer experiences, and
interactions between elderly family members and elderly
friends affect perceptions about sexuality among the aged.
The major assumption of this study is that the more
interaction people have with the elderly, the more knowledge
and more favourably inclined attitudes, and permissiveness
they will have toward them. The implications of this study
are directed toward professionals who have historically cared
for the elderly, and as such, have the opportunity to
facilitate positive changes in their sexual life.
Rationale for the study. There are a number of reasons why this subject is appropriate for study. First, this is a timely issue in that recognition of the needs of the elderly is increasing as their population is rapidly increasing. Second, most research in the area of sexuality of the elderly before the 1980s has focused solely on physical and biological aspects of sexuality. It is only recently that empirical research has addressed the psychosocial aspects of sexual expression among the elderly. Finally, services and programs provided by nurses and social workers to assist older adults with their sexuality are non-existent; yet the demand to recognize this need among older adults has been predicted to increase in the near future.
Concepts

Older adults are those persons 65 years or older.

Sexuality is the expression of thoughts or feelings in an intimate manner which involves: 1) biological aspects of gender, sexual intercourse, and reproduction; and, 2) psychosocial aspects which include self-concept, self-esteem, body image, gender identity, or self-identity as a woman or a man, sexual preference for partners and gender-related social roles (Kastenbaum, 1979).

Perceptions originate from attitudes and knowledge that predispose an individual to act in either a positive or negative way toward sexuality among adults over 65 years of age.

Nursing students include individuals enrolled full-time and part-time in a four year baccalaureate honours university program (BScN).

Social work students include individuals enrolled full-time and part-time in a four year baccalaureate honours university program (BSW).
REVIEW OF THE LITERATURE

This review focuses on empirical investigations specifically related to the identification of how academic, professional, and personal interactions with older adults influence perceptions that nursing and social work students have toward sexuality among older adults. It is organized according to: 1) nature of sexuality among older adults; 2) perceptions of sexuality among older adults; and, 3) factors which influence perceptions of sexuality among older adults.

I The Nature of Sexuality among Older Adults

In Western society, sexuality in older adults is generally dominated by irrational fears, stereotypical thinking, and a lack of knowledge (Cameron, 1970; Comfort, 1976; Golde & Kogan, 1959). More specifically, Calderone (1976) and White (1982) have stated that many sexual problems among older adults are a result of these fears and ignorance. The notion that sexuality diminishes in older persons is fuelled by the stereotype that human needs and interests are somehow lost beyond a certain age. For instance, Pomata (1985) identified significant differences in diagnosis and treatment planning for patients of differing age who had sexual problems among psychologists and physicians. In this regard, older patients were typically prescribed a medical diagnosis and treatment (medication), while younger patients were typically perceived as having problems of psychological
origin, thus requiring psychotherapy as treatment.

This view is deemed to be a biological-reductionist view of human development as it generally devalues the psychosocial processes integral to human development of aging (Marson, 1983). However, the life-span theory of sexuality (Huyck, 1981) embraces both the biological and psychosocial changes of aging. When one considers the nature of sexuality within this theoretical framework, a variety of multi-faceted and interrelated concepts are revealed.

A. Biological Aspects

The literature pre-70s and post-70s revealed a mix of opinions about the physical abilities of sexual expression in old age. However, Masters and Johnson's (1966) identification of the sexual response cycle among older adults has been most widely accepted by medical professionals and social scientists. Figure 1 illustrates the distinct physical effects of aging on the sexual response capabilities of older males and females as identified by Masters and Johnson (1966).
Figure 1. Effects of aging on sexual response cycle (Masters & Johnson, 1966)

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<tr>
<th>Female</th>
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<td>1. Excitement Phase</td>
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<tr>
<td>- lubrication is slower</td>
<td>-erection slower; erectile firmness decreased</td>
<td></td>
</tr>
<tr>
<td>- lubrication amount is decreased</td>
<td>-increased need for direct genital stimulation</td>
<td></td>
</tr>
<tr>
<td>- clitoris may be smaller</td>
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2. Plateau Phase

| - less increase in size of vaginal canal | -decreased in Cowper's gland secretion |
| - reduced uterine elevation | -ability to maintain erection before ejaculation is increased |
| | -decreased testicular elevation |

3. Orgasmic Phase

| - shortened orgasmic phase possible painful spasm of uterus at orgasm due to decreased estrogen | -decreased need to ejaculate |
| | -decreased ejaculatory inevitability |
| | -decreased force and volume of ejaculate |

4. Resolution Phase

| - rapid deengorgement | - rapid deengorgement |
| | - longer refractory period |
In summary, there appears to be no biological limitation to sexuality capacity in the aging female. However, in the aging male, there are some substantial changes in erectile capacity, delayed ejaculation, and less forceful ejaculation. Further, Masters and Johnson (1966) contended that with the exception of specific existing diseases, physiologic changes do not "ring a mandatory curtain" (p. 54) on sexuality in either aging men or aging women.

Earlier research about sex and aging reported lower levels of sexual activity, sharp declining levels, or little to no sexual activity or interest among most of the older adults studied (Kinsey, Pomeroy, & Martin, 1948, 1953; Masters & Johnson, 1966; Pfeiffer & Davies, 1972; Pfeiffer, Verwoerdt, & Wang, 1968, 1969). Hobson (1984) indicated that these studies were guided by the self-fulfilling prophecy that no or minimal sexual activity was expected and consequently was found. The three most widely cited studies on sexuality of older adults are the Duke University Longitudinal Study (Pfeiffer et al., 1969), the work of Kinsey (1948, 1953), and Masters and Johnson (1966). Although deemed seminal at the time they were published, these studies have been criticized largely because together their findings are based on only 300 subjects over the age of 60. Also, a number of conceptual and methodological problems inherent in these investigations (Botwinick, 1984; George & Weiler, 1981; Starr & Weiner, 1981) generally limit their contribution to generalize empirical
knowledge about sex and aging. By contrast, a number of recent North American studies have revealed extensive sexual activity and interest for those over 60 years of age.

For instance, Nichols and Newman (1980) found that in their sample of adults 60 years or older, over 50% were still sexually active and reported no significant decline in activity below age 75. However, in adults 75 years or older, decline was as high as 75% due primarily to the inaccessibility of a partner and the health status of that partner. In the extensive Consumer Union Survey, Brecher (1984) reported that over 50% of the unmarried women and over 75% of the unmarried men in their 60s and 70s (from a sample of 2,622 polled in a national U.S. magazine) were sexually active. Similarly, 75% of the respondents of the Starr-Weiner survey (1981) indicated that sex feels as good or better, then it did when they were younger (36% said better). [This report included 518 females and 282 males between the ages of 60 and 91 from senior centres in four regions of the U.S. to cover a wide range of social, economic, and ethnic backgrounds.]

In a study related to sexual interest contrasted to levels of sexual performance, indicated that generally among women, only about one-third reported continuing sexual interest and only about one-fifth reported ongoing sexual activity (Pfeiffer et al., 1969). More specifically, when these women were tracked for 10 years, there was virtually no further decline from these proportions. These same
researchers indicated that four out of five men who remained in good health in old age continued to be sexually interested, although the number of those who continued to engage in sexual intercourse decreased with advancing age. More specifically, about two out of three men in their early 60s were still sexually active; only one in five were still active in their 80s. Further, both men and women agreed that when intercourse ceased, it was usually due to the male's refusal or inability to continue, rather than the female's lack of interest (Pfeiffer et al., 1968).

It has also been shown that those who have had higher levels of sexual interest in early and middle life continued to have the same in later life (Pfeiffer & Davies, 1972; Masters & Johnson, 1966). In this regard, longitudinal research has indicated that not only is continued sexual activity possible or even probable, but for some, there is an increase in sexual expression (Solnick, 1978). Thus, many older adults can continue sexual activity if they can adapt to the physical changes of aging, if they are not physically ill, and/or if sex was an important aspect of their lives in the past (Pfeiffer & Davies, 1972; Masters & Johnson, 1966). Further, in this regard, Haerberle (1978) reported that sexual activity with a partner positively contributes to the overall maintenance of good health in old age.

Finally, although culture imposes some restrictions on elderly men, their sexuality is primarily limited by physical
factors. By contrast, among elderly females, where physical abilities are more present than in males, they are primarily limited from sexual expression by cultural factors. The identification of this distinction also seems necessary when one considers the psychosocial aspects of sexuality among the aged (Sviland, 1974).

B. Psychosocial Aspects

Societal stereotypes appear to influence sexual expression among older adults more than the biological aspects. The notion that the elderly have nothing to contribute to society because they are no longer young (Oaks, Melchiode, & Ficher, 1976) also has an inherent impact on the importance of interpersonal and individual aspects related to sexuality among older adults (White & Catania, 1982). In this regard, empirical literature consistently reveals that society in general exhibits prevailing negative attitudes toward elderly who display interest in sexual activity, and consequently, these attitudes result in a series of problems for the elderly (Elias & Elias, 1977; Decker, 1980; Delora, Warren & Ellison, 1981; Victor, 1980). A serious result of these negative attitudes is their sexual role loss, which may cause clinical depression, which in turn may lead to further psychological manifestations such as suicide (Marson, 1983; Sviland, 1974).

A woman's social worth and socialized values have been
always defined in terms of her reproductive capacities. After childbearing years she is assumed to decline in physical attractiveness, sexual desirability, and value to society (Mims & Swenson, 1980). Menopause is, therefore, feared by many women because it signals role loss. Men however, experience subtle emotional and attitudinal changes related to energy levels, career success, and family stressors. Thus, for both men and women, sexual responsiveness may decrease, and this change may in turn lead to depression, behavioural changes, and exacerbated marital problems (Mims & Swenson, 1980).

Married men (as a group) do not significantly differ from unmarried men (as a group) in regard to their degree of sexual activity (Pfeiffer & Busse, 1969). On the other hand, very few unmarried women reported any consistent sexual activity in their later years. Again, the unavailability of a societally sanctioned sexual partner has been suggested to be the principal determinant for the discontinuation of sexual activity on the part of many women (Pfeiffer & Busse, 1969). Further, for both women and men between the ages of 65 and 79, it is projected that for every 100 males, there will be 130 females by 1991, and this figure will stabilize into the year 2001. As well, for those 80 years and older, it is anticipated that there will be 200 females for every 100 males in 1991, and this ratio will increase to 220 females by 2001 (Health and Welfare Canada, 1983).
As well, older females are not only sexually restricted by the availability of their male counterparts, but they are also influenced by the negative sexual attitudes existing in health care institutions that often become their homes. For instance, Wasow and Loeb (1981) interviewed 27 male nursing home residents, 35 female nursing home residents, and 17 staff members, only one of whom was male. The attitudes were categorized as permissive, semi-restrictive, or restrictive. As expected, the highest proportion of female residents (47%) was considered to have a restrictive attitude, and male residents were almost evenly divided among the three attitudinal categories. Further, 61% of the sample of residents expressed a lack of self-perception of physical attractiveness, and reported that a lack of privacy was a primary factor in restriction of sexual expression (Kaas, 1978).

II Nursing and Social Work Perceptions of Sexuality among Older Adults

A. Knowledge and Attitudes

Although there is no continuity in the literature concerning perceptions of sexuality among older adults, there have been substantially more empirical studies completed on this topic in the field of nursing. Therefore, all relevant literature has been dichotomized accordingly and separated by the nursing and social work domains as deemed appropriate by
this researcher.

The literature has verified that perceptions can dictate behaviours. Decker (1980), Ludeman (1981), and Silny (1980) reviewed the literature concerning attitudes toward the aging and sexuality. All of these sources reported that both young and old samples regard sexuality for the aging as unlikely and/or disgusting. More specifically, over 30 years of research on college students' attitudes toward the elderly has summarily revealed the following:

1) negative attitudes and stereotypes with respect to old age appear to be widespread among college students (Kogan, 1961; Palmore, 1980; Tauckman & Lorge, 1953);

2) certain life experiences appear to positively influence college students' attitudes toward the elderly (Crockett, Cress & Osterkamp, 1979; Naus, 1973; Sherman, Gold & Sherman, 1978); and,

3) certain life experiences appear to negatively influence college students' attitudes toward the elderly (Auerbach & Levenson, 1977; Rosencranz & McNevin, 1969).

Although young (18-25) and middle aged (40-55) generations have been found to generally maintain a sexless perception of the elderly (Cameron, 1970; Bond & Tramer, 1983), university students usually consider sex unimportant for the elderly when compared to the general population at large (Golde & Kogan, 1959; La Torre & Kear, 1977; Croft, 1982). For instance, in one study, young college students
barely believed in the existence of sex after 40 (Pocs, Godow, Tolone, & Walsh, 1977). When asked to project about the sexual activities of their parents, these students came up with performance frequencies lower than what Kinsey et al., found for their parents' age group many decades earlier. Similarly, Spence et al., (1968) surveyed attitudes of first and fourth year medical students toward the elderly. These students determined old age to begin at 40-50 years of age, but distinguished that one began to feel old (psychological old age) before one began to experience physiological aging (chronological old age). Further, not only did 'sexual old age' precede 'chronological old age', but sexual old age for women was believed to occur 10-20 years sooner than for men.

The interrelationship between sexual knowledge and attitudes has not been well studied or documented. Studies that have been conducted with university students reveal that those with a very low factual knowledge were much more restrictive than those with high factual knowledge (Wasow & Loeb, 1975). On the other hand, White (1982a) found the frequency of sexual activity among nursing home residents, as reported by both residents and staff, correlated positively with staff attitudes. In addition, White (1982a) reported that staff with a greater knowledge of sexuality and aging tended to have more positive attitudes toward the elderly. According to LaTorre and Kear (1977), it is necessary to change attitudes of people who care for the aged in order that
they may better understand and accept individual sexual problems and concerns. Furthermore, biases that may exist in professional orientation may also affect one's personal perceptions, which may create biased diagnosis and treatments (Pomata, 1985). Since both nurses and social workers are sexual beings, they too are influenced by their personal experiences and socially-learned beliefs about sexuality among older adults.

**Nursing students.** It has been concluded that in general, nurses have not been equipped by their training to meet elderly patients' informational and counselling needs (Macleod, 1980). Nursing research carried out in the USA in the 1970s has shown that nursing students tend to be less knowledgeable about sexuality, and also more traditional in their attitudes towards the elderly than other groups of university students (Payne, 1976). For example, three case studies were examined by Pease (1974) in which young female nursing students received overt sexual advances from elderly male patients. It was determined that 'stereotypical thinking' among these nurses was significant. More specifically, what was viewed as a 'disgusting' advance by an aged male would be considered a complimentary advance by a young male. Solnick (1978) stated that nursing students with very low factual sexual knowledge were much more restrictive than those with higher factual sexual knowledge. However, gynaecological nurses who were supposedly expected to be
better equipped than other nurses in this area, lack the knowledge, and the social and communication skills to discuss sexuality issues with their patients (Webb, 1988). Similarly, it is also professionally expected that social workers possess effective communication skills. Unfortunately, the professional inclination to utilize such skills among the elderly with sexual problems appears to be lacking.

Social work students. There appears to be a shortage of trained social workers capable and willing to provide sexual guidance to the elderly. As has been indicated, a lack of knowledge, and/or negative attitudes can lead to avoidance or a rationale that sex is unneeded or deviant (Pease, 1974); and, this in part, may explain the shortage.

In a study conducted at Boston University Medical Center by Ende et al. (1984), a group of physicians and social workers examined physician behaviours toward sexual history-taking in all age groups in a primary medical clinic. This study revealed that when sexual history-taking was mandated across the age spectrum, 82% of the time this information was appropriately elicited. For the 18% from which the information was not obtained, 67% of these patients were in the over-65 age bracket. Further, when asked whether sexual history-taking was considered appropriate, 91% of the over-65 patient population replied affirmatively, while only 9% replied negatively. There was also no significant difference among age groups regarding feelings of discomfort related to
discussion of the subject (Hays, 1984). The results of this study validated the notion that social workers working with other health care professionals are indeed affected by their colleagues' attitudes and behaviours regarding sexuality with older adults.

Further, Sigmund Freud introduced the libido theory, claiming that sexuality is a major force in human development from birth to death. However, sexual problems among the elderly (those problems specifically dealing with the psychosocial aspects) were not explored by Freud as he maintained that any therapy, particularly psychotherapy, for the elderly population was viewed as 'only supportive', 'having no systematic theory', or 'not worth a long-term investment' (Butler & Lewis, 1982; Cohen, 1977; Mutschler, 1971). Consequently, since the social work profession incorporated Freud's theories, counselling services to the elderly with sexual problems have been non-existent.

B. The Mims-Swenson Model

There are a variety of practice models that have been developed to assist health care professionals in their work with older people. The Mims-Swenson Sexual Health Model was developed in order to provide a framework for self-assessment, for professional assessment, for intervention, and for education. This model, although derived for nursing practice, is applicable and generalizable to both nursing and social
work professions. Because of the frontline nature of both professions, nurses and social workers have ample opportunities to assist older adults in developing, maintaining, or coping with sexual responses.

Mims and Swenson (1980) outlined certain sexual growth expectations and disturbances for the stages of sexual development in late adulthood (above 55 years). These expectations included: the development of new ways to achieve sexual satisfaction after loss or illness of partner; understanding and accepting own and others sexual needs; and, accepting a slowed response cycle. The disturbances included: withdrawal, bitterness, guilt; lack of self-control leading to voyeurism, exhibitionism, molesting; and, conformity to cultural stereotypes regarding sexuality and aging. Each profession, however, requires varying levels of skill to assist older adults with sexual growth expectations and disturbances. The Model identifies those professional aptitudes essential for each level of skill.
As indicated in Figure 2, the life experience level includes both destructive and helpful behaviours that are products of life experiences. Since many individuals internalize negative attitudes and behaviours about sexuality at a very early age, awareness is the first step in being able to learn, to practice, and to teach. In the intermediate level, many sexual concerns are alleviated simply by giving
the older adult permission to engage or not engage in various sexual behaviours. Thus, such permission-giving would be detrimental without the ability to provide accurate information. The advanced level includes suggestion giving, therapy, and educational programs. Specifically, sexuality programs should focus on building awareness, increasing knowledge, and acknowledgment of feelings, biases, and attitudes of self and others.

As one might assume, the model is helpful in defining and communicating various levels of expertise based on knowledge, attitudes, and transmittal skills in respective professional practices. Thus, when a helping professional is able to balance cognitive awareness with an awareness of personal values and attitudes, intervention in the area of sexuality will become easier.

III Factors Influencing Nursing and Social Work Perceptions of Sexuality among Older Adults

Identifying those factors which can alter one's perceptions of sexuality among older adults is an important process for training future health care professionals, such as nurses and social workers, to assist older adults with this important quality of life issue. Gerontological education and other types of interaction with the elderly have been identified in the literature as factors which can influence perceptions of sexuality among older adults.
A. Education

The importance of human sexuality can only be fully understood by relating it to the total adjustment of the individual in his/her family and society (a holistic and humanistic perspective). Recognizing this perspective and learning how to meaningfully incorporate it becomes the task and scope of any successful sex education program. Psychological theory and social learning theory present frameworks for modifying attitudes, knowledge, and behaviour regarding sexuality.

Studies by White and Catania (1982), Hammond (1979), Santo Pietro (1980), Mandel (1983), and Roy (1983) have revealed that increased knowledge about sexuality and aging through education tends to result in more positive attitudes in nursing home staff, gerontology students, nursing home residents, and their families. Further, sex researchers and educators have pointed out the positive contributions of sex education to healthy sexual attitudes and behaviour (White & Catania, 1982). The Mims-Swenson model (previously presented p. 21 to p. 24) may be used as a tool for self-evaluation, and also in educational and training programs. More specifically, effective education in sexual health requires experiences and preparation in the cognitive, affective, and transmittal components, all of which are interrelated. The cognitive component focuses on sexual anatomy, physiology, psychosexual development, psychosocial behaviour, sexual variations, and
the effects of drugs, disease, stress, and physical handicaps on sexual behaviour. The affective component is dependent on the opportunity to interact with others regarding feelings and attitudes about sexual behaviours. Finally, the transmittal component relies heavily on the assessment, intervention, evaluation, and communication skills, of which the level of competence depends on former communication skills and the integration of the cognitive and affective components of sexuality.

Although professional schools are attempting to integrate sexuality into related curriculum offerings (required or elective), there are still many professionals who have not had proper educational experiences to prepare them to include sexuality as a legitimate concern among the elderly (Mims & Swenson, 1980). More specifically, a study of a continuing education program of 93 multi-disciplinary health professionals in the U.S.A., including 52 nurses, indicated that only 35% had experienced any type of sex education, and only 6% had sex education past the high school level (Mims & Swenson, 1980). In 1972, Woods' study of the emotional responses of 113 graduating medical students at the University of Southern California as to what they considered the impact of their education on their existing sexual attitudes and knowledge demonstrated that the subjects felt grossly inadequate, both intellectually and emotionally, to deal with the sexual problems commonly encountered by physicians in
clinical practice. Further, over half felt that their medical education had failed to significantly increase their understanding of human sexuality. The most striking finding concerned the belief that their own sexual conflicts and anxieties paralysed their sense of clinical adequacy. Since older people tend to first advise their doctors of any type of health problem, this was most alarming.

Gunter (1971) reported that after taking a sequence of gerontology courses, students' negative stereotypes of the elderly decreased. Similar findings have been reported by Heller and Walsh (1976), Kayser and Minnegerode (1975), Green (1981), King and Cobb (1983), Olsen (1982), and Robb (1979). In this regard, Gunderson and McCary (1980), Taylor (1982), and White and Catania (1982) concluded that sexual attitudes tend to move toward a more liberal and permissive perspective after having been exposed to a human sexuality course. The type of education and continuing education were variables found to be significantly related to knowledge and/or attitudes of sexuality of older adults (Glass, Mustian, & Carter, 1986).

Course offerings. Although most nurses fare better in education and training than social workers, there are empirical findings which reveal the differing impacts of education on sexuality in the elderly on different types of nurses. Specifically, it has been determined by some that most nurses even in their nursing degree programs, have not
had the educational opportunities to acquire the knowledge and skills necessary to provide adequate health care for older patients with sexual concerns. For example, Mims and Swenson (1980) reported that nursing schools only give token support to including sexuality in the curriculum. Part of the solution involves education to effectively change attitudes and to create policies to rectify this situation (Marson, 1983). Further, schools of nursing need to assume the responsibility for educating students about the sexuality of older people by including courses on human sexuality in their basic curriculum, by integrating health problems affecting sexuality into medical-surgical nursing courses, and by adding courses on aging (Byers, 1983; Tobiason, Knudsen, Stengel, & Giss, 1979).

Studies of comparisons of groups of nurses have suggested that more university educated nursing students have more accepting attitudes toward sexuality, and are more liberal in their attitudes toward sexuality than are college educated nurses. Whether this is an age and/or education effect is not clear (Lief & Payne, 1975; Damrosche, 1981). Studies in which groups of nurses have attended a workshop or received specific curriculum input about sexuality, have shown that it is possible to increase their knowledge, and that increased knowledge leads to more liberal attitudes toward sexuality (Santo Pietro, 1980; Mandel, 1983; Roy, 1983; West, 1983). Furthermore, Galbraith and Su*cie (1987) have made the
recommendation that nursing students should complete the gerontological content curriculum before they begin their clinical experience that involves the elderly. Thus, by working from a factual base of knowledge and information, nursing students can enter a clinical experience with a better understanding of the elderly that should result in a meaningful interaction on their behalf.

Conversely, other studies have identified that there is a negative correlation between knowledge and education. That is, it appears that the less knowledge the provider possessed about the sexuality of the elderly, the more formal education s/he had received (White & Catania, 1982). More restrictive attitudes were also associated with a more advanced level of general education. These findings contradict the studies by McContha and Stevenson (1982), Wasow and Loeb (1975), and White (1982a).

As stated earlier, the majority of social workers and social work educators have traditionally exhibited a pronounced reluctance to deal with, work with, or teach content that is specific to the aged. Gradually, the development of specialized curricula in geriatric social work at the undergraduate, master, and doctoral levels of study has begun the preparation process of social work practitioners, educators, and researchers to address the specialized needs of the aged (Holosko & Feit, 1991; Nelson, 1988). Certain trends have been identified regarding sex related issues and problems
of older adults in social work education and practice. These include: the development of concentration in social work practice with sex related problems to broaden the professional roles available for those social workers willing to address sexual issues; the development of effective interventive strategies for clients with sexuality problems; and, application of future research in the area of human sexuality (Schlesinger, 1983). Unfortunately, there is still a lack of social work literature regarding the effects of sexuality courses that specifically address sexuality issues of the aged population.

Clinical practicum. Literature specific to nursing and social work practicum/internship experiences affecting knowledge and attitude is also generally lacking. However, it has been found that negative views of older adults generally prevail if limited relationships exist with them. In short, an accurate frame of reference for understanding the older individual in a positive sexual context is lacking. Without insightful socialization experiences, such as supervised geriatric field work and ongoing supervisory conferences, these attitudes and stereotypes may be brought into professional relationships (Greene, 1981, Galbraith & Suttie, 1987). By utilizing curriculum content and clinical experience to assess specific attitudes toward the elderly, students are usually better able to focus on the realities of aging, which include positive and negative aspects of human
life-span development. Further, a holistic perspective of the elderly seems to have been acquired as a result of students' practical orientation (Galbraith & Suttie, 1987).

However, a study by Miko (1986) was conducted to determine if person-to-person interaction between college students and elderly nursing home residents would have any effect on their attitudes toward old people in general. It was found that the interaction led to more positive evaluations of the aged by the students. However, a comparison of treatment and control groups 12 weeks after the termination of the interaction indicated no long-term effects on either attitudes toward, or frequency of involvement with, persons 70 years of age or older. The failure to find group differences 12 weeks after the original post-test in this study seemed to contradict the findings of earlier investigations which concluded that positive or negative attitudinal or behavioral effects of intergenerational experiences were more long-lasting (Miko, 1986).

B. Other Factors

There are a number of other factors which may influence nursing and social work students' perceptions of sexuality among older adults. Research findings reveal that paid employment and volunteering in the geriatric field, as well as interacting with elderly family members and elderly friends, have the ability to change one's perceptions of sexuality
among older adults.

Glass et al. (1986), stated that there is a significant relationship between knowledge and length of time in employment position and continuing education. For instance, as the time duration in a particular position increased, it appeared that the provider's knowledge base about elderly sexuality increased. On the other hand, providers who had attained a higher level position tended to have more restrictive attitudes toward the sexuality of older adults (Glass et al., 1986). Thus, it can be assumed that persons who have higher level positions usually have greater responsibility for the overall operation of long-term care institutions. Since many residents and family members may be offended by sexual behaviour within institutions of care, persons in such positions may feel that the individual's intimate needs are secondary to the institutional needs. This connection was supported by Steffl (1975) and Rubenstein (1978). According to Mullens (1983), only 28% of the nursing homes gave staff training in sexuality and aging.

However, Kaas (1978) interviewed 85 nursing home residents, and distributed questionnaires to 207 staff working in these settings. He found that the staff who responded had more favourable sexual attitudes than did residents. Similarly, a sexual psychoeducational intervention program was conducted with staff members in a number of U.S. nursing homes. The results from these personal interviews indicated
significant changes in attitudes toward and knowledge about sexuality and aging and sexual behavior (White & Catania, 1982).

It has been suggested that greater acceptance of sexual activity or interest among the aged by those who work with the elderly may provide for a more tolerant environment for sexually active elderly (White & Catania, 1982). Specifically, staff who work with the elderly can learn how to permit some residents to satisfy their sexual needs without disrupting day-to-day activities in the institution (Hobson, 1984).

Volunteer opportunities serving the elderly exist in a variety of health settings. Citizens can provide ongoing services in agencies, organizations, programs, and a variety of community settings (Euster, 1984). The literature clearly suggests that volunteers may be extremely effective in providing services to the aged (Euster, 1984). It is acknowledged that volunteer activity can provide an individual with a means of acquiring new abilities, experiences, attitudes, and knowledge (Ager, 1987). Further, the more intimately one is involved as a volunteer with members in the group and in the group process, the more will s/he may reap the benefits of this experience (Ager, 1987). Unfortunately, the literature is void of any information related specifically to volunteer experiences with the elderly.

In regard to family relationships and dynamics, the
limited findings indicate that nuclear family members usually retain intensive on-going relationships with their elderly members (Stolar, Hill, & Tomblin, 1986). However, having a dependent elderly parent is becoming a normative, although stressful experience for some individuals and families (Stolar et al., 1986). In Canada, 26% of individuals aged 65 and over in private households lived alone, while the remaining number live with at least one other person in 1981 (Chappell, Strain, & Blandford, 1986). The importance of living arrangements for social support is important since living with someone (family and/or friends) changes the social context of one's life (Chappell et al., 1986).

A study was conducted in order to assess the effects of a sex education program with elderly persons, nursing home staff, and adult family members of elderly persons. The latter two groups are important when considering possible hindrances to sexual activity in the elderly person's social-sexual environment. It was found that brief educational intervention led to the significant changes in attitudes and knowledge (White & Catania, 1982). This finding indicated that the exposure to sexual education had a significant positive effect (more knowledge, greater permissiveness) among all groups (White & Catania, 1982). The fact that a relatively brief educational intervention led to the significant changes in attitude and knowledge seems an important finding (White & Catania, 1982). However, as cited
earlier by Miko (1986), the duration one sustains a positive attitude and increased knowledge level can be brief, depending on the type of educational intervention offered.

Silny (1980) reported that sampling bias generally occurs in attitudinal research because children of subjects have not permitted their elderly parents to answer questionnaires that deal with their sexuality. As such, children are seen as holding less favourable attitudes toward sex among the elderly than are spouses, doctors, or the individual him/herself. Further, an incest taboo often prohibits parent-child discussions concerning sexuality during the early stages of the family life cycle which continues to exist in later life.

These adult children, typically possessing restrictive attitudes, could be educated about parental sexual expression as both family and professionals are in a position to serve as a resource and a support for dealing with the sexual concerns of their older relatives or older clients. Since Field and Minkler (1988) stated that relationships within the family remain relatively stable in old age, it can be assumed that initiating education about sexual expression of elderly parents or relatives in an institutional setting could assist elderly resident, the family, and the management personnel of such institutions. Field and Minkler (1988) also indicated that positive emotional relationships tend to involve supportive ties beyond the family.

Finally, since friendships have a voluntary nature based
on similarity and consensus, they often have the potential of leading to greater communication and intimacy when compared to the obligatory nature of kin relations (Wood & Robertson, 1978; Cantor, 1979; Haas-Hawkings, 1978). In fact, Chappell et al. (1986) identified that among the elderly, contact with friends is more strongly associated with emotional satisfaction than is contact with the family. [Among the men, a significant decline in the importance of friendship was observed, while no change appeared for women.] Bond and Tramer (1983) indicated that friends are seen as holding less favourable attitudes toward sex among the elderly than are spouse, doctor, or self. This appears to suggest that friends socialized in similar restrictive environments perpetuate the stereotype that sexual expression eases with old age.

There is a limited amount of literature from both nursing and social work concerning sexuality among older adults. Generally, most literature is fairly recent (within the last 20 years), employing small empirical samples, of which overt generalizations are difficult to render. What is evident from an overview of this material is that aging and sexuality is multi-faceted and relatively complex to understand. Indeed, a variety of factors influence both one's age and one's sexuality. Despite this, the topic appears timely and relevant because both social workers and nurses are confronted with the issue in a variety of settings in which they are
employed. In general, longstanding negative stereotypes fostered in society at large prevail and influence how we both perceive and care for the elderly in society. An examination of factors which influence such perceptions corroborate this generalization.

Specifically, when one examines the nature of sexuality among older adults, both biological and psychosocial aspects are most prominent. In regard to the biological aspect, it was found that although the effects of aging retard sexual response in general, there is no physiological limitation (outside of disease, disability, or illness) that halts sexual activity in either males or females. Highlighted in a consideration of psychosocial aspect was the notion that socialization (according to gender roles) and institutionalization are influential variables in perpetuating negative stereotypes regarding sexuality among the elderly.

Further, when specific perceptions of nursing and social work undergraduate students were examined, it was evident that these negative stereotypes are often reinforced in professional training and education. The Mims-Swenson Sexual Health Model was identified as an appropriate educational tool to initiate professional ‘retraining’ of helping professionals in this area. In turn, such ‘retraining’ can assist nurses and social workers to become better sensitized to the sexual needs of the elderly.

Finally, a number of experiential factors, e.g.
education, volunteer work, employment, family, and friends, provides a contextual framework for understanding how perceptions of sexuality among older adults are shaped among nurses and social workers. In this regard, studies have revealed that additional educational experiences (i.e. courses or clinical experiences) tended to result in increased knowledge and permissive attitude (regarding sexual expression among the elderly) among both nursing and social work students. Despite this, educational offerings and opportunities in both nursing and social work are seriously limited.

Volunteer and employment experiences seem to provide the setting specific opportunities to positively improve one's perceptions of sexuality among older adults. However, this is dependent on the role one fulfills in such settings. And, interactions with family and friends tend to provide the personal opportunities to improve similar positive perceptions. In conclusion, regardless of the biological, psychosocial, and experiential relationships with older adults, negative stereotypes and perceptions still prevail among nursing and social work professions.
RESEARCH QUESTIONS

This study seeks to identify the existence of relationships between specific variables that may influence perceptions of undergraduate nursing and social work students toward sexuality among older adults. A comparison between these two groups of students may reveal what relationships exist shaping such perceptions both within and between groups. Therefore, this study requires a research design that can accurately describe quantitative relationships among variables which may influence perceptions of sexuality among older adults.

The assumptions underlying this study are: 1) that nursing and social work students are likely to work with older adults because of increasing population trend of the elderly; 2) that while nursing and social work professional values are similar, education and training are different enough for the need to look at each group separately and together.

The following research questions provide the framework for this exploratory-descriptive study:
1. What are the socio-demographic characteristics of the undergraduate nursing and social work students?
2. What experiences with older adults do nursing students and social work students have?
3. What knowledge do nursing students and social work students have about sexuality and the elderly?
4. What attitudes do nursing students and social work students have about sexuality and the elderly?

5. How do various experiences with the elderly influence the perceptions of sexuality among nurses and social workers?
METHOD

The Setting and Population

The University of Windsor in South Western Ontario provides the setting for this study. The university primarily serves Essex and Kent Counties. There were 9,026 full-time undergraduate students, and 4,756 part-time undergraduate students enrolled in the university for the winter semester of the 1989-1990 academic year (University of Windsor, Public Relations Department, personal communication, August 1990). A variety of programs are offered at the university, which include certificates, undergraduate degrees, graduate degrees, and doctoral degrees. The university is located in the city of Windsor (population 200,000) known for its automobile industry and manufacturing.

The undergraduate nursing and social work student bodies at the University of Windsor provide the study population. During the winter semester of the 1989-90 academic year, there were 406 undergraduate students enrolled in the undergraduate nursing program and 331 students enrolled in the social work program. These figures include both part-time and full-time students (University of Windsor, Office of the Registrar, personal communication, August 1990).

The Sample

Data was collected from a sample of third and fourth year undergraduate nursing and social work students enrolled during the winter semester of the 1989-90 academic year. The reason
for identifying this cohort as the sample was based on the fact that at these levels, both student groups are required to complete practicums or internships in order to gain practical experiences in their respective fields.

There were 98 students enrolled in the third year and 92 students enrolled in the fourth year level of the nursing program comprising a total potential sample of $N_1 = 190$. There were 51 students enrolled in third year and 70 students enrolled in the fourth year level of the social work program comprising a potential total sample of $N_2 = 121$ [as was noted, these figures included both part-time and full-time students].

Among this sample, 69% of the third and fourth year nursing students were single females between 20-24 years of age. Comparably, 52% of the third and fourth year social work students were single females between 20-24 years of age (University of Windsor, Office of the Registrar, personal communication, August 1990).

The Procedure

During the last two weeks of February 1990, the samples ($N_1$ and $N_2$) were administered a pretested questionnaire in class by the researcher. The permission of directors and faculty members in both programs was sought and obtained prior to the distribution of the questionnaire. A brief introduction of the purpose of this study was first provided to the students, and they were then asked to complete the questionnaire at home without discussing it with other
individuals (to avoid contaminating their responses). Confidentiality and voluntary participation were emphasized and required. Upon completion, students were then instructed to seal the questionnaire and consent form in the accompanying envelope, and were informed that the questionnaire packets would be collected in the same class time the following week. The researcher also indicated to the students that the returns could be submitted in the researcher's mailbox. There were a total of $N_1 = 40$ (21.1%) nursing respondents and $N_2 = 56$ (46.3%) social work respondents.

The Questionnaire

The questions in the data collection instrument were derived from several different sources, and were primarily structured or fixed choice response items (see Appendix A). Some questions were used in their original form from the Assessment Scale of Knowledge and Attitude toward Sexuality in Aged (ASKAS) devised by Charles White (1982a). Still others were developed by the researcher and her supervisor, Dr. M. J. Holosko at the University of Windsor, School of Social Work, based on a review of the literature in this field. The questionnaire also contain a cover letter outlining the purpose of the study (Appendix B), and a standard human subject consent form (Appendix C).

Pretesting the questionnaire. The questionnaire was pretested with first and second year social work undergraduate students in mid-January 1990. The researcher administered the
questionnaire in the same procedure as described above, and all students who participated in this process were informed of the purpose of the pre-test, excluded from further study participation and also safeguarded according to human subject ethics protocol. Upon completion, each respondent was asked to identify any difficulties they had with the questionnaire. Their comments were used to refine the final version of the questionnaire which was administered.

**Items on the questionnaire.** The questionnaire (Appendix A) had five sections that contained a total of 72 questions. These were categorized as follows:

The **Background Information** sub-section included questions on demographics such as age, gender, marital status, faculty, year of study, and full or part-time status. The second segment, entitled **Education History**, consisted of questions about education type and level, the number of gerontology courses completed, and, the number of gerontology-focused practicum completed. The third part of the survey was comprised of questions relating to **Interactions with the Elderly**. Specifically, this sub-section consisted of questions relating to the length and type of interaction in work, volunteer, family, and friends settings with the elderly.

The fourth and fifth segments of this survey consisted of the **Aging Sexuality Knowledge and Attitude Scale (ASKAS)** (White, 1982a). The ASKAS is based on the notion of life
cycle alterations in the social and environmental context, in expectations, and in the physiology of sexuality (White, 1982a). The fourth section included 34 Knowledge questions relating to the biological issues related to sexuality among older adults. Respondents answered these latter questions with either a "True", "False", or "Don't Know" response. A low score indicated a low incorrect response rate, and thus, high knowledge of sexuality among older adults. The fifth section included 26 Attitude items which respondents answered using a 7-point Likert-type scale. The rating ranged from "strongly disagree", "disagree", "moderately disagree", "neutral", "moderately agree", "agree", or "strongly agree". These items were based on the assumption that attitudes toward sexuality in the context of old age institutions (specifically the nursing home) are predictive of attitudes toward sexuality in the aged in other contexts (White, 1982a). As in the Knowledge scale, a low score indicated a more favourable and permissive attitude.

White (1982a) tested the reliability of ASKAS by using the Guttman split-half reliability test and the Cronbach Alpha internal consistency test on a sample of nursing home residents, nursing home staff, community aged, and families of the aged. He found an average internal consistency reliability coefficient of $\alpha = .85$, $p < .05$ for both the knowledge and attitude sub-scales in these samples.
RESULTS AND DISCUSSION

The results and discussion of data* are presented together, organized in the following sub-sections: 1) background data; 2) the knowledge and attitude data; and, 3) other statistical analyses.

I Background Data

As indicated in Table 1, the 40 nursing subjects for this study were all females, whereas 7 of the 56 social work students were males. The majority, 31 (77.5%), of the nursing respondents were single, 7 (17.5%) were married, and 1 (2.5%) were separated. On the other hand, 35 (62.5%) of the social work respondents were single, 1 (1.8%) was in a common-law relationship, 14 (25%) were married, 2 (3.6%) were separated, 5.4% were divorced, and 1 (1.8%) was widowed. The ages of the nursing respondents ranged from 21 to 52 years, of which 31 (77.5%) were in the 21-25 age range, while 9 (20%) were in the 26-52 age range. The mean age (\(\bar{X}\)) reported was 24.5 years. Among the social work respondents, 31 (55.4%) were in the

* Data were analyzed using the IBM 4381 computer at the University of Windsor Computer Centre. The Statistical Package for the Social Sciences -X (SPSS-X, 1984) was utilized in all analyses. Missing data are excluded from the analyses, and are deleted and so noted in the respective tables.
Table 1

**Selected Socio-Demographic Characteristics of Nursing Students**

$N_1=40$ and Social Work Students ($N_2=56$)

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Nursing ($N_1=40$)</th>
<th>Social Work ($N_2=56$)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Actual Freq.</td>
<td>Relative Pct. (%)</td>
</tr>
<tr>
<td>1. Age Ranges (yrs)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. 21-25</td>
<td>31.0</td>
<td>77.5</td>
</tr>
<tr>
<td>b. 26-52</td>
<td>9.0</td>
<td>20.0</td>
</tr>
<tr>
<td>2. Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Male</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>b. Female</td>
<td>40.0</td>
<td>100.0</td>
</tr>
<tr>
<td>3. Marital Status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Single</td>
<td>31.0</td>
<td>77.5</td>
</tr>
<tr>
<td>b. Common-Law</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>c. Married</td>
<td>7.0</td>
<td>17.5</td>
</tr>
<tr>
<td>d. Separated</td>
<td>1.0</td>
<td>2.5</td>
</tr>
<tr>
<td>e. Divorced</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>f. Widowed</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>g. No Answer</td>
<td>1.0</td>
<td>2.5</td>
</tr>
</tbody>
</table>

21-25 age range, while 25 (37.6%) were in the 26-52 age range. The mean age ($\bar{X}$) for social workers was 27.4 years.

The educational profiles of the nursing and social work
respondents are indicated in Table 2. As noted, of the nursing students, 95% were enrolled full-time and 5% were enrolled part-time in their program. Further, 55% were in the third year of study and 45% were in the fourth year of study. Also, among the nursing students, 52.5% had completed gerontology courses, of which 15% were required courses and 27.5% were elective courses. And, 90% of the nursing students had completed some form of a geriatric practicum. Of these, 82.5% were in these settings for 1 to 4 semesters, while 5% were in these settings for 5 to 8 semesters.

Conversely, among the social work respondents, 91.1% were enrolled full-time and 8.9% were enrolled part-time in their program of study. Also, 50% were in their third year and fourth year of study respectively. Further, 48.2% had completed gerontology courses, of which, 1.8% were required courses and 44.6% were elective courses. And, 14.3% of the social work students had completed a geriatric practicum; 14.3% of these had completed such practicums for only 1 to 4 semesters.
Table 2

Educational Profiles of Nursing Students \((N_1=40)\) and Social Work Students \((N_2=56)\)

<table>
<thead>
<tr>
<th>Educational Profiles</th>
<th>Nursing ((N_1=40))</th>
<th>Social Work ((N_2=56))</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Actual Freq.</td>
<td>Relative Pct. (%)</td>
</tr>
<tr>
<td>1. Status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. full-time</td>
<td>38.0</td>
<td>95.0</td>
</tr>
<tr>
<td>b. part-time</td>
<td>2.0</td>
<td>5.0</td>
</tr>
<tr>
<td>2. Year of Study</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. 3rd yr.</td>
<td>22.0</td>
<td>55.0</td>
</tr>
<tr>
<td>b. 4th yr.</td>
<td>18.0</td>
<td>45.0</td>
</tr>
<tr>
<td>3. Completion of:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Gerontology Courses</td>
<td>21.0</td>
<td>52.5</td>
</tr>
<tr>
<td>- required</td>
<td>6.0</td>
<td>15.0</td>
</tr>
<tr>
<td>- elective</td>
<td>11.0</td>
<td>27.5</td>
</tr>
<tr>
<td>- no answer</td>
<td>4.0</td>
<td>10.0</td>
</tr>
<tr>
<td>b. Geriatric Practicums</td>
<td>36.0</td>
<td>90.0</td>
</tr>
<tr>
<td>- 1-4 semst.</td>
<td>33.0</td>
<td>82.5</td>
</tr>
<tr>
<td>- 5-8 semst.</td>
<td>2.0</td>
<td>5.0</td>
</tr>
<tr>
<td>- no answer</td>
<td>1.0</td>
<td>2.5</td>
</tr>
</tbody>
</table>
Table 3 reveals the range of "other experiences" the sample had with older adults. It indicates that 45% of the nursing respondents had volunteered in geriatric settings, compared to 16.1% of the social work respondents. Also, 30% of the nursing respondents had been employed in a geriatric setting, compared to 17.9% of the social work respondents.

Table 3

Experiences with Older Adults Reported by Nursing Students \( (N_1=40) \) and Social Work Students \( (N_2=56) \)

<table>
<thead>
<tr>
<th>Experiences with the Aged</th>
<th>Nursing ( (N_1=40) )</th>
<th>Social Work ( (N_2=56) )</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Actual Freq.</td>
<td>Relative Pct.(%)</td>
</tr>
<tr>
<td>1. Volunteered</td>
<td>18.0</td>
<td>45.0</td>
</tr>
<tr>
<td>2. Employed (paid capacity)</td>
<td>12.0</td>
<td>30.0</td>
</tr>
<tr>
<td>3. Resided with</td>
<td>14.0</td>
<td>35.0</td>
</tr>
<tr>
<td>4. Family</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. those older</td>
<td>32.0</td>
<td>80.0</td>
</tr>
<tr>
<td>b. maintain wkly contact</td>
<td>18.0</td>
<td>45.0</td>
</tr>
<tr>
<td>5. Friends</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. those older</td>
<td>8.0</td>
<td>20.0</td>
</tr>
<tr>
<td>b. maintain wkly contact</td>
<td>3.0</td>
<td>7.5</td>
</tr>
</tbody>
</table>
Further, 35% of the nursing respondents had lived with an older adult, compared to 25% of the social work respondents. Further, 80% of the nursing subjects had family members over the age of 65, of which 45% maintained weekly contact with these members. Similarly, 64.3% of the social work subjects had family members over the age of 65, of which 34% maintained weekly contact with them. Finally, 20% of the nursing subjects had friends who are were the age of 65, of which 7.5% maintained weekly contact with these friends. Similarly, 32.4% of the social work subjects had friends over the age of 65, of which 25.1% maintained weekly contact with them.
Table 4

Frequencies of Practicum, Employment, and Volunteer Experiences present among Nursing Students (N₁=40) and Social Work Students (N₂=56)

The Various Experiences* with the Elderly

<table>
<thead>
<tr>
<th>Practicum</th>
<th>Employment</th>
<th>Volunteer</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Nursing Students (N₁=40):</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assessments 4(10%)</td>
<td>Swim Instructor 1(5.5%)</td>
<td>Visitor 1(10%)</td>
</tr>
<tr>
<td>Rec. Thpy. 6(14%)</td>
<td>Reality Orient. 1(5.5%)</td>
<td>Nurse's Aide 9(90%)</td>
</tr>
<tr>
<td>Nursing Care 32(76%)</td>
<td>Nursing Care 16(89%)</td>
<td></td>
</tr>
<tr>
<td><strong>TOTALS</strong> 42(100%)</td>
<td>18(100%)</td>
<td>10(100%)</td>
</tr>
</tbody>
</table>

Social Work Students (N₂=56):

| Crisis Work 1(7%) | Rec. Thpy. 1(11%) | Rec. Thpy. 2(22%) |
| Assessments 2(13%) | Receptionist 1(11%) | Visitor 7(78%) |
| A/D Planning 2(13%) | Counselling 1(11%) | |
| Grp. Thpy. 3(20%) | Dietary Aide 2(22%) | |
| Visitor 3(20%) | Nursing Aide 4(44%) | |
| Counselling 4(27%) | | |
| **TOTALS** 15(100%) | 9(99%) | 9(100%) |

Note. Key: Rec. Thpy. = Recreational Therapy  
A/D Planning = Admission and Discharge Planning  
Grp. Thpy. = Group Therapy  
Reality Orient. = Reality Orientation

* Students did not indicate more than two roles in their cited experiences.
Table 4 reveals that among the nursing students, 32 (76%) had practicum and 16 (89%) employment experiences providing nursing care, and 9 (90%) volunteer experiences as a nurse's aide. Similarly, among the social work students, 4 (27%) had practicum experiences performing some form of counselling, 4 (44%) employment experiences as a nurse's aide, and 7 (78%) volunteer experiences as a friendly visitor.

Discussion of background data. The results of the findings in Table 1 were as expected. The age, gender, current marital status, and enrolment composition of these two samples is similar. But what differs is the experiences each student group has had.

The difference as seen in Table 2 shows that the nursing students were more inclined to receive more undergraduate geriatric education than social work students as it appeared that the nursing students had completed more gerontological courses and practicums than the social work students. The trend appears to indicate that more employment opportunities exist with older adults for nurses than for social workers. Conversely, more employment opportunities exist in family service settings for social workers than for nurses.

An inspection of Table 3 revealed that the nursing students had more interaction with older adults within the context of volunteering, employment, residing with, and contacts with family members than their social work
 counterparts. However, the social work students maintained interaction with older adults on a friendship basis more than the nursing students (7\% versus 25\%).

Finally, in Table 4 it was anticipated that there would be more variety in the practicum experiences among the social work students than the nursing students. This may be explained by the fact that the nursing students completed most of their practicum/internships in hospital settings, thereby limiting their options in practicum and employment experiences. As revealed in employment experiences, these nursing and social work students had pursued a variety of professionally-related employment opportunities prior to the completion of their post-secondary degrees. This appears to indicate a commitment to their likely career-paths. A somewhat unexpected finding was that there were 6 social work students who had employment experiences as dietary (2) and nurse's (4) aides. Further, as was found, there were few volunteer experiences cited by either student group. This may be explained by the economic necessity to exploit brief employment opportunities in their professions rather than volunteer opportunities.
II Knowledge and Attitude Data

This sub-section reports on findings derived from the standardized knowledge and attitude sub-scales derived from White's (1982) Assessment of Attitudes and Knowledge Regarding Sexuality in the Aged (ASKAS). As previously indicated, this instrument is calculated in such a way that lower scores indicate higher knowledge and permissive attitudes in each respective sub-scale. The study respondents' scores in each sub-scale of this measure will be presented separately.

A. Knowledge Scores

This inventory provided data about the sexual knowledge nursing and social work students had about older adults. Questions in this scale were primarily based on perceptions of specific biological changes in older adults which generally affect sexual ability. There were also questions which addressed some psychosocial sexual issues that may exist as a result of biological changes in older adults.

The mean scores in both samples ranged from 1 to 2.6. Table 5 illustrates the nursing and social work responses. [Please note that the correct answers are indicated in parenthesis after each question. Further, any "Don't Know" responses were tabulated as non-answers.]*
Table 5

The Ranked Means ($\bar{X}$) of Knowledge Scores Reported by Nursing Students ($N_1=40$) and Social Work Students ($N_2=56$)

<table>
<thead>
<tr>
<th>Sexuality Questions of Older Adults</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$\bar{X}$</td>
<td>$\bar{X}$</td>
</tr>
<tr>
<td></td>
<td>nur.</td>
<td>s.wk</td>
</tr>
<tr>
<td>1. Need younger partners for stimulation(2)</td>
<td>2.0</td>
<td>1.9</td>
</tr>
<tr>
<td>2. Prescription drugs alter sex drive(1)</td>
<td>2.0</td>
<td>1.9</td>
</tr>
<tr>
<td>3. Males unable to have sex(2)</td>
<td>2.0</td>
<td>1.7</td>
</tr>
<tr>
<td>4. Increases risk of heart attack(2)</td>
<td>2.0</td>
<td>1.8</td>
</tr>
<tr>
<td>5. Sex life-long need(1)</td>
<td>2.0</td>
<td>1.9</td>
</tr>
<tr>
<td>6. Sex dangerous to health(2)</td>
<td>2.0</td>
<td>2.0</td>
</tr>
<tr>
<td>7. Masturbation causes mental dementia(2)</td>
<td>1.9</td>
<td>1.8</td>
</tr>
<tr>
<td>8. Fear of inability to perform affects males(1)</td>
<td>1.9</td>
<td>1.9</td>
</tr>
<tr>
<td>9. Drugs interfere with responsiveness(1)</td>
<td>1.9</td>
<td>1.9</td>
</tr>
<tr>
<td>10. Slower response time rather than reduction of interest(1)</td>
<td>1.9</td>
<td>1.5</td>
</tr>
<tr>
<td>11. Reduced vaginal lubrication(1)</td>
<td>1.9</td>
<td>1.3</td>
</tr>
<tr>
<td>12. Have ability into 80 and 90 years of age(1)</td>
<td>1.8</td>
<td>1.9</td>
</tr>
<tr>
<td>13. Psychosocial causes influence activity more than biological and physical causes(1)</td>
<td>1.8</td>
<td>1.7</td>
</tr>
<tr>
<td>14. Females sexually unresponsive(2)</td>
<td>1.8</td>
<td>1.8</td>
</tr>
<tr>
<td>15. Psychologically beneficial(1)</td>
<td>1.8</td>
<td>2.0</td>
</tr>
<tr>
<td>16. Longer to achieve vaginal lubrication(1)</td>
<td>1.7</td>
<td>1.1</td>
</tr>
<tr>
<td>17. Longer to attain an erection(1)</td>
<td>1.7</td>
<td>1.2</td>
</tr>
<tr>
<td>18. Disinterest related to depression(1)</td>
<td>1.6</td>
<td>1.5</td>
</tr>
<tr>
<td>19. Females have painful intercourse due to reduced elasticity and lubrication(1)</td>
<td>1.6</td>
<td>1.2</td>
</tr>
<tr>
<td>20. Loss of satisfaction among females(2)</td>
<td>1.5</td>
<td>1.2</td>
</tr>
<tr>
<td>21. Beneficial physical effects(1)</td>
<td>1.5</td>
<td>1.5</td>
</tr>
<tr>
<td>22. Masturbation beneficial effects on responsiveness(1)</td>
<td>1.3</td>
<td>1.0</td>
</tr>
<tr>
<td>23. Erection less firm(1)</td>
<td>1.3</td>
<td>0.8</td>
</tr>
<tr>
<td>24. Females have physiological induced need for sex(2)</td>
<td>1.2</td>
<td>0.8</td>
</tr>
<tr>
<td>25. Among males, responsiveness influenced by activity(1)</td>
<td>1.1</td>
<td>0.9</td>
</tr>
<tr>
<td>26. Frequency decreases among males(1)</td>
<td>1.1</td>
<td>1.0</td>
</tr>
<tr>
<td>27. Sexual activity dependent on interest of male(1)</td>
<td>1.1</td>
<td>0.9</td>
</tr>
<tr>
<td>28. Intensity of orgasm reduced in males(1)</td>
<td>1.1</td>
<td>0.8</td>
</tr>
<tr>
<td>29. Psychosocial impotence increases among males(1)</td>
<td>1.0</td>
<td>0.7</td>
</tr>
<tr>
<td>30. Reduced need to ejaculate increases duration of erection(1)</td>
<td>0.9</td>
<td>0.5</td>
</tr>
<tr>
<td>31. Greater decrease in frequency among males than females(1)</td>
<td>0.9</td>
<td>0.5</td>
</tr>
<tr>
<td>32. Influenced by sexual activity when young adult(1)</td>
<td>0.8</td>
<td>0.8</td>
</tr>
<tr>
<td>33. Sex urge increases in males(1)</td>
<td>0.8</td>
<td>0.6</td>
</tr>
<tr>
<td>34. Heavy cigarette smoking decreases desire(1)</td>
<td>0.7</td>
<td>0.6</td>
</tr>
</tbody>
</table>

Note. *Scores "1=True", "2=False", and "3=Don't Know"
These data (in Table 5) indicated a definite lack of knowledge about the biological changes which affect one's sexual abilities as they age. Further, although nursing students received more gerontological education opportunities than the social work students (see Table 2), both groups presented similar knowledge scores on this inventory. That is, the mean knowledge score among the nursing students was $\bar{X} = 1.50$ and the mean knowledge score among the social work students was $\bar{X} = 1.30$.

B. Attitude Scores

This sub-scale identified attitudes concerning sexual activity among older adults. As specified by White (1982a), this sub-scale is based on the assumption that attitudes toward sexuality in nursing homes are predictive of attitudes toward sexuality among the aged in other contexts (p.493). Respondents were asked to answer questions using a score ranging from "1=strongly disagree" to "7=strongly agree". Tables 6 and 7 illustrate the top 10 mean scores ranked in descending order on this part of the ASKAS.
Table 6
The Top Ten Mean (X) of Attitude Scores (Agree Congruence) Reported by both Nursing Students (N=40) and Social Work Students (N=58) on the ASKAS

<table>
<thead>
<tr>
<th>Sexuality Questions of Older Adults</th>
<th>Mean (X)*</th>
<th>Standard Deviation (S.D.)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Nur.</td>
<td>S.Wk</td>
</tr>
<tr>
<td>1. Nursing homes should provide opportunity for interaction</td>
<td>6.7</td>
<td>6.7</td>
</tr>
<tr>
<td>2. Nursing home staff need to be trained</td>
<td>6.6</td>
<td>6.7</td>
</tr>
<tr>
<td>3. Residents of nursing homes should engage in sex without fear of intrusion</td>
<td>6.3</td>
<td>6.3</td>
</tr>
<tr>
<td>4. Support sex education for nursing home staff</td>
<td>6.3</td>
<td>6.3</td>
</tr>
<tr>
<td>5. Want to know more about sexual ability</td>
<td>6.1</td>
<td>6.0</td>
</tr>
<tr>
<td>6. Support sex education for nursing home residents</td>
<td>6.1</td>
<td>5.8</td>
</tr>
<tr>
<td>7. Large beds should be provided in nursing homes</td>
<td>5.8</td>
<td>5.8</td>
</tr>
<tr>
<td>8. Masturbation is acceptable in males</td>
<td>5.6</td>
<td>5.6</td>
</tr>
<tr>
<td>9. Masturbation is acceptable in females</td>
<td>5.6</td>
<td>5.6</td>
</tr>
<tr>
<td>10. Ignore if relative having sex with another resident in nursing home</td>
<td>5.6</td>
<td>6.1</td>
</tr>
</tbody>
</table>

Note. *Scores ranged from "1=strongly disagree" to "7=strongly agree".
Table 7

The Top Ten Mean (X) of Attitude Scores (Disagree Congruence) by both Nursing Students (N₁=40) and Social Work Students (N₂=56) in the ASKAS

<table>
<thead>
<tr>
<th>Sexuality Questions of Older Adults</th>
<th>Mean (X)*</th>
<th>Standard Deviation (S.D.)</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Little interest</td>
<td>1.7</td>
<td>1.6</td>
<td>0.9</td>
<td>0.8</td>
</tr>
<tr>
<td>2. Nursing homes should not encourage activity</td>
<td>1.7</td>
<td>1.9</td>
<td>1.3</td>
<td>1.4</td>
</tr>
<tr>
<td>3. Wouldn't place relative in nursing home which supports sexual activity</td>
<td>1.7</td>
<td>1.7</td>
<td>0.9</td>
<td>1.1</td>
</tr>
<tr>
<td>4. Masturbation is harmful</td>
<td>1.7</td>
<td>1.6</td>
<td>1.5</td>
<td>1.1</td>
</tr>
<tr>
<td>5. Complain to nursing home mgt if relative having sex with another resident</td>
<td>1.7</td>
<td>1.5</td>
<td>1.1</td>
<td>1.1</td>
</tr>
<tr>
<td>6. Recreational sex is immoral</td>
<td>1.6</td>
<td>1.6</td>
<td>1.1</td>
<td>1.2</td>
</tr>
<tr>
<td>7. Complain to mgt if activity existed in nursing home</td>
<td>1.6</td>
<td>1.6</td>
<td>1.1</td>
<td>0.8</td>
</tr>
<tr>
<td>8. Nursing homes should not provide privacy for expression</td>
<td>1.5</td>
<td>1.5</td>
<td>1.1</td>
<td>1.0</td>
</tr>
<tr>
<td>9. Disappears with increasing age</td>
<td>1.5</td>
<td>1.8</td>
<td>0.7</td>
<td>1.2</td>
</tr>
<tr>
<td>10. Nursing home residents should not have sex</td>
<td>1.5</td>
<td>1.3</td>
<td>0.8</td>
<td>0.7</td>
</tr>
</tbody>
</table>

Note. *Scores ranged from "1=strongly disagree" to "7=strongly agree".
The overall mean scores on this 26 item ranged from 6.69 to 1.35. Interestingly, the "3=moderately disagree" or "4=neutral" scores were not endorsed in either group of respondents. [That is, respondents either felt negatively or positively about each question.] As in the knowledge sub-scale, both groups responded quite similarly to the questions in the attitude sub-scale. That is, the mean attitude score among the nursing students was $\bar{x} = 3.37$, and the mean attitude score among the social work students was $\bar{x} = 3.35$.

Reliability. The reliability of the knowledge and attitude sub-scales (ASKAS) with this sample was calculated to determine the stability of these findings. Table 7 illustrates these data compared with the reliability scores of the original scores and the study which developed the ASKAS (White, 1982a).
Table 8
Comparison of Reliability Scores of ASKAS Reported by the White (1982a) and Present Study (N=96).

<table>
<thead>
<tr>
<th>Reliability Tests with ASKAS</th>
<th>Present Study</th>
<th>White (1982a)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N (N=40)</td>
<td>SW (N=56)</td>
</tr>
<tr>
<td>1. Knowledge</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Guttman Split-half</td>
<td>.84</td>
<td>.85</td>
</tr>
<tr>
<td>b. Alpha</td>
<td>.79</td>
<td>.84</td>
</tr>
<tr>
<td>2. Attitude</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Guttman Split-half</td>
<td>.76</td>
<td>.59</td>
</tr>
<tr>
<td>b. Alpha</td>
<td>.86</td>
<td>.78</td>
</tr>
</tbody>
</table>

Note. Key: N=nursing students
SW=social work students
NHst=nursing home staff
NHrs=nursing home residents
CmAg=community aged
FmAg=family of aged

As indicated in Table 8, the majority of the reliability scores were within an acceptable to high reliability range. However, the attitude reliability score among the social work students on the one dimension (split-half) in this present study was considerably less than the nursing scores computed in this regard. Furthermore, Spearman's Correlation coefficients were determined to identify any correlations.
between the knowledge and attitude responses given by the nursing and social work students.

Discussion of knowledge and attitude scores. It was expected that the nursing students would have more extensive knowledge than social work students about sexuality among the elderly. Interestingly, as a sample, both groups of students did not respond correctly to some knowledge questions. The nursing students responded correctly to five questions and the social work students responded correctly to three questions.

The attitude scores in both respondent groups generally indicated a permissive attitude about sexuality among older adults. However, Solnick (1978) maintained that those persons with very low factual knowledge are generally much more restrictive in attitudes than those with high factual knowledge. Furthermore, studies conducted by White (1982) and Hammond (1979) also conclude that knowledge and attitude scores are not always dependent variables per se. According to Corea (1977) and Wilson and Hafferty (1983), students attracted to certain professions may possess characteristics and attitudes which are similar to the philosophies of their respective profession. Thus, the permissive attitudes found among both groups of students in this study appear to indicate that there is a permissive attitude about sexuality among the aged in the nursing and social work professions. It was also expected that the knowledge and attitude scores in this study
would be comparable in reliability with White's study (1982a), and the data certainly corroborate this assumption. Indeed, the high degrees of reliability found were encouraging from a psychometric standpoint.

III Other Statistical Analyses

Following the analyses of these descriptive data, specific variable relationships were tested. Three basic tests were used to scrutinize the data at this level in order to determine the strength of association between variables. These were: 1) Fisher's exact test ($\chi^2$); 2) the Pearson Product Moment (PPM) correlation coefficient ($\rho$); and, 3) Spearman's Rho ($S_R$). These tests are based on bivariate statistical analysis according to the appropriate level of measurement. Each test fulfills the purpose of this study, which is to identify and compare the significant variable relationships in each student group. Only significant variable relationships are discussed here.

A. Relationship between Knowledge and Attitude

Statistically speaking, the respondents in the nursing program had more knowledge than the social work respondents $t = 3.79$, $p<.05$, $N=40$. Further, both student groups identified significant relationships with more knowledge and maintaining a permissive attitude, as $S_R = -.4120$, $p<.05$, $N=40$ and $S_R = -.2452$, $p<.05$, $N=56$. However, there was a higher
degree of significance between knowledge and attitude among the social work students $r = -0.4532$, $p < .01$, $N = 56$ than the nursing students $r = -0.3713$, $p < .05$, $N = 40$.

B. **Relationship between Knowledge and Other Variables**

As social work students increase in age, they possessed more knowledge about sexuality and the elderly ($r = 0.3220$, $p < .05$, $N = 56$). Current marital status was collapsed into the single and married categories as these contained the highest frequencies in both respondent groups, and when tested, married social work students were more knowledgeable than single social work students as $t = -2.67$, $p < .05$, $N = 56$. Surprisingly, those social work students who had not lived with an older adult had more knowledge about sexuality among the aged $t = -2.00$, $p < .05$, $N = 56$.

C. **Relationship between Attitude and Other Variables**

Nursing students in their fourth year of study had more knowledge than those in their third year of study $t = 2.20$, $p < .05$, $N = 40$. The nursing students who had not completed post-secondary gerontology courses had more permissive attitudes than those nursing students who had completed such courses $t = 2.84$, $p < .05$, $N = 40$. Similarly, those who had completed such courses had less permissive attitudes $r = 0.4143$, $p < .05$, $N = 40$. The more semesters taking such a course resulted in a less permissive attitude toward sexuality among older adults.
$S_R = .4909, p<.05, N=38$. The more required post-secondary gerontology courses completed by nursing students resulted in a less permissive attitude about sexuality among the elderly $r = .3705, p<.05, N=40$. Further, the more semesters taking required post-secondary gerontology courses, the less permissive attitude about aged sexuality existed $S_R = .3895, p<.05, N=36$.

The more elderly family members among the nursing students, the more permissive was their attitude about sexuality among older adults $S_R = -.2631, p<.05, N=40$. Further, the more weekly contact the nursing students had with elderly family members, the more permissive was their attitude as $r = -.3277, p<.05, N=40$ and $S_R = -.2847, p<.05, N=40$. Likewise, the more elderly friends among the nursing students, the more permissive was their attitude $S_R = -.3207, p<.05, N=40$, and the more weekly contact with these friends the more permissive their attitude $S_R = -.3855, p<.05, N=40$.

Among those social work students who had not completed post-secondary gerontology courses, had more permissive attitudes than those who had completed such courses $t = 2.37, p<.05, N=56$. In fact, the more semesters taking such a course, the more restrictive the attitudes of the social work students $S_R = .2464, p<.05, N=55$. Furthermore, the more semesters taking a required post-secondary gerontology course also resulted in a restrictive attitude among the social work students $S_R = .2212, p<.05, N=56$. Also, the more elderly
friends social work students had, the more permissive their attitudes about sexuality among the elderly $r = -0.2947$, $p<.05$, $N=56$. The more weekly contact with these elderly friends, also resulted in possessing permissive attitudes $r = -0.2728$, $p<.05$, $N=56$.

**Discussion of statistical analyses.** It was anticipated that the nursing students would have more sexual knowledge than the social work students since these students completed more gerontological post-secondary courses and practicums than the social work students (see Table 2). As previously stated, most of the literature related to knowledge and attitude about sexuality of older adults is based primarily on the nursing perspective. However, because the nursing students in this study correctly answered only 13.75% of the knowledge questions, it appears that they have not acquired or retained information in their geriatric courses or practicums which focused on the sexuality needs of their elderly patients. As was indicated by Lief and Payne (1975) and MacLeod Clark (1987), nurses have not had the educational opportunities to acquire the knowledge and skills to provide adequate health care for older patients with sexual concerns. It has been suggested and corroborated in this present study that only a token support is provided to meet this reality in nursing curriculums.

As previously stated, the impetus for this study was to
specifically identify and compare significant relationships between those variables which influence more knowledge and permissive attitudes about sexuality among older adults comparatively among the nursing and social work students. Consequently, the following Figure 3 illustrates the significantly tested relationships.

**Figure 3.** Significant variable relationships between more knowledge and other variables of nursing students \((N_1=40)\) and social work students \((N_2=56)\)

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Dependent Variables</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Nursing ((N_1=40))</strong></td>
<td>More Knowledge</td>
</tr>
<tr>
<td>Permissive Attitude</td>
<td></td>
</tr>
<tr>
<td><strong>Social Work ((N_2=56))</strong></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td></td>
</tr>
<tr>
<td>Current Marital Status</td>
<td></td>
</tr>
<tr>
<td>Not Lived with Older Adult</td>
<td></td>
</tr>
<tr>
<td>Permissive Attitude</td>
<td></td>
</tr>
</tbody>
</table>
As illustrated in Figure 3, it was expected that the age variable among the social work students would be significant with the knowledge variable since the mean age for this group was higher than in the nursing group. However, there is a lack of literature on the relationship between knowledge of sexuality among older adults and the age of social work students. It may be assumed that these older students possess more life experiences which may have provided 'intuitive knowledge' as opposed to formal post-secondary gerontological knowledge. This may also explain the significant relationship between the married social work students and possessing more knowledge about sexuality among the elderly than the single social work students. [There is a positive correlation with increasing age and current marital status among the social work students.] Further, this 'intuitiveness' may also explain not needing to reside with older adults to have knowledge about their sexual abilities.

White (1982a), Hammond (1979), and White and Catania (1982) found that professionals who worked with the aged had increased knowledge after participating in a sexual education program. However, a study by Galbraith and Suttie (1987) revealed a negative correlation existing between knowledge and education. Specifically, he found that the less knowledge the helping professional possessed about the sexuality of the elderly, the more formal education s/he had received. This appeared to be the situation with the nursing students in this
study. However, one may assume that there is limited sexual content in their completed gerontology courses. The fact that very few human sexuality textbooks are specific to health care providers of the elderly (Mims & Swenson, 1980) may explain this reality.

It was also expected that as knowledge levels increased, the exhibition of a more permissive attitude would also increase. Santo Pietro (1980), Mandel (1983), Roy (1983), and West (1983) contended that health-care students, particularly nursing or medical students, who had received a specific curriculum about sexuality, had increased their knowledge, and that this increased knowledge created more liberal attitudes toward sexuality. Also, McContha and Stevenson (1982) concluded that nursing home aides with a greater knowledge about aging tended to have more positive attitudes toward the sexuality of older adults. Conversely, Solnick (1978) found that those with very low factual knowledge were much more restrictive than those with high factual knowledge. The following discussion of the significant relationships with the attitude variable [formed in this study] concurs with Solnick's finding.

Figure 4 illustrates the significantly tested relationships between permissive attitude and other independent variables among both student groups.
**Figure 4.** Significant variable relationships between permissive attitude and other variables among nursing students \((N_1=40)\) and social work \((N_2=56)\) students

**Independent Variables**

**Nursing \((N_1=40)\)**
- Program Year
- Not Completed P.S.G.C.*
- Fewer Semesters Completing P.S.G.C.
- Completed Fewer Required P.S.G.C.
- More Number of Elderly Family
- More Weekly Contact with Elderly Family
- More Number of Elderly Friends
- More Weekly Contact with Elderly Friends
- More Knowledge

**Social Work \((N_2=56)\)**
- Not Completed P.S.G.C.
- Completed Fewer Required P.S.G.C.
- Fewer Semesters Completing P.S.G.C.
- Permissive Attitude
- More Number of Elderly Friends
- More Weekly Contact with Elderly Friends
- More Knowledge

*Post-Secondary Gerontology Courses
As illustrated in Figure 4, there are more significant relationships with other variables affecting sexual attitudes than variables related to knowledge. Although nursing research conducted during the 1970s has shown that nursing students tend to be more traditional in their attitudes than other groups of students (Lief & Payne, 1975; Webb, 1985), in this study, it was found that attitudes may be shifting as a result of increased contact with the aged population. For example, earlier comparisons of groups of nurses suggest that more highly educated nursing students have more accepting attitudes toward sexuality and are more liberal in their attitudes about sexuality (Lief & Payne, 1975). It may be that persons who are exposed to higher levels of nursing education encounter learning experiences which enable them to gain more positive attitudes toward sexuality among older persons. This may explain the more permissive attitude of the fourth year nursing students when compared to the third year nursing students in this study. Further, some educators have also pointed out the positive contribution of sex education to healthy sexual attitudes (White & Catania, 1982). Although Gunderson and McCary (1980), Taylor (1982), Hammond (1979), McContha and Stevenson (1982), Wasow and Loeb (1975), and White (1982a) concluded that sexual attitudes tend to move toward a more liberal and permissive perspective after having been exposed to a human sexuality course, this was not applicable among both groups of students in this study. One
can surmise that both groups of students have experienced formal gerontology courses negatively (boring, irrelevant, etc...) and consequently, avoid completing such courses in their programs. Also, the lack of required post-secondary gerontology courses in both nursing and social work university programs may explain the relationship found with the attitude variable.

As discussed in the previous literature review, some adult children who inhibited their own sexuality for many years simply cannot tolerate liberated values and behaviours. However, as expected, this intolerance seems not to exist among the nursing students studied here. This may be due in part to the societal expectation that thoughts and beliefs tend to be more liberal because of young age.

Although the literature indicated that friends hold less favourable attitudes toward sex among the elderly than a spouse, doctor, or self (Bond & Tramer, 1983), this finding was not supported in this study. Specifically, it was found that having many elderly friends and maintaining weekly contact with these friends resulted in possessing permissive attitudes among both student groups. However, there was a surprising relationship with these variables in the two student groups. Among the social work students, the quantity of weekly contact with elderly friends was dependent on the existence of a permissive sexual attitude whereas this dependent relationship did not exist among the nursing
students.

Students who appear to generally have permissive attitudes are apparently more humanistic. In turn, their attitudes do not appear to be biological-reductionist in orientation since certain life experiences (refer to Figure 4) appear to positively influence attitudes toward the elderly (Crockett et al., 1979; Naus, 1973; Sherman et al., 1978). However, Auerbach and Levenson (1977), and Rosencranz and McNevin (1969) contended that certain life experiences may negatively influence students' attitudes toward the elderly. This was not specifically investigated in this study; however, the lack of significant relationships with some life experience variables may have indicated that some life experiences do negatively influence attitudes about sexuality among the elderly.

Based on the significant relationships that existed among the nursing and social work students with respect to the knowledge variable, one is able to identify at what level each student group operates on in the Mims-Swenson model. As stated previously, when a helping professional is able to balance cognitive awareness with an awareness of personal values and attitudes, intervention in the area of sexuality will [usually] become easier. The sample in this study operated on the life experience level of the Mims-Swenson model since the sample knowledge was low. However, those individuals in both student groups with high knowledge and
permissive attitude operate at the intermediate level of this model. [For a review of the model, please refer to p. 21.]
CONCLUSIONS

The conclusions will be discussed according to:
1) conclusions related to the literature review; 2) conclusions related to the findings of the research questions; 3) limitations of the study; and, 4) recommendations.

Conclusions Related to the Literature Review

The literature review in this study was divided into three main sections - the nature of sexuality among older adults, nursing and social work perceptions, and factors influencing these perceptions. A discussion of each section follows.

A. The Nature of Sexuality among Older Adults

Literature in this area addresses two specific concerns. First, the need for acquiring more knowledge about the biological aspects of sexuality and aging; and, in conjunction with this, addressing these biological changes with the recognition of the differences between gender groups. The literature overwhelmingly supports the notion that biological alterations with regard to sexual expression impact older males and females differently psychosocially simply by virtue of different sexual roles in our North American society. The adaption to physical limitations as an older adult, male or female, is the key to enjoying a sexually fulfilling life. However, the inaccessibility of 'socially acceptable'
partners, especially for older females, has prevailed although the age of ‘female liberation’ and progressive gender equality has been introduced. The literature cites more social limitations for the older female than the older male reveals that sexuality among older adults appears to be a woman’s issue.

B. Nursing and Social Work Perceptions

Literature pertaining to nursing and social work perceptions has identified a major area of concern - education. Although studies on perceptions of sexuality among older adults have yielded conflicting results, the literature is consistent in identifying educational training as influencing perceptions among helping professionals. However, the prevalence of negative stereotypes that reinforce restrictive perceptions about sexuality among the aged has biased and limited professional training for nurses and social workers.

In the literature review, it was suggested that there is a correlation between permissive attitude and more knowledge. Consequently, the literature reinforces the need for professional training at least to the intermediate level of the Mims-Swenson model in order to provide appropriate therapeutic interaction for older adults with sexual problems.

In addition to basic physiological information, older adults also need supports to increase their self-esteem and
understanding for their own sexual needs, expectations, and attitudes. A professional operating at the intermediate level can encourage education that allows for experimentation. In short, the literature stresses that the desire to fulfil one's sexual self is usually dependent on individual choice. Therefore, the need for effective skill development regarding sexuality issues among older adults requires professional training to update the sexual knowledge of older people. This training should progressively range from the life experiential level, to the basic level, to the intermediate level, and finally, to the advanced level.

C. **Factors Influencing Perceptions**

More research which focuses on the impact of experiential variables, such as, work, volunteer, family, and friends is needed. Specifically, education increases awareness which in turn, decreases negative stereotypes. The tradition that has existed among post-secondary institutions is that the focus on sexuality among older adults is lacking (refer to p. 66). Most universities in Canada offer one or more professional courses related to gerontology which generally provide future professionals with a broad interdisciplinary view of later life.

The majority of studies revealed that more knowledge creates a more permissive attitude about sexuality among the aged. Further educational practicum experiences guided by
insightful supervisors can provide positive experiences for students in this regard. It is important to remember that practicum supervisors may also possess restrictive perceptions about sexuality among older adults, and consequently, may also require retraining.

However, professional (education and work) and personal (volunteer, family, and friends) interaction is essential as it tests values and core beliefs. Although educational and other life experiences can have a positive effect on knowledge and attitude, providing education in experiential setting appears to yield the greatest benefit. [This is usually dependent on response to the type of education provided in practicum, work, volunteer, family, and friend settings.]

According to the literature, it is often more difficult to educate family and friends because the perceptions of sexual expression are very subjective. Although family perceptions may need to be altered, friendships are often more important than family to the older adults. For older adults, the risk of losing such an important relationship as a result of sexual needs may outway the need to be sexually active.

II  Conclusions Related to the Research Questions

The research questions provided a conceptual and methodological framework for this study. The following general conclusions can be derived from the study in attempting to answer these questions.
1. What are the socio-demographic characteristics of the undergraduate nursing and social work students?

The demographic characteristics of the sample were generalizable. It was apparent that young, single females between the ages of 21-25 are enroled in the senior level of undergraduate nursing and social work programs. These characteristics were found to be similar to those described by Registrar Offices in other Ontario universities comparable to the University of Windsor (McMaster University, Office of the Registrar, personal communication, June 1990; Lakehead University, Office of the Registrar, personal communication, July 1990).

2. What experiences with older adults do nursing students and social work students have?

There is a variety of experiences that both nursing and social work students in this sample have had with older adults. It appears from the findings that the presence of required post-secondary gerontology courses exist more in the nursing program than in the social work program. Furthermore, social work students are more apt to complete elective gerontology courses because required gerontology courses do not exist in their program. The opportunity for geriatric practicum experiences are also more prevalent in the nursing program.

With regard to experiences outside the realm of formal academia, both groups of students tend to have the similar
number of work experiences with older adults. The dissimilarities were that the nursing students had more family members over the age of 50, while the social work students were more inclined to have friendships with persons over the age of 65. Furthermore, nursing students had twice as many volunteer experiences with older adults than social work students.

In specific identification of practicum, volunteer, and employment experiences, there was a greater range of practicum and volunteer experiences among the social work students (refer to Table 4). This was primarily due to the fact that the majority of practicum, volunteer, and employment experiences for the nursing students focused on providing direct nursing care to older adults.

3. What knowledge do nursing and social work students have about sexuality and the elderly?

Both nursing students and social work students had very limited knowledge about the physiology of sexual changes and abilities among older adults. Specifically, out of 34 knowledge questions, the nursing students responded correctly to five questions in this sub-scale, and the social work students responded correctly to three questions.

4. What attitudes do nursing students and social work students have about sexuality and the elderly?

Both nursing students and social work students scored similarly on the attitude sub-scale. Their attitudes were
generally permissive with regard to sexual expression among older adults in various settings.

5. How do various experiences with the elderly influence the perceptions of sexuality among nursing and social work students?

The influence of various experiences with the elderly on perceptions generally differed among nursing and social work students. The significant effects of various experiences held by the nursing students with increased knowledge was nonexistent. However, the effects of age, marital status, and residency with an older adult were the only experiences found among the social work students that were significant with increased knowledge.

In this study, both nursing and social work students cited that post-secondary gerontology courses contributed to a more restrictive attitude about sexuality among older adults. However, interaction with family and friends resulted in a more permissive attitude among the nursing students. Among the social work students, interaction with friends resulted in a more permissive attitude.

III Limitations

As with all social science research, there are inherent limitations which have outcome implications for this study. First, the accuracy of the respondents must be taken into account. Some may have consulted with others thereby altering
the initial thought or feeling about questions asked in the inventories. Although it was specifically noted on the cover letter in the question packages not to so this, it cannot be determined if this was dutifully followed.

Secondly, researcher bias may have affected the interpretation of categorizing practicum, employment, and volunteer experiences. For purposes of simplicity, the determination of such experiences fitting into each category was totally subject to my discretion. This may have influenced the frequencies among each category as well as subsequent conclusions.

Thirdly, sample size was limited. Specifically, larger sample size may have produced other significant data which was overlooked by the study. Furthermore, the number of students who did not respond to the questionnaire was 80 of 120 nursing students and 59 of 115 social work students [total number of third and fourth year students in each program] (University of Windsor, Office of the Registrar, personal communication, April 1991). One can speculate that those who did not respond may: 1) perceive themselves as not having enough experience with older adults to adequately complete the questionnaire; and, 2) have restrictive attitudes about sexuality among older adults. As indicated in Table 2, more social work students responded to the questionnaire than nursing students. This may be related to the fact that this researcher is a social work student.
As an exploratory-descriptive study [which examined general perceptions that shaped people’s attitudes and knowledge about sexuality among older adults], this researcher acknowledges the fact that there are inherent biases in the way questions were asked and/or variables selected for inclusion in this study may be limiting. Further, the instrument used could have been tested and scrutinized more for its validity.

IV Recommendations

With regard to the current and ever-increasing older population in Canada, the findings of this study identify three critical issues which must be addressed in the future: policy changes; education; and research.

As this study and others suggest, the implementation of more policies which recognize the sexual needs of the elderly, specifically elderly residents of institutional facilities, appears warranted. Such policies would validate these needs to administrators, supervisors, staff, and residents themselves of such facilities. Further, policy changes appear to be required in training programs (in this study, undergraduate nursing and social work programs).

Although it was identified in this study that gerontology courses do not provide positive perceptions of sexuality among older adults, it may be that the manner in which such courses were designed need changes. Furthermore, the opportunity for
social work students to obtain more geriatric practicums appears to be required. The patterns regarding sex related issues and problems in social work education and practice were identified as the: recognition of a gap in the social work curricula in the area of human sexuality; development of advanced courses and concentration in social work practice with sex related problems; broadening of professional roles available for those social workers willing to address sexual issues; and, application of future research to issues of social work curriculum design in the area of human sexuality (Schlesinger, 1983). The recent development of specialized curricula in geriatric social work at the master and doctoral levels of study and the incorporation of generalized aging content at the undergraduate BSW level of study has begun to recognize the needs (including sexual needs) of the aged. If policies existed that recognized the sexual needs of patients/clients/residents, this policy position would in turn affect the nursing or social work students' training experience.

Other formal training experiences, such as volunteering and employment need to be encouraged so that the sexuality issue becomes commonplace in serving older adults. This cannot but help to influence relationships with elderly family members and elderly friends. Further research that examines more thoroughly the content of such experiences will continue to identify those variables which are significant with
positive perceptions of sexuality among older adults.

In conclusion, it appears that with the expanding geriatric population, society will have to take a more liberalized view regarding alternate life-styles. The ability to choose their mates on the basis of psychological compatibility, not preconceived standards of normalcy would enable the older population to enjoy a healthy sexual life in their older adult years. Numerous opportunities will continue to exist for helping professionals to assist older adults to achieve this.
Appendix A

Questionnaire
COMPARATIVE STUDY OF PERCEPTIONS OF SEXUALITY AMONG OLDER ADULTS

Instructions: Please answer all to the best of your ability. This is not a test; it is an opinion survey designed to collect information about your perceptions. Also, please be reminded that all of your responses will be held in strictest confidence.

PART I  BACKGROUND INFORMATION

1. Age: ____ years
2. What is your gender? Female ____ Male ____
3. What is your current marital status?:
   Single ____ Married ____ Common Law ____
   Divorced ____ Widowed ____ Separated ____

PART II  POST-SECONDARY HISTORY

1. Nursing student: full-time ____ part-time ____
   Specify what year of study you are in: ____
2. Social Work student: full-time ____ part-time ____
   Specify what year of study you are in: ____
3. a) Have you completed any post-secondary courses which focus specifically on older adults (65 years or over)?
   Yes ____ No ____
   If "Yes," answer b and c; if "No," go to question 4.
   b) How many of these courses were for one semester? ____
   c) How many of these courses were required? ____
      elective? ____
4. a) Have you ever had a post-secondary field practicum/placement in a setting with clients/patients who were predominantly over 65 years of age?
   Yes ____ No ____
PART II (continued)

If "Yes," answer b and c; if "No," go to PART III.

b) What were your duties and responsibilities with these older adults? (Briefly describe.)

__________________________________________________________

__________________________________________________________

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c) How many semesters did this last? _____

PART III EXPERIENCES WITH OLDER ADULTS

1. a) Have you ever been employed (in a paid capacity) in the field of gerontology?

   Yes _____  No _____

   If "Yes," answer b and c; if "No," go to question 2.

b) Briefly describe your most recent job title and duties:

   _______________________________________________________

   _______________________________________________________

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   ___ month(s)
PART III (continued)

3. a) How many persons in your family of origin (including blended families, i.e. stepfather etc.,) are over 65 years of age? ______

b) How many persons of these family members do you have regular (weekly minimum) contact with? ______

4. a) How many of your friends are over 65 years of age? __

b) How many of these friends do you have regular (weekly minimum) contact with? ______

5. a) Have you ever lived with a person over the age of 65?

   Yes ____   No ____

   If "Yes," answer b and c; if "No," go to PART IV.

   b) How many persons over 65 years of age have you lived with to date?: _____

   c) What length of time did you live with them?
      (approximate to the nearest month)

      Person 1: _________   Person 3: _________

      Person 2: _________   Person 4: _________

PART IV   KNOWLEDGE OF SEXUALITY (please check either True, False, or Don't Know)

1. Sexual activity in aged persons is often dangerous to their health.

   True ____   False ____   Don't Know ____

2. Males over the age of 65 typically take longer to attain an erection of their penis than do younger males.

   True ____   False ____   Don't Know ____

3. Males over the age of 65 usually experience a reduction in the intensity of orgasm relative to younger males.

   True ____   False ____   Don't Know ____
PART IV (continued)

4. The firmness of erection in aged males is often less than that of younger persons.
   True ____  False ____  Don't Know ____

5. The older female (65 years or over) has reduced vaginal lubrication secretion relative to younger females.
   True ____  False ____  Don't Know ____

6. The female takes longer to achieve vaginal lubrication relative to younger females.
   True ____  False ____  Don't Know ____

7. The older female may experience painful intercourse due to reduced elasticity of the vagina and vaginal lubrication.
   True ____  False ____  Don't Know ____

8. Sexuality is typically a life-long need.
   True ____  False ____  Don't Know ____

9. Sexual behaviour in older people (65 or over) increases the risk of heart attack.
   True ____  False ____  Don't Know ____

10. Most males over the age of 65 are unable to engage in sexual intercourse.
    True ____  False ____  Don't Know ____

11. The relatively most sexually active younger people tend to become the relatively most sexually active older people.
    True ____  False ____  Don't Know ____

12. There is evidence that sexual activity in older persons has beneficial physical effects on the participants.
    True ____  False ____  Don't Know ____

13. Sexual activity may be psychologically beneficial to older persons.
    True ____  False ____  Don't Know ____
PART IV (continued)

14. Most older females are sexually unresponsive.
   True ____  False ____  Don't Know ____

15. The sex urge typically increases with age in males over 65 years of age.
   True ____  False ____  Don't Know ____

16. Prescription drugs may alter a person's sex drive.
   True ____  False ____  Don't Know ____

17. Females after menopause, have a physiologically induced need for sexual activity.
   True ____  False ____  Don't Know ____

18. Basically, changes with advanced age (65 or over) in sexuality involve a slowing of response time rather than a reduction of interest in sex.
   True ____  False ____  Don't Know ____

19. Older males typically experience a reduced need to ejaculate and hence may maintain an erection of the penis for a longer time than younger males.
   True ____  False ____  Don't Know ____

20. Older males and females cannot act as sex partners as both need younger partners for stimulation.
   True ____  False ____  Don't Know ____

21. The most common determinant of the frequency of sexual activity in older couples is the interest or lack of interest of the husband in a sexual relationship with his wife.
   True ____  False ____  Don't Know ____

22. Barbiturates, tranquilizers, and alcohol may lower the sexual arousal levels of aged persons and interfere with sexual responsiveness.
   True ____  False ____  Don't Know ____
PART IV (continued)

23. Sexual disinterest in aged persons may be a reflection of a psychological state of depression.
   True _____  False _____  Don't Know _____

24. There is a decrease in frequency of sexual activity with older age in males.
   True _____  False _____  Don't Know _____

25. There is a greater decrease in male sexuality with age than there is in female sexuality.
   True _____  False _____  Don't Know _____

26. Heavy consumption of cigarettes may diminish sexual desire.
   True _____  False _____  Don't Know _____

27. An important factor in the sexual responsiveness in the aging male is the frequency of sexual activity.
   True _____  False _____  Don't Know _____

28. Fear of the inability to perform sexually may bring about an inability to perform sexually in older males.
   True _____  False _____  Don't Know _____

29. The ending of sexual activity in old age is most likely and primarily due to social and psychological causes rather than biological and physical causes.
   True _____  False _____  Don't Know _____

30. Excessive masturbation may bring about an early onset of mental confusion and dementia in the aged.
   True _____  False _____  Don't Know _____

31. There is an inevitable loss of sexual satisfaction in postmenopausal women.
   True _____  False _____  Don't Know _____
PART IV (continued)

32. Secondary impotence (non-physiologically caused) increases in males over the age of 60 relative to younger males.

   True _____    False _____    Don't Know _____

33. In the absence of severe physical disability, males and females may maintain sexual interest and activity well into their 80's and 90's.

   True _____    False _____    Don't Know _____

34. Masturbation in older males and females has beneficial effects on the maintenance of sexual responsiveness.

   True _____    False _____    Don't Know _____

PART V    ATTITUDES TOWARD SEXUALITY

Respond by using the following scale: 1 strongly disagree
2 disagree
3 moderately disagree
4 neutral
5 moderately agree
6 agree
7 strongly agree

1. Aged people (65 or over) have little interest in sexuality. ___

2. An aged person who shows sexual interest brings disgrace to herself/himself. ___

3. Institutions such as nursing homes ought not to encourage or support sexual activity of any sort in its residence. ___

4. Female and male residents of nursing homes ought to live on separate floors or in separate wings of the nursing home. ___

5. Nursing homes have no obligation to provide adequate privacy for residents who desire to be alone, either by themselves or as a couple. ___

6. As one becomes older (65 or over), interest in sexuality inevitably disappears. ___
PART V (continued)

7. If I knew that a particular nursing home permitted and supported sexual activity in residents who desired such, I would not place a relative in that nursing home. __

8. It is immoral for older persons to engage in recreational sex. __

9. I would like to know more about the changes in sexual functioning in older years. __

10. I feel I know all I need to know about sexuality in the aged. __

11. I would complain to the management if I knew of sexual activity between any residents of a nursing home. __

12. I would support sex education courses for aged residents of nursing homes. __

13. I would support sex education courses for the staff of nursing homes. __

14. Masturbation is an acceptable sexual activity for older males. __

15. Masturbation is an acceptable sexual activity for older females. __

16. Institutions such as nursing homes, ought to provide large enough beds for couples who desire such to sleep together. __

17. Staff of nursing homes ought to be trained or educated with regard to sexuality in the aged and/or disabled. __

18. Residents of nursing homes ought not to engage in sexual activity of any sort. __

19. Institutions such as nursing homes should provide opportunities for the social interaction of men and women. __

20. Masturbation is harmful and ought to be avoided. __

21. Institutions such as nursing homes should provide privacy so as to allow residents to engage in sexual behaviour without fear of intrusion or observation. __
PART V (continued)

22. If family members object to a widowed relative engaging in sexual relations with another resident of a nursing home, it is the obligation of the management and staff to make certain that such sexual activity is prevented. __

23. Sexual relations outside the context of marriage are always wrong. __

Again using the scale for questions 24, 25, and 26: If a relative of mine, living in a nursing home, was to have a sexual relationship with another resident, I would:

24. Complain to the management. __

25. Move my relative from this institution. __

26. Stay out of it as it is not my concern. __

** Once again, thank you for your time and effort. **
APPENDIX B

Cover Letter
Dear Respondent:

Enclosed is a pretested seven page questionnaire designed to identify the perceptions nursing and social work students have about sexuality among older adults. The questionnaire can be completed in less than 20 minutes.

I ask that you answer the questionnaire on your leisure, without consultation with others. This allows your true thoughts to be presented in this survey study.

Once you have answered all questions, please seal the envelope with the signed consent form and questionnaire enclosed. As stated in class, the questionnaire packets will be collected one week from today, during this same classtime. The packets can also be submitted to my mailbox in Room 8118 Lambton Tower.

Thank you very much for your participation.

Sincerely,

Kelly-Ann Spezowka, BSW
MSW Candidate
APPENDIX C

Consent Form
CONSENT FORM FOR STUDY RESPONDENTS

I, the undersigned, agree to participate to the following study which focuses on the comparison of perceptions concerning sexuality among older adults. I understand that participation in this study is completely voluntary and that information collected from me will remain anonymous and confidential.

I understand that all information collected from myself and other individuals will be reported in group numerical or statistical form only. No names will be used in the study and this consent form will be detached from the questionnaire upon receipt of the information.

I understand that this survey is research being supervised through the Office of Graduate Studies and the School of Social Work at the University of Windsor.

Signature: ________________________
Date: __________________________

* Again, please be reminded that this sheet will be detached from your survey.
Reference List


VITA AUCTORIS

Kelly-Ann Spezowka was born June 6, 1965 in Windsor, Ontario. She has completed grade school and high school in Belle River, Ontario. She entered the University of Windsor in 1984 in the undergraduate social work program. After a leave of absence to travel, she returned to complete her B.S.W. She continued on with graduate studies in social work at the University of Windsor in September 1989 and will graduate with her M.S.W. in June 1991. She is presently employed at St. Joseph's Hospital in Sarnia as a Medical Social Worker with a particular focus on terminally diagnosed patients. She has conducted educational seminars on the topic of sexuality among older adults in various health care settings in the Lambton County area. She hopes to become a certified sex therapist.