The UNIVERSITY OF CALGARY

# The Attitudes and Knowledge Levels of Social Work and Nursing Students Toward the Elderly

by

Patricia E. Bianchini

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## ABSTRACT

The growing elderly population will necessitate an increase in the number of gerontologically trained social workers and nurses. This study describes the current elder-related training of 159 social work and nursing students at the University of Calgary. Further, it explores the readiness of this group to work with seniors by measuring their elder-related knowledge and attitudes as well as their motivation for a career in this field. The reasons cited by respondents for choosing, or not choosing, a career with the elderly will be presented. The findings suggest that neither nursing or social work respondents are adequately prepared for a career in gerontology. Directions for future education and research are discussed.

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# CHAPTER ONE

# INTRODUCTION

## Statement of Intent

The intent of this thesis is to examine the elder-related knowledge among social work and nursing students, their attitudes toward the elderly, as well as their motivation for choosing, or not choosing, a gerontological career.

## Statement of the Problem

Advances in medical technology have enabled people to live longer lives than ever before. The combined forces of large scale immigration in the early 1900's, greater life expectancy (including decreased infant mortality rates), and lower overall fertility rates have created 'population aging' in Canada. In fact, "...[t]he senior population has grown more than twice as fast as the overall population since the early 1980's" (Statistics Canada: Division of Aging and Seniors, 1999). In this century Canada's senior population has risen from 4.8% in 1921, to 9.6% in 1981, and finally to 12.3% in 1998 (Statistics Canada: Division of Aging and Seniors, 1999). It is predicted that by the year 2031, 23% of Canada's population will be over the age of 65. The fastest growing segment of the Canadian population is the old-old, those over 85 years of age (Novak, 1997).

While medical progress has produced some control over the negative health related aspects of aging, there usually remains a period of dependency and a need for

specialized care toward the end of life (Galbraith & Suttie, 1987). A Canadian study on hospital utilization found that the number of hospital admissions and the length of hospital stay both increased with age. That is, in 1993-94, 263 admissions were recorded for individuals' aged 35-44; 343 for those aged 45-54; 807 for those aged 65-74; and 1015 for individuals aged 75-84 (Decoster, Roos, Carrier & Peterson 1997). Individuals aged 85 and older had fewer hospital admissions than those under the age of 65 (500 total admissions). The reduced frequency of admission for this group likely results from 34% of the population living in an institutional setting (compared with 8.9% of those 75-84 and 2.1% of those aged 65-74) (Statistics Canada: Division of Aging and Seniors, 1999).

The number of older adults requiring specialized care increases the likelihood that most health care and social service professionals will work with elderly clients at some point during their careers (Reed, Beall & Baumhover, 1988). Butler (1980) predicts that health professional students, during the prime of their careers, will spend 75% of their practice with the elderly (cited in Williams, Lusk & Kline, 1986).

A study by the National Council of Health Centers asserts that the urgency for geriatric nurses will continue to rise as the nursing home population grows and the proportion of hospital use by seniors continues to increase (cited in Joel, Baldwin & Stevens 1989). Moreover, the United States Bureau of Labor Statistics (1984) listed gerontological social work as one of the fastest growing occupations (cited in Lubben, Damron-Rodriguex & Beck, 1992). A 1995 study by Teare and Sheafor reported that of 1450 social work practitioners, 35% listed elderly persons as

comprising a large proportion of their clientele. Further, Peterson and Wendt (1990) reported that 62% of NASW members indicated that their work necessitates gerontological knowledge (cited in Scharlach, Robinson, Damron-Rodriguez & Feldman, 1997). Although data specific to Canadian gerontological professionals was not available, it can be assumed that the numbers will be comparable to the United States as our senior population continues to rise (Novak, 1997) and their higher proportion of hospital use has been cited (Decoster, Roos, Carriere & Peterson, 1997).

Despite the demand for gerontologically trained professionals, "[m]ost social workers do not have even a minimum level of gerontological competence" (Scharlach, 1997, p. 14). This lack of competence results, in part, because few graduate students take a course in gerontology and even fewer major in this field. For example, in 1996 only 3% of 34,480 graduate social work students majored in gerontology (Council of Social Work Education, 1996 cited in Scharlach, et. al., 1997) and less than 2% of students, who did not major in gerontology, took any course work related to aging (Damron-Rodriguez, Villa, Tsen, Hung-Fu & Lubben, 1997).

Apart from the lack of educational preparation, both social work and nursing students consistently demonstrate low motivation for this career (Belgrave, Lavin, Breslau & Haug, 1982; Carmel, Cwikel & Galinsky, 1992; Aday & Campbell, 1995). Higher interest in working with children, the stigma attached to work with the elderly as mundane and unchallenging, and students' lack of desire to work in

institutional settings, such as nursing homes, all contribute to the limited interest in gerontology.

As the need for gerontological nurses and social workers increases, and the preparation and motivation for this career remains low, we face a critical shortage of professionals trained to provide quality service to the elderly. The urgency of this situation is emphasized by Williams, Lusk, and Kline (1986) who suggest that further investigations be undertaken to explore the factors that may influence a student's decision to practice with the elderly.

**Significance of the Problem**

As the literature review will demonstrate, both social work and nursing students lack knowledge on the biological, psychological, social, and demographical aspects of aging (Williams, et. al., 1986; Davis-Berman & Robinson, 1989; Reed, Beall & Baumhover, 1992). This lack of knowledge translates into over-generalizations and misconceptions that are likely to lower quality of care, undermine an elder's physical abilities, and compromise their right to self-determination.

The gerontological knowledge levels of nursing students have been examined in at least six studies in the United States over the past two decades (Williams, et. al, 1986; Galbraith & Suttie, 1987; Carmel, et. al., 1992; Reed, et. al, 1992; Aday & Campbell, 1995; Rowland & Shoemaker, 1995). In measuring knowledge, three of the studies used Palmore's Facts on Aging Quiz (FAQ), a 25-item true/false

questionnaire based on factual data. The results of these studies showed that nursing students achieved average correct response scores between 62 and 70% (Williams, et. al, 1986; Carmel, et. al., 1992; Reed, et. al, 1992). While there is no established cut-off score, to determine a threshold that represents an acceptable level of knowledge, these researchers report that their results demonstrate significant gaps in gerontological knowledge. Fewer studies have examined social work students' knowledge levels of elder-related issues, however, studies completed thus far show comparable knowledge levels to that of nursing students (Davis-Berman & Robinson, 1989; Carmel, et. al., 1992).

Knowledge of aging is one variable that may impact attitudes toward the elderly (Eddy, 1986; Butler, 1989; Rohan, Berkman & Holmes, 1994; Aday & Campbell, 1995). Several researchers, using standardized instruments to measure attitudes, report that social work and nursing students possess neutral to negative attitudes towards the elderly (Cook, & Peiper, 1986; Galbraith & Suttie, 1987; McCracken, et. al., 1995; Rowland & Shoemaker, 1995). Respondents in these studies saw the elderly as institutionalized, bored, irritated, angry, rigid, lonely, isolated, and dirty (Barresi, & Brubaker, 1980; Reekie & Hansen, 1992; Brockopp, Warden, Colclough & Brockopp, 1993; Rohan, Berkman, Walker & Homes, 1994).

Misconceptions and overgeneralizations are the basis for negative stereotypes (Brehm & Kassin, 1993). Negative stereotypes, in turn, are often the basis for negative attitudes (Chumbler, 1994). Combined, negative stereotypes and attitudes

can lead to inadequate health care services (Reekie & Hansen, 1992; Brockopp, et. al., 1993; Rohan, et. al., 1994; Brymer, et. al., 1996).

Ageism includes prejudices and stereotypes applied to older people sheerly on the basis of age (Butler, Lewis & Sunderland, 1998). Ageist beliefs are so deeply ingrained in Western culture that they commonly go unnoticed. From a young age we are taught to value youth and independence thereby rejecting aging and dependence. It is in this light that an elder experiencing physical changes can be seen as having "tipped the balance towards a problem of more dependence" (Kaufmann, 1994, p. 49).

As a result of our disdain for dependence the literature depicts longevity as a drain on our society (Jeffreys, 1996), rather than an untapped resource for our society. It is not, therefore, surprising that ageism can negatively affect health care providers' professional training and service delivery. In fact, it has been stated that & Albert, 1991 cited in Henderson, 1997).

> ... [t]he medical profession is not immune to ageism. ... In fact, it was there that I first became conscious of the prejudice toward age, there when I first heard the term "crock" -- originally applied to patients with no organic basis for the disease thought to be hypochondriacal applied to middle aged women and older people (Butler, 1989, p. 140).

Whether we are aware of it or not, we have all seen ageism in health care. Ageist health services take the form of; rampant misdiagnosis (Simon, 1989;

Lebowitz, 1996; Henderson, 1997), over prescription of medication (Sharpe, 1997), and inappropriate and ineffective nursing and social work assessments, care, and counsel (Belgrave, Lavin, Breslau & Haug, 1982; Reekie & Hansen, 1992; Rohan, et. al., 1994). Ultimately, ageism affects not only an elder's health outcome but also their behavior and mood (Grant, 1996).

Kosberg and Harris (1976) state that positive attitudes toward clients are the basis for effective social work practice. The social work profession espouses the importance of the therapeutic relationship grounded in positive regard. Furthermore, "... social workers are ... obliged to protect the prerogatives and aspirations of those they serve ..." (Rothman, et. al., 1996) yet, their failure to effectively advocate for adequate housing options, higher standards in nursing homes, and increased availability of respite care, can be seen as an acceptance and perpetuation of ageism (Heycox, 1989). Moreover, the profession accepts the view that working with the elderly is a low status career (Heycox, 1989; Reed, et. al., 1992; Scharlach, et. al., 1997).

The impact of inadequate gerontological knowledge on the nursing care provided to elderly persons has been examined in a few studies. Brockopp, et. al., (1993) suggested that post-operative pain management for the elderly was compromised as a result of the misconceptions held by nursing staff. A further study by Brymer, et. al. (1996) found an inability among nurses to adequately assess and treat seniors' health issues such as dementia, depression, malnutrition, and myocardial infarction.

Education has a significant role to play in the development of a pool of well trained gerontological nurses and social workers. Clark asserts that "...[t]he education and training of health care professionals shape their identities, values, and norms of practice ..." (1997, p. 441). Educational programs must ensure that students preparing for human-service-oriented careers hold adequate knowledge about the aging process and understand the individuality and capabilities of older clients (Reed, et. al., 1992). Relative to the educational experience, research suggests that one's knowledge, attitude, and motivation to work with the elderly can be influenced by the number of gerontological courses taken, professors' attitudes toward the elderly, and the occurrence of a positive field practicum in the area of aging (Galbraith & Suttie, 1987; Litwin, 1994; Aday & Campbell, 1995). Without adequate attention to these issues the future care of older adults is jeopardized as limited knowledge combined with negative attitudes will result in the provision of poor quality health care service (Williams, Lusk & Kline 1986; Reed, Beall, & Baumhover 1992; Aday & Campbell, 1995).

**Purpose of this Thesis**

This thesis addresses three research questions.

- What is the knowledge level of social work and nursing students regarding the elderly?
- What are the attitudes of social work and nursing students towards the elderly?

- What motivates and deters social work and nursing students from choosing a career in the field of gerontology?

This research will build on previous studies that have assessed the elder-related attitudes and knowledge levels of practicing or prospective health care workers. This study differs from those in the past as the knowledge and attitudes of nursing and social work students have not been examined in a Canadian context. Findings in Canada may vary from those in the United States as a result of differences in the health care and educational systems. To improve elder care in Canada it is necessary to examine the current state of the attitudes and knowledge levels held by Canadian students.

In terms of gerontological knowledge and attitudes, there has been only one U.S. study that has included both nursing and social work students (Reed, et. al., 1992). This thesis seeks to measure and compare the attitudes and knowledge levels of social work and nursing students. Although there is considerable literature on multidisciplinary teams, the focus has not been specifically on the nursing/ social work dyad. It is important to increase our understanding of how both social work and nursing practice is affected by their knowledge of, and attitudes toward, the elderly.

Motivators and deterrents for work in the field of gerontology have seldom been studied from respondents' self-reports regarding their perceptions of a gerontological career. Variables such as age, ethnicity, and previous educational/ personal experience with the elderly have been incorporated into a few studies and

the results, to date, are inconclusive. In this study respondents were asked to report, in their own words, what motivates or deters them from choosing a career with this population.

**Organization of the Thesis**

The body of this thesis explores the questions posed in Chapter One. Chapter Two provides a critical literature review of previous studies designed to assess the elder-related knowledge levels and attitudes of social work and/ or nursing students and practitioners. Further, variables found to affect knowledge, attitudes, and motivation for a gerontological will be discussed. Chapter Three describes the research methodology including the research design and procedures, the research population, sample, instrumentation, and data analyses. Chapter Four presents findings and results. Chapter Five discusses the research findings, and draws conclusions and recommendations. This chapter will also include a discussion of the study's limitations.

# CHAPTER TWO

# LITERATURE REVIEW

## Introduction

This chapter provides a conceptual framework for the research conducted in this thesis. Chapter Two begins by discussing theories related to the development of attitudes as well as the impact of knowledge on attitudes. An analysis of past research which explored the knowledge levels and attitudes of social work and nursing students and practitioners will be presented. This chapter will also include a discussion of variables that have been found to motivate or deter students from choosing a career in this field.

The analysis of past research on attitudes and knowledge levels of social work and nursing students will likely lead readers to question the impact on the quality of care that is provided to elderly patients. As such, Chapter Two also examines research studies which have assessed the quality of social work and nursing care being provided to seniors. The chapter concludes with an examination of gerontological content included in nursing and social work curricula.

## Relationship between Attitudes and Knowledge

Attitudes are the positive or negative reaction to a person, object, or idea (Brehm & Kassin, 1993). Misconceptions and stereotypical beliefs often cause negative attitudes towards certain groups of society, e.g. the elderly. Theories on the

development of stereotypes assert that a lack of accurate information is the most significant contributor to stereotyping. According to Brehm and Kassin (1993) the formation of stereotypes involve both social categorization (sorting of individuals into groups based on common attributes such as age) and the adoption of an outgroup homogeneity bias (the belief that the categorized group holds little diversity, that all members of the group are the same). Stereotyping occurs when individuals attempt to generalize from a limited number of examples (Tybout & Scott, 1983; Franken, 1994). Stereotypes can also arise when the individual has no personal knowledge of a population and in the absence of knowledge adopts the beliefs and attitudes of others.

Like attitudes and values, stereotypes are often relatively stable (Franken, 1994). They will often remain until challenged by new and discrepant information and experiences (Peterson & Eden, 1977). Stereotypes tend to disappear only when a number of newly encountered examples do not fit the set category (Franken, 1994). The altering of a stereotype is believed to arise as a result of cognitive dissonance, which is "[a]n unpleasant psychological state often occurring when a person holds two conflicting cognitions" (Brehm & Kassin, 1993, p. 475). When cognitive dissonance occurs an individual will either discard the new information as invalid or alter their previous beliefs by incorporating the new information. Most often, an individual will ignore several incongruent examples before changing their stereotypic perceptions of a particular group (Myers, 1992; Franken, 1993).

Peterson & Eden (1977); Butler (1989); and Schneider, Snyder-Joy & Hopper, (1993) assert that increased knowledge can reduce the negative attitudes and stereotypical beliefs held in regard to certain groups in society. Butler has written, "[c]oncerning the treatment of ageism, as a disease, I find that knowledge is the most basic intervention serving as antidote to numerous erroneous but widely held beliefs" (1989, p. 138). He continues, "[i]n order to treat this disease [ageism] we first need to realize what is really true about persons. One antidote to ageism is knowledge" (1989, p. 142). Education engages students in analysis, evaluation and exposure to new information. This new information will, in turn, threaten the stereotypical beliefs which students may posses.

Attitudinal change can occur when individuals experience sufficient contact with outgroup members and when the contacts with the outgroup members are without a sampling bias (Brahm & Kassin, 1993), such as that found in a nursing home. Several authors have claimed that increased personal experience, with a representative sample of the outgroup, will help fade stereotypical beliefs (Peterson & Eden, 1977; Brahm & Kassin, 1993; Kupetz, 1994).

To be an effective social work or nurse practitioner the individual must have substantial knowledge of the elderly and the aging process. This knowledge can be achieved through sufficient elder-related course work, practicum, and/or personal experience. This knowledge could ensure that stereotypes and misconceptions do not hinder quality of care.

**What do Students Need to Know**

To work effectively with seniors professionals must hold a wide variety of knowledge in relation to issues that affect their lives. While the discussion below does not include all of the areas in which gerontological knowledge should be acquired it does provide an overview of some of the major elder-related issues identified in the literature.

What is the relationship between gerontological course work and the identified educational needs of allied community health professionals? To address this question, Mosely, Shumaker, Hilegass, Dunton & Swager (1996) conducted a research study at the Nevada Geriatric Education Center. Mosely's study included 281 respondents, most of which were social work and nursing practitioners. The survey found that professionals observe a lack of training in elder-related health promotion, death and dying, acute health care, counseling, and case management. Other researchers have noted the need for social workers and nurses to be trained in interdisciplinary teamwork (Nelson, 1992, Ryan, 1996; Scharlach, et. al., 1997; Netting & Williams, 1998), geriatric counselling, and chronic mental health problems (Johnson, Kuder & Wellons, 1992; Scharlach, et. al., 1997; Kramer, 1999; Scharlach, 1999).

Knowledge of Demographics Assuming that increased knowledge will decrease misconceptions and stereotypes about seniors, social work and nursing students should know basic facts about aging and the elderly (Butler, 1989). However, social work and nursing students frequently answer a number of basic

demographic questions wrong when completing Palmore's Facts on Aging Quiz (Palmore, 1988), a 25 item true/false questionnaire. Students are not aware that the; percentage of Canada's population over the age of 65 is less than 15%; that more women than men are widowed but that this gap is decreasing; that it is less than 10% of seniors who reside in nursing homes, that more than three quarters of the elderly are living independently, and that most seniors reside with either a spouse or a family member (Palmore. 1988). Students are also unaware that seniors have fewer motorvehicle accidents than drivers under the age of 65 and that the majority of seniors have incomes above the poverty line (as defined by the Federal government) (Mathews, Tindale & Norris, 1984).

Knowledge of Dementia Knowledge about dementia has become increasingly important as the old-old, those over the age of 85, have become the fastest growing segment of the elderly population and the prevalence of dementia in this age group is estimated at 25% (Carlson & Roberson, 1994). Alzheimers disease (AD) accounts for approximately 50% of all dementias. At least 50% of nursing home residents are thought to have Alzheimers disease (Marshall, 1994; Banazak, 1996).

Several studies have examined dementia knowledge. In order to assess an individual's knowledge of AD the Alzheimers Disease Knowledge scale (ADK) was developed in 1988. The scale consists of 20 multiple choice items in direct questions or incomplete statements. This scale was validated on four university samples during the development process and had alpha coefficients ranging from .71 to .91

(Dieckmann, et. al., 1988, cited in Beall, Baumhover, Novak, Edwards, Plant & Peironi, 1992).

Kane (1999) used the ADK scale to assess the knowledge levels of 333 BSW and MSW students relative to Alzheimers disease. Data was collected in classroom settings at three Florida Universities. The respondents were predominantly Caucasian (71%) and female (83%). The mean correct response score for the ADK scale was only 33% (Kane, 1999). Utilizing the same scale, Beall et. al., (1992) sampled 99 third and fourth year nursing students from a University in the United States. In this study the mean correct score was 62%.

As the ADK scale does not include cut off scores, which identify a threshold at which an appropriate level of knowledge is deemed, these data are open to interpretation. The average scores of 62 and 33%, however, appear low. With such limited knowledge of the disease it is unlikely that these professionals could provide empathetic and effective care to the individual or the family affected by Alzheimers disease.

Although the focus of this thesis is on nursing and social work students, other research has reported that physicians did not demonstrate sufficient knowledge relative to the dementias. Rubin, Glasser & Werckle (1987) (cited in Beall, et. al., 1992) found that 70% of physicians who participated in their study failed to identify more than four causes of dementia.

The following sections concern knowledge about depression, older women, health promotion, drug use, and geriatric counseling. While researchers have not

examined social work and nursing students' knowledge levels specific to these topics, there is an implied lack of understanding. The topics below have been identified in the literature as important for gerontological professionals.

Knowledge of Depression Depression is often undiagnosed among the elderly. If left untreated mental health conditions in the elderly may become comorbid with physical illness (Rosen & Persky, 1996/97) and exacerbate existing conditions. Depression is the most common emotional disorder found in the elderly (Butler, et. al., 1988). Although prevalence estimates of depression range from 3 to 60%, the most common estimate is 12% (Dorfman, Lubben, Mayer-Oakes, Atchison, Scweitzer, De Jong & Matthias, 1995).

The suicide rate among white men aged 85 and over is reported at six times the rate of the general population. Even more alarming is the claim that nearly 40% of all elders who commit suicide have seen their doctor sometime in the week before killing themselves "...yet their depression is rarely recognized and hardly ever treated" (Lebowitz, 1996, p.2).

Grant (1995) reports that compared to younger adults presenting with the same symptoms elderly patients are less frequently diagnosed with depression. The high prevalence of undiagnosed depression is accounted for by the following; inappropriate criterion of the DSM-IV relative to seniors; the general somatic symptoms reported by the elderly; and the frequency with which depressive symptoms mimic other diseases such as dementia, for example, cognitive deficits in memory and concentration can occur with both illnesses (George, 1993; Dorfman et.

al., 1995). Increased awareness and knowledge among health professionals would greatly improve the lives of many elders as depression is one of the most treatable mental illnesses (National Institute on Aging, 1992).

Knowledge of Drug Use Scharf and Christophidis, (1993) assert that individuals over the age of 65 are three times more likely to experience an adverse drug reaction compared to those under the age of 50. Further, these authors report that adverse drug reactions cause 15% of all elderly hospital admissions. Health care professionals must be cognizant of the presenting symptoms including confusion, increased falls, loss of mobility and incontinence. Garrity and Lawson, (1989) purport that allied health professionals can help decrease adverse drug reactions by providing patients with clear and specific instructions. Health professionals should also ensure that there are no physical barriers to their drug program such as an elder's ability to open the pill container.

Knowledge of Older Women Women face multiple issues as they age. Health care professionals must be sensitive to the fact that elderly women have a:

- Higher prevalence of disease and disability, including Alzheimers disease, coronary heart disease, and depression (Sharpe, 1995; Henderson, 1997; Mcann, Hebert, Bennett, Skul & Evans, 1997).
- Lower rate of diagnostic testing and preventive treatment for cancer and heart disease (Henderson, 1997).
- Greater likelihood of being over-prescribed medications (Henderson, 1997).

- Greater likelihood of being the primary caregiver to a dependent spouse (Sharpe, 1995).
- Lower socioeconomic status (Sharpe, 1995).
- An increased chance of being widowed and living alone (McCann, et. al., 1997).

When working with older women, professionals must not only be aware but also aim to decrease the impact that these multiple barriers have on their well being.

Knowledge of Health Promotion As the shift toward community health care becomes more prominent there is an increased importance placed on the knowledge of health promotion. While there is no set goal for health promotion it typically aims to improve quality of life and maximize independence. Promotional strategies that can be successful in meeting these goals with the elderly include exercise programs, smoking cessation programs, hypertension treatment (McElhaney, 1994), immunization, improved nutrition (Patterson & Feightner, 1997), and optimal drug management (Garrity & Lawson, 1989; McElhaney, 1994). Allied health professionals should understand that the success of a health promotional program is often dependent on a physician's participation (McElhaney, 1994).

Knowledge of Counseling Geriatric social workers report being ill prepared to counsel elderly clients (Quam & Whitford, 1992). They report feeling ineffective in managing behavioral problems, serving mental health needs, and providing family counseling with older adults (Quam & Whitford, 1992).

The first stage in counseling is the development of a therapeutic relationship. In order to achieve a therapeutic relationship social workers must begin where the

client is and therefore have knowledge regarding the above topics. Scharlach, et. al., (1997) asserts that social workers must be able to accurately perform a bio-psycho-social assessment with an elder. For example, to be effective in managing a behavioral problem created by someone living with a dementia the worker must first understand the fear and frustrations that often accompany the early stages of this disease (McGowan, 1994).

Several authors have noted that educational programs could better prepare geriatric social workers by teaching various theories which have been defined as effective in the literature including; the use of life narratives to reaffirm self (Sherman, 1994); reminiscence with individuals to help them cope with current difficulties (Tobin & Gustafson, 1987; Creanza & McWhirter, 1994); reminiscence as a form of group therapy (Burnisde, 1993); and empowerment in order to support an elder's efforts to gain, or regain, control over their health (Browne, 1995; Scharlach, et. al., 1997). Richman (1994) states that faculty members should stress that the best counselor for the elderly individual will be one "... who is aware of the person's assets; respects the person's wisdom and experience; and realizes how much he or she has to offer" (p. 405).

**Knowledge Levels of Nursing and Social Work Students and Practitioners Reflected in Research Using the Facts on Aging Quiz**

The Facts on Aging Quiz (FAQ) has been the most common measure of gerontological knowledge. The quiz was developed in 1976 by Erdman Palmore

(Palmore, 1977). The FAQ is a 25-item true/false questionnaire that covers basic facts about the physical, mental, and social status of seniors. Based on results from more than 90 studies that used the FAQ, Palmore (1988) reported that education had the most significant impact on knowledge scores. Respondents with high-school-or-less achieved a mean score of 57%, college or undergraduate 64%, graduate school 68%, and the gerontology students and faculty 83%. Since the first inclusion of the FAQ in 1976 to the late 1990's little improvement has been found in students' knowledge of the elderly (see Appendix A), despite the increased awareness of "population aging."

Researchers do not often report an alpha coefficient with the Facts on Aging Quiz. When alphas are provided they are usually quite low .48 (Williams, et. al., 1986) and .47 (Huckdat, 1983). A low alpha suggests that the scale may not be an accurate overall measure of knowledge given the high degree of random error. However, the quiz is based on factual data of the elderly, making it difficult to argue with its appropriate use as a measure of knowledge.

Participants are more likely to answer certain questions incorrectly on the FAQ. Based on the studies reviewed in this thesis, students appear least likely to know demographic information regarding the elderly population (e.g. percentage of U.S. population that is over the age of 65, or percentage of the elderly who reside in long term care institutions). Students are also likely to have misconceptions regarding an elder's economic state and social well being (e.g. occurrence of social isolation and frequency of boredom). Finally, there are a number of misconceptions

regarding the normal physical aspects of aging (e.g. the weakening of all five senses with old age).

Facts on Aging Quiz -- Social Work Students and Practitioners

Forty masters of social work (MSW) students enrolled in a Southeastern university participated in a study conducted by Reed, et. al., (1992). Sixty-two percent of the respondents stated never having taken a course in gerontology. Twenty-three percent reported having had prior paid work experience with seniors. MSW students' average correct response score was 68% using Palmore's Facts on Aging Quiz . These authors interpreted the average score to be rather low despite the fact that it was comparable with Palmore's overall results for graduate students.

Barresi and Brubaker (1980) used a cross sectional survey design to assess the knowledge levels of MSW practitioners. They randomly mailed questionnaires to 384 registered MSW social workers from Ohio. The investigators received 200 completed questionnaires for a response rate of 64%. The sample consisted of 128 women and 72 men with an average age of 46. The participants had an average of 15 years experience but only 3% of the sample listed geriatrics as their first level of specialization. Utilizing the FAQ these researchers found that participants average correct response score was 68%. This study was conducted almost twenty years ago, more recent studies were not available.

Facts on Aging Quiz -- Nursing Students and Practitioners

Reed, et. al., (1992) also studied the knowledge levels of 27 Masters of nursing students. Remarkably, 60% of these respondents reported never having taken a course in gerontology despite the fact that 78% reported having had prior work experience with this population. Nursing students achieved a mean knowledge score of 68% on the FAQ.

Williams et. al., (1986) studied the knowledge levels of 322 nursing students in a Midwestern university. The investigators reported an average correct response score of 70%, which was the highest average score found by this writer. No differences in the participant variables between this study and the others reported in the literature review could account for the higher scores attained by Williams, et. al., (1986).

Hucktadt (1983) used the FAQ in a cross-sectional survey to assess the knowledge of nursing practitioners. Two hundred and fifty-two nurses, with a minimum of 4 years experience, responded to this mail survey, for a 54% response rate. The results from this survey showed that nursing practitioners scored an average of 62%, a score lower than any of the nursing students reported in this literature review. Hucktadt (1983) reported that the FAQ group score reliability was high while the item to total reliability was low, with an alpha of .47. The author suggests that this reliability is low because of the low item-to-item correlation in the quiz.

To summarize, the research studies reviewed for this chapter consistently found health care students and practitioners to have insufficient knowledge of elderly persons and the aging process, as measured by the FAQ (Williams, et. al., 1986; Davis-Berman & Robinson, 1989; Reed, et. al, 1992). Correct scores on the FAQ when applied to social work and nursing students have ranged from just over 50% (Beall, et. al., 1992) to 70% (Williams et. al., 1986). Of equal importance to knowledge is the display of genuine warmth and concern by the professionals towards the patients they serve.

**Attitudes**

The literature suggests that social work and nursing students hold, at best, neutral perceptions of the elderly (see Appendix B) (Cook, & Peiper, 1986; Galbraith & Suttie, 1987; Aday, & Campbell, 1995; McCracken, et. al., 1995; Rowland & Shoemaker, 1995; Kane, 1999). There is an abundance of elder-related stereotypes and little understanding of the immense diversity of the aging population (Scharlach, et. al., 1997). "The elderly are generally perceived by younger persons as physically and mentally on the decline, socially withdrawn, and unproductive in society" (Williams, et. al., 1986, p.545).

Attitudes of Social Work Students and Practitioners

Kane (1999) assessed the elder-related attitudes of 333 BSW and MSW students using Kogan's Attitude toward Old People Scale (OPS). Kogan's OPS

ranges in scores from 34 to 238, with higher score indicating more positive attitudes. Kane reported that BSW and MSW respondents achieved a mean score of 168.8 and while there were no guidelines available to interpret this score the researcher found them to be indicative of generally neutral attitudes. Unfortunately, Kane did not specify areas where students appeared more positive or negative.

While Kogan's Old People Scale is often used by researchers to measure attitudes it is important to note that it was developed in 1967 and includes outmoded language. "The language used in the Kogan scale reflects how society viewed elderly people more than 35 years ago" (Hilt, 1997, p. 1373). Kane's study (1999) was limited by the fact that this scale was used, and in particular, that the scales reliability score was not reported. As is similar to many other attitudinal scales', the OPS does not have standard cut off scores. Without standardized cut off scores researchers must personally interpret respondents scores.

Barresi and Brubaker (1980) assessed the attitudes of 200 MSW practitioners by studying the response patterns to questions on the Facts on Aging Quiz. They revealed that where more than 60% of the respondents got the answers wrong, 5 items indicated a negative bias (believing the elderly to be worse off than they actually are) while 3 indicated a positive bias (believing the elderly to be functioning at a higher level than they actually are). Negative misconceptions included believing that the elderly were institutionalized, often irritated, angry, lonely, socially isolated and living in poverty.

Attitudes of Nursing Students and Practitioners

Williams, Lusk, and Kline (1986) assessed attitudes by studying the response patterns of 322 nursing students who completed the Facts on Aging Quiz. Of the incorrect responses noted by nursing students the authors reported that, 31% had a negative-aged bias and 22% held a positive-aged bias. As was found in the study by Barresi and Brubaker (1980), negative misconceptions held by the nursing group included seeing the elderly as institutionalized, irritated, angry, lonely, socially isolated and living in poverty.

The studies by Barresi and Brubaker (1980) and Williams, et. al., (1986), however, must be viewed with caution as the measurement used to assess attitudes was developed to measure knowledge and has never been tested for its ability to reliably measure attitudes. Further, both studies were completed more than a decade ago and more recent studies could find different results.

Galbraith and Suttie (1987) surveyed 86 first year nursing students utilizing the Oberleader Attitude Toward Aging scale. This scale ranges in scores from 25 to 100, with higher scores singling more positive attitudes. It consists of 25 statements and a 4-point likert scale allowing participants to respond anywhere between strongly agree to strongly disagree. Respondents completed the attitude scale before and after a course on the human life span and a 5-week clinical rotation with both well elders in the community and elders living in a nursing home. Mean scores improved from 64.8 at pre-test to 66.8 at post-test. The authors reported that 17 responses became more positive while only 8 became more negative following the

course and clinical experience. This improvement was reported as being significant at the $P < .05$ level. Galbraith and Suttie (1987) did note that even an average score of 67 was only slightly higher than the median score on the scale. The investigators classified the respondents in the neutral area relative to their perceptions of the elderly. No alpha coefficient was reported for this measurement and it is therefore difficult to determine the reliability of the scale.

Aday and Campbell (1995) used a pre-test post-test design with an attitudinal measurement occurring prior to and following an entire nursing degree program. This program included exposure to theories of aging, demographics of aging, common health problems of aging, care of the sick elderly, health promotion, and illness prevention in home and outpatient settings. Forty-six percent of the sample stated having weekly personal contact with seniors and 80% reported having had prior paid work experience with the elderly.

Aday and Campbell (1995) utilized the Perceptions of Aging and Elderly Inventory (PAEI) and the Elderly Patient Care Inventory (PAEI) to measure the attitudes of the 45 nursing students. Respondents were asked to state their agreement or disagreement with individual items using a likert scale. Possible attitude scores for PAEI range from 20 to 80. The EPCI instrument can range in scores from 12 to 48. With both scales, higher scores signal more positive elder-related attitudes. The PAEI and the EPCI both demonstrate high reliability with respective alphas of .81 and .71.

At post-test, Aday and Campbell (1995) reported that respondents had a statistically significant increase in both their positive perceptions of the elderly and in their positive perceptions of elderly patient care. Scores for the Perceptions of Aging and Elderly Inventory increased from 58.8 at pre-test to 62.4 at post-test. Scores for the Elderly Patient Care Inventory rose from 30.7 at pre-test to 34.1 at post-test.

Considering the median scores for both of these scales (50 for PAEI and 30 for EPCI), it would appear that this group of nursing students held neutral to slightly positive perceptions of the elderly population prior to the degree program. However, pre-test scores should not detract from the finding that this type of intervention led to a statistically significant improvement in both perceptions of aging and care of the aged.

As these two studies demonstrate, attitudes can be improved through the educational process. While two studies are not sufficient to draw conclusive evidence, it does appear that the mixture of course work and clinical experience with both well and frail elderly can enhance the elder-related attitudes of nursing students.

Nursing programs that require only contact with seniors in nursing home settings may do more harm than good relative to gerontological attitudes. Cook & Pieper (1986) used a pre-test post-test design to measure the impact of a two-week nursing home practicum on nursing students. The researchers used a 38-item investigator designed questionnaire to assess the attitudes of 70 nursing students. Following the nursing home practicum 16 items become more negative while only 8

became more positive. Fifteen of the items that became more negative were related to working with the elderly. The change in attitudes from pre-test to post-test was significant at the $p < .05$ level. The authors (1986) concluded that while the attitudes of some students improved, the overall impact of the clinical experience was negative.

Rowland and Shoemaker (1995) also utilized a 24-item investigator designed attitude questionnaire in a pre-test post-test study. These investigators measured the attitudes of 169 nursing students before and after a 5-week nursing home clinical practicum. Their results showed that 5 descriptors became more negative while only 2 became more positive following the intervention. Positive attitudinal changes after the nursing-home experience included fewer students saying that they would avoid an elder's company and fewer students seeing the elderly as getting in the way. However, following the practicum experience nursing students saw the elderly as being more dirty, more difficult to communicate with, less grateful, less trustworthy in terms of carrying out medical directions, less pleasant, friendly, kindly and satisfying.

The studies by Cook & Pieper (1986) and Rowland & Shoemaker (1995) suggest that a nursing home clinical rotation does not promote positive attitudes about the elderly. These studies are limited by the use of investigator designed instruments which lack the reporting of reliability coefficients. The absence of reliability measures makes it difficult for the readers to know whether the scales were homogeneous.

In summary, the literature review showed that neither social work or nursing students held positive attitudes towards the elderly. It is hopeful that the educational experience, and in particular the practicum, can play a role in creating more positive attitudes toward the elderly. The urgency to foster positive attitudes comes in part from social work and nursing students' poor motivation to choose a career with this population. "Negative attitudes and stereotypes about aging pose one of the most difficult barriers to recruiting and training an adequate number of social workers to work with older adults" (Scharlach, et. al., 1997, p. 15).

**Deterrents to Selecting a Career in Gerontology**

The literature review indicates that social work and nursing students do not want to work with the elderly. Carmel, et. al., (1992), for example, asked 17 social work and 27 nursing students to rank order their preference for work with the elderly on a scale of 1 - 7, with higher scores indicating less motivation for this career. Nursing students had a mean response of 5.0 while social work students had a mean response of 5.2. Assuming a median score of 3.5 indicates neither a strong desire nor a strong resistance to this career, scores of 5.0 and 5.2 seem indicative of a fairly strong resistance to this type of career.

Reed et al. (1992), Hugman (1994), Litwin (1994), and Scharlach, et. al., (1997) report that social work and nursing students poor motivation for a gerontological career is due, in part, to the pervasive belief that a lower status is attached to working with this population. Litwin (1994), suggests that one's

perception of the role of elders in society is a primary factor in the level of motivation for gerontological work.

Pessimism about outcomes and feelings of insufficient accomplishment in caring for the elderly are also potential barriers in motivating professionals for this career. Several researchers report that health professionals believe their time is wasted providing treatment to the elderly when their condition is likely to deteriorate (Philipose, Tate & Jacobs, 1991; Litwin, 1994; Scharlach, et. al., 1997). The studies by Gallbraith & Suttie (1987) and Aday & Campbell (1995) suggest that nurses working with community residing elders may report higher motivation for a gerontological career. This heightened motivation may be related to their perceptions of providing health promotion or disease prevention.

The educational experiences plays a significant role not only in students' knowledge and attitudes but also in their perceptions of a gerontological career (Butler, 1989). The literature suggests that an insufficient amount of personal contact with well older people, the number of courses taken in gerontology, and instructors' attitudes toward the elderly all affect students' perceptions (Galbraith & Suttie, 1987; Litwin, 1994; Aday & Campbell, 1995).

## Research Comparing Social Work and Nursing Students Gerontological Knowledge and Attitudes

Two research studies included both social work and nursing students. Carmel et. al. (1992) examined the knowledge levels, attitudes, and motivation for a

gerontological career both before and after a course in gerontology. Participants in this study consisted of 24 nursing students and 14 social work students from a university in Israel. The independent variable consisted of one 25-hour lecture based course in gerontology.

At pre-test, social work students' correct response score was 57% and nursing students' correct response score was 55% on Palmore's Facts on Aging Quiz (FAQ). At post-test, social work students scored 60% and nursing students scored 63%. The improvement in knowledge following the course was only significant in nursing students. While this result provides support for the inclusion of gerontological course work the internal reliability of this research may have been affected by a testing recall effect, that is, the improvement of scores may be related to the students' memory of the questions on the pre-test.

Carmel, et. al., (1992) asked participants to respond to two open-ended questions: "What is pleasant and what is unpleasant for you about young people?" and "[w]hat is pleasant and what is unpleasant for you about old people?" (p. 343) These questions were then coded into unpleasant and pleasant for young and old. There were no statistically significant differences between the responses given by social work and nursing students. Both groups reported more positive interactions with younger populations and more negative interactions with older populations. This trend did not change following the course intervention.

Nursing and social work students were asked to rank order their work preference, given a list of seven age groups. Both nursing and social work students

strongly resisted a career with the elderly, ranking older adults among the lowest on the list of preferred subspecialties. As has been mentioned, social work students ranked elderly individuals at 5.2 and nursing students ranked seniors at 5.0 on a scale, which ranged from 1 (high desire to work with group) to 7 (low desire to work with group). Although nursing and social work students' attitudes and motivation did not differ significantly, nursing students did report a slightly higher motivation for work with the elderly. There was no significant change in motivation by either group at post-test.

This study provides insight into the similarities and differences between nursing and social work students, however, it has limitations and is not generalizable to a Canadian population. The students in this study were enrolled in a university in Israel and their responses likely reflected their culture. For example, the authors report that the first question on the FAQ, "[t]he majority of old people (past age 65) are senile (i.e., defective memory, disoriented, or demented)" sparked immediate negative reactions during the pre-test. This same finding has not been reported in any of the American studies reviewed.

The study by Carmel, et. al., (1992) is also limited by the small sample size at post-test (n = 14 social work students and n = 24 nursing students). The final limitation of this research was the authors unsuccessful intent to complete a follow-up study six months after the course. Without explanation the authors reported that nursing students refused to participate in the follow-up. While these limitations do

no negate their findings they do suggest caution regarding the study's generalizability.

Reed, et. al., (1992) completed the second study, which included both social work and nursing students. These investigators used a convenience cross sectional sample of 40 masters of social work and 27 masters of nursing students. Although the majority of respondents had no course work in gerontology, almost half had prior work experience with the elderly. The purpose of this study was to assess the knowledge levels, attitudes, and perceived barriers to gerontological education and careers among nursing and social work students.

Knowledge scores, as measured by the FAQ, were not significantly different for social work and nursing students as both groups scored 68%. Attitudes were measured using Kogan's Old People Scale (OPS) which can range from 34 to 238 with higher scores indicating more positive attitudes. There were no statistically significant attitudinal differences between the groups and the average score was 150. This score was slightly better than the midpoint score of 136. No alpha coefficient was provided for this scale and, as has been mentioned in an earlier section, Kogan's Old People Scale is limited by the antiquated languaging of the questions (Hilt, 1997).

Predictors of knowledge in this study included attitude scores, age of the participant and whether or not the participant had lived with an older adult. In fact, these authors found that a considerable amount of the variance (32.6%) in knowledge was explained by attitudes, age, and living experience. According to these authors

the only variable that was directly and significantly related to positive attitudes on the OPS was knowledge (Reed, et. al., 1992).

Social work and nursing students agreed on the top three barriers to gerontological training, these were, fragmentation in services to the aged, higher status in working with children/ lower status in working with the elderly, and limited experience with relatively healthy older adults. Where differences in perceived barriers existed, nursing students reported that insufficient academic role models and insufficient gerontological content in the curriculum were significant barriers. Social work students reported that the perceived low status involved in working with the elderly was the biggest barrier.

The study by Reed et. al. (1992) is limited in its generalizability to undergraduate Canadian students. First, the research was performed in the United States. Second, participants were enrolled in Master's level programs, as opposed to bachelor level programs. This higher level of education, according to Palmore (1988), should improve the scores achieved on the Facts on Aging Quiz. Third, the investigators failed to report an alpha coefficient for the scales, therefore, leaving question as to the scales' reliability.

The accuracy and completeness of a health professionals' knowledge about aging has implications for the quality of care provided (Reed, et. al., 1992; Williams, et. al., 1986; Aday & Campbell, 1995). It is also likely that neutral attitudes and a strong resistance for a gerontological career among prospective health professionals would translate into less than optimal quality of care for seniors. The following

section examines research studies that have assessed the quality of care that social work and nursing practitioners provide to the elderly.

**Implications for Quality of Care**

Given the above findings, what quality of care are seniors being provided?

Lack of gerontological knowledge on the part of nurses has been shown to hamper the postoperative pain control provided to elderly patients (Brockopp, et. al., 1993). Ineffective pain management for the elderly was associated with misconceptions including an inappropriate fear of addiction and respiratory distress. The study by Brockopp, et. al., (1993) also found that nursing respondents failed to understand confusion as it relates to pain assessment with the elderly.

In an attempt to assess the health-related gerontological knowledge of nursing practitioners Brymer, et. al., (1996) conducted a Canadian-based study using an investigator designed mailed questionnaire. Seventy-six completed questionnaires were received from emergency room nurses, for a response rate of 63%. The results of this quiz showed statistically significant deficits in the nurses' ability to assess depression, dementia, falls, and malnutrition. Further, these emergency room nurses demonstrated a lack of knowledge regarding myocardial infarction, infection and urinary incontinence in the elderly (Brymer, et. al., 1996). Finally, Scharf & Christophidis (1993), Grant (1996), and Lebowitz (1996) have demonstrated that inadequate gerontological knowledge presents a very high risk for attributing treatable physical ailments to the inevitable deterioration process of aging.

Ageism can affect the medical, social, and situational choices that are presented to an elder. Grant (1996) stated that when professionals believe an older person's range of physical and cognitive abilities is narrowing, there is a tendency to restrict individual freedom and self-determination even further. This restricting of self-determination is present despite research depicting the correlation between quality of life and a sense of independence, control, and feelings of usefulness (Fitch & Slivinske, 1988, Beckingham & Watt, 1995, Smits, Deeg & Bosscher, 1995, Galambos, 1997).

Reekie and Hansen (1992) randomly mailed vignettes to 228 individuals listed with NASW Register of Clinical Social Workers. The vignettes were identical in the explanation of the clients' situation and in all but two of the described client demographics. The demographic items that varied were the gender and age of the hypothetical client (age was entered as either 32 or 62 years). The investigators received responses from 103 MSWs, for a response rate of 45%. An interactive effect was found between the gender of the social worker and the age of the hypothetical client. That is, female social workers attributed less importance to the psychodynamic issues of older clients. Results of this study showed that none of the respondents labeled the older client with dementia or other more specific age-related disorders. It should be noted that the hypothetical age of the "older adult" (62 years) is often categorized in the young-old group and had the age been reported in the 70's or above different results may have been found.

Rohan, et. al., (1994) conducted a secondary data analyses of social work records. This analyses revealed that social workers spent less time with older, versus younger, oncology patients even though an equal number of psychosocial issues were identified. That is, social workers spent an average of 3.1 hours with individuals aged 18-64; 2.1 for the 65-74 group; and 1.9 for the 75 and older group. Moreover, social workers placed less importance on supportive and adjustment counseling with older adults. Recorded counseling time showed that social workers spent 1.8 hours with the 18-64 group; 1.4 with the 65-74 group; and 1.0 with the 75 and older group. Rohan et. al. (1994) found that social workers were more likely to provide instrumental and concrete services to the elderly, in place of counseling. Although this study only included data on 5 social workers, the results raise concern about the quality of service provided to the elderly.

Hospital social workers are often in the role of discharge planner, facilitating the use of resources in an effort to 'free up' acute care beds. It is under this pressure and the demands of heavy caseloads that the elderly are referred to as "discharge or placement problems". A study utilizing 24 elderly hospital patients, deemed 'cognitively competent', and their social workers described their perceptions of social work involvement (Kadushin, 1996). At discharge, Kadushin (1996) found that 40% of patients were still confused about the role of social work. In addition, there was disagreement between the patient and the worker as to what interventions were performed and which, if any, psychosocial problems were addressed. While it may seem more probable than not that a hospitalized patient and a health care

professional would see the relationship and corresponding work differently, this study indicates that the social workers failed to acknowledge the patients' right to self-determination and collaboration within the working relationship.

These studies depict that the quality of care being provided to the elderly is far from ideal. What are educational institutions doing to improve the knowledge levels, attitudes, and motivation of their graduates relative to the elderly population? The following section explores the current state of social work and nursing curricula relative to the improvement of elder-related knowledge and attitudes.

**The Preparation of Gerontological Professionals: The Current State of our Curricula in Schools of Nursing and Social Work**

Nelson, 1983; Kim, Johnson & See, 1987; Lubben, et. al., 1992; Karl, 1997; and Scharlach, et. al., 1997 have noted the lack of emphasis on gerontology in educational programs. "Limited curriculum and student specialization opportunities in gerontological concentrations reflect ageism in professional education" (Rosen & Persky, 1996/97, p.47).

Gerontological content in social work programs is poorly developed, suggesting a lack of commitment to practice with the elderly (Nelson, 1983; Kim, et. al., 1987; Lubben, et. al., 1992; Karl, 1997; Scharlach, et. al., 1997). Lubben et. al., (1992) conducted a nation wide survey of all BSW and MSW programs in the United States. Their study found that 33% of MSW programs and 80% of BSW programs did not offer a single course in gerontology. Moreover, 33% of MSW programs and

11% of BSW programs offered only one course in this field. From this base it is not surprising that only 3% of 34,480 graduate social work students in 1996 specialized in gerontology (Council on Social Work Education, 1996 cited in Scharlach, et. al., 1997).

National surveys of gerontological content were not available for Canadian social work or nursing programs. In an attempt to understand current gerontological coverage in Canadian schools, this writer conducted a random telephone survey of 13 universities across Canada, which offered a social work and/or nursing bachelor degree program. Upon speaking with an undergraduate student advisor the following questions were asked; a) are social work or nursing students required to take a course in gerontology to meet the degree requirements? b) are gerontology courses available for students to take as electives within the faculty?

Results showed that none of the 8 schools of social work and only 3 of the 10 schools of nursing require a course, or a partial course, in gerontology. Even more alarming, 2 of the social work programs and 2 of the nursing programs do not even provide a course in gerontology as an option. Details of this telephone survey are available in Appendix C.

The three reasons cited most often for the exclusion of gerontology content from social work and nursing curricula are; a) the lack of faculty who are prepared and motivated to teach gerontology; b) the lack of space available in an already full curricula (Edel, 1986; Kim, et. al., 1986; Lubben, 1992; Watt & Merridith, 1995; Scharlach, et. al., 1997) and; c) the lack of students interested in the field of

gerontology (Scharlach, et. al., 1997). Hypothesized solutions to these problems have ranged from educating faculty through workshops and courses, providing incentives for gerontological research, providing the opportunity for a gerontological certificate to accompany a degree, and infusing more gerontological examples into core curriculum courses.

While a single course on aging may be a step towards improving gerontological content, its benefits are limited. A course in gerontology is shown to facilitate a small improvement in one's knowledge (as measured through the FAQ), leaving attitudes and motivation for a gerontological career in tact (Davis-Berman & Robinson, 1989; Carmel, et. al., 1992). Curricula that appear to have the most positive impact on students are those that provide a course on aging as well as a practicum experience with both the well and the frail elderly (Gallbraith & Suttie, 1987; Aday & Campbell, 1995).

**Summary**

There have been a number of studies completed in the United States on nursing students' attitudes and knowledge level toward the elderly. Given the nature of these educational programs and the geographical location of the research studies it is important to note that most studies discussed in this chapter were comprised mainly of young (20 - 30 years old) Caucasian women. Studies have generally shown that nursing students' knowledge levels range between 62 and 70% as

measured by the Facts on Aging Quiz. Typically, studies have reported that nursing respondents hold neutral to negative elder-related attitudes.

Compared to nursing students, fewer studies have been conducted to understand social work students' attitudes and knowledge levels toward the elderly. The studies completed thus far, however, show comparable knowledge and attitudes with nursing students. This writer did not find a single article which suggested that any group of nursing or social work students held positive attitudes toward the elderly.

The original study that utilized Palmore's Facts on Aging Quiz was conducted in the mid 1970's (Palmore, 1977). This study found that the average correct response score for an undergraduate student was 64%. It is interesting to note that despite the increased awareness of population aging, studies using the Facts on Aging Quiz conducted more than 15 years later have not found improved correct response scores.

While attitude scales appear more difficult to interpret than knowledge scales there is little doubt that social work and nursing students hold negative misconceptions about the elderly population. Moreover, professional practice has been shown to be affected by the lack of knowledge, negative misconceptions, and astoundingly poor motivation to work with the elderly. The literature review also suggests, however, that this is not inevitable. If educators are willing to invest in gerontology, future health professionals will be more prepared and may be more satisfied in their work with this population. On the other hand,

> Failure of schools of social work to expand gerontological curriculum will mean that schools of social work will have missed a momentous opportunity to train social workers for jobs in an area of rapid growth and that the social work profession will continue to be inadequately prepared to meet the needs of our rapidly aging population (Lubben, et. al., 1992, p. 170).

While this quote speaks to the social work profession it is also applicable to nursing.

# CHAPTER THREE

# METHODOLOGY

## Introduction

The following chapter will present the research design, data collection procedures, and data analyses that were used in this research. Chapter Three will also include a description of the research population and sample.

## Research Design and Procedures

This thesis employed a cross-sectional survey design with a convenience sample. Data on knowledge of the elderly, attitudes toward the elderly and motivation for a gerontological career were collected using group-administered questionnaires in classroom settings. Respondents completed the questionnaires independently, however, the researcher was available during their participation to answer questions. All of the data collection occurred within a three week time frame in April, 1999.

Ethics approval was attained prior to the data collection. The University of Calgary Social Work Ethics Review Committee, University of Calgary Nursing Ethics Review Committee and the Mount Royal College Ethics Review Committee approved this study. Following ethics approval the researcher obtained a list of the core curriculum courses in the Faculties of Social Work and Nursing for the Winter of 1999 semester. When possible, permission for access to these courses was sought

in face-to-face meetings with professors. Otherwise, an e-mail that communicated the purpose of the study, the study's ethical clearance, and the expectations of respondents was sent to professors teaching core courses. If classroom access was granted, the role of the professor in the data collection was simply to introduce the researcher.

Each professor determined whether the questionnaires would be completed during or following the course lecture. If data collection occurred at the end of class, participants could choose to either stay and participate or leave the classroom. If data was collected during class time the researcher distributed questionnaires to all students and stated their right to return the survey blank or to return it completed. As a tool to increase the survey's response rate respondents were offered the opportunity to enter their name to win a $70.00 gift certificate from a local spa and wellness center.

The questionnaires were distributed with a cover letter, which explained the study and the voluntary nature of participation. Informed consent was obtained prior to data collection. In order to ensure anonymity the informed consent sheet was removed from the questionnaires once they were completed.

**Research Questions**

This study sought to describe the elder-related attitudes and knowledge levels, as well as the motivation for a gerontological career, held by nursing and

social work students. In an attempt to measure these variables, the following questions were asked:

1. What are the knowledge levels of third and fourth year social work and nursing students regarding the elderly population?
2. What are the attitudes demonstrated by third and fourth year social work and nursing students towards the elderly?
3. What are the reasons expressed by third and fourth year social work and nursing students for choosing, or not choosing, a career in the field of gerontology?

**Operational Definitions**

It is important to have specific and clearly explicated definitions of the research concepts before attempting to measure them. The following operational definitions are used to transform the conceptual research questions into measurable variables. The definitions used for "elderly", "knowledge of the elderly", and "attitudes toward the elderly" were derived from the literature.

Variable 1: Elderly - Individuals over the age of 65.

Variable 2: Third and fourth year social work students - students enrolled in either a third or fourth year core curriculum course during the Winter of 1999 in the faculty of Social Work at the University of Calgary.

Variable 3: Third and fourth year nursing students - students enrolled in either a third or fourth year core curriculum course during the Winter of 1999 in the Faculty of Nursing at the University of Calgary or Mount Royal College.

Variable 4: Knowledge of the elderly - Knowledge can be defined as a "...person's range of information or understanding of..." (Thompson, 1992, p. 49). This study measured knowledge of the elderly by using Palmore's Facts on Aging Quiz (FAQ) (Palmore, 1977). This quiz measures one's knowledge of basic physical, mental and social aspects of aging. Correct answers are based on "factual statements which can be documented by empirical research" (Palmore, 1977, p. 315). Palmore's Facts on Aging quiz is the most frequently used measurement for knowledge of the elderly. The quiz will be described in greater detail in the Instrumentation section.

Variable 5: Attitudes toward the elderly - Attitudes have been defined as an "...opinion or way of thinking" (Thompson, 1992, p. 47). According to Shaw and Wright (1967), attitudes are learned and seen on a continuum varying in intensity and ranging in quality from positive through to negative. The Fraboni Scale of Ageism was used in this study to measure attitudes toward the elderly. Items on this scale address an individual's perception of seniors' residential patterns, cross-generational relations, dependence, cognitive style, personal appearance and personality (Fraboni, et. al., 1990). This scale will also be described in greater depth in the Instrumentation section.

Variable 6: Reasons for choosing, or not choosing, to work with the elderly – To measure this variable the survey requested that respondents circle "yes" or "no" to the question: "Would you choose a career with the elderly?" Following this

question, an open-ended statement asked respondents to list their reasons for choosing or not choosing a career with the elderly.

**Instrumentation**

The survey instrument (Appendix D) consisted of nine pages. The first three pages were simply the informed consent letter which respondents were asked to sign. Pages four and five of the survey asked respondents to provide demographic information as well as data relative to their prior experience with the elderly. Page five also asked respondents about their motivation for a gerontological career. Pages six to nine consisted of two separate instruments which measured elder-related knowledge levels and attitudes: Palmore's Facts on Aging Quiz (FAQ) and the Fraboni Scale of Ageism (FSA).

Facts on Aging Quiz -- Measure of Knowledge

Erdman Palmore developed the Facts on Aging Quiz in 1976. The quiz is composed of 25 true/false items that cover basic physical, mental, and social facts about seniors (Palmore, 1976). Although the statements were based on American statistics, Matthew et. al. (1984) validated the FAQ for use in Canada. Matthew et. al. confirmed that the answers to the demographic questions in the quiz (Items 1, 7, 8, 10, 19 and 21) were consistent for Canadian seniors. He concluded that, with minor variations in the correct percentages, the true/false answers remained the same regardless of whether the sample referred to Canadian- or American-based seniors.

The FAQ was originally tested in 1977 on samples from Duke University and Pennsylvania State University. The results from this testing provided a benchmark against which future researchers could compare scores, that is; undergraduates achieved an average score of 67%; graduate students in human development averaged 80%; and faculty members in human development scored an average of 90% (Palmore, 1977).

From 1977 to 1987, Palmore reported that the FAQ had been used in 98 studies (Palmore, 1988). Of the 98 studies reported by Palmore more than 15 involved practicing nurses, 2 involved practicing social workers, and 4 involved undergraduate nursing students (Palmore, 1988). In the four studies which used nursing students as participants, the average FAQ scores were 66% (Stone, 1977 cited in Palmore, 1988), 68% (Whittingtom, 1978 cited in Palmore, 1988), 72% (Sheeley, 1979 cited in Palmore, 1988), and 70% (Williams, et. al., 1986). On average these students preformed slightly better than Palmore's original sample of undergraduates although this would be anticipated given the education and training provided to nursing students.

Few authors report alpha reliability scores when utilizing the Facts on Aging Quiz. When alpha scores have been reported they tend to be quite low. For example, Williams et. al., (1986) reported a Cronbach's alpha reliability coefficient of .48 based on their research with 322 nursing students. Hucktadt (1983), who used the FAQ to study nursing practitioners, reported that group score reliability was high while item to total reliability was low, with an alpha of .47. As a low alpha is

indicative of a high degree of random error results from this quiz should be interpreted with caution.

In 1988 Palmore defended the reliability of his quiz. Palmore claimed that the purpose of the quiz was to yield measurements that were directly interpretable relative to one's ability to distinguish between the truth or falsity of statements regarding the elderly. Palmore (1988) compared the FAQ with a hypothetical quiz designed to test knowledge about state capitals. That is, a quiz consisting of 25 true/ false statements about which cities are capitals would likely be valid although it would not yield high item-to-item correlation. Further, a low reliability alpha would not negate the fact that students who score higher would probably know more about state capitals than would the students who score lower. Palmore's (1988) defense of the FAQ is strengthened by the research studies which demonstrate that individuals trained in gerontology score higher on the FAQ than those without a gerontological education.

The Facts on Aging Quiz 2 (FAQ2) was developed in the early 1980's. Like the first FAQ, it is composed of 25 social, mental and physical facts about aging. The FAQ2 was developed to provide gerontology professors with a tool to gain a more accurate measure of improved knowledge. That is, using two varying Facts on Aging Quizzes before and after a course in gerontology would eliminate the bias introduced by repeated measures (Palmore, 1988). Seven items in the FAQ2 appeared, to this researcher, to be particularly appropriate questions for social work and nursing students and as a result those seven items were included in the overall

measure of knowledge. The first 25 questions found in the knowledge quiz compose the original FAQ while the remaining items were derived from the FAQ2, for a total of 32 questions.

Fraboni Scale of Ageism -- Attitudinal Measure

The Fraboni Scale of Ageism (FSA) was developed in 1989 as a way of building on past ageism scales which focused on 'aged' stereotypes and myths. The FSA is a 29-item likert scale which uses a specific operational definition of ageism based on three of Allport's (1958) five levels of prejudice: "...antilocution (mere antipathetic talk); avoidance (avoiding members of the disliked group); and discrimination (excluding members from certain political rights, privileges, employment, educational or recreational opportunities, types of employment, residential housing etc.)" (cited in Fraboni, et. al., 1990, p.57). In total, ten items are used to define antilocution (items 1 through 10); nine are used to define discrimination (items 11 through 19); and ten are used to define avoidance (items 20 through 29).

The FSA ranges in possible scores from 29 – 145 with higher scores indicating more ageism. This scale does not include cut off scores, which would enable researchers to consistently interpret the results of their respondents. For the purpose of this research the scale was divided into five hypothetical categories, it was assumed that scores ranging from 29 - 52 reflected positive perceptions of the elderly; 53 - 75 somewhat positive perceptions; 76 - 99 neutral perceptions; 100 -

122 somewhat negative perceptions; and 123 - 145 negative perceptions of the elderly.

The FSA was originally tested on two groups: 109 undergraduate university students from all four years of a psychology and social welfare degree program and 122 adults from a wide range of occupations. The mean FSA score for the original sample population was 57.9. The original testing of the scale yielded an overall reliability of .86 (Fraboni, et. al., 1990). The FSA, therefore, is relatively homogeneous and there appears to be consistency among the items. There have been no other published studies which have used this scale to measure ageism.

**Setting, Population and Sample**

This study was conducted at the University of Calgary (U of C) and Mount Royal College (MRC). The population for this research was third and fourth year social work students at the U of C and third and fourth year nursing students at the U of C and MRC. The undergraduate conjoint nursing program is delivered through both U of C and MRC. A convenience sample included all third and fourth year social work and nursing students who were enrolled in any core curriculum course during the Winter of 1999.

The sampling frame consisted of 3 social work classes and 7 nursing classes. Two additional nursing classes (holding approximately 10 students each) were asked to participate but declined due to time constraints. In total, 201 social work and nursing students were in class the day that the research study was conducted. The

final sample included 159 participants for a response rate of 79%. There was one-fourth year nursing class, holding 24 students, in which no one chose to participate. This group accounts for a substantial amount of the nonresponse rate. The final sample included 64 nursing and 95 social work respondents. The sample, as expected, was predominantly young, less than 31 years of age (79%), Caucasian (85.7%), and female (93.5%). Further details of participants' demographics will be presented in Chapter Four, which discusses the study's results.

**Data Analyses**

Raw scores attained from the questionnaires were entered into the computer program SPSS. Using SPSS, the researcher executed descriptive and inferential statistics. Nominal level variables, such as gender, were coded as dichotomous variables (men = 0, women = 1). Several items in the knowledge and attitude scales were also re-coded. Relative to the FAQ, respondents could answer the questions with "true", "false", or "I do not know" and these responses were coded as 1, 2 and 3 respectively. Prior to data analyses, however, correct responses to the items were re-coded into 1 and incorrect or uncertain (I do not know) responses were re-coded into 0.

The Fraboni Scale of Ageism required participants to respond to either negative or positive elder-related statements using a 5-point likert-scale (1 representing strong agreement with the statement and 5 representing strong disagreement). In order for higher scores to reflect more ageism some items were

reverse coded. For example, the first statement on the ageism scale reads: "Teenage suicide is more tragic than suicide among the old." This was reverse coded so that a response of 1 (strong agreement) became 5, to reflect a more ageist response.

Descriptive statistics were used to specify respondents' characteristics. They were also used to examine the overall percentages and frequencies of the respondents' scores on the FAQ and FSA scales. In addition, reliability analyses were conducted to determine the scales' consistency in this study.

Scatterplots were employed in the data analyses to visually determine whether knowledge and attitude scores were skewed or heteroscedastic. Correlations were used to determine whether significant bivariate relationships existed among the independent variables as well as between the dependent and independent variables. In addition, correlations examined the strength and direction of any relationship between these variables.

Independent t-tests were employed to determine whether significant differences existed between nursing and social work respondents relative to their prior gerontolgical contact, knowledge levels, attitude scores, and motivation to work with the elderly. Multiple regressions were employed to measure the amount of variance, in the knowledge levels and attitudes, that could be attributed to selected criterion variables. Specifically, multiple regressions examined whether a significant amount of variance in knowledge or attitudes could be predicted by previous gerontological contact, perception of past gerontological contact, number of courses taken in gerontology, program type, and desire for a gerontological career.

Finally, motivation for a gerontological career was examined by calculating the number of yes/ no responses to the question: "Would you choose a career with the elderly?" The open-ended question, which asked respondents to state their reasons for choosing or not choosing a career with the elderly, was analyzed qualitatively. Responses to this question were extracted from each questionnaire and aggregated for analyses. Themes were then identified through the number of times respondents stated the same responses for choosing, or not choosing, a gerontological career.

**Summary**

This thesis utilized a cross-sectional survey design to study third and fourth year nursing and social work students. A group administered questionnaire gathered data on respondents' demographics, exposure to gerontology, motivation for a gerontological career, and responses to the two validated measurement scales for elder-related knowledge levels and attitudes. Data were analyzed using both descriptive and inferential statistics.

# Chapter 4

# Findings

## Introduction

This chapter reports the results of a survey that measured the attitudes, knowledge levels, and motivation levels of 95 third and fourth year social work students and 64 third and fourth year nursing students. Prior to presenting the research findings, it should be noted that the data were cleaned before analyses were performed. Given the low rate of missing data for individual questions on the attitude and knowledge scales, the scores of those respondents who failed to answer every question on the scale were eliminated. This accounted for the disqualification of seven respondents for the FAQ and six for the FSA. For the purpose of this study the level of significance has been set at $p < .05$, as is typically used in research of this type.

## Demographics and Gerontological Education and Work Experience

Table 4.1 displays the demographics of social work and nursing respondents. The majority of respondents were Caucasian women between 20 and 25 years of age. Tables 4.2 through 4.4 depict the quantity and type of respondents' past gerontological contact. Almost 80% of nursing respondents reported having taken a course in aging and 96.9% reported having taken a gerontological practicum. In

TABLE 4.1

Respondent Demographics

| Variable | N |
|---|---|
| Program | |
| Social Work | 95 |
| Nursing | 64 |
| Total N | 159 |
| Missing | 0 |
| | |
| Year of Program | |
| Third | 81 |
| Fourth | 78 |
| Total N | 159 |
| Missing | 0 |
| | |
| Age of Respondents | |
| 20 - 25 | 84 |
| 26 - 31 | 45 |
| 32 - 40 | 16 |
| 41 - 50 | 11 |
| Over 50 | 1 |
| Total N | 157 |
| Missing | 2 |

TABLE 4.1 Continued

Respondent Demographics

| Variable | N |
|---|---|
| Gender of Respondents | |
| Female | 148 |
| Male | 10 |
| Total N | 158 |
| Missing | 1 |
| | |
| Ethnicity of Respondents | |
| Caucasian | 134 |
| Asian | 10 |
| Aboriginal | 2 |
| Other | 11 |
| Total N | 157 |
| Missing data | 2 |

contrast, the majority of social work respondents had no course work (69.5%) or practicum experience (72.6%) with this population.

Where both social work and nursing respondents had practicum experience, differences in the type of practicum were noted. Table 4.3 depicts the type of elder-related practicum experienced by these groups and the respondents perceptions of those practicum experiences. While nursing students overwhelmingly experience the elderly population in a nursing home or institutional setting (98%), social work students were more likely to work with this population in the community (48%). Respondents were asked to rate their practicum using a 4 point likert scale with 1 indicating a very positive experience and 4 indicating a very negative experience. While nursing students typically rated their practicum experience as either somewhat positive or somewhat negative (76%) social work students were more likely to rate their experience as either very or somewhat positive (85%). Nursing respondents gave an average rating of 2.2 (s.d. = .81) for their practicum while social work respondents gave an average rating of 1.6 (s.d. = .85). This difference between social work and nursing respondents was statistically significant, using an independent t-test (see Table 4.14).

Forty-one percent of social work and 63% of nursing respondents had prior work experience with the elderly (Table 4.4). Of those students who had prior gerontolgocical work experience, 44% of nursing and 32% of social work respondents were employed in a nursing home. In addition, 35% of social work and 23% of nursing respondents had elder-related work experience in the community.

TABLE 4.2

Quantity of Gerontological Education

| | Social Work | | Nursing | |
|---|---|---|---|---|
| Variable | Frequency | % | Frequency | % |
| Number of gerontological courses | | | | |
| 0 | 64 | 69.5 | 11 | 20.8 |
| 1 | 19 | 20.7 | 31 | 58.4 |
| 2+ | 9 | 9.8 | 11 | 20.8 |
| Total N | 92 | 100.0 | 53 | 100.0 |
| Missing | 3 | | 11 | |
| | | | | |
| Practicum experience with elderly | | | | |
| No | 69 | 72.6 | 2 | 3.1 |
| Yes | 26 | 27.4 | 62 | 96.9 |
| Total N | 95 | 100.0 | 64 | 100.0 |
| Missing | 0 | | 0 | |

TABLE 4.3

Practicum Experience in Geronotlogy

| | Social Work | | Nursing | |
|---|---|---|---|---|
| Variable | Frequency | % | Frequency | % |
| Location of gerontological practicum | | | | |
| Nursing home | 7 | 28.0 | 47 | 87.0 |
| Community | 12 | 48.0 | 1 | 1.9 |
| Hospital | 3 | 12.0 | 6 | 11.1 |
| Other | 3 | 12.0 | 0 | 0 |
| Total N | 25 | 100.0 | 54 | 100.0 |
| Missing | 1 | | 8 | |
| Rating of the practicum | | | | |
| 1 (very positive) | 15 | 57.7 | 13 | 21.0 |
| 2 | 7 | 27.0 | 24 | 38.7 |
| 3 | 3 | 11.5 | 23 | 37.1 |
| 4 (very negative) | 1 | 3.8 | 2 | 3.2 |
| Total N | 25 | 100.0 | 62 | 100.0 |
| Missing | 1 | | 0 | |

TABLE 4.4

Work Experience in Gerontology

| | Social Work | | Nursing | |
|---|---|---|---|---|
| Variable | Frequency | % | Frequency | % |
| Prior geriatric work experience | | | | |
| None | 56 | 58.9 | 24 | 37.5 |
| Some | 39 | 41.1 | 40 | 62.5 |
| Total N | 95 | 100.0 | 64 | 100.0 |
| Missing | 0 | | 0 | |
| | | | | |
| Type of work setting | | | | |
| Nursing home | 12 | 32.5 | 17 | 43.6 |
| Community | 13 | 35.1 | 9 | 23.1 |
| Hospital | 7 | 18.9 | 11 | 28.2 |
| Other | 5 | 13.5 | 2 | 5.1 |
| Total N | 37 | 100.0 | 39 | 100.0 |
| Missing | 2 | | 1 | |
| | | | | |
| Rating of work experience | | | | |
| 1 (very positive) | 21 | 53.9 | 11 | 28.2 |
| 2 | 12 | 30.8 | 17 | 43.6 |
| 3 | 4 | 10.2 | 7 | 18.0 |
| 4 (very negative) | 2 | 5.1 | 4 | 10.2 |
| Total N | 39 | 100.0 | 39 | 100.0 |
| Missing | 0 | | 1 | |

A four-point likert scale was used to assess respondents' perceptions of their work experience which ranged from 1 (very positive experience) to 4 (very negative experience) (Table 4.4). Nursing and social work perceptions of this experience differed somewhat. While 54% of social work respondents reported their gerontological work experience as very positive, only 29% of nursing respondents gave a very positive rating. Nursing respondents gave a mean rating of 2.1 (standard deviation = .93) and social work respondents gave a mean rating of 1.7 (standard deviation = .87). This group difference was smaller than the difference in practicum perceptions but, was still found to be statistically significant using an independent t-test (see Table 4.14).

**Selecting a Career in Gerontolgical Practice**

To address students' motivation for a gerontological career, respondents were asked: "Would you choose a career with the elderly?" Only 33.9% of nursing students and 51.1% of social work students reported that they would choose a career with the elderly (Table 4.5). Tables 4.6 and 4.7 display the reasons expressed by social work and nursing respondents for either choosing or not choosing a career with the elderly. Nursing and social work students shared similar reasons for choosing a career with the elderly (Table 4.6). Both groups expressed a desire for a rewarding career and a reciprocal relationship between the professional and the client as reasons for choosing to work with seniors. Social work students also noted that the availability of future job opportunities made this career choice attractive.

TABLE 4.5

Motivation for a Gerontological Career

| | Social Work | | Nursing | |
|---|---|---|---|---|
| Variable | Frequency | % | Frequency | % |
| Would you choose a gerontological career? | | | | |
| Yes | 45 | 51.1 | 21 | 33.9 |
| No | 43 | 48.9 | 41 | 66.1 |
| Total N | 88 | 100.0 | 62 | 100.0 |
| Missing | 7 | | 2 | |

TABLE 4.6

Motivators for a Gerontological Career

| Frequency of reasons cited by social work and nursing students for **choosing** a career with the elderly. | Social work N | Nursing N |
|---|---|---|
| They have a lot to offer; knowledge, experience, and honesty. | 17 | 5 |
| It would be rewarding. | 11 | 6 |
| I enjoy their company. | 9 | 7 |
| There will be an increased demand for elder-related services. | 9 | 1 |
| There is a need for sensitive and caring professionals in this field. | 6 | 3 |
| They are very appreciative. | 1 | 1 |
| Would like to advocate for better treatment of the elderly. | 5 | 0 |
| It is very interesting work. | 3 | 0 |
| I have great respect for this population. | 3 | 0 |
| I feel comfortable with this population. | 0 | 2 |
| Total | 64 | 25 |

Nursing and social work students reported many reasons for not choosing a gerontological career including; the "depressing" nature of both the population and the institutions which elders may be housed in; and a greater interest in working with other populations. Social work respondents also cited their lack of desire to work with death and dying as a deterrent to a gerontological career. Specific to nursing respondents were reservations about the slow paced nature of work with seniors; the heavy lifting involved in caring for the elderly; poor pay; and poor working conditions including the treatment of elderly patients by health professionals (see Table 4.7).

Nursing respondents listed more than twice as many reasons for not choosing versus choosing a career with the elderly. That is, 59 recorded deterrents and 25 recorded motivators for a gerontological career were extracted from the questionnaires completed by nursing respondents. In comparison, social work respondents listed 64 motivators and 56 deterrents to work with the elderly.

**Knowledge of Elder Related Issues**

Respondents' knowledge of elder-related issues was assessed using Palmore's Facts on Aging Quiz 1 in addition to seven questions from Palmore's Facts on Aging Quiz 2. By adding the total number of correct responses, total scores for this instrument range from 0 to 32, with higher scores reflecting greater elder-related knowledge. The survey allowed three potential responses to the questions including;

TABLE 4.7

Deterrents to a Gerontological Career

| Reasons cited by social work and nursing students for **not choosing** a career with the elderly | Social Work N | Nursing N |
|---|---|---|
| Not an area of interest/ desire. | 27 | 7 |
| More interested in working with children. | 10 | 11 |
| Working with the elderly would be depressing/ sad. | 6 | 7 |
| Do not like the regimental and depressing institutional type settings such as, nursing homes. | 2 | 6 |
| "The idea of watching human beings decline in physical and mental health is difficult for me"; "No real hope- only getting worse." | 1 | 1 |
| Too emotionally draining. | 1 | 4 |
| It is difficult to relate to the elderly. | 1 | 1 |
| I do not have the patience. | 1 | 0 |
| "I'm not really excited about the prospect of death"; do not want to work with death and dying. | 4 | 0 |
| I would prefer to work with a more energetic population. | 1 | 0 |
| I have had negative experiences with elderly people. | 1 | 0 |
| There is a stigma attached to working with this population (it is perceived as easy work). | 1 | 0 |
| You get paid less money/ poor working conditions. | 0 | 3 |

TABLE 4.7 Continued

Deterrents to a Gerontological Career

| Reasons cited by social work and nursing students for **not choosing** a career with the elderly | Social Work N | Nursing N |
|---|---|---|
| They are not treated well (neglected) by nurses/ health professionals; It can be disturbing to see how they are treated. | 0 | 4 |
| Lack of adequate resources. | 0 | 1 |
| Not rewarding. | 0 | 1 |
| Not very challenging/ enjoy fast paced environments better. | 0 | 5 |
| Too challenging/ demanding e.g. lifting. | 0 | 4 |
| I would not want to work with cognitively impaired seniors. | 0 | 2 |
| There are more legal/ ethical concerns with this population. | 0 | 1 |
| Very dirty and smelly work. | 0 | 1 |
| Total | 56 | 59 |

true, false, and I do not know. To allow concise and simple data analyses, "I do not know" responses were re- coded as incorrect.

A reliability test for the Facts on Aging Quiz indicates that a more reliable scale is required to accurately measure knowledge. The reliability for the scale is not considered adequate for many research purposes although the demonstrated alpha in this study of .58 is higher than the .48 reported by Williams et. al. (1986), and the .47 reported by Hucktadt (1983). Still, given the low rate of reliability it follows that there was likely a high degree of random error in this quiz and therefore the results should be interpreted with caution.

Both social work and nursing students scored poorly on the Facts on Aging Quiz (Table 4.8). While nursing respondents demonstrated a higher level of elder-related knowledge compared to social work respondents the difference was not statistically significant. Findings from the Facts on Aging Quiz were analyzed to determine which questions were answered incorrectly by each group (Tables 4.9 through 4.12). There were 14 items encompassing social, biological, demographic and stereotypical knowledge to which more than half the respondents did not know the correct answer.

Although social work students are trained to assess the individual in their environment including financial, social, biological, and psychological factors, they had insufficient knowledge in seven of the eight questions pertaining to social gerontology (Table 4.9). The three items with the lowest percentage of correct

TABLE 4.8

Students Performance on the Facts on Aging Quiz

| Program | N | Range | Mean | SD | % Correct |
|---|---|---|---|---|---|
| Nursing | 61 | 11 - 25 | 18.50 | 3.19 | 57.8% |
| Social Work | 91 | 8 - 26 | 16.93 | 3.56 | 52.9% |
| Total | 152 | | | | |
| Missing | 7 | | | | |

responses were given for; "[t]he majority of old people have incomes below the poverty line (as defined by the federal government)" (8.4% correct response rate); "[t]he majority of old people live alone" (27.4% correct response rate); and "[t]he majority of old people say they are seldom irritated or angry" (23.2% correct response rate).

Advocacy is another core activity of social work practice. Effective advocacy assumes an awareness of social problems experienced by individuals or groups. However, when social work respondents were asked whether "[t]he majority of medical practitioners tend to give low priority to the aged", only 46.3% of them understood this social reality and therefore answered correctly.

Nursing respondents knew very little in regard to elder-related social issues (Table 4.9). Nursing respondents believe elders to be more isolated, angry, bored, and poverty stricken than is the reality. Both social work (63%) and nursing (75%) respondents incorrectly believe that the majority of seniors live alone.

Palmore's Facts on Aging Quiz includes 6 elder-related biological questions (Table 4.10). Nursing students had a mean correct response score of 69% for the question "[l]ung vital capacity tends to decline in old age"; 62.5% for "[o]lder persons have more acute illness than do younger persons"; and 40.6% for "[o]ld people usually take longer to learn something new." While nursing respondents scored higher than social work respondents on these questions their scores remained lower than what might be expected given the nature of their education and training.

TABLE 4.9

Frequency and Percentage of Correct Responses to the Social FAQ Questions

| | Social Work N = 95 | | Nursing N = 64 | |
|---|---|---|---|---|
| Scale Items | Frequency | (%) | Frequency | (%) |
| The majority of old people say they are seldom bored. | 38 | (40.0) | 25 | (39.1) |
| The majority of old people are socially isolated. | 47 | (49.5) | 26 | (40.6) |
| The majority of medical practitioners tend to give low priority to the aged. | 44 | (46.3) | 38 | (59.4) |
| The majority of old people have incomes below the poverty line. | 8 | (8.4) | 5 | (7.8) |
| The majority of old people are working or would like to have some kind of work to do. | 78 | (82.1) | 58 | (90.6) |
| Old people tend to become more religious as they age. | 31 | (32.6) | 26 | (40.6) |
| Missing | | | 1 | |
| The majority of old people say they are seldom irritated or angry. | 22 | (23.2) | 17 | (26.6) |
| The majority of old people live alone. | 26 | (27.4) | 16 | (25.0) |

Three of the six biological questions were answered incorrectly by more than half of the social work respondents. Social work respondents wrongfully believe that; lung vital capacity does not decline in old age; that older people do not take longer to learn something new; and that older people have more acute illness than do younger persons.

Both groups also showed low scores on several basic demographic questions (Table 4.11). Social work respondents had a 16.8% correct response score for "[a]t least one-tenth of the aged are living in long-stay institutions"; 15.8% for "[t]he health and economic status of old people will be about the same or worse in the year 2015"; and only 3.2% for "[o]ver 15% of the population are now age 65 or over." Nursing respondents had a 14.4% correct response score for; "[t]he proportion of widowed among the aged is decreasing"; 12.5% for "[t]he aged have higher rates of criminal victimization than younger persons"; and only 3.1% for "[o]ver 15% of the population are now age 65 or over."

Only 36% of nursing and social work respondents correctly believed that the aged have fewer motorvehicle accidents than do younger persons. Only 32.6% of social work respondents and 28.1% of nursing respondents correctly believed that older workers have fewer accidents on the job when compared to younger workers. These misconceptions are important as they have the potential to lead to stereotypes about the population. Both social work and nursing respondents, however, overwhelmingly disagreed with blatant stereotyping of seniors (Table 4.12). That is, "[i]n general, all old people tend to be pretty much alike" (nursing 92.2%, and social

TABLE 4.10

Frequency and Percentage of Correct Responses to the Biological FAQ Questions

| | Social Work N = 95 | | Nursing N = 64 | |
|---|---|---|---|---|
| Scale Items | Frequency | (%) | Frequency | (%) |
| The five senses all tend to weaken in old age. | 64 | (67.4) | 49 | (76.6) |
| Lung vital capacity tends to decline in old age. | 42 | (44.2) | 44 | (68.8)* |
| Missing | | | 1 | |
| Physical strength tends to decline in old age. | 80 | (84.2) | 61 | (95.3)* |
| Old people usually take longer to learn something new. | 37 | (38.9) | 26 | (40.6) |
| Older people tend to react slower than younger people do. | 55 | (57.9) | 50 | (78.1)* |
| Older persons have more acute illness than do younger persons. | 32 | (33.7) | 40 | (62.5)* |

* significant difference between group scores at the 0.05 level (2-tailed).

TABLE 4.11

Frequency and Percentage of Correct Responses to the Demographic FAQ Questions

| Scale Items | Social Work N = 95 Frequency | (%) | Nursing N = 64 Frequency | (%) |
|---|---|---|---|---|
| At least one-tenth of the aged are living in long-stay institutions. | 16 | (16.8) | 7 | (26.6) |
| Aged drivers have fewer accidents per driver than those under age 65. | 35 | (36.8) | 23 | (35.9) |
| Older workers have fewer accidents than younger workers. | 31 | (32.6) | 18 | (28.1) |
| Over 15% of the population are now age 65 or over. | 3 | (3.2) | 2 | (3.1) |
| The health and economic status of old people will be about the same or worse in the year 2015. | 15 | (15.8) | 11 | (17.2) |
| Older persons have more injuries in the home than do younger persons. | 57 | (60.0) | 37 | (57.8) |
| The aged have higher rates of criminal victimization than younger persons. | 34 | (35.8) | 8 | (12.5)* |
| The aged are more fearful of crime than are younger persons. | 67 | (70.5) | 47 | (73.4) |
| There are about equal numbers of widows and widowers among the aged. | 72 | (75.8) | 35 | (54.7)* |
| The proportion of widowed among the aged is decreasing. | 21 | (22.1) | 9 | (14.1) |

* significant difference between group scores at the 0.05 level (2-tailed).

TABLE 4.12

Frequency and Percentage of Correct Responses to the Stereotyping FAQ Questions

| Scale Items | Social Work N = 95 Frequency | (%) | Nursing N = 64 Frequency | (%) |
|---|---|---|---|---|
| The majority of old people are senile. | 92 | (96.8) | 64 | (100) |
| The majority of old people have no interest in, nor capacity for sexual relations. | 93 | (97.9) | 64 | (100) |
| The majority of old people feel miserable most of the time. | 92 | (96.8) | 64 | (100) |
| Older workers usually cannot work as effectively as younger workers. | 86 | (90.5) | 50 | (78.1)* |
| Missing | 1 | | 1 | |
| Over three-fourths of the aged are health enough to carry out their normal activities. | 75 | (78.9) | 51 | (79.7) |
| The majority of old people are unable to adapt to change. | 83 | (87.4) | 50 | (78.1)* |
| It is almost impossible for the average old person to learn something new. | 93 | (97.9) | 63 | (98.4) |
| In general, old people tend to be pretty much alike. | 89 | (93.7) | 59 | (92.2) |

* significant difference between group scores at the 0.05 level (2-tailed).

work 93.7% correct response score); "[t]he majority of old people are senile" (nursing 100% and social work 96.8% correct score); and "[t]he majority of old people feel miserable most of the time" (nursing 100% and social work 96.8% correct response score).

**Attitudes**

Attitudes towards the elderly were measured using the Fraboni Scale of Ageism (FSA). This survey is composed of 29 statements and it requires participants to respond to each statement by selecting among 5 responses on a likert scale (1 indicating strong agreement with the statement and 5 indicating a strong disagreement). Higher scores on this scale reflect more ageist beliefs.

The Fraboni Scale of Ageism has a possible range of scores from 29 to 145. The scale does not include cut off scores and therefore does not categorize respondents according to their score. For the purpose of this study, 5 categories were constructed: 29 - 52 (positive attitudes towards the elderly); 53 - 75 (somewhat positive attitudes towards the elderly); 76 - 98 (neutral attitudes towards the elderly); 99 - 121 (somewhat negative attitudes towards the elderly); and 122 - 145 (negative attitudes towards the elderly).

Using the FSA nursing respondents in this study achieved a mean score of 58.3 (standard deviation = 10.2) while social work students achieved a mean score of 53.7 ( standard deviation = 10.2) (Table 4.13). Although both groups fall in the somewhat positive category, the between group difference was statistically

significant as determined by an independent t-test (see Table 4.14). A reliability test for the Fraboni Scale of Ageism produced an alpha of .813 for this study. This alpha is sufficient for most researchers to determine that the scale is consistent.

Figure 4.1 depicts the specific attitudes expressed by social work and nursing respondents. While attitudes, in general, were fairly positive both groups did express neutral to negative attitudes on a number of stereotypical-type questions. Nursing respondents had a mean score of 2.6 and social work students had a mean score of 2.4 for the statement "[m]ost old people should not be allowed to renew their drivers licenses." Negative attitudes were also reported for the questions "[o]ld people should compete athletically at their own level" (nursing mean 4.1, social work mean 3.8); and "[o]ld people focus on the present versus the past" (nursing mean 3.5, social work mean 3.4).

Both nursing and social work respondents scored somewhat negatively regarding their beliefs on the likeability of seniors. For example, nursing respondents gave the following average ratings; "[f]eeling happy when around old people is probably a common feeling" (mean 2.4); "I would like to go to an open house at a seniors' club if invited" (mean 2.6); and "I would prefer not to live with an old person" (mean 2.6). Although social work respondents did not score as negatively on these items their most negative scores for this section were also derived from the same statements with mean scores of 2.2, 2.1, and 2.4 respectively. Nursing respondents also expressed somewhat ageist perceptions for the statement,

"[t]eenage suicide is more tragic than suicide among the old", with a mean score of 2.3.

Both social work and nursing students reported fairly positive attitudes on items regarding seniors' status in society. For example "[o]ld people deserve the same rights and freedoms as do other members of our society" (nursing mean 1.3, social work mean 1.2); "[i]t is best that old people live in institutions that are largely removed from the rest of society" (nursing mean 1.1, social work mean 1.0); and "[o]ld people should be encouraged to speak out politically" (nursing mean 1.3, social work mean 1.4). Both groups also agreed that "[m]ost old people are interesting, individualistic people" (nursing mean 1.3, social work mean 1.3); that "[o]ld people can be very creative" (nursing mean 1.3, social work mean 1.3); and that "[t]he company of most old people is enjoyable" (nursing mean 1.4, social work mean 1.4).

## Comparing Social Work and Nursing Students

*Independent t-tests*

Univariate analyses showed that differences between social work and nursing students exist not only in their gerontological training but also in their attitudes, knowledge and motivation levels toward the elderly. Ninety-seven percent of nursing respondents and 27% of social work respondents had past practicum experience with the elderly. Seventy-nine percent of nursing respondents reported

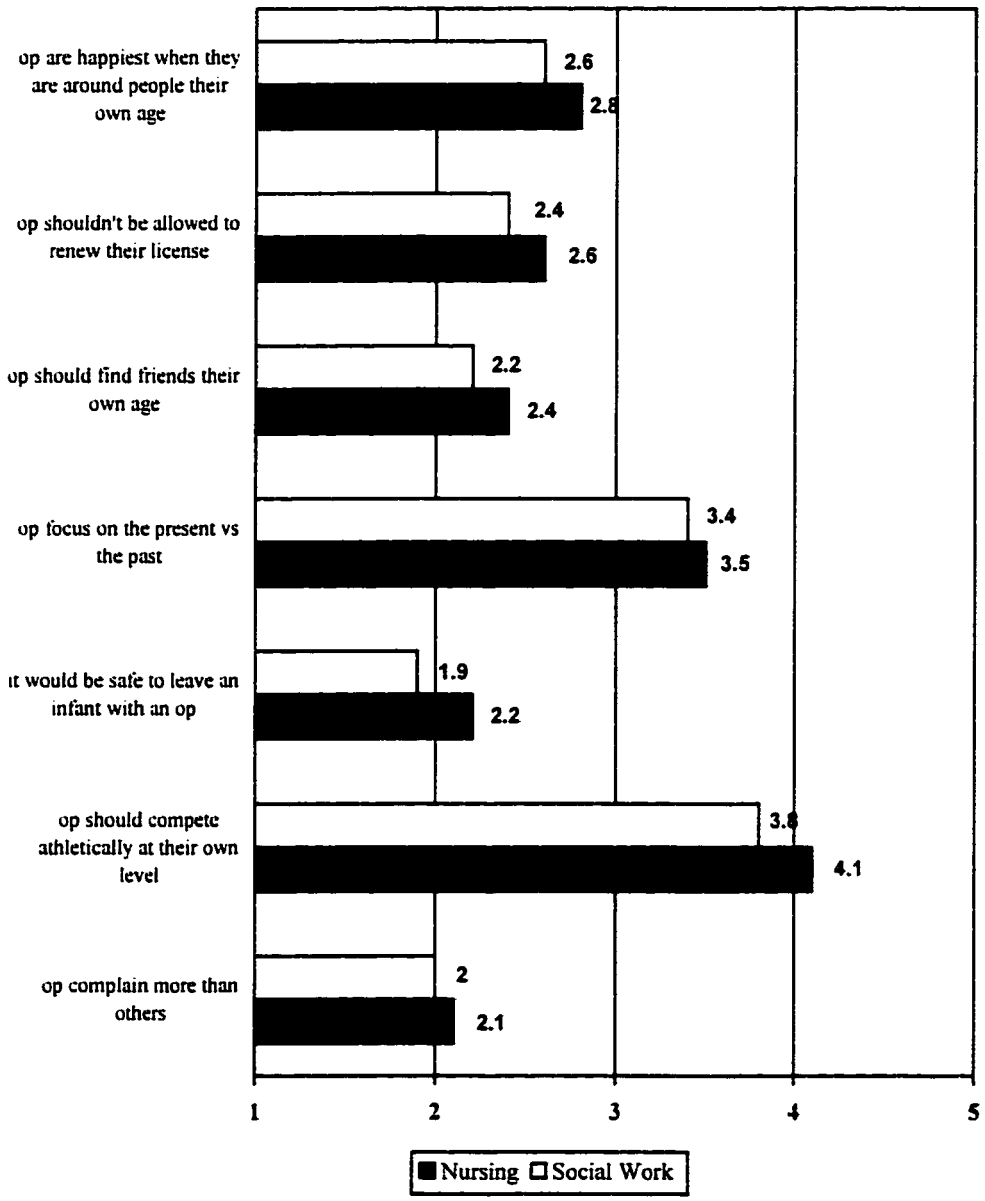
Table 4.13

Students' Performance on the Fraboni Scale of Ageism

| Program | N | Range | Mean | Std. Deviation |
|---|---|---|---|---|
| Nursing | 60 | 36 - 85 | 58.30 | 10.23 |
| Social Work | 92 | 36 - 76 | 53.69 | 10.20 |
| Total N | 152 | | | |
| Missing | 7 | | | |

FIGURE 4.1

Mean Levels of Agreement with Attitudinal Statements

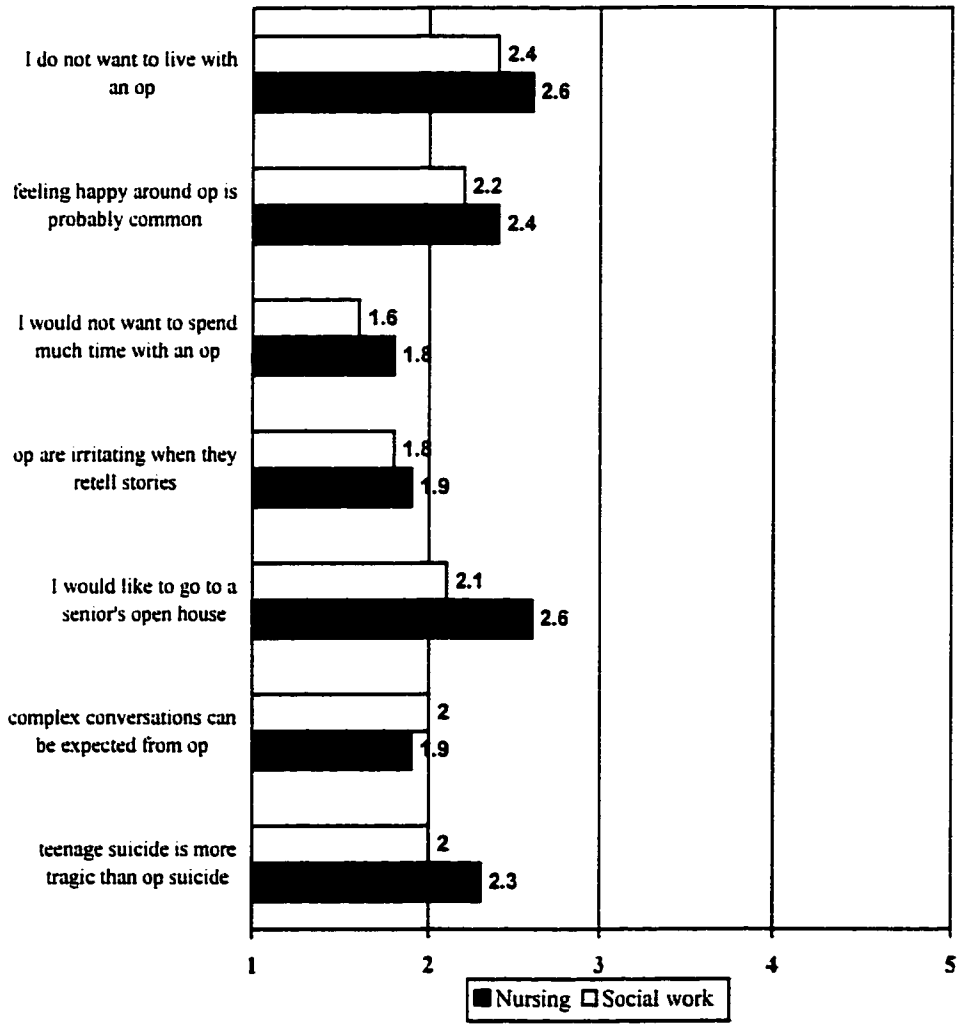



Higher scores signify more ageism

op = older persons

FIGURE 4.1 Continued

Mean Levels of Agreement with Attitudinal Statements

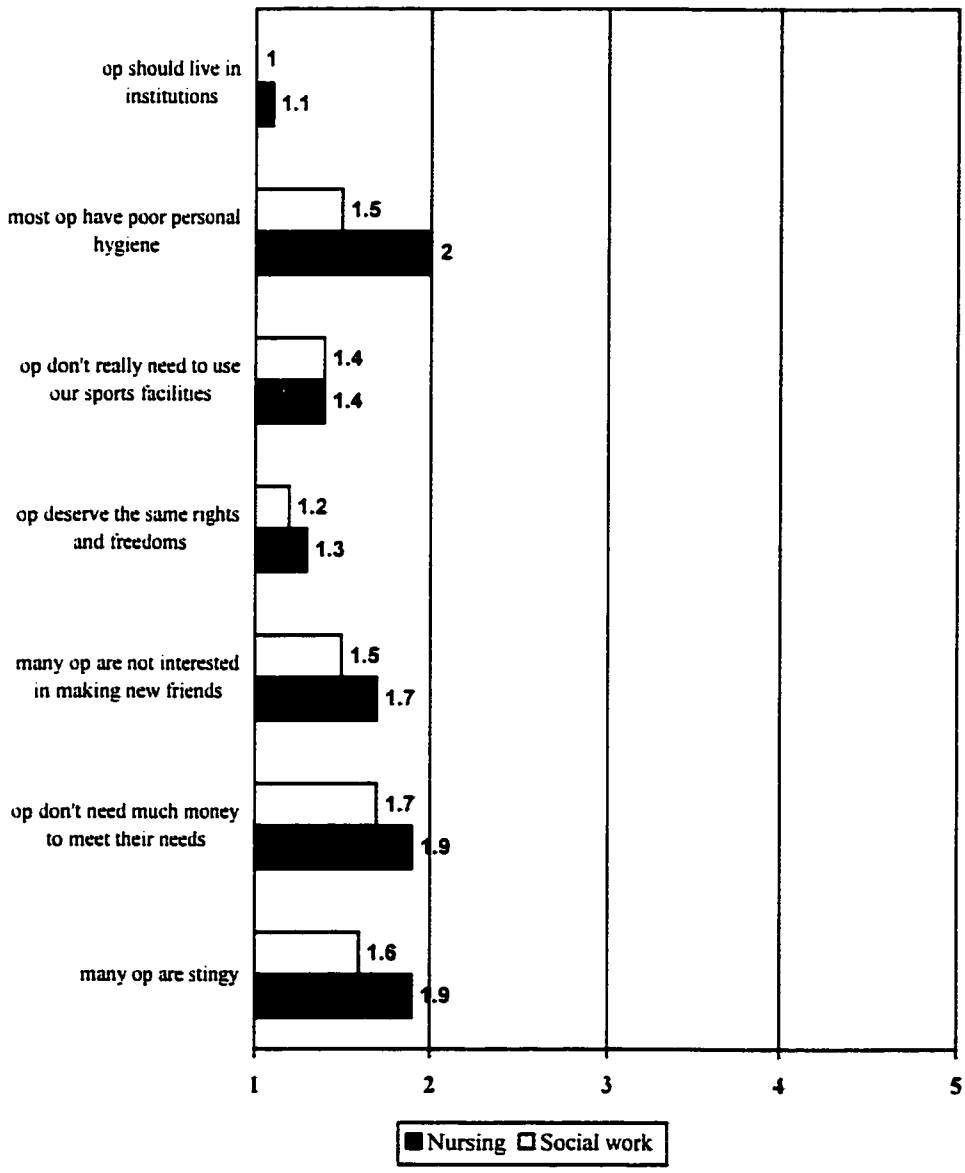



Higher scores signify more ageism

op = older persons

FIGURE 4.1 Continued

Mean Levels of Agreement with Attitudinal Statements

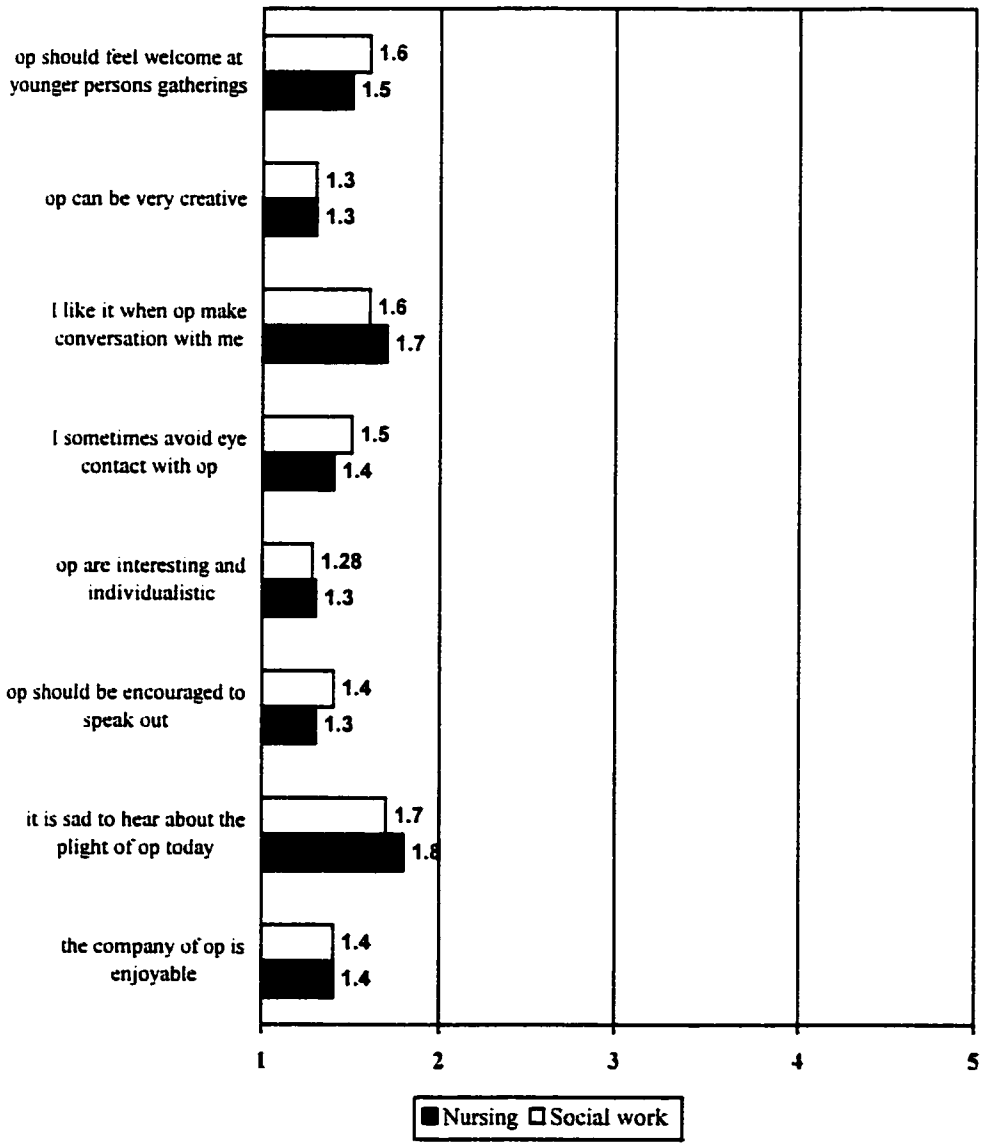



Higher scores signify more ageism

op = older persons

FIGURE 4.1 Continued

Mean Levels of Agreement with Attitudinal Statements




Higher scores indicate more ageism

op = older persons

having taken a course in gerontology while this number was only 30% for social work students. Nursing students scored slightly higher on the knowledge quiz but demonstrated slightly more ageist beliefs on the ageism scale. Finally, 51% of social work respondents and 34% of nursing respondents said they would choose a career with the elderly. When level of variable measurement permitted, independent t-tests were conducted to determine which group differences were statistically significant (Table 4.14).

An independent t-test comparing the overall knowledge scores of nursing and social work respondents was nonsignificant. An independent t-test comparing the total Fraboni Scale of Ageism scores for nursing and social work respondents, however, was significant ($t = 2.716$, $df = 150$, $p < .001$). This finding suggests that nursing respondents hold more ageist beliefs than do social work respondents. The Faboni Scale of Ageism average score for social work students was 53.7 while nursing respondents had a mean score of 58.3. While the finding was statistically significant the actual difference in scores was less than 5 points.

Independent t-tests were also run to determine if the perceptions expressed by social work and nursing respondents', relative to their prior practicum and work experience with seniors, differed significantly. Table 4.14 reports that group perceptions for both practicum and work experience did differ significantly. In both experiences, social work respondents perceived the contact as more positive (see Tables 4.3 and 4.4).

TABLE 4.14

Significant t-tests between Social Work and Nursing Respondents

| Variable | t | df | Sig (2-tailed) |
|---|---|---|---|
| FSA | 2.716 | 150 | .007 |
| Rate your practicum experience | 3.127 | 86 | .002 |
| Rate your work experience | 2.135 | 76 | .036 |

**Correlations**

Correlations were conducted to determine if linear relationships appeared to exist between any of the independent variables. Correlations were also conducted to question whether the dependent variables, knowledge levels and attitudes, were significantly correlated with any of the independent variables. Unfortunately, the level of measurement, which was used for many of the independent variables, prevented them from being included in the correlation matrix.

Correlations were run for nursing and social work respondents independently and together. When the groups were run independently, the only significant correlation for nursing students was between their FSA scores and their ratings of practicum experience ($r = .365$, $p < .01$) (Table 4.15). Significant correlations for social work students were found in their ratings of practicum and work experience ($r = .795$, $p < .01$) and in their FAQ scores and the number of gerontology courses taken ($r = .298$, $p < .05$) (Table 4.16).

When correlations combined both groups the only significant correlation that existed among the measured independent variables were ratings of practicum and work experience ($r = .351$, $p < .05$). Three significant positive correlations between the independent and dependent variables were identified in this study (Table 4.17). The strength of the correlation between Palmore's Facts on Aging Quiz and the number of courses taken in gerontology was weak ($r = .301$, $p < .01$) but was significant. No significant relationship was established between the FAQ and the FSA.

TABLE 4.15

Significant Correlations between Variables – Nursing Respondents

| Variable | Fraboni Scale of Ageism |
|---|---|
| Rate your practicum experience | .365** |

** = significant at .01 level

TABLE 4.16

Significant Correlations between Variables – Social Work Respondents

| Variable | Facts on Aging Quiz | Rate your work experience |
|---|---|---|
| Number of gerontology courses taken | .298* | |
| Rate your practicum experience | | .795** |

* = significant at .05 level

** = significant at .01 level

TABLE 4.17

Correlations between Independent and Dependent Variables - All Respondents

| | Dependent Variables | |
|---|---|---|
| Independent Variables | Facts on Aging Quiz | Fraboni Scale of Ageism |
| Number of gerontology courses taken | .301** | -.026 |
| Rate your practicum experience | -.159 | .441** |
| Rate your work experience | .042 | .261* |
| Facts on Aging scale | 1.000 | -.142 |
| Fraboni Scale of Ageism | -.142 | 1.000 |

* = significant at .05 level

** = significant at .01 level

The Fraboni Scale of Ageism was significantly correlated with one's rating of his/her practicum experience ($r = .441$, $p < .05$). This moderate correlation suggests that individuals who demonstrate more ageist beliefs were also more likely to rate their practicum experience with the elderly as negative. The FSA was also significantly correlated, in a positive direction, with one's rating of their prior elder-related work experience ($r = .261$, $p < .05$).

**Predictors of Attitudes and Knowledge Levels**

*Multiple Regression Analyses*

In order to determine which, if any variables, might serve as predictors for respondents' elder related attitudes toward the elderly and / or knowledge levels of elder-related issues, a series of multiple regression analyses were conducted. Standard multiple regression is a statistical test where all independent variables enter the regression equation at the same time and each is assessed as though it were entered into the equation last (Tabachnick & Fidell, 1989). Tabachnick and Fidell (1989) suggest using standard multiple regression unless there is a specific reason for using another type of regression. Researchers suggest that regression equations should have 20 times more cases than independent variables (Tabachnick, & Fidell, 1989). The present study meets this requirement when performing the regression on each of the dependent variables.

*Predictors of Elder-Related Knowledge*

The first research question this thesis sought to answer is - - "what are the elder-related knowledge levels of third and fourth year social work and nursing students at the University of Calgary?" Findings from the univariate analyses identified low knowledge levels, as measured by the Facts on Aging Quiz. Multiple regression analysis provides information about the relative contribution of each variable to the observed variance in the FAQ scores. According to the correlation statistics, course work in gerontology is one variable that relates to knowledge scores. It can also be hypothesized that other variables not included in the correlation matrix due to their level of measurement, would also affect one's FAQ score. For example, an individual with gerontological practicum experience might be expected to know more about this population than a respondent with less experience. Further, Reed, et. al., (1992) found that personal experience with the elderly was related to higher knowledge scores on the FAQ.

Table 4.18 indicates that 13% of the variance in respondents' score for the Facts on Aging Quiz was predicted by the number of courses they had taken in gerontology and whether respondents had prior personal and practicum experience with this population. Each of these variables was a significant predictor of the Facts on Aging Quiz score. This indicates that an increased number of gerontology courses and having had prior personal and practicum experience with the elderly leads to an increase in one's knowledge as measured by the FAQ. The regression slopes indicate that one's score on the FAQ will increase with the occurrence of a

gerontology course. That is, a slope of 1.086 suggests that if an individual takes a course in gerontology their FAQ score should be 1.086 above the mean score of 18.5 for nursing and 16.9 for social work. While this finding leaves 87% of the variance in knowledge scores unaccounted for it is encouraging to know that the educational process can improve elder-related knowledge through elder-related course work and practicums.

Predictors of Attitudes toward the Elderly

The correlation matrix displayed in Table 4.17 suggests a relationship between the Fraboni Scale of Ageism and respondents' ratings of her/his prior work and practicum experience. This researcher also chose to enter students responses to "would you choose a career with the elderly?" into the multiple regression as it seems likely that those with more ageist views would be less likely to choose a career with this population. Further, FAQ scores were entered into the equation. While there was not a correlation found between FSA and FAQ scores in this study Fraboni, et. al. (1990) did find a significant negative correlation between the scales in their study. Finally, program type was entered into the multiple regression as an independent t-test showed that the nursing and social work respondents scored significantly different on the FSA. When these variables were entered into a regression analyses they were found to account for a significant amount of variance in the FSA.

TABLE 4.18

Predictors of Scores on the Facts on Aging Quiz

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|---|---|---|---|---|
| 1 | .389 | .152 | .133 | 3.2071 |

| Variable | B | Standard Error | Beta |
|---|---|---|---|
| Number of courses in gerontology | 1.086 | .241 | .241* |
| Prior practicum experience | 1.131 | .165 | .165* |
| Prior personal experience | 2.602 | .166 | .166* |

* = significant at the 0.05 level

Thirty-eight percent of the variance in Fraboni Scale of Ageism scores could be predicted by respondents' program type, their rating of their prior work and practicum experience with the elderly, their FAQ score, and whether or not they would choose a career with the elderly (Tables 4.19). Table 4.19 indicates that when variables were examined independently, only two of the five variables were significant predictors of FSA scores.

**Summary**

Univariate analysis of the data found that this sample was overwhelmingly composed of nursing students who had experienced both course work and practicum experience with the elderly and of social work students who had little course work or practicum experience with the elderly. A further notable difference between the groups was the nature of their practicum experiences. While nursing students commonly had practicum experience in nursing homes, social work students were more likely to have experience working with elders in the community. Furthermore, nursing students rated their practicum experience more negatively than did social work students.

The average score on Palmore's Facts on Aging Quiz was 57.8% for nursing students and 52.9% for social work students. The average score for the Fraboni Scale of Ageism was 58.3 for nursing students and 53.7 for social work students. These attitudes are somewhat positive given the possible range of scores between the low (29) and the high (145). Relative to motivation for a gerontological career, about

TABLE 4.19

Predictors of Fraboni Scale of Ageism Scores

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|---|---|---|---|---|
| 1 | .675 | .455 | .384 | 8.1394 |

| Variable | B | Standard Error | Beta |
|---|---|---|---|
| Practicum rating | 4.037 | 1.788 | .323* |
| Work rating | .855 | 1.356 | .079 |
| Would you choose a career with elderly | -1.693 | 2.906 | -.082 |
| FAQ | -.431 | .395 | -.132 |
| Program type | -9.168 | 2.904 | -.398* |

* $p < .05$

one third of nursing respondents and half of social work respondents stated that they would choose a career with the elderly.

Further analyses found that significant differences existed between social work and nursing students relative to their group scores on the Fraboni Scale of Ageism. Correlation analyses identified three independent variables which were significantly correlated with either the Facts on Aging Quiz or Fraboni Scale of Ageism. The number of courses taken in gerontology was related to Facts on Aging Quiz scores while perceptions of practicum and work experience were related to scores on the Fraboni Scale of Ageism.

Multiple regression analysis determined that 13% of the variance in the FAQ and 38% of the variance in the FSA instruments could be predicted by the selected independent variables.

Chapter 5 will discuss the implications and recommendations of these findings.

# CHAPTER FIVE

# DISCUSSION

## Introduction

Three research questions were investigated in this thesis: 1. What is the knowledge level of third and fourth year social work and nursing students regarding the elderly? 2. What are the attitudes of third and fourth year social work and nursing students towards the elderly? 3. What motivates or deters third and fourth year social work and nursing students from choosing a career with the elderly? Chapter five will begin by summarizing the quantity of gerontological educational reported by the University of Calgary (U of C) social work and nursing students who responded to this survey. Later in the chapter the research questions will be addressed, as will the implications of the research findings.

## Background of Social Work and Nursing Students at the University of Calgary

The majority social work respondents had no practicum experience (72.6%) or course work (69.5%) in gerontology. Conversely, almost all nursing students had had elder-related practicum experience (96.9%) and course work (79%). The between group differences in elder-related education can be partially explained by the nature of the programs. Nursing students at the University of Calgary have limited options available for their practicum settings, particularly in their first year of study. Further, most of the available first year practicum options involve working

with seniors in a nursing home. Social work students, however, are provided with a wide variety of practicum settings and populations, very few of which involve work with seniors.

Quantity of gerontological course work was explored through the question; "[p]lease identify the number of gerontological courses you have/ are taking." This question may have been misinterpreted by nursing students who understood the word 'course' as meaning either a) a practicum, and/or b) some content in a course. The reported 79% of nursing students who had taken a course focussed solely in gerontology may be somewhat inflated. This speculation is derived from the fact that the nursing degree program at the University of Calgary does not require a course in gerontology but does include a number of aging related topics in other core courses. The high rate in which social work students reported not having taken a course in gerontology may reflect the limited gerontology option courses which were available in the Fall of 1998 and the Winter of 1999. A gerontological social work elective course was offered in the Winter of 1998, however, the then third year social work students could not enroll in this course due to other course requirements.

Social work students, in comparison to nursing students, were more likely to report a positive practicum experience with the elderly. This result may be indicative of a) social work students being more likely to have had a practicum in the community versus in a nursing home and / or b) social work respondents being more likely to have selected a practicum with the elderly, demonstrating a desire to work with the population and thus being more likely to enjoy the experience.

Forty-one percent of social work and 63% of nursing respondents had prior work experience with the elderly. The results showed that social work respondents were, again, more likely to work with the elderly in the community and were more likely to rate this experience as very positive. This finding supports the literature which suggests that students who experience the well elderly (in community settings) may find the work more enjoyable and rewarding than those who only experience the sick and frail elderly (such as those who may be found in a nursing home or hospital setting).

Considering the aging of the Canadian population, and the higher utilization of health care towards the end of life, an alarming number of nursing students stated not wanting a gerontological career. In fact, sixty-six percent of nursing respondents stated that they would not choose a career with the elderly. This finding suggests that both future job satisfaction and quality of elder care will be jeopardized as it is inevitable that a substantial number of nurses will in fact work with the elderly.

Social work students reported a somewhat greater willingness to work with the elderly (51%). While social work respondents' desire to work with this population may seem positive, they have had limited practicum experience and course work in this area. In light of their obvious lack of gerontolgical preparation, quality of care could be diminished.

The top three reasons cited for choosing a career with the elderly were the same for social work and nursing respondents. These were: enjoying the company of older adults; a belief that the elderly have a lot to offer; and the belief that this type

of career would be rewarding. The top three reasons given by students for not choosing a career with the elderly were also the same for both groups. These were; a lack of interest; a desire to work with children; and a sense that working with seniors would be depressing. These findings are consistent with those presented in the literature review. This study did not confirm past studies that also noted the role of faculty in promoting the importance of work with seniors.

**What do Social Work and Nursing Students Know about the Elderly?**

Given that 81 of the nursing and social work respondents were one year away from graduating and 77 of the social work and nursing respondents were weeks away from graduating, their lack of gerontological knowledge was alarming. The average correct response score on Palmore's Facts on Aging Quiz was 58.3% for nursing students and 53.7% for social work students.

While it may be argued that this finding lacks merit as a result of the scale's poor reliability, the high use of this scale in past research does give present researchers a basis for comparison. Past FAQ research using health professional students typically achieved results in the mid to high sixth percentile. The study reported by Beall et. al., (1992) found an average correct response of just over 50%. The study by Beall, et. al., was the only published research that reported scores as low as those achieved by the respondents at the University of Calgary. Whether we are examining respondents' raw scores or comparing them to previous studies it is obvious that U of C respondents have inadequate knowledge of elder-related issues.

Whether social work and nursing students will require the type of knowledge measured by the quiz to effectively carry out future job responsibilities may be questioned. However, even if their lack of knowledge, as measured by the FAQ, does not result in incompetent practice it will certainly play a role in the quality of care that will be provided. In fact, it would be naive to believe that gaps in knowledge would not result in less than optimal quality of care.

Some questions, more than others, could have an impact on the quality of social work and nursing care provided to seniors. For example, a psychosocial assessment could be hindered by the fact that more than 50% of social work and nursing students do not know that seniors are seldom bored or irritated. Further, more than 50% do not know that the majority of seniors live with someone, are not socially isolated, and are not poverty stricken. From a biological standpoint, only 40% of nursing and social work students understand that older adults will usually take longer to learn something new compared to younger adults. This misconception will likely have a negative impact on the manner in which social workers and nurses provide care to the elderly.

**What are the Attitudes of Social Work and Nursing Students toward the Elderly?**

Attitudes were measured through the Fraboni Scale of Ageism. It is unfortunate that the scale is not accompanied by standardized cut-off scores whereby all researchers using the scale could make consistent interpretations of respondents'

scores. Without standardized cut-off scores, researchers are left to draw upon their own interpretations of respondents' scores. Given that the FSA has a range of possible scores from 29 to 145 and higher scores signal more ageism, the respondents in this study fall in the somewhat positive category with scores of 58.3 (nursing) and 53.7 (social work).

While their scores appear acceptable it is still disconcerting that on a scale from 1 to 5, with higher scores signaling more ageism, the following statements would not elicit unanimous responses of 1:

- Teenage suicide is more tragic than suicide among the elderly (2.0 for sw and 2.3 for nursing).
- Feeling happy when around old people is probably a common feeling (2.2 for sw and 2.4 for nursing).
- Old people shouldn't be allowed to renew their drivers license (2.4 sw and 2.6 for nursing).
- Old people complain more than others do (2.0 for sw and 2.1 for nursing).

It is this writer's view that these statements and corresponding responses reflect blatant ageist attitudes. However, it should be noted that there were far more answers on the questionnaire where social work and nursing students disagreed with ageist comments. The researchers who developed the Fraboni Scale of Ageism found very similar scores (57.9) in their study of university and career-oriented respondents (Fraboni, et. al., 1990). The Fraboni Scale of Ageism has not been utilized by other researchers, however, studies using alternate attitude measures have

typically found social work and nursing students to hold neutral to negative attitudes toward the elderly.

The literature review reported that Barresi & Brubaker (1980) and Williams, et. al., (1986) used the Facts on Aging Quiz as a measure of attitudes. As the FAQ has not been validated as an attitude measure, it was not used as an attitude measure in this study. However, as the FSA did not reveal strongly held positive or negative attitudes the FAQ was re-examined. Questions in which more than 50% of the respondents did not answer correctly were identified. These responses could be viewed as reflecting either a positive or negative age bias. For example, more than 50% of respondents did not know that the majority of old people are not socially isolated. In essence, respondents held a negative age bias – wrongly believing that most seniors are socially isolated. The findings from this data analyses show that where 50% or more of the respondents did not answer correctly, 10 (77%) held a negative age bias, 1 (8%) held a positive age bias, and 2 (15%) were neutral. Like the studies by Barresi & Brubaker (1980) and Williams, et. al., (1986) these results imply that respondents were more likely to portray seniors as a somewhat depressing population.

The results from this analysis must be interpreted with caution as the quiz was not developed to measure attitudes. Still, the attitudinal findings of the FSA and the FAQ present an interesting difference. The differences between the findings of the two scales could be accounted for by social desirability. That is, it may be that students' attitudes were more positive when measured by the FSA because

respondents knew they were being measured and therefore gave socially desirably answers. The differences could also be accounted for by the fact that attitudes towards the elderly are not as black and white as those interpreted by the FAQ. That is, when given the opportunity to more accurately express their perceptions, respondents present neutral rather than strongly held positive or negative attitudes.

A final indication of respondents' attitudes may be extracted from their self reports on their reasons for choosing or not choosing a gerontological career. Chapter Four reported that social work respondents listed a similar number of motivators (64) and deterrents (56) but that nursing respondents cited 59 deterrents to a gerontological career but only 25 motivators.

Future research could benefit by the development of attitude scales with standardized cut-off scores.

**Between Group Differences**

Comparisons between nursing and social work students were examined using independent t-tests. While there was an actual difference between the group scores on Palmore's Facts on Aging Quiz, the difference was nonsignificant. This finding strongly suggests the belief that nursing respondents misunderstood the question regarding the quantity of gerontological course work. That is, if 79% of nursing students, compared to 31% of social work students, took a course in gerontology then nursing students should have achieved significantly higher knowledge scores.

A statistically significant group difference was noted when group scores for the Fraboni Scale of Ageism were compared. While nursing students scored significantly higher on the FSA, indicating more negative attitudes, this result must be interpreted with caution as the actual difference in scores was not great (nursing = 58.3; social work = 53.7).

Correlations were found among two independent variables and between various independent and dependent variables. However, the vast majority of these statistically significant relationships showed only mild to moderate correlations. A significant correlation was found between the independent variables that asked respondents to rate their practicum and work experience with the elderly. This correlation was very strong (.795) when examining social work responses, however, it became weaker when all respondents were included in the correlation (.351). This mildly positive correlation suggests that if a student rated their work experience as negative (3 or 4 on a four point scale) they would also be more likely to rate their practicum experience as negative.

Not surprisingly, the strongest correlation with Palmore's Facts on Aging quiz was the number of courses taken in gerontology. What was surprising was the weak level of correlation, however, the reason for this strength may be found in the interpretation of the question "how many courses have/ are you taking in gerontology?" This conclusion is based on the fact that past research has found knowledge, as measured by the FAQ, to be highly related to the number of gerontology courses taken (see Chapter 2). Further evidence can be taken from the

finding that when the groups were separated a significant correlation was found between these variables (FAQ and coursework) for social work but not for nursing students.

The Fraboni Scale of Ageism was most strongly correlated with a students rating of their practicum experience. A moderately strong positive correlation implied that a negative practicum experience was related to an increased ageist attitude. While it approached significance, there was no significant correlation found between the FSA and the FAQ. This differs from the study conducted by Fraboni et. al. (1990) which found a significant correlation between the FSA and the FAQ ($r = -.28$, $p < .01$).

**Multivariate Analysis**

Standard multiple regression determined that knowledge was most affected by the number of gerontology courses taken, having had personal experience with the elderly, and having had prior practicum experience with the elderly. While the total variance accounted for was only 13%, this figure does give some direction to those wanting to improve the knowledge level of prospective health professionals. More variance in knowledge may have been found if the FAQ had been a more reliable measure in this study.

A multiple regression also found that a large amount of variance in the Fraboni Scale of Ageism was accounted for by a number of independent variables. Specifically, 38% of the variance in the FSA was accounted for by students' rating of

their practicum and work experience, whether or not they would choose a career with the elderly, program type, and their achieved score on the FAQ.

**Limitations of this Research**

Limitations of this research detract some from the strength of the findings. Both internal and external validity will be effected by the selection bias of the sample. The researcher can not assume that the individuals who completed the questionnaires are comparable to those who did not. That is, the nonresponse bias limits external validity as it prevents generalizability to all University of Calgary (U of C) nursing and social work students. In addition, generalizing these findings beyond the University of Calgary and Mount Royal College nursing and social work faculties may not be appropriate. The characteristics of this sample, both in terms of individual characteristics and the learning experience unique to these nursing and social work programs, can not be generalized to health care professionals who studied elsewhere.

External validity may further be affected by reactivity, which suggests that attitudes towards elderly may be affected by the fact that they are being measured. This limitation includes the factor of social desirability. The principle of reductionism also poses the question of whether it is even possible to measure knowledge and attitudes using a survey design.

A pilot test of the survey may have strengthened the questionnaire and thereby the study's results. Had a pilot test been performed the ambiguity in the

question "how many gerontology course have/ are you taking?" could have been corrected. Ensuring that more independent variables were measured at the interval level of measurement could have further strengthened the study. Variables entered in the nominal and ordinal level of measurement prevented their inclusion in the correlation statistics and independent t-tests.

**Implications**

The implications for this research are largely directed to the institutions that educate nursing and social work students. Professional programs have a responsibility to ensure that their graduates acquire sufficient knowledge regarding the aging process and basic skills for working with elderly persons. A significant contribution to quality elder care can be produced in the classroom or practicum setting. It is imperative that education strives to shape students attitudes. In the absence of adequate knowledge and with a less than positive attitude the elderly patient is at risk for inappropriate, and sometimes discriminatory, service provision. Future research should further examine the relationship between these variables. That is, the relationship between knowledge and attitudes as well as the impact of knowledge and attitudes on quality of care.

How can we improve the motivation of nursing and social work students to choose a career in gerontology? Educators may want to ask themselves how they can increase the gerontological interest of their students and how they can help to demystify the belief that working with the elderly would be depressing - entailing

inevitable decline and death. Through the literature review and the results of this research it has become evident that the nature of elder-related practicum experiences is critical in attitude development and motivation for a gerontological career. In this instance, educators are provided with substantial opportunity to change both the attitudes, and the numbers, of prospective gerontological health professionals.

Programs must take a responsible approach to the types of gerontological practicum their students experience. Given the research findings, it is obvious that faculty must create a positive practicum experience for nursing students as its impact on attitudes is undeniable. It is imperative that nursing programs do not use nursing home settings as a first clinical contact. Students should be required to work with well elderly in the community in addition to working with elderly in a nursing-home setting (Aday & Campbell, 1995; Cook & Pieper, 1986; Rowland & Shoemaker, 1995). Relative to social work practicum settings at the University of Calgary, more elder-related opportunities must be made available.

It is time that the University of Calgary social work and nursing programs make a commitment to serve this growing population. The faculties should seriously consider requiring students to take a course in gerontology which, at the very least, could debunk so many of the stereotypes and misconceptions students have demonstrated. Gerontological content should also be integrated throughout core curriculum courses with relevant cases and role plays.

"Crucial initiatives ... are needed at this critical time for the social work profession to realize its vast potential for improving the delivery of social,

psychological and physical health services for older adults" (Scharlach, et. al., 1997, p. 5). Failure of schools of social work and nursing to increase grerontological content can only mean that the elderly population will be inappropriately served. This reality implies that both professions may not be sufficiently complying with the codes of ethics that uphold the rights of the clients and patients they serve. Although the growth of the elderly population and its impact on the health and social services is undeniable, this is not reflected in nursing and social work education. The literature is clear, social work and nursing students are astoundingly ill prepared for work with this population.

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# APPENDIX A

## Facts on Aging Quiz - A Time line

Appendix A

Facts on Aging Quiz - A Time Line

| Study | Sample | Participant Variables | Design | Intervention | Ultimate Outcomes |
|---|---|---|---|---|---|
| Palmore, 1977 | 86 undergrads 44 grad. students | undergrads were enrolled in a sociology course grad students were in aging and human development | Cross sectional survey | none | undergrads scored 65% grad students scored 80% |
| Barresi & Brubaker, 1980 | 200 MSW's | From Ohio state; 64% female; mean age 46.3 | Cross sectional survey | NA | 68% correct response rate. |
| *Perrotta, Perkins, schrimpfhauser, & Calkins, 1981 | 127 first year medical students | State University of New York | Cross sectional survey | NA | 63% correct response rate. |
| *Ross, 1983 | 64 nursing students | NA | Pre-test Post-test | An experience of contact with well older people living in the community | Mean percent correct increased from 66% to 80% following the experience |
| Hucktadt, 1983 | 252 registered nurses | Residents in Kansas | Cross sectional survey | None | 62% mean score |
| Michieulutte & Diseker, | 368 medical students | North Carolina | Cross sectional | None | Scores ranged from 63% for dental students to 70% for first year medical |

| | | | | | |
|---|---|---|---|---|---|
| 1984/85 | 219 physician assistants 157 physicians 75 dentists | | survey | | students |
| Williams, et. al., 1986 | 322 nursing students | Large midwestern university; 94% female; mean age of 23 | Cross sectional survey | None | 70% average correct response rate. |
| *Walter, 1986 | 167 nurses | Employed in nursing homes | Cross sectional survey | None | 63% correct response rate |
| Carmel, et. al., 1992 | 52 nursing students 45 social work students 127 medical students | NA | Pre-test Post-test | Course in gerontology | Nursing and social work students increased knowledge level while medical students remained the same. At post-test the tope PAQ score was 64%(by nursing and social work students). |
| Reed, 1992 | 40 MSW students 27 Master in Nursing students | Mean age 33.9; 94% Caucasian | Cross sectional survey | none | Both groups of students achieved 68% |

* cited in Palmore (1988)

# APPENDIX B

## Attitudes - A Time Line

Appendix B

Attitudes - A Time Line

| Study | Sample | Participant variables | Design | Intervention | Instrument | Ultimate Outcomes |
|---|---|---|---|---|---|---|
| Peach & Pathy, 1982 | 63 medical students assigned to geriatric care<br>66 medical students assigned to general care | Welsh National School of Medicine | Comparis on group post test only | Experience in either geriatric or general care | Investigator designed questionnairre | Attitudes of the group experiencing geriatric care were more positive |
| Cook & Pieper, 1986 | 70 nursing students | Diploma nursing program in the Midwest; mean age 20 | Pre-test Post-test | Two week practicum in a nursing home | Investigator designed 38 item questionnaire | Eight items became more positive while 16 became more negative. All but one of the negative ratings were related to working with the elderly. |
| Gallbraith & Suttie, 1987 | 86 nursing students | 86% female | Pre-test Post-test | Course in gerontology and 5 week clinical focusing on both well elderly in the community and elderly in nursing homes | Oberleder Attitude Toward Aging Scale | Significant difference was noted as attitudes became more positive following the intervention. Positive attitude changes were noted in 17 of 25 responses. Eight |

| | | | | | | |
|---|---|---|---|---|---|---|
| | | | | | | responses became more negative. |
| Hellbusch, et. al., 1994 | 200 medical physicians | Nebraska; 92% male; 71% between the ages of 30-49. | Cross sectional survey | None | Kogan's Attitude Toward Old People Scale | Mean KOPS score was 96.9 (scores can range from 34 to 238 with lower scores showing less negative attitudes). |
| Aday & Campbell, 1995 | 45 nursing students | Southeastern University; mean age 28. | Pre-test post-test | Course work in gerontolgoy and pracica experience with both well and frail elderly. | Perceptions of Aging and Elderly Inventory (PAEI); Elderly Patient Care Inventory (EPCI); Rank ordering of client populations. | Significant relationship between PAEI and EPCI. A significant difference, in a positive direction, was found on both scales at post-test. Fewer negative stereotypes at post-test. Increased preference at post-test to work with the elderly. |
| Rowland, & Shoemaker, 1995 | 169 nursing students | 85% between 20-30 years of age; 90% Caucasian; 75% female | Pre-test Post-test | Practica in a nursing home | Investigator designed two-staged survey | 76% of answers were the same at pre- and post-test. Where answers changed, 5 became more negative while 2 became more positive. |
| Kane, 1999 | 333 MSW and BSW students | Florida | Cross sectional survey | none | Kogans Attitude Towrd Old People Scale; | MSW and BSW students had neutral attitudes. |

# APPENDIX C

## Gerontolgical Coverage of Canadian Schools of Social Work and Nursing

Gerontolgical Coverage of Canadian Schools of Social Work and Nursing

| University | Social Work Program | Nursing Program |
|---|---|---|
| University of Windsor | No course requirement<br>An elective is available | NA |
| University of Ottawa | NA | No course requirement<br>Electives are available |
| Carlton University | No course requirement<br>An elective is available | NA |
| University of Alberta | NA | No course requirement<br>An elective is available |
| Athabaska University | NA | No course requirement<br>Electives are available |
| University of Lethbridge | No course requirement<br>An elective is available | Reqired to take one course in gerontology |
| University of Manitoba | No course requirement<br>Electives are available | No course requirement; utilizes a geriatric client model for a core course in managed care.<br>Electives are available |
| Memorial University | No response | No course requirement, one course required in middle to older age adults<br>No electives available |
| University of Calgary | No course requirement<br>An elective is available | No course requirement<br>No elective is available |
| University of British Columbia | No course requirement<br>No electives available | One six week course in gerontology is required |
| Memorial University | NA | One gerontology course is required |

# APPENDIX D

## Survey Instrument

## Consent Form

**Research Project Title:** "The attitudes and knowledge level of prospective health care professionals: A Canadian study"

**Investigators:** Patricia Moan, BSW (MSW student) **Funding Agency:** U of C, Faculty of Social Work

This consent form, a copy of which has been given to you, is only part of the process of informed consent. It should give you the basic idea of what the research is about and what your participation will involve. If you would like more detail about something mentioned here, or information not included here, please ask. Please take time to read this form carefully and to understand any accompanying information.

1. **Purpose and Usefulness:** The purpose of this study is to assess the knowledge level and attitudes of 3rd and 4th year social work and nursing students toward the elderly. The study will contribute knowledge in the understanding of why individuals choose, or do not choose, a career with the elderly. The results of this study may be used to enhance gerontological education in nursing and social work curriculums.
2. **Participants, Procedures and Your Participation:** You will be asked to complete a questionnaire. The first half will be based on "true", "false", and "I do not know" responses while the second half will seek your opinion ranging from strongly agree (1) to strongly disagree (5). You will also be asked for some demographic information and for your reasons for choosing, or not choosing, a career in the field of gerontology.
3. **Research Design:** Your responses will be aggregated in order to understand the overall attitudes and knowledge level toward the elderly. The aggregated responses of social work students will be compared with those of nursing students to determine similarities and differences between the groups.

4. **Risks/Costs/Benefits:** The research does not pose any risks to anyone who is participating. The only costs to you is the time that it will take in order to complete the questionnaires (about 25 minutes). There will be no monetary compensation. The benefits of participating are; a chance to win a $70.00 gift certificate from Oasis Spa and Wellness Center, the questionnaires will provide feedback as to the knowledge level and attitudes of prospective gerontological professionals, and insight into why this career may be chosen.

5. **Your Choice:** It is your choice whether to participate or not in this study. If you would like assistance in reading or completing the questionnaires, the researcher will be able to help you.

6. **Confidentiality:** When completing the questionnaires, you will not be asked to include your name. Your completed questionnaires and information will be stored on a computer which will be secured in the office of the researcher. No one will be able to connect which answers are provided by which participants.

7. **Further Information:** Your participation will be completed within a half hour. I do not plan to contact research participants for follow-up or to provide additional information. You are encouraged to ask for any additional information by contacting the researcher at the number listed below.

Your signature on this form indicates that you have understood to your satisfaction the information regarding participation in the research project, and agree to participate as a subject. In no way does this waive your legal rights nor release the investigators, sponsors, or involved institutions from their legal and professional responsibilities. You are free to withdraw from the study at any time. Your continued participation should be as informed as your initial consent, so you should feel free to ask for clarification or new information throughout your participation. If you have further questions concerning matters related to this research , please contact: Patricia Moan, Faculty of Social Work, University of Calgary at (403) 220-7412.

If you have any questions concerning your participation in this project, you may also contact my supervisor, Jack Sieppert, (U of C) 220 – 6944 or contact Sharon Moore (MRC) 240-6894.

Participant signature Date

**Questionnaire**

**"The attitudes and knowledge level of prospective health care professionals"**

Investigator: Patricia Moan, Faculty of Social Work, University of Calgary

Please fill in the following information, in order to give me an idea of the backgrounds of the people who are participating in this study. You do not have to provide answers for any questions which you feel uncomfortable with. However, the more complete your responses, the more valuable that your answers will be.

1. **Faculty of Study:** _____ Nursing _____ Social Work
2. **Year of Program:** _____ Third _____ Fourth
3. **Age:** _____ 20-25 _____ 26-31 _____ 32-40 __ 41-50 _____ Over 50
4. **Gender:** _____ Female _____ Male
5. **Ethnicity:** _____ Caucasian ____ Asian _____ Aboriginal _____Other (specify) _____
6. Please identify the **number of gerontological courses** you have/ are taking _____

**7a.** List your prior **Practicum experience with the elderly** (include length of time)

_____

_____

_____

_____

_____

_____

**7b.** Please rate the experience by circling a number from 1(very positive) to 4 (very negative) - **1 2 3 4**

**8a.** List your prior **Work experience with the elderly** (paid or volunteer, including length of time)

_____

_____

_____

_____

_____

_____

**8b.** Please rate the experience by circling a number from 1(very positive) to 4 (very negative) - **1 2 3 4**

**9a.** List your prior **personal experience with the elderly** (i.e. close to grandparents, neighbor)

_____

_____

_____

_____

_____

_____

**9b.** Please rate the experience by circling a number from 1(very positive) to 4 (very negative) - **1 2 3 4**

**10a.** Would you **choose a career with the elderly?** _____ Yes _____ No

**10b.** Please list the **reasons** why you would or would not choose a career with this population

_____

_____

_____

_____

_____

_____

| **Please indicate the correct response by checking True or False. If you do not know the correct answer you may check Uncertain.** | **True False Uncertain** |
|---|---|
| 1. The majority of old people (age 65+) are senile (have defective memory, are disoriented, or demented). | ☐ ☐ ☐ |
| 2. The five senses (sight, hearing taste, touch, and smell) all tend to weaken in old age. | ☐ ☐ ☐ |
| 3. The majority of old people have no interest in, nor capacity for sexual relations. | ☐ ☐ ☐ |
| 4. Lung Vital capacity tends to decline in old age. | ☐ ☐ ☐ |
| 5. The majority of old people feel miserable most of the time. | ☐ ☐ ☐ |
| 6. Physical strength tends to decline in old age. | ☐ ☐ ☐ |
| 7. At least one-tenth of the aged are living in long-stay institutions (such as nursing homes, mental hospitals etc). | ☐ ☐ ☐ |
| 8. Aged drivers have fewer accidents per driver than those under age 65. | ☐ ☐ ☐ |
| 9. Older workers usually cannot work as effectively as younger workers. | ☐ ☐ ☐ |
| 10. Over three-fourths of the aged are healthy enough to carry out their normal activities. | ☐ ☐ ☐ |
| 11. The majority of old people are unable to adapt to change. | ☐ ☐ ☐ |
| 12. Old people usually take longer to learn something new. | ☐ ☐ ☐ |
| 13. It is almost impossible for the average old person to learn something new. | ☐ ☐ ☐ |
| 14. Older people tend to react slower than younger people do. | ☐ ☐ ☐ |
| 15. In general, old people tend to be pretty much alike. | ☐ ☐ ☐ |
| 16. The majority of old people say they are seldom bored. | ☐ ☐ ☐ |
| | |

| | True | False | Uncertain |
|---|---|---|---|
| 17. The majority of old people are socially isolated. | ☐ | ☐ | ☐ |
| 18. Older workers have fewer accidents than younger workers. | ☐ | ☐ | ☐ |
| 19. Over 15% of the population are now age 65 or over. | ☐ | ☐ | ☐ |
| 20. The majority of medical practitioners tend to give low priority to the aged. | ☐ | ☐ | ☐ |
| 21. The majority of old people have incomes below the poverty line (as defined by the federal government). | ☐ | ☐ | ☐ |
| 23. Old people tend to become more religious as they age. | ☐ | ☐ | ☐ |
| 24. The majority of old people say they are seldom irritated or angry. | ☐ | ☐ | ☐ |
| 25. The health and economic status of old people will be about the same or worse in the year 2015. | ☐ | ☐ | ☐ |
| 26. Older persons have more acute (short-term) illnesses than do younger persons. | ☐ | ☐ | ☐ |
| 27. Older persons have more injuries in the home than younger persons. | ☐ | ☐ | ☐ |
| 28. The aged have higher rates of criminal victimization than younger persons. | ☐ | ☐ | ☐ |
| 29. The aged are more fearful of crime than are younger persons. | ☐ | ☐ | ☐ |
| 30. There are about equal numbers of widows and widowers among the aged. | ☐ | ☐ | ☐ |
| 31. The majority of old people live alone. | ☐ | ☐ | ☐ |
| 32. The proportion widowed among the aged is decreasing. | ☐ | ☐ | ☐ |

| **The following statements attempt to measure perceptions of the elderly. Please circle the response that best reflects your view on a continuum from 1 (strongly agree with the statement) to 5 (strongly disagree with the statement).** | **Strongly Agree** | | | | **Strongly Disagree** |
|---|---|---|---|---|---|
| 1. Teenage suicide is more tragic than suicide among the old. | 1 | 2 | 3 | 4 | 5 |
| 2. Many old people are stingy and hoard their money and possessions. | 1 | 2 | 3 | 4 | 5 |
| 3.Many old people are not interested in making new friends. | 1 | 2 | 3 | 4 | 5 |
| 4. Many old people focus on the present rather than the past. | 1 | 2 | 3 | 4 | 5 |
| 5. Complex and interesting conversations can be expected from most old people. | 1 | 2 | 3 | 4 | 5 |
| 6. Most old people should not be allowed to renew their drivers licenses. | 1 | 2 | 3 | 4 | 5 |
| 7. Most old people would be considered to have poor personal hygiene. | 1 | 2 | 3 | 4 | 5 |
| 8. Most old people can be irritating because they tell the same stories over and over again. | 1 | 2 | 3 | 4 | 5 |
| 9. Old people complain more than other people do. | 1 | 2 | 3 | 4 | 5 |
| 10. Old people do not need much money to meet their needs. | 1 | 2 | 3 | 4 | 5 |
| 11. There should be special clubs set aside within sports facilities so that old people can compete at their own level. | 1 | 2 | 3 | 4 | 5 |
| 12. Old people deserve the same rights and freedoms as do other members of our society. | 1 | 2 | 3 | 4 | 5 |
| 13. Old people don't really need to use our community sports facilities. | 1 | 2 | 3 | 4 | 5 |
| 14. It would be safe to leave an infant in the care of most old people. | 1 | 2 | 3 | 4 | 5 |

| | Strongly Agree | | | | Strongly Disagree |
|---|---|---|---|---|---|
| 15. It is best that old people live in institutions that are largely removed from the rest of society. | 1 | 2 | 3 | 4 | 5 |
| 16. The company of most old people is quite enjoyable. | 1 | 2 | 3 | 4 | 5 |
| 17. It is sad to hear about the plight of the old in our society these days. | 1 | 2 | 3 | 4 | 5 |
| 18. Old people should be encouraged to speak out politically. | 1 | 2 | 3 | 4 | 5 |
| 19. Most old people are interesting, individualistic people. | 1 | 2 | 3 | 4 | 5 |
| 20. I sometimes avoid eye contact with old people when I see them. | 1 | 2 | 3 | 4 | 5 |
| 21. I like it when old people try to make conversation with me. | 1 | 2 | 3 | 4 | 5 |
| 22. Feeling happy when around old people is probably a common feeling. | 1 | 2 | 3 | 4 | 5 |
| 23. Old people should find friends their own age. | 1 | 2 | 3 | 4 | 5 |
| 24. Old people should feel welcome at the social gatherings of young people. | 1 | 2 | 3 | 4 | 5 |
| 25. I would like to go to an open house at seniors' club, if invited. | 1 | 2 | 3 | 4 | 5 |
| 26. Old people can be very creative. | 1 | 2 | 3 | 4 | 5 |
| 27. I personally would not want to spend much time with an old person. | 1 | 2 | 3 | 4 | 5 |
| 28. Many old people are happiest with people their own age. | 1 | 2 | 3 | 4 | 5 |
| 29. I would prefer not to live with an old person. | 1 | 2 | 3 | 4 | 5 |

** Palmore's Facts on Aging Quiz and Fraboni Scale of Ageism are used with permission.