

2008

Bridging the Gap: Gerontology and Social Work Education

Cindy Snyder

Susan Wesley

Muh Bi Lin

George Fox University, mbilin@georgefox.edu

J Dean May

Follow this and additional works at: http://digitalcommons.georgefox.edu/sw_fac



Part of the [Social Work Commons](#)

Recommended Citation

Snyder, Cindy; Wesley, Susan; Lin, Muh Bi; and May, J Dean, "Bridging the Gap: Gerontology and Social Work Education" (2008).
Faculty Publications - School of Social Work. Paper 8.
http://digitalcommons.georgefox.edu/sw_fac/8

This Article is brought to you for free and open access by the School of Social Work at Digital Commons @ George Fox University. It has been accepted for inclusion in Faculty Publications - School of Social Work by an authorized administrator of Digital Commons @ George Fox University. For more information, please contact arolfe@georgefox.edu.

Bridging the Gap: Gerontology and Social Work Education

Cindy S. Snyder, PhD, MSW, MA

Susan C. Wesley, PhD, MSSW

Muh Bi Lin, PhD, MSW

J. Dean May, EdD, MSW

ABSTRACT. The following study was implemented to explore the potential for a four-week curriculum module in gerontological social work education to positively impact students' practice-related knowledge concerning older adults, as well as their attitudes toward elderly persons and interest in working with them. Pertinent literature was reviewed to conceptualize the building of a gerontology curriculum module that could be integrated into a pre-existing social work course. The module's design and content were reflective of its primary goal, which was to educate students about salient aspects of social work knowledge, skill, and practice with older adults utilizing experiential methods. Data analysis revealed a significant increase in students' knowledge of aging ($t=12.23$, $df=106$, $p<0.01$), significant decline in students' ageist attitudes ($t=3.34$, $df=106$, $p<0.01$), and an increased interest in working with older adults as clients ($z=3.162$, $p<0.05$). Given the pending unprecedented growth in the older adult population and the lack of gerontology education in social work programs, this study attempts to bridge this gap.

Cindy S. Snyder is Assistant Professor; Susan C. Wesley (E-mail: susan.wesley@wku.edu), Muh Bi Lin (E-mail: toby.lin@wku.edu), and J. Dean May (E-mail: dean.may@wku.edu) are Associate Professors; all are affiliated with the Department of Social Work, Western Kentucky University.

Address correspondence to: Cindy S. Snyder, Department of Social Work, Western Kentucky University, Academic Complex Room 211, 1906 College Heights Boulevard, # 11039, Bowling Green, KY 42101 (E-mail: cindy.snyder@wku.edu).

KEYWORDS. Gerontology curriculum, baccalaureate social work education, gerontology competencies, gerontological social work

The dawn of our new millennium witnessed an unprecedented 34.5 million people inhabiting the United States who were 65 years of age or older. This figure represented 12.4% of the total population, and estimates indicate that it will grow to over 19.6% by 2030 (U.S. Census Bureau, 2005). Projections through the year 2020 call for 20,000 additional social workers who can address the needs of the aged, especially in the areas of management and prevention of disabilities and disease (Lawrence et al., 2002). Despite these circumstances, scholars throughout the 1990s called attention to the fact that the profession of social work was failing to implement a timely educational response that would prepare students with the knowledge and skills necessary to work with older adults and their families (Rosen & Zlotnik, 2001). Multiple factors appeared to be contributing to this situation including: (1) inadequate faculty preparation (Kropf, Schneider, & Stahlman, 1993); (2) low student interest (Berenbaum, 2000; Kane, 1999; Mosher-Ashley, 2000; Paton, Sar, Barber, & Holland, 2001); and (3) ageist attitudes (Scharlach, Damron-Rodriguez, Robinson, & Feldman, 2000; SAGE-SW, 2001). The gap created by the lack of gerontology training for social workers and the nation's augmented need for knowledge of aging in practice settings has made the need for integrating aging content into the general social work curriculum a pressing priority (Bures, Toseland, & Fortune, 2002). The purpose of this study is to examine the efficacy of integrating a gerontology rich curriculum module into a pre-existing human behavior and social environment (HBSE) course. Our research question was: can a four-week curriculum module in gerontological social work, delivered within the context of an HBSE course, positively impact students' practice-related knowledge concerning older adults, as well as their attitudes toward elderly persons and their interest in working with them? Our research team chose this particular HBSE course as the starting point of our integration investigation because it was a foundation course that already had aging content, and we wanted to improve upon and evaluate the delivery of that material. Although we were not members of the John A. Hartford Foundation GeroRich project, which lasted through the grant period of January 2002 to August 2004, we utilized many of the ideas it disseminated to develop the module. We chose the module approach because the Hartford Foundation GeroRich project had already developed such curriculum

modules as well as a great deal of information that could be used to supplement them. Thus, the aim of our initial integration approach was to begin to situate aging content in strategic areas within the foundation portions of the curriculum, and this was the first course we selected. Hence, our beginning effort was not as pervasive as the pursuit of a curriculum infusion strategy which typically targets the entire foundation content for gerontological enrichment (Lee & Waites, 2006).

LITERATURE REVIEW

Student Interest in Working with Older Adults

Given the demographic imperative, additional information is needed concerning factors that positively influence health and human service students' interest in working within the field of aging; more specifically, social work programs need to be designed in a way that promote this interest (Cummings, Galambos, & DeCoster, 2003). Interest in aging has been defined as the intention to learn about aging in order to pursue a career in gerontology (Damron-Rodriguez, Kramer, & Gallagher-Thompson, 1998). It is particularly noteworthy that social work students tend to rate their interest in geriatric practice as being low in comparison with other areas such as mental health, child welfare, health, and family services (Abell & McDonell, 1990; Butler, 1990; Damron-Rodriguez & Lubben, 1997; Fredriksen-Goldsen, Hooyman, & Bonifas, 2006; Olson, 2002; Rubin, Johnson, & DeWeaver, 1986). And yet, by the year 2020, it is projected that approximately 70,000 gerontological social workers will need to be ready to meet the needs of a diverse older population (Fredriksen-Goldsen et al., 2006).

A desire to understand one's own aging process, as well as that of friends and family members, has been identified as a motivating factor for interest in working with older adults (Carpenter, 1996). Taking coursework in aging has also been associated with interest in gerontological careers (Cummings et al., 2003; Damron-Rodriguez et al., 1998; Devlin, Mellor, & Worthington, 1994). However, other studies indicate no impact of taking gerontology coursework upon interest in working with older adults (Davis-Berman & Robinson, 1989; Dellasega & Curriero, 1991; Olson, 2002). It has also been postulated that interest in aging may be fostered through education, but without a pre-existing interest to work with older adults, education alone would be unlikely to affect interest in

working with them (Litwin, 1994). For the students who do express an interest in working with older adults, a positive personal and/or professional experience has been noted as an important factor in further developing it (Carpenter, 1996; Cummings et al., 2003; Siegler, Cotter, Goldberg, Brice, & Ellis, 1996). Other factors that have been associated with student desire to work with older adults include: quality of experiences with older adults (Cummings et al., 2003), frequency of contacts (Kane, 1999), exposure to professionals who work with this population (Cohen, Sandel, Thomas, & Barton, 2004), and serving in a care-giving role with an older adult (Robert & Mosher-Ashley, 2000).

Several studies have considered the variables that might serve as barriers to students developing an interest in gerontology. The following factors have been cited: insufficient curriculum time (Gorelik, Damron-Rodriguez, Funderburk, & Solomon, 2000), limited experience with healthy older adults, perceived lower status of the work (Reed, Beall, & Baumhover, 1992), and lack of academic role models with expertise in gerontology (Lee & Waites, 2006; Paton et al., 2001).

Student Knowledge About Working with Older Adults

Increasing social work students' knowledge about aging and older adults is believed to impact their ability to provide effective service to this population (Olson, 2002). This belief is strengthened by Palmore (1982), who articulates a theoretical model in which knowledge about aging and older adults is hypothesized to positively affect both behavior and attitudes; his hypothesis has been supported by several studies across various disciplines (Olson, 2002). For example, Kane (1999) found that knowledge of Alzheimer's disease was significantly correlated with willingness to work with older adults with the disease. However, Paton et al. (2001) found that knowledge of aging was not associated with student interest in working with older adults; thus, it remains unclear how knowledge of aging relates to student career interests (Barton, Cohen, Thomas, & Sandel, 2005).

Coursework taken in a variety of different disciplines has proven beneficial in increasing aging knowledge among college students; Barton et al. (2005) have provided an excellent review of this literature. For the social work students who participated in her study, Olson (2002) found that a time-limited educational module proved to be a promising intervention for increasing knowledge about assessment and intervention with older adults for her social work undergraduate and graduate students; however,

their interest in working with elders did not change, except for a slight decline in the Master of Social Work (MSW) group. Furthermore, Olson (2002) discovered that Bachelor of Social Work (BSW) students demonstrated larger knowledge gains when compared to MSW students, which suggests that an opportune time to target social work students for this type of educational intervention is at the undergraduate level. This finding was also supported by Burke (2003), who integrated a gerontology curriculum module into a practicum seminar course in an effort to enhance the gerontology competencies of students in a small baccalaureate social work program. Using a qualitative method of analysis, Burke found that students evidenced an enhanced knowledge of the multidimensional aspects of aging; students also indicated a lessening of fears about working with older people as well as getting older themselves.

Dorfman and Murty (2005) describe a geriatric enrichment model with an overall goal of infusing gerontological competencies across all foundation courses within the undergraduate and graduate program at the University of Iowa School of Social Work. Data analysis of the model showed strong positive pre- to post-test changes in student knowledge as well as attitudes and skills. Similarly, Fredriksen-Goldsen et al. (2006) utilized a three-tiered curricular infusion strategy to integrate multi-generational practice competencies into the graduate social work program at the University of Washington. Their findings illustrate that student knowledge, interest, and skills in aging increased significantly as a result of these efforts. Gellis, Sherman, and Lawrance (2003) articulate an educational intervention that focuses upon knowledge about health and social problems, which they found can increase student knowledge of gerontological social work.

Student Attitudes Toward Working with Older Adults

Developing a positive attitude toward older adults and the aging process is frequently mentioned as a fundamental factor for stimulating interest in aging-related work (Cummings & Galambos, 2002; Robert & Mosher-Ashley, 2000). Educators from a variety of disciplines have tried to assess the impact of geriatric educational programs on changing students' attitudes as well as knowledge about older adults (Olson, 2002). Angiullo, Whitborne, and Powers (1996) documented positive changes taking place in attitudes toward older adults among students who completed a psychology of aging course. Haulotte and McNeil (1998) reported that attitudes moved toward greater appreciation of elderly

people among a small sample of students who completed a course in nursing home social work. Lee and Waites (2006) conducted a recent study wherein aging content was infused throughout a baccalaureate social work program's foundation curriculum, and they found that student participants demonstrated improved attitudes as well as gerontology competence. Cohen et al. (2004) found that when undergraduate social work students' biases towards older adults were exposed within the context of a focused group, they became more interested in choosing geriatric social work as a career path. Olson demonstrated that infusing a curriculum module with aging content can provide a potential means of impacting student attitudes. After participating in her module, both undergraduate and graduate students were found to make statistically significant gains when compared to a control group.

However, the literature base also cautions that geriatric educational efforts do not consistently produce such positive effects (Olson, 2002). For example, in a study of over 200 social work, nursing, and medical students, no significant changes in attitudes or work preferences occurred among any of the studied groups following their completion of courses in gerontology (Carmel, Cwikel, & Galinsky, 1992). A study by Davis-Berman and Robinson (1989), conducted with a small sample of social work students, suggested that coursework in aging may actually reduce preferences to work with older adults.

METHOD

Research Question

The research project addressed the following question: can a four-week curriculum module in gerontological social work, delivered within the context of a human behavior and social environment course, positively impact students' practice-related knowledge concerning older adults, as well as their attitudes toward elderly persons and interest in working with them?

Sample

Study participants included 107 BSW students enrolled in the first of a two course series on human behavior and social environment in the department of social work at a large public university in a southern state over the course of three semesters. Among all participants, 95 (88.8%)

were females and 12 (11.2%) were males. Fifty-seven of the subjects (53.3%) were social work majors. The other 50 (46.7%) subjects came from disciplines such as psychology and sociology. Nearly all of the non-social work majors, 48 of the 50 (96%), were pursuing a minor in social work. The average age was 25.74 (median = 22, standard deviation = 7.785, range = 31). The presence of 11 respondents aged 40 or above significantly skewed the age distribution and resulted in an average age that is higher than typical of undergraduate students.

Instruments

Three dependent variables were measured utilizing pre-tests and post-tests: (1) knowledge of gerontological social work practice concepts, (2) attitudes toward elderly adults, and (3) interest in working with elderly clients.

Knowledge of aging was measured using the most recent version of the Facts on Aging Quiz 1 (FAQ1) developed by Palmore (1998). Having been first made available for public use in 1977, the FAQ1 deals with basic physical, psychological, and social facts on aging (Palmore, 1981), and has undergone numerous revisions which has resulted in various versions. The FAQ1 utilizes 25 objective questions and each question poses four potential answers; the respondent is asked to ascertain which one is correct. Scores were calculated based on the total number of questions correctly answered. The higher the score, the higher the aging knowledge as measured by the quiz. For questions answered incorrectly, the quiz further identifies each participant's negative, positive, or neutral bias based on the answer picked. Total negative and positive biases are calculated for each participant.

The FAQ instruments have been used in a broad array of research settings, and there are currently over 150 publications reporting the evaluation or the use of the instruments (Cowan, Fitzpatrick, Roberts, & White, 2004). Over time, the FAQ tools have attracted considerable discussion concerning their function, reliability, and validity (Cowan et al., 2004). Palmore (1977) suggested that the FAQ1 measured both attitudes toward aging as well as knowledge about aging. This suggestion has been challenged by Klemmack's (1978) research which indicated that the FAQ1 was more reflective of a respondent's stereotypes about aging (both negative and positive), and was not reflective of knowledge of aging. Furthermore, when Norris, Tindale, and Matthews (1987) utilized the FAQ1 to survey various samples of respondents in order to investigate the

structural properties of the quiz, they noted that there was a lack of evidence to support Palmore's (1981) contention that the reliability and validity of the FAQ instruments had been well documented. They concluded that the structure of the FAQ1 did not appear to be reliable, the content validity was not well described, and the face validity was questionable (Norris et al., 1987). In response to the validity concern raised by Klemmack and Norris et al., Palmore (1998) insisted that the quiz was designed as an "edumetric" (p. 57) tool for yielding measurement of a specified performance standard, instead of as a valid psychometric instrument for measuring participants' degree of knowledge about aging.

Attitudes toward the elderly were measured using the Fraboni Scale of Ageism (FSA) (Fraboni, Saltstone, & Hughes, 1990). This instrument is designed to assess both affective and cognitive dimensions of ageism. It comprises three subscales—discrimination (e.g., "It is best that old people live where they won't bother anyone"); antilocution (e.g., "teenage suicide is more tragic than suicide among the old"); and avoidance (e.g., "I personally would not want to spend much time with an old person"). The FSA consists of 29 items in which participants respond using a Likert-type scale which ranges from 1 (strongly disagree) to 4 (strongly agree). Scores range from 29 to 116, and higher scores indicate greater levels of ageism. The FSA is reported by Fraboni et al. (1990) to significantly correlate with Facts on Aging Quiz ($r = .28, p < 0.5$). Additionally, Fraboni, Saltstone, and Hughes (1990) determined FSA scores had adequate internal-consistency reliability with an alpha coefficient of .86. Fraboni et al. (1990) also found evidence that demonstrated the instrument's construct validity. It has been noted that the FSA has shown potential as a well-balanced measure of age bias with which investigators can study ageism, but research that validates the psychometric qualities of the FSA has been sparse (Rupp, Vodanovich, & Crede, 2005).

Interest in working with older adult clients was measured by a single question to which respondents answered using a scale developed by the project investigators which was a modified version of Olson's (2002) scale; Olson has neither assessed the validity or reliability of her scale (C. Olson, personal communication, February 9, 2007). We posed the following question on our scale: "On a scale of 1 to 3 what is your interest in working with elderly clients once you graduate with your bachelor's degree? Please circle one answer from the choices below." Possible choices on our scale included (1) I doubt I would like it, (2) I am undecided as to whether I would like it, and (3) I would really like it. The positive movement from one score to the other is interpreted as an increase in

interest, and vice versa. We named the scale the Interest in Working with Older Adult Clients Inventory; to date, no work has been done by investigators to assess the validity or reliability of this scale. When respondents completed the scale, they were also asked to provide demographic information relating to: age, gender, major, minor, and if they had any paid or volunteer experience with older adults.

Procedure

Data was collected by means of administering the multiple choice version of Palmore's (1998) Facts on Aging Quiz 1, Fraboni's Scale of Ageism (Fraboni et al., 1990), and the question on interest in working with elderly clients. Data was gathered eleven weeks into the semester and again four weeks later. Between administration of the pre-tests and post-tests, each class received a four-week curriculum module in gerontological social work. Prior to the module, students were provided with a written informed consent document prior to verbally agreeing to participate in the study. The consent document explained the purpose of the study, the procedures to be used, and the potential benefits and possible risks of participating. To assure confidentiality, students were assigned a number so that data they submitted for the investigation would not be associated with their names; this allowed the investigators to match their pre-test and post-test scores. Participants were told they could withdraw from the study at any time. All students chose to participate in the study and no students chose to withdraw from it. Our total sample included 107 students.

Intervention

A curriculum module providing an overview of social work practice with older adults and their families was integrated into an existing HBSE course and delivered to 107 baccalaureate students over a three-semester period. The course utilizes a life-span approach to explore human growth and development from conception through late adulthood. The module's design and content were reflective of its primary goal, which was to educate students about salient aspects of social work knowledge, skill, and practice with older adults utilizing experiential methods.

Week One. The introductory component of the module introduced key myths and realities of the normative and non-normative biological aspects of aging that are especially pertinent to social work practice. As students reviewed facts concerning these biological changes, they were encouraged to reflect upon their own values, fears, and biases about the aging

process. The topics of life expectancy, strengths, and wellness in the later years were introduced. Models of successful aging depicting older adults who were thriving during this portion of the life cycle were utilized to offer the inspiration that life expectancy and good health can be greatly extended well into the older adult years (Greenburg, Schimel, & Mertens, 2002).

The module began with students completing Fraboni's Scale of Ageism (Fraboni et al., 1990) and the Interest in Working with Elderly Clients Scale. Palmore's (1998) Facts on Aging Quiz was administered to test students' initial knowledge; participants were reassured that they would not be graded on the quiz and that they would get immediate feedback about correct answers upon its completion. Discussion ensued by the instructor inviting students to ask questions about those items that they were most surprised by or could not believe (Palmore, 1998). This proved an effective method for introducing and discussing many myths about the aging process.

The instructor explained that the Fraboni's Scale of Ageism (Fraboni et al., 1990) measured ageist attitudes. Ageism was defined as having negative images of, and attitudes toward, individuals simply because they are old (Zastrow & Kirst-Ashman, 2007); ageist beliefs would include ideas such as the aging process makes people less attractive, sexual, intelligent, and productive. It was noted that elderly people are disparaged by such ageist beliefs, because social sanctions against expressions of negative attitudes about the older adults are almost completely lacking (Levy & Banaji, 2002); cartoons depicting older adults as being unattractive, physically unhealthy, and sexually inept were used to illustrate this point. Drawing upon the scholarship of Greenburg, Schimel, and Mertens (2002), the instructor explained that in the United States, the non-elderly are likely to apply a multitude of negative stereotypes to the aged (Kite & Johnson, 1988), assume value and attitude differences, and expect that the elderly have very different social and economic interests (Palmore, 1999). To emphasize this point, a case study involving sex among nursing home residents was utilized to help students explore their values and biases about older adults remaining sexually active. This case study and discussion was followed up with a film clip from *Tonight's the Night* (Canadian Broadcasting Company, 1995) designed to provide students with an opportunity to incorporate knowledge of love, intimacy, and sexuality among older persons.

To help students understand that they had a good chance of living well beyond the age of 80, they were asked to complete a longevity assignment

that would provide them with an estimated life expectancy considering their current age, gender, family history, and life style (Emlet, 2002). After completing the assignment, they were asked to contemplate such questions as, “what changes are necessary for you at this time in order to accommodate your own plans for aging in a healthy way?” After processing this assignment, the instructor explored health maintenance and wellness strategies with students while showing them cases of older adult role models who had practiced these strategies and aged in an exemplary fashion.

Discussion about longevity and wellness led to the final topic introduced during this first week of the module—the strengths model of working with older adults. It was stressed that older people have a tremendous capacity for autonomy and growth throughout the later portion of their life span. The strengths model was compared and contrasted to the more traditional medical model wherein older people are thought to be incapable of taking care of themselves because of deficits; hence treatment plans based on this model tend to focus attention on what must be done, instead of exploring what the client wants done, as well as reinforcing and supporting the positive coping responses the client is already making (Fast & Chapin, 2000).

Weeks Two and Three. This portion of the module focused on the psychological and social aspects of later adulthood. It was designed to help students identify normal, social, and psychological changes in later life, review social and psychological theories of aging, assess for depression in older adults, identify wellness and prevention concepts for older persons, understand the influence of aging on family dynamics, and note ethical and professional boundary issues that commonly arise in work with older adults and their caregivers such as client self-determination, end-of-life decisions, and family conflicts. The family life cycle framework was utilized to demonstrate how middle-aged family members frequently encounter role strain as they strive to meet the needs of both their children and aging parents.

Students were introduced to the family life cycle framework (Carter & McGoldrick, 1989), with particular emphasis given to the developmental tasks of later adulthood. Students were introduced to the life review and informed that two elements had been noted as particularly necessary for the successful resolution of this task: (1) learning to accept the inevitability of one’s death, and (2) reviewing one’s life and concluding that it was meaningful (Zastrow & Kirst-Ashman, 2007). It was noted that this last stage of life, according to Erikson (1963), involves the psychological

crisis of integrity versus despair, and that the achievement of integrity comes only after considerable reflection and review about one's life. Also acknowledged was that both ageism and low status present formidable social forces that can hinder adults from positively resolving this psychological crisis in the manner outlined by Erikson. To illustrate this point, it was emphasized that depression is the most common emotional problem faced by older adults (Zastrow & Kirst-Ashman), and students learned how to assess for it using the Geriatric Depression Scale (GDS). The GDS is a 30-item self-report assessment designed by Sheikh and Yesavage (1986) to identify depression in the elderly. It is typically utilized as a routine part of a comprehensive geriatric assessment.

Two theories of aging were compared and contrasted: the activity theory and the disengagement theory. Students were asked to articulate the ways in which the disengagement theory might explain both the high rates of depression experienced by older adults as well as ageist practices that rationalize social withdrawal from older people. Students were taught how to use an additional instrument to assess older adult functioning, the Instrumental Activities of Daily Living Scale (Lawton & Brody, 1969). The instrument is a nine-item assessment tool that considers problems typically experienced by clients undergoing changes in their level of ability to perform activities of daily living.

The film, *Dad* (Goldberg, 1989) was then shown as a case study in which the above-mentioned material could be discussed. The film depicted a three-generational family comprising a divorced father, John Tremont, his teenage son (Billy), and his seventy-year-old parents (Jake and Betty). A presenting problem for John was his being sandwiched between the developmental issues of his son and parents. The family life cycle theoretical framework was used as a starting point to begin discussion about the case. Students were then asked to process and answer questions about the film and its characters utilizing Carter and McGoldrick's (1989) family life cycle framework, Erikson's (1963) theory of psychosocial development, the Geriatric Depression Scale (Sheikh & Yesavage, 1986), and the Activities of Daily Living Scale (Lawton & Brody, 1969).

At the end of the film, Jake, the protagonist, dies. This event allowed students' attention to be turned toward examining the skills necessary in relating to a dying person and survivors. The film was utilized to demonstrate the need for health care professionals to consider the perspective of the individual with terminal illness. It also provided an example of a physician's struggle to respond to the whole person rather than just the illness.

Week Four. The last week provided an overview of issues commonly faced by the aged such as death of a spouse, grandparents raising grandchildren, malnutrition, financial difficulties, transportation problems, health issues and the cost of care, elder abuse, depression/suicide, and crime victimization. Formal macro system responses to these problems—such as social services, public assistance programs, social insurance programs, and nursing homes—were also reviewed. After being taught how to engage elderly clients in identifying problems that were being encountered in daily living, students learned how to map the older adults' support systems, and enhance them by brokering services with both naturally occurring helpers and formal systems (Fast & Chapin, 2000).

By engaging in the above-mentioned activities during the module, the intent was that with a more sober and realistic understanding of their own fears and reactions to older adults, students would be better able to understand ageism as something we are all prone to but can nevertheless combat (Greenberg et al., 2002). It was continually emphasized that through empathizing rather than distancing practices, we can view older adults as individuals instead of in a generic and hurtful way, realizing that we will most likely, someday, join their ranks.

RESULTS

For examining the impact of the four-week module on gerontological knowledge, the paired t-test was performed to analyze scores from the Facts on Aging Quiz (Palmore, 1998). The results indicate there was a significant difference between the pre-test and post-test scores ($t = 12.23$, $df = 106$, $p < 0.01$). The post-test showed a positive mean score increase of 7.24, out of a possible maximum score of 30 (pre-test mean = 11.52, post-test mean = 18.77). There was also a significant difference between pre-test and post-test in negative bias ($t = 9.41$, $d = 105$, $p < 0.01$), and in positive bias as well ($t = 8.58$, $d = 101$, $p < .01$). This indicates there was a significant reduction in bias toward the elderly.

For examining the variable, impact on attitude, a paired t-test was performed for comparing the pre-test and post-test scores on Fraboni's Scale of Ageism (Fraboni et al., 1990). The results indicated that there was a significant difference between the pre-test and post-test scores ($t = 3.34$, $df = 106$, $p < 0.01$). There was a significant decrease of ageism scores after the four-week module (pre-test mean = 57.22, post-test mean = 54.94).

There was a significant difference in pre-test ageism scores between social work majors and students from other disciplines ($t = 2.35$, $df = 105$, $p < .05$). Social work majors scored lower than the nonsocial work majors (social work majors' mean: 55.39, nonsocial work majors' mean: 59.32). This seems to indicate that nonsocial work majors come into the class with higher levels of ageism. This difference was reduced at the post-test and there was no significant difference between these two groups ($t = 1.72$, $df = 105$, $p = .397$). This study did not find a correlation between the Facts on Aging Quiz (Palmore, 1998) and Fraboni's Scale of Ageism as indicated by Fraboni et al. (1990).

The Wilcoxon Signed Ranks Test was used to examine the change between pre-test and post-test of the variable interest in working with the elderly. It was used to measure changes of ranked orders in interest: (1) I doubt that I would like it, (2) I'm undecided as to whether I would like it, and (3) I think I would really like it. The results show there was a significant difference in interest after the four-week module ($z = 3.162$, $p < 0.05$). Specifically, there were 26 positive changes of ranked orders, 8 negative, and 70 which remained unchanged.

The study also investigated participants' prior experience in working with the elderly either through a paid job or as a volunteer. Results showed that 48 of the subjects (44.9%) had prior experience working with the elderly. It was found that prior experience does not relate significantly to any measures of knowledge, attitude, or interest based on the t-test.

DISCUSSION

The statistical results indicate that the four-week gerontological module achieved its purposes in increasing participants' knowledge, reducing ageism, and increasing interest in working with the elderly. From an educational point of view, this affirms the usefulness of implementing such a module. Nevertheless, there is still the question: to what degree is the post-test performance caused by the module itself instead of something else? First, it is important to note that participants in this sample scored a mean of 11.52 (46%) on the Facts on Aging Quiz (Palmore, 1998) at pre-test. Compared to the known group norms, all undergraduate students (56%), nurses (66%), and the general public (61%), it is rather low. The likelihood of scoring higher in the post-test could be greater because of the rather low pre-test score. But at the same time, the sample scored 18.77 (75%), which is higher than any of the known group norms reported

by Palmore (1998). The substantial mean score gain at post-test (7.25), together with the higher than known group norms score, seems to suggest the effectiveness of the four-week module.

The finding that there was a significant difference in pre-test ageism scores between social work majors and students from other disciplines and that these differences diminished at the post-test may indicate that the four-week module served as an equalizer in bridging the gap in ageist attitudes among participants. Non-social work majors came into the class with a higher level of ageism, but as the result of the module, the level of ageism decreased to no significant difference from that of social work majors. Perhaps social work majors had more exposure to aging content during the four-week period while taking the module because they were enrolled in other social work courses as well. The fact that nonsocial work majors were able to bridge the gap in ageism with less exposure to other social work content suggests that the module did have a significant impact on reducing ageism. Also, the statistically significant finding, utilizing the Wilcoxon Signed Ranks Test, assessing pre- and post-test interest in working with elderly, increases confidence that the four-week module contributed to students' change of interest in working with elderly clients.

Limitations of the Study

One of the main limitations of this study was its internal validity. The research design did not include a control group; therefore, the effects of history and maturation on the variables under investigation could not be determined. For example, given that the subjects in this study are college students, particularly social work students, perhaps the findings are due to their exposure to content in other courses and not the intervention. Also, since taking the quiz and inventory itself were considered part of the learning process, the pre-test was not withheld to control for testing effects. It is important to note that the association between the intervention and the change of knowledge and attitude is to be approached cautiously and conservatively. Another issue of internal validity concerns the delivery of the intervention. Since the module was delivered by only one instructor, the impact of the instructor's personal characteristics on the outcomes is unknown. The lack of a control group and the potential confounding of intervention material with instructor characteristics necessitate the need for further study and replication. There are other limitations to the study that suggest the importance of replication. The instruments used to gather data in this study were based on self-report. Despite the

value in self-report data, there are limitations with this procedure. Also, the subjects in this study were predominantly female and all subjects were college students from a comprehensive university located in the mid-south; therefore, how much can the findings be generalized? The researchers for this study chose to use an intensive four-week unit in a human behavior course for exposing students to gerontological content. Perhaps other methods for exposing students to this content would be more effective, such as infusing it across the core curriculum or addressing it intensely during the field practicum. This study did not address some important questions such as: could this method of utilizing an intensive multi-week unit be used elsewhere in the curriculum? Would this method be effective for other professionals wanting to teach gerontological content? These are among the questions identified for future investigations.

Implications for Social Work Education

The development of this curriculum module marked our initial effort, which began in 2003, to begin visualizing ways to integrate gerontological content into our undergraduate social work foundation courses. To further this goal, three of the four investigators on this project were participants in the recently completed round of John A. Hartford Foundation grants to the Council on Social Work Education's Gero-Ed Project, the Curriculum Development Institutes (CDI), which began in 2005. Upon securing a small internal university grant in 2006, we have since utilized our CDI training experience to begin the process of integrating gerontological content into three other courses in our undergraduate curriculum, which include the foundation areas of policy, practice, and research. We also have plans to begin integrating gerontological content into our field seminar courses and to expand the number of aging-related field sites we offer. We are currently attempting to secure another internal grant so that the effectiveness of these efforts might be evaluated.

We continue to utilize the above-described four-week module to conclude our HBSE life-span course wherein we intensively focus upon issues related to older adults. However, within the context of this particular course, we are in the process of broadening our strategy to utilize a multi-generational infusion model wherein we highlight the importance of multigenerational linkages across the life span as an organizing theme throughout the entire semester (Lee & Waites, 2006). By focusing on cross-generational relationships, our aging content is now first introduced toward the beginning of the course as we consider the topic of grandparents

raising grandchildren. The role of older adults in family life-span development then continues to be interwoven throughout the entire course and thus leads students organically up to the concluding four-week module, which serves to focus more intensively and purposefully upon the age strata of older adulthood. Our social work department is housed within the College of Health and Human Services, and we believe our efforts to use both an integration and infusion model to enrich coursework with aging content could be applicable to most of the other departments within our college.

With the media regularly providing examples of the magnitude and scope of imminent demographic changes, our society, indeed the global community itself, is on the brink of dramatic alteration in the ways we go about our daily lives. To meet the challenges, the social work profession must sustain and expand its efforts to prepare competent social workers for changing times. The gap between the growing demand for geriatric social workers and the lack of gerontology education in programs of social work offers the impetus for social work education to implement more comprehensive and creative strategies to better prepare students to work with older clients (Kropf, 2002). The module described in this document offers one creative, and potentially effective, approach to the task.

On a larger scale, several foundations have recently provided funding for such innovations as curricula changes that integrate gerontology content into social work courses. An outstanding example is the John A. Hartford Foundation, which is funding several multi-million dollar initiatives to enhance gerontology capacity building within social work as well as other professions (Robbins & Rieder, 2002). Also, at least four million dollars from non-Hartford funding has been directed by private sources to geriatric social work. For example, the Hearst Foundation, the Archstone Foundation in California, and the Burden Foundation in New York have all made substantive awards to social work programs for geriatric social work enrichment (Robbins & Rieder, 2002). Thus, major funding initiatives exist that afford social work educators various opportunities to launch additional expansive efforts to increase student preparation in working with older clients by enriching their curriculums with gerontological content (Robbins & Rieder, 2002). In order for these efforts to be sustainable, social work educators throughout society will need to assume leadership roles within their universities and communities to emphasize the necessity of bridging the gap through gerontologizing social work education for all students (Rosen, Zlotnik, & Singer, 2002).

REFERENCES

- Abell, N., & McDonell, J. (1990). Preparing for practice: Motivations, expectations and aspirations of the MSW class of 1990. *Journal of Social Work Education, 26*, 57–64.
- Angiullo, L., Whitborne, S. K., & Powers, C. (1996). The effects of instruction and experience on college students' attitudes toward the elderly. *Educational Gerontology, 22*, 483–495.
- Barton, T. R., Cohen, H. L., Thomas, C. L., & Sandel, M. H. (2005). Evaluating the impact of a Hartford Gero-Rich project on a bachelor of social work program. *The Journal of Baccalaureate Social Work, Gerontology Issue*, 13–25.
- Berenbaum, R. (2000). Motivating students in the helping professions to work with the aged. *Educational Gerontology, 26*, 83–96.
- Bures, R. M., Toseland, R. W., & Fortune, A. E. (2002). Strengthening geriatric social work training: Perspectives from the University of Albany. In M. J. Mellor & J. Ivry (Eds.), *Advancing gerontological social work education* (pp. 111–128). New York: Haworth.
- Burke, J. (2003). A model for developing a gerontology curriculum module in small baccalaureate social work programs. *Gerontology & Geriatrics Education, 24*(1), 63–73.
- Butler, A. (1990). A reevaluation of social work students' career interests. *Journal of Social Work Education, 26*, 45–56.
- Canadian Broadcasting Company (Producer) (1995). *Tonight's the night* [Motion picture]. United States: Fanlight Productions.
- Carmel, S., Cwikel, G., & Galinsky, D. (1992). Changes in knowledge, attitudes and work preferences following courses in gerontology among medical, nursing, and social work students. *Educational Gerontology, 18*, 329–342.
- Carpenter, B. D. (1996). Why students are interested in the elderly: A comparative analysis of motives. *Gerontology & Geriatrics Education, 16*(4), 41–51.
- Carter, B., & McGoldrick, M. (1989). *Changing family life cycle: A framework for family therapy*. Boston: Allyn & Bacon.
- Cohen, H. L., Sandel, M. H., Thomas, C. L., & Barton, T. R. (2004). Using focus groups as an educational methodology: Deconstructing stereotypes and social work practice misconceptions concerning aging and older adults. *Educational Gerontology, 30*, 329–346.
- Cowan, D. T., Fitzpatrick, J. M., Roberts, J. D., & While, A. E. (2004). Measuring the knowledge and attitudes of health care staff toward older people: Sensitivity of measurement Instruments. *Educational Gerontology, 30*, 237–254.
- Cummings, S. M., & Galambos, C. (2002). Predictors of graduate social work students' interest in aging related work. *Journal of Gerontological Social Work, 39*, 77–94.
- Cummings, S. M., Galambos, C., & DeCoster, V. A. (2003). Predictors of MSW employment in gerontological practice. *Educational Gerontology, 29*, 295–311.
- Damron-Rodriguez, J. A., Kramer, B. J., & Gallagher-Thompson, D. (1998). Effect of geriatric clinical rotations on health professions trainees' attitudes about older adults. *Gerontology & Geriatrics Education, 19*(2), 67–79.
- Damron-Rodriguez, J. A., & Lubben, J. (1997). The 1995 White House Conference on Aging: An agenda for social work education and training. In C. Salz (Ed.), *Social work*

- response to the 1995 White House Conference on Aging: From issues to action (pp. 65–77). Binghamton, NY: Haworth.
- Davis-Berman, J., & Robinson, J. D. (1989). Knowledge on aging and preferences to work with the elderly: the impact of a course on aging. *Gerontology & Geriatrics Education, 10*(1), 23–36.
- Dellasega, C., & Curriero, F. C. (1991). The effects of institutional and community experiences on nursing students' intentions toward work with the elderly. *Journal of Nursing Education, 30*, 405–410.
- Devlin, H., Mellor, A. C., & Worthington, H. V. (1994). Attitudes of dental students towards elderly people. *Journal of Dentistry, 22*(1), 45–48.
- Dorfman, L. T., & Murty, S. A. (2005). A diffusion of innovations approach to gerontological curriculum enrichment: Institutionalizing and sustaining curricular change. *Gerontology & Geriatrics Education, 26*(2), 35–50.
- Emler, C. A. (2002). Longevity assignment. In N. P. Kropf & C. J. Tompkins (Eds.), *Teaching aging: Syllabi, resources, and infusion materials for the social work curriculum* (p. 152). Alexandria, VA: CSWE.
- Erikson, E. H. (1963). *Childhood and society*. New York: Norton.
- Fast, B., & Chapin, R. (2000). *Strengths-based care management for older adults*. Baltimore: Health Professions.
- Fraboni, M., Saltstone, R., & Hughes, S. (1990). The Fraboni Scale of Ageism (FSA): An attempt at a more precise measure of ageism. *Canadian Journal of Aging, 9*(1), 56–66.
- Fredriksen-Goldsen, K. I., Hooymann, N. R., & Bonifas, R. P. (2006). Special Section: Innovations in gerontological social work education multigenerational practice: An innovative infusion approach. *Journal of Social Work Education, 42*(1), 25–36.
- Gellis, Z., Sherman, S., & Lawrence, F. (2003). First year graduate social work students' knowledge of and attitude toward older adults. *Educational Gerontology, 29*, 1–16.
- Goldberg, G. D. (Director) (1989). *Dad* [Motion picture]. United States: Universal Studios.
- Gorelik, Y., Damron-Rodriguez, J., Funderburk, B. & Solomon, D. (2000). Undergraduate interest in aging: Is it affected by contact with older adults? *Educational Gerontology, 26*, 623–638.
- Greenburg, J., Schimel, J., & Mertens, A. (2002). Ageism: Denying the face of the future. In T. Nelson (Ed.), *Ageism: Stereotyping and prejudice against older persons* (pp. 27–48). Cambridge, MA: MIT.
- Haulotte, S., & McNeil, J. (1998). Integrating didactic and experiential aging curricula. *Journal of Gerontological Social Work, 30* (3/4), 43–57.
- Kane, M. (1999). Factors affecting social work students' willingness to work with elders with Alzheimer's Disease. *Journal of Social Work Education, 35*(1), 71–85.
- Kite, M. E., & Johnson, B. T. (1988). Attitudes toward older and younger adults: A meta-analysis. *Psychology and Aging, 3*, 233–244.
- Klemmack, D. L. (1978). Comment: An examination of Palmore's Facts on Aging Quiz. *The Gerontologist, 18*(4), 403–406.
- Kropf, N. P. (2002). Strategies to increase student interest in aging. In M. J. Mellor & J. Ivry (Eds.), *Advancing gerontological social work education* (pp. 57–68). New York: Haworth.

- Kropf, N. P., Schneider, R. L., & Stahlman, S. D. (1993). Status of gerontology in baccalaureate social work education. *Educational Gerontology, 19*, 623–634.
- Lawrence, A. R., Jarman-Rohde, L., Dunkle, R., Campbell, R., Bakalar, H., & Li, L. (2002). Student pioneers and educational innovations: attracting students to gerontology. In M. J. Mellor & J. Ivry (Eds.), *Advancing gerontological social work education* (pp. 91–110). New York: Haworth.
- Lawton, M. P., & Brody, E. M. (1969). Assessment of older people: Self-maintaining and instrumental activities of daily living. *Gerontologist, 9*, 179–186.
- Lee, E.-K. O., & Waites, C. E. (2006). Special section: innovations in gerontological social work education infusing aging content across the curriculum: Innovations in baccalaureate social work education. *Journal of Social Work Education, 42*, 49–65.
- Litwin, H. (1994). Sources of motivation for work in gerontology: The ethnic factor among students of social work in Israel. *Educational Gerontology, 20*, 329–347.
- Levy, B. R., & Banaji, M. R. (2002). Implicit ageism. In T. Nelson (Ed.), *Ageism: Stereotyping and prejudice against older persons* (pp. 49–76). Cambridge, MA: MIT.
- Mosher-Ashley, P. R. (2000). Factors influencing college students to choose careers working with elderly persons. *Educational Gerontology, 26*, 725–736.
- Norris, J., Tindale, J., & Matthews, A. (1987) The factor structure of the FAQ. *The Gerontologist, 27*, 673–676.
- Olson, C. J. (2002). A curriculum module enhances students' gerontological practice-related knowledge and attitudes. In M. J. Mellor & J. Ivry (Eds.), *Advancing gerontological social work education* (pp. 159–176). New York: Haworth.
- Palmore, E. (1977). Facts on Ageing. A short quiz. *The Gerontologist, 17*, 315–320.
- Palmore, E. (1981). The Facts on Ageing Quiz, part two. *The Gerontologist, 4*, 431–437.
- Palmore, E. (1982). Attitudes toward the aged: What we know and need to know. *Research on Aging, 4*, 333–348.
- Palmore, E. (1988). *The Facts on Ageing Quiz*. New York: Springer.
- Palmore, E. (1998). *The facts on aging quiz* (2nd ed.). New York: Springer.
- Palmore, E. (1999). *Ageism: Negative and positive*. New York: Springer.
- Paton, R. N., Sar, B. K., Barber, G. R., & Holland, B. E. (2001). Working with older persons: Student views and experiences. *Educational Gerontology, 27*, 169–183.
- Reed, C. C., Beall, S. C., & Baumhover, L. A. (1992). Gerontology education for students in nursing and social work: Knowledge, attitudes and perceived barriers. *Educational Gerontology, 18*, 625–636.
- Robbins, L. A., & Rieder, C. H. (2002). The John A. Hartford Geriatric Social Work Initiative. In M. J. Mellor & J. Ivry (Eds.), *Advancing gerontological social work education* (pp. 71–90). New York: Haworth.
- Robert, R., & Mosher-Ashley, P. M. (2000). Factors influencing college students to choose careers working with elderly persons. *Educational Gerontology, 26*, 725–736.
- Rosen, A., & Zlotnik, J. (2001). Demographics and reality: the “disconnect” in social work education. *Journal of Gerontological Social Work, 36*, 81–97.
- Rosen, A. L., Zlotnik, J., & Singer, T. (2002). Basic gerontological competence for all social workers: the need to “gerontologize” social work education. In M. J. Mellor & J. Ivry (Eds.), *Advancing gerontological social work education* (pp. 25–36). New York: Haworth.

- Rubin, A., Johnson, P., & DeWeaver, K. (1986). Direct practice interests of MSW students: Changes from entry to graduation. *Journal of Social Work Education, 22*, 98–108.
- Rupp, D. E., Vodanovich, S. J., & Crede, M. (2005). The multidimensional nature of ageism: Construct validity and group differences. *The Journal of Social Psychology, 145*, 335–362.
- SAGE-SW. (2001). *A blueprint for the new millennium: Strengthening the impact of social work to improve the quality of life for older Americans and their families*. Washington D. C.: SAGE-SW.
- Scharlach, A., Damron-Rodriguez, J., Robinson, B., & Feldman, R. (2000). Educating social workers for an aging society: A vision for the 21st century. *Journal of Social Work Education, 36*, 521–538.
- Sheikh, R. L., & Yesavage, J. A. (1986). Geriatric depression scale (GDS): Recent evidence and development of a shorter version. *Clinical Gerontologist, 5*, 165–173.
- Siegler, E. L., Cotter, V. T., Goldberg, G. R., Brice, N., & Ellis, N. B. (1996). Living with dementia: An interdisciplinary, experiential seminar for medical, nursing, and social work students. *Gerontology & Geriatrics Education, 16*(4), 3–13.
- U.S. Census Bureau. (2005). *65 +in the United States 2005: Current population reports*. Retrieved Feb. 28, 2007, 2007, from <http://www.census.gov/prod/2006pubs/p23-209.pdf>
- Zastrow, C. H., & Kirst-Ashman, K. K. (2007). *Understanding human behavior and the social environment* (7th ed.). Pacific Grove, CA: Brooks/Cole.