Enhancing gerontology interest among MPH students: Is adding aging to international service learning effective?

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Abstract:

With the proportions and numbers of older adults increasing rapidly in the United States and worldwide, there is acute need for professionals with "gero-competency" and "gero-interest" in the spectrum of health and human service fields. We examine whether adding on gerontology content to an existing international health-focused service learning course would suffice to spark interest in gerontology and gero-focused careers among Master's in Public Health students in Community Health Education. Currently, comparatively few graduate programs in public health education in the United States offer aging concentrations. We thus explore this alternative strategy. We used case study methodology to guide our assessment, which included content and thematic analyses of "artifacts of learning" and transcripts of in-depth interviews with five graduate students. Despite little prior exposure to gerontology and limited preparation with gerontology content, the students were able to competently analyze community aging issues. They recommended that aging-related courses with experiential opportunities be offered in health education curricula. Of the five students, three were not interested in a gero-focused career, one was open to the idea, and the other had found her niche in an aging-related position and enjoyed working in that environment. As the population ages, there is great need to spark students' interest in aging-related careers. Adding on gerontology content to an existing health education course appeared less effective in sparking gero-interest, despite proven pedagogical approaches such as service learning. Encouraging students to take aging-focused courses with experiential learning components and offering more gerontology concentrations in Master's in Public Health–level community health education programs may be more effective.

Article:

As the population ages worldwide, there is an acute need for health and human service professionals with "gero-competency," but students in an array of disciplines including the health professions often display a "profound lack of interest" in training to serve older populations (Dauenhauer, Steitz, Aponte, & Faria, 2010, p. 320; Rowe, 2008; Voogt, Mickus, Santiago, & Herman, 2008). Many health and human service professions report a shortage of trained elder-focused staff to serve large and growing underserved populations, due to limited

exposure to care settings outside of hospitals and discrepancies between professional preparation and compensation. The United States is "facing a crisis: lack of adequately trained, and emotionally oriented, personnel to work with aging persons in various fields" (Lun, 2011, p. 1). It is thus necessary to raise "gero-interest" among more students being prepared to work in health and human service professions, that is, awareness about aging and encouragement to consider work in gerontology.

Service learning is effective pedagogy for gerontology. This pedagogy highlights student interaction with the population and provides critical experiential learning that connects academic materials and real-life applications that promote professional identity as a gerontologist (Gendron, Myers, Pelco, & Welleford, 2013). These, coupled with regular and appropriate reflection, create a holistic education experience that increases awareness, shapes attitudes, promotes efficient learning and retention, and enhances professionalism, self-reflection, and personal growth (Long, Larsen, Hussey, & Travis, 2001; McClam, Diambra, Burton, Fuss, & Fudge, 2008). It fostered gerontological competency among social work students and assisted with reorienting preexisting notions of older adults (Cohen, Hatchett, & Eastridge, 2006; Faria, Dauenhauer, & Steitz, 2010). The value of this pedagogy for gerontology students has been well established (Roodin, Brown, & Shedlock, 2013).

In Master's in Public Health (MPH) programs, there is comparatively less emphasis on gerontology training in the curriculum. Some schools offer aging-related courses based on faculty expertise, and others partner with gerontology or allied social science programs. Systematic search in July 2015 of the database of the Council for Education in Public Health (http://www.ceph.org), a public health program accreditation body in the United States recognized by the U.S. Department of Education, showed 17 graduate programs that offer aging-related concentrations out of 133 accredited graduate programs in North America. In contrast, MPH degree programs with Maternal and Child Health specializations numbered 68. The academic program finder website of the U.S.-based Association of Schools and Programs of Public Health (n.d.) showed 27 programs related to aging, out of 2,602 total programs at all degree levels, in all schools, nationwide (for graduate programs, it showed 19 out of 2,241 programs). In comparison, there were 17 programs on adolescent health, 103 on maternal and child health, and 95 on population sciences (15, 83, and 73 programs, respectively, at the graduate level; Association of Schools and Programs of Public Health, n.d.). Thus, the fastest growing demographic group globally appears to receive less program emphasis in graduate education in public health in the United States. Furthermore, a report by Anft (2014) states that the number of gerontology programs at all levels, including graduate and undergraduate degree, and Associate and certificate programs in the United States are being "reduced in size, folded into other departments, suspended, or eliminated outright" (p. 1) despite the growing demographic need.

Since health education students will increasingly be required to work in settings where older adults and their issues will predominate, it stands to reason that they will need increased gero-competency and gero-interest. Given the shortage of aging-focused programs as explained above, a possible training strategy is to include gerontology content into classes that focus on other health-related issues. To consider this issue, we examined the proposition whether adding gerontology content to an international service learning course on community health and

development in a low-income country would increase MPH-level community health education students' awareness of and interest in serving seniors. We assessed whether this approach, as contrasted to offering an aging-focused course, might suffice to spark students' gero-interest in aging issues and careers.

International Service Learning

We explored community health education graduate students' interest in elder issues after an international service learning course in Livingstone, Zambia, in July 2011, offered over a 5-week summer session at a state university in the Southeastern United States. The second author taught the course, which focused on community health and development in resource-poor settings and required international travel, cross-cultural immersion, and service learning experiences.

Ten students enrolled: six graduate MPH/Community Health Education students (five females and one male) and four undergraduate students in health studies and global studies concentrations (all females). The course syllabus included Student Learning Objectives requiring students to critically analyze global demographic, socioeconomic, and health trends as they affected a local community. Students were required to maintain field journals, journal critical incidents, write group reflections, and post updates to a public course blog. Students also took pictures that represented the context of community health and development issues in the region. Graduate students were required to write a field report on the "Social and Health Conditions of Older Persons/Grandparents in Livingstone, Zambia." Student individual products were assembled in a personal service learning Google website. Each Google website contained a separate "Lessons Learned" section in which the students critically reflected on their overall experience.

Students participated in predeparture and postreturn mini seminars to immerse them in the curriculum and debrief/reflect on the overseas experience. During the overseas portion, they worked alongside staff in local clinics during weekly child health visits, weighing and measuring babies and documenting these growth data in patient charts. They also participated in "Child Health Day" events, providing educational materials to mothers and assisting public health nurses with well-baby checks. During the mornings, teams of two to three students accompanied community health workers on household visits for home-based care that included interacting with elderly in the homes. The home-based care activities included assessing food situation and needs, screening for high blood pressure, handing out vitamins and over-the-counter pain medication, and documenting any concerns the elders articulated. Students also delivered HIV/AIDS prevention education to mothers and to inmates in a local prison, engaged in farming and building activities, conducted adult literacy classes, organized after-school crafts and sports, assisted staff with "African-based" hospice care (ancillary care for individuals with chronic conditions who were unable to convalesce at home), and assisted with activities of daily living in an "old people's home." This assistance with activities of daily living included light housework such as making beds, sweeping the sleeping area and the area used for sitting during the day, organizing the recreational room, helping with laundry, fetching meals for the resident, and participating in assigned recreational time (playing board games and reading with residents).

Predeparture training included concise overviews of eight topics: service learning and reflection, Zambia's primary health care system, HIV/AIDS and TB coepidemics, home-based care/workers and household health, participant observation and field notes, cultural efficacy for international field work in a resource-poor setting, food insecurity issues, and aging issues. The total amount of material that had to be covered constrained the content of each topic. Training on aging issues was provided by the first author. Students also completed a 16-item true/false questionnaire adapted from Palmore's Facts on Aging Quiz to help them sift myth from fact and understand prevailing stereotypes about aging. Examples of statements include the following: "Intelligence declines with age," "Most elders have little interest in or capacity for sexual relations," and "The elderly naturally withdraw from participation in community life in old age." Factual answers were provided. This quiz, used as a sensitization tool, was not repeated at the end of the course to assess whether students' views had changed. Students read and discussed two relevant articles: (1) "Seven 'Deadly' Assumptions: Unraveling the Implications of HIV/AIDS Among Grandmothers in South Africa and Beyond" (Chazan, 2008) and (2) "Household Composition Among elders in Sub-Saharan Africa in the Context of HIV/AIDS" (Zimmer, 2009).

Methodology

We used a case study approach to assess the proposition whether adding gerontology content to an existing health education course would spark student interest in aging-related issues and careers. We employed Yin's (2013) single-case design, given its compatibility with exploratory inquiry involving "real-time" or unique experiences. The experiences of MPH students working with the elderly in the international service learning context involve multiple factors that are not simply isolated into separate parts. In fact, the second author had limited control over any confounding variables associated with the experience. The class itself represented a purposefully selected case that exemplified our pedagogic strategy and could yield new understanding and insights applicable to future educational design to increase students' gero-interest (Johansson, 2003).

Our goal was to conduct an analysis of the graduate students' experiences with the elderly bounded by the international service learning context and duration within this context. Our intention was to gather multiple perspectives that could yield a more holistic picture. We therefore adopted a holistic approach to this analysis in which we examined, categorized, and collated/summarized artifacts that represent evidence to address our study proposition (Yin, 2013). In line with this, we examined multiple data sources, that is, transcripts of in-depth interviews with the students, the public blog entries, and the personal Google website (with the journal entries and field reports they wrote, the photos taken, and "Lessons Learned" during the course). We treated the course as a complex contemporary unit and investigated in its natural functions and setting, by multiple methods. It represented a single, holistic, instrumental case, which could yield analytical insights that may be generalized to other educational approaches to promote gero-competency (Baxter & Jack, 2008; Johansson, 2003).

With the defined number of students enrolled in the program, we focused on the panel of informants (six graduate students) who were completing requirements that aligned with the "Seven Areas of Responsibility and Competencies" defining the health education specialist's position. These were developed by the National Commission for Health Education Credentialing

(National Commission for Health Education Credentialing, Society for Public Health Education, & American Association for Health Education, 2010). This kind of purposeful selection is a recommended strategy for qualitative interviewing as it allows for rich and in-depth data from the selected panel participants (Maxwell, 2013, pp. 96-97). Five students agreed to participate; the sixth could not be contacted despite repeated attempts. We conducted individual in-depth interviews with the five graduate students, four female and one male, 8 months after the class ended. Their ages ranged from 24 to 45 years. All were born and raised in the United States and interested in International Health. Institutional review board approval was obtained for this assessment.

We organized our data as units of graduate students' perspectives, shared as "artifacts of learning" (i.e., student's public blog postings and Google website with journal entries, field reports, photos, and "Lessons Learned") and postexperience interviews. As an overall strategy, we conducted both content and thematic analysis of the students' "artifacts of learning" and of transcripts from the in-depth interviews. We analytically bound the focus of our assessment by time and activity to themes that alluded to awareness of local and global aging, and interest in further experiences and/or work with aging populations (Baxter & Jack, 2008). The first author transcribed all postexperience interviews. We then reviewed the units of data ("artifacts of learning" and interview transcripts) for each student. We developed and applied an "open-coding" system to capture the different words, ideas, and visual perspectives represented in the units (Charmaz, 2006). We later revised and refined our coding scheme to cover additional emergent concepts and grouped the final coded content into identifiable themes with patterns. These were examined across the units of the case, documenting similarities and differences.

Our use of content and thematic analysis approaches allowed us to recognize and organize indications related to our propositions. We employed additional techniques to promote analytical rigor and credibility: The second author, who taught the course, had prolonged exposure and discussion with the students while teaching the class over a period of 5 weeks; both authors coded and discussed all the journal entries, blog postings, field reports, photos, and interview transcripts; participants were consulted for clarification on concepts and meanings; and information from the "artifacts of learning" and in-depth interviews was triangulated. This allowed us to strategically focus our analysis on identifying salient information that addressed our proposition, with the goal of building holistic explanations and indications of what might be occurring (Yin, 2013).

Outcomes

Concerning increased awareness of aging-related issues, or interest in pursuing a gero-focused career, the following indications emerge from the "artifacts of learning" and in-depth interviews.

Indication 1: Preclass Aging Sensitization Exercise Not Effective

Students indicated that they remembered little, if anything, about the predeparture true/false aging sensitization exercise once in the field and reported that it did not raise their awareness; as one said, "I don't recall that it helped me at all." They also reported that reading the articles was one among the many demands placed on them while preparing for the course, and it did not

suffice to develop their thinking on aging issues. Two students said it made them "vaguely more aware." Clearly, this brief introduction was not effective either in piquing students' interest in aging issues or in sensitizing them to aging populations.

Indication 2: Little Prior Academic Exposure to Gerontology—Knowledge Comes From Family Experiences

All the students noted that they had had little prior exposure to gerontology in their education. Only one of the students had an "aging" course as an undergraduate, and nothing since then. Personal experiences were more impactful. Three students recalled the important role that their grandparents had played in their lives, and their exposure to aging issues. One said, "My great grandmother was in a nursing home for a while and we had to move her there because there was a controversy about her living alone." Another said, "My grandmother worked in the Division of Nursing at a Nursing Home . . . and I have volunteered there since sixth grade. . . . I got a lot of exposure to aging issues."

Indication 3: Sensitization to Aging Issues Accrued During the Field Experience

When probed about their memorable field experiences with aging, students reported some "standout" moments related to a community facility—an old people's home, which housed people ranging in age from 48 to 99 years. The facility, constructed and staffed by an international mission organization, was partially state-supported. The home had its own kitchen garden where residents and community members could work. The produce was used for daily meals and surplus sold in the market. A student said, "I remember clearly an older gentleman called "Immanuel" [pseudonym]. He picked up a picture book about life in the ocean, but I soon realized he couldn't see. I began to read to him and his whole demeanor changed."

Students also observed aging-related needs (see Figure 1) within broader community needs, as evidenced by this statement: "There is a bigger general need in the community, that is the opportunity for [economic] advancement." Another student also said, "The biggest need is financial support. This old man was selling fritters on the road side because he didn't have a job. Maybe his children sent money, I have no idea, they lived far away."
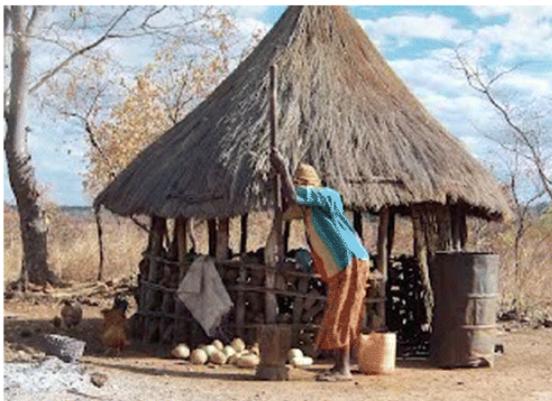
Figure 1. Photograph taken by a student of an older woman pounding grain.
Note. Older adults typically have to perform grueling daily subsistence tasks for themselves, such as procuring and preparing basic items for meager meals.

Indication 4: Written Work Revealed Basic Ability to Contextualize Aging Issues

The students' written field reports all revealed ability to analyze aging issues. They accurately identified relevant population trends. One noted that the World Health Organization defined old age as 60+ years but indicated this should be lowered for African continental settings that have lower life expectancy. Some noted the difference between chronological age and functional age (based on health). One student asked an older Zambian woman when she thought "old age" began, and noted that her answer included chronological age (age 50 years) and social roles (when grandparenthood begins). All reports described chronic health conditions common among the older adults, and how poverty and separation from young adult family members exacerbated the issues. The reports concluded with practice recommendations, for example, boosting support to poverty-stricken Zambian elders through savings or pension schemes and modifying existing home-based care programs around HIV/AIDS to serve seniors by, for example, vitamin pill distribution to seniors with inadequate nutrition.

Indication 5: High Interest in an Aging-Related Curriculum

Most students agreed that aging-related courses would be an important addition to an MPH/community health education curriculum. One student said, "I certainly think it's necessary. There are so many new medical or public health advances. It would be the neatest thing to learn how to translate that to the masses." Another echoed, "I think it's necessary . . . an older adult focused curriculum can shine a spotlight on a population that needs to be targeted." One however said, "I've never really considered it because it's not a primary interest for me."

Indication 6: Low Interest in an Aging Career

Despite analytic ability and the interest in aging-related courses, three out of the five students were not interested in pursuing a gero-focused career. One student was considering it. One student was already in such a job. She had not actively sought it out but got the opportunity and now loved it, and planned to make her career gero-focused.

> It's my first job. I wasn't sure what I wanted to do. I saw this opportunity and I would never have thought I would really love it, but I absolutely love working in a nursing home . . . with older adults . . . it's very rewarding. Lots of patients have no family that visit . . . so I don't only work on their limitations but also strategize on how to improve their quality of life.

The student considering an aging-focused career said, "[The] class definitely sparked a lot in my mind . . . it was an eye-opening experience. . . I am still trying to figure out what I want to do, but definitely yes [would consider an aging-related career]."

The students with no interest in an aging-focused career all had prior interests that this course did not change. This health education course, with a service learning component in an international setting, attracted students interested in international issues. As a female student said, "I actually always wanted the opportunity to learn and study abroad. . . . I did not have the opportunity in

my undergraduate studies . . . so when I heard about this course I was eager." Another said, "I just want to work internationally. I am really interested in international health and epidemiology, epidemics like HIV and TB." Another student had a different interest: "I am interested in studying the built environment and its effect on obesity . . . since I have a background in real estate. . . . I want to help as many people as I can." That is, she wanted to work with all age-groups and not solely with a gero-focus.

We asked for suggestions on how to increase students' interest in aging-related careers. A student said, "Maybe all classes need to have [aging-related] presentations and content woven in, and we get to know that it is a growing field."

Discussion and Conclusion

We applied case study methodology to assess the proposition whether adding gerontology content into a service learning course that focused on other issues (International Health in this case) might suffice to spark MPH/community health education students' gero-interest in studying about aging and considering a gero-focused career. This is in contrast to students taking aging-focused courses, especially since few MPH programs in the United States offer a gerontology focus. Our assessment indicates that adding aging content to the broader course had limited efficacy in raising gero-interest in aging issues and gero-focused careers among the MPH students, despite the proven service learning pedagogy. Nonetheless, students' writings revealed adequate analytic capability regarding aging issues in a community context. Students mostly supported adding aging-focused courses to public health education curricula to raise awareness about this growing field. Three of the five students interviewed were not interested in gero-focused careers. Of the remaining two, one was in such a job and planned to make it a career focus, and the other was willing to consider it. These findings indicate that adding gero-content to existing courses, even with service learning pedagogy, is not highly effective in increasing students' gero-interest. Therefore, increasing gerontology-focused courses and programs should be the main strategy in promoting the training and interest of students in serving the growing older population. Other courses should also incorporate gero-content in every way possible to reinforce the importance of the subject.

As the global population ages, there is greater need for students in health and human service fields to be trained in gerontology and encouraged into careers that serve seniors. Students' gero-interest and gero-competency should be increased by a variety of methods. We recommend that U.S.-based MPH/graduate health education programs offer concentrations and courses in gerontology, and promote required gerontology coursework across graduate education, preferably through service learning pedagogy. Frank (2014) states that though gero-competences exist for many health and social service disciplines, "public health currently does not have competencies specific to addressing the needs of older adults" (p. 287). Thus, although health education as a discipline has traditionally not specialized to serve older age-groups, there is a growing need for generalist professionals within this field to have a basic familiarity with the issues of aging individuals, families, and their societal settings, including how to design, deliver, and evaluate appropriate health education outreach and services tailored to their needs and realities. This kind of 21st-century public health workforce training and development is a critical step toward improved population health outcomes.

Limitations

The limitations of this study include concerns raised regarding single–case study methodology, such as lack of replicability, and potential for researcher subjectivity. In our study, however, we have addressed the issue of researcher subjectivity through separating the roles of class instructor and primary data analyst. Future studies can examine other pedagogic approaches to increasing public health students' gero-interest and gero-competency. Additionally, our small number of participants (five of six) may have affected data saturation, that is, when no new or relevant information emerges with respect to the research proposition or theory. We adjusted for this by using multiple data sources and instituted cross-checks with participants to ensure that our analysis of viewpoints and artifacts shared were relevant and appropriately represented. Despite these limitations, our study adds to the evidence on the need, and effective pedagogic strategies, to increase gero-interest among MPH students in Public Health Education programs.

References

Anft, M. (2014). Gerontology in demand, but degree programs languish. Chronicle of Higher Education. Retrieved from http://chronicle.com/article/Gerontologists-in-Demand-but/146387/?cid=cc&utm_source=cc&utm_medium=en

Association of Schools and Programs of Public Health . (n.d.). Academic program finder. Retrieved from http://www.aspph.org/program-finder/

Baxter, P., Jack, S. (2008). Qualitative case study methodology: Study design and implementation for novice researchers. The Qualitative Report, 13, 544-559. Retrieved from http://nsuworks.nova.edu/tqr/vol13/iss4/2

Charmaz, K. (2006). Constructing grounded theory: A practice guide through qualitative analysis. London, England: Sage.

Chazan, A. (2008). Seven "deadly" assumptions: Unravelling the implications of HIV/AIDS among grandmothers in South Africa and beyond. Aging & Society, 28, 935-958.

Cohen, H. L., Hatchett, B., Eastridge, D. (2006). Intergenerational service-learning: An innovative teaching strategy to infuse gerontology content into foundation courses. Journal of Gerontological Social Work, 48, 161-178.

Dauenhauer, J. A., Steitz, D. W., Aponte, C. I., Faria, D. F. (2010). Enhancing student gerocompetencies: Evaluation of an intergenerational service learning course. Journal of Gerontological Social Work, 53, 319-335. doi:10.1080/01634371003715577

Faria, D. F. F., Dauenhauer, J. A., Steitz, D. W. (2010). Fostering social work gerontological competencies: Qualitative analysis of an intergenerational service-learning course. Gerontology & Geriatrics Education, 31, 92-113.

Frank, J. C. (2014). A missing piece in the infrastructure to promote healthy aging programs: Education and work force development. Frontiers in Public Health, 2, 287. doi:10.3389/fpubh.2014.00287

Gendron, T. L., Myers, B. J., Pelco, L. E., Welleford, A. E. (2013). Promoting the development of professional identity of gerontologists: An academic/experiential learning model. Gerontology & Geriatrics Education, 34, 176-196. doi:10.1080/02701960.2012.718008

Johansson, R. (2003). Case study methodology. A key note speech at the international conference "Methodologies in Housing Research." Stockholm, Sweden: The Royal Institute of Technology in cooperation with the International Association of People–Environment Studies.

Long, A. B., Larsen, P., Hussey, L., Travis, S. S. (2001). Organizing, managing, and evaluating service-learning projects. Educational Gerontology, 27, 3-21.

Lun, M. W. A. (2011). Student knowledge and attitudes toward older people and their impact on pursuing aging careers. Educational Gerontology, 37, 1-11. doi:10.1080/03601270903534770

Maxwell, J. (2013). Qualitative research design: An interactive approach. Thousand Oaks, CA: Sage.

McClam, T, Diambra, J. F., Burton, B., Fuss, A., Fudge, D. L. (2008). An analysis of a service learning project: Students' expectations, concerns, and reflections. Journal of Experiential Education, 30(3), 236-249.

National Commission for Health Education Credentialing, Society for Public Health Education, & American Association for Health Education . (2010). A competency-based framework for health education specialists—2010. Whitehall, PA: National Commission for Health Education Credentialing.

Roodin, P., Brown, L. H., Shedlock, D. (2013). Intergenerational service learning: A review of recent literature and directions for the future. Gerontology & Geriatrics Education, 34, 3-25. doi:10.1080/02701960.2012.755624

Rowe, J. (2008). Retooling for an aging America: Building the health care workforce. Washington, DC: National Academy of Sciences. Retrieved from https://iom.nationalacademies.org/~/media/Files/Report%20Files/2008/Retooling-for-an-Aging-America-Building-the-Health-Care-

Workforce/ReportBriefRetoolingforanAgingAmericaBuildingtheHealthCareWorkforce.pdf

Voogt, S., Mickus, M., Santiago, O., Herman, S. (2008). Attitudes, experiences, and interest in geriatrics of first-year allopathic and osteopathic medical students. Journal of the American Geriatrics Society, 56, 339-344. doi:10.1111/j.1532-5415.2007.01541.x

Yin, R. K. (2013). Case study research: Design and methods (5th ed.). Thousand Oaks, CA: Sage.

Zimmer, Z. (2009). Household composition among elders in sub-Saharan Africa in the context of HIV/AIDS. Journal of Marriage and Family, 71, 1086-1099.