

Connecting Generations: Service-Learning as a tool for building a foundation to gerontology nursing

**CHONG Ching Liang¹, LU Mengya², NAZRIN Banu Abdul Razack³,
LEE Ho Yee Caroline⁴, and A.M.A NASIRUDEEN⁵**

¹ School of Health Sciences, Ngee Ann Polytechnic, Singapore
Email address: Chong_Ching_Liang@np.edu.sg

² School of Health Sciences, Ngee Ann Polytechnic, Singapore
Email address: LU_Mengya@np.edu.sg

³ School of Health Sciences, Ngee Ann Polytechnic, Singapore
Email address: Nazrin_Banu_ABDUL_RAZACK@np.edu.sg

⁴ School of Health Sciences, Ngee Ann Polytechnic, Singapore
Email address: Caroline_LEE@np.edu.sg

⁵ School of Health Sciences, Ngee Ann Polytechnic, Singapore
Email address: Nasirudeen_AMA@np.edu.sg

Abstract:

1. Introduction

Historically low birthrates and the effectiveness of an extremely efficient public healthcare system meant by 2050, 1 in 2 within Singapore will be over 65 (Ng, 2017). While this potentially seismic shift in demands on healthcare was predicted over two decades globally, the crucial field of gerontology has not kept pace with the rising number of elderly worldwide (Abbey et al, 2006; Lun, 2011; Warshaw & Bragg, 2016).

One of the key issues is the lack of attraction for the field of gerontology and community nursing in general particularly with trainee nurses. Warsaw & Bragg (2016) noted that there has been little or no changes since 2008 Institute of Medicine report:

Negative cultural and professional stereotypes discourage health professions students from selecting careers working with older adults.

Therefore the challenge for the future of healthcare from the field of gerontology suggests that it is not merely the technical education that must be transformed but the “soft skills” that will enable trainee nurses to understand and break their negative stereotypes of the elderly.

Within the School of Health Sciences (HS) at Ngee Ann Polytechnic (NP), Singapore, it is apparent we cannot be training professionals but we must train *empathetic* professionals. The question is how do we engineer this shift since empathy cannot be taught. We hope the answer to this question comes from infusing Service-Learning (S-L) within our learning environment.

Chong (2017) cited Bringle and Hatcher (1995) and Sook & Bloomquist (2015) to clarify what is S-L:

S-L initiatives must not be confused with other non-classroom-based activities such as internship or volunteerism (Bringle & Hatcher, 1995). Sook & Bloomquist (2015) concluded that any S-L infused course MUST have overt goals to achieve BOTH academic and civic learning.

Within the context of this paper, the specific research question that we are investigating is whether a meaningful S-L engagement with elderly population can enhance students' attitude towards them and in doing so, motivate a section of our students to enter the important and short-handed sector of gerontology nursing.

2. Theoretical framework/literature review

The general observations from the literature review are that there are multi-factorial obstacles that dissuade a fledgling nurse from picking gerontology nursing as a future career. The crux of the problem in gerontology nursing is this: both the learner and the learning guides are often not themselves elderly, thus learning sometimes occurs in a vacuum devoid of empathy. This may facilitate the rise of assumptions, stereotypes, prejudgments leading ultimately to discrimination.

Bergman *et al.* (2014) noted in their discussion of Bousfield & Hutchison (2010) that it is the quality of contact (or even more crucially, the lack of contact or meaningful contacts) that impacts on positive attitudes towards the elderly. Lun (2011) in her review article discussed VonDras & Lor-Vang's 2004 research that found that some form of structured experiential engagement can positively impact on the students views of the elderly.

Boswell (2012) research saw a negative correlation of knowledge of aging and attitude. In HS, we are fusing content knowledge (curriculum) with social engagement of the elderly via the S-L engagement to influence for the better, our students' perception of the older generation.

S-L can be the holy grail for nursing educators. It combines theory with face-to-face engagement with the elderly community for the students to practice, test out theory and most importantly to *interact* with the community. Leung *et al* (2011) found that S-L significantly ($p=0.001$) reduced the negative stereotypes that students have towards the elderly while concurrently, the medical students with S-L viewed elderly more positively than those in the control group ($p=0.03$). The research instrument used was

3. Methods/analysis

The research design is a *Pre-Post* quasi-experimental research. Purposive Sampling is used. The inclusion criterion is any student enrolled in the Gerontology & Community Nursing (GCN) module¹. The size of the research population is 516 (based on the "Pre" population numbers). The survey is anonymously administered through Google forms platform. The instruments used to measure the intervention of S-L to the attitudinal state of our students is a revised version of Kogan's Attitude Towards Older People survey. This survey was administered twice: before and after the S-L activity. The "pre" data will serve as a quasi-

¹ Within the polytechnic system, "modules" are synonymous with "classes".

control group for the post data. The research population was split into Experiment Group 1 where the students engaged in a health and social engagement carnival for the elderly population and Experiment Group 2 where the students have to engage in a health survey with an elderly relative or neighbour. The two groups are separated to see if the nature of the S-L activity have an impact. The data is analysed using the two tailed independent samples t-test analysis.

4. Results and Discussion

The results from this pilot study is very encouraging. The two experimental groups showed significant and symmetrical shifts in their positive views of the elderly after the S-L engagement.

Experimental Group 1: HS Carnival Team

Kogan's Intergenerational relationship subscale

	Before (mean)	After (mean)	p-value
Negative attitude towards older people	8.89	8.55	0.051
Positive attitude towards older people	10.04	10.75	0.000***

*** highly significant

Students scored slightly higher on the positive attitude measure after the intervention [mean = 10.75, SD = 1.674, n=305] compared to before the intervention [mean = 10.04, SD = 1.554, n=317]. This difference was statistically highly significant [p = 0.000].

Experimental Group 2: Home Interview Team

Kogan's Intergenerational relationship subscale

	Before (mean)	After (mean)	p-value
Negative attitude towards older people	8.69	8.45	0.300
Positive attitude towards older people	10.25	10.80	0.003***

*** highly significant

Students scored slightly higher on the positive attitude measure after the intervention [mean = 10.80, SD = 1.980, n=186] compared to before the intervention [mean = 10.25, SD = 1.716, n=215]. This difference was statistically highly significant [p = 0.003].

Experimental Group 1: HS Carnival Team

Kogan's Cognitive abilities and style subscale

	Before (mean)	After (mean)	p-value
Negative attitude towards older people	6.19	6.02	0.181
Positive attitude towards older people	6.35	6.86	0.000***

*** highly significant

Students scored slightly higher on the positive attitude measure after the intervention [mean = 6.86, SD = 1.299, n=305] compared to before the intervention [mean = 6.35, SD = 1.353, n=317]. This difference was statistically highly significant [p = 0.000].

Experimental Group 2: Home Interview Team**Kogan's Cognitive abilities and style subscale:**

	Before (mean)	After (mean)	p-value
Negative attitude towards older people	6.20	5.96	0.119
Positive attitude towards older people	6.25	6.85	0.000***

*** highly significant

Students scored slightly higher on the positive attitude measure after the intervention [mean = 6.85, SD = 1.455, n=186] compared to before the intervention [mean = 6.25, SD = 1.392, n=215]. This difference was statistically highly significant [p = 0.000].

Experimental Group 1: HS Carnival Team**Feelings caused by living with older people subscale:**

	Before (mean)	After (mean)	p-value
Negative attitude towards older people	5.66	5.66	0.978
Positive attitude towards older people	6.70	7.29	0.000***

*** highly significant

Students scored higher on the positive attitude measure after the intervention [mean = 7.29, SD = 1.405, n=305] compared to before the intervention [mean = 6.70, SD = 1.469, n=317]. This difference was statistically highly significant [p = 0.000].

Experimental Group 2: Home Interview Team**Feelings caused by living with older people subscale:**

	Before (mean)	After (mean)	p-value
Negative attitude towards older people	5.49	5.31	0.252
Positive attitude towards older people	6.61	7.32	0.000***

*** highly significant

Students scored slightly higher on the positive attitude measure after the intervention [mean = 7.32, SD = 1.427, n=186] compared to before the intervention [mean = 6.61, SD = 1.449, n=215]. This difference was statistically highly significant [p = 0.000].

In our study, we analysed the impact of the S-L activity using three of Kogan's 7 sub-scales as presented above. These data allow us to see if our students' views on geriatric patients have been shifted. The students in both experimental groups viewed the elderly more positively as a result of the S-L engagements.

The module tutors also noticed an interesting phenomenon from the home interview groups. The students all reported renewed respect of their grandparents whom they have to interview. The students' renewed respect comes from hearing the life-stories from their grandparents. More than one student group have expressed shame that they have not found out about these things without the S-L engagement. One student interestingly described this as elder neglect. This was not analysed scientifically as the information were provided anecdotally from the teaching team. This perhaps can be examined more formally in future iterations of this study.

It is interesting that in our research finding, the negative attitudes are non-significant. This might be due to some form of a *Hawthorne Effect* or the traditional Asian cultural

programming that prevented the research population from reporting negative views of the elderly.

The research team also evaluated the students' assignments to use it as a qualitative companion to the quantitative study. The teaching team of the GCN module have observed that the S-L activity have raised the interest of the nursing students towards the topic. Here are excerpts of the qualitative responses.

On stereotypes, wrongful assumptions and newly discovered respect:

“By being more understanding and patients towards the elderly. I felt that we need to get rid of myths and stereotypes about the elderly, as the interviews that we do for the service learning. They are actually a very intelligent individuals and are really passionate in sharing their past experiences with us. So I thought this service learning is an enjoyable experience and memorable to me.” – Student A

“We will not be able to better understand the elderly unless we make an effort to get to know them. Before this experience, I realized that there are many misconceptions I had about the elderly, through interacting with them I was able to empathize with them better and learn to be more patient.” – Student B

“Senior citizens are not to be looked down by the public. They still have their own life as all of us (the younger generations) have. From this service-learning we have found out that they still have goals in life. The person may be assumed as aged according to the number of years since birth which is also known as chronological age. However, it is one's emotional well-being, taking care of health and thoughts telling us we are aged or not. ” – Student C

The results of this preliminary study are consistent with past studies that looked at the impact of S-L on students' perceptions of elderly population (Abbey *et al*, 2006; Augustin & Freeman, 2016; Leung *et al*, 2011)

5. Conclusions and contributions to theory and practice

While it is early days yet, this pilot study suggests that S-L is shaping up to be an important and effective tool to enable our students to discover their interest in working within the most crucial sector of nursing – gerontology nursing. S-L accorded the students a powerful mean of helping them achieve greater understanding of the geriatric community by allowing the experience of direct contact. Perhaps more encouraging the students seems to have shift the way they view the elderly that they have engaged. Past researches have shown that this may be a small but important part to shift the students view towards gerontology nursing (VonDras & Lor-Vang, 2004; Bousfield & Hutchison, 2010 ; Lun, 2011; Bergman *et al.*, 2014).

Keywords: Service-Learning, Gerontology Nursing, Ageing Population

References:

- Abbey J, Abbey B, Bridges P, Elder R, Lemcke P, Liddle J, & Thornton R. (2006). Clinical placements in residential aged care facilities: the impact on nursing students' perception of aged care and the effect on career plans. *Australian Journal of Advanced Nursing*, 23(4), 14–19. Retrieved from <http://libweb.np.edu.sg/appv4/nwaccess.aspx?url=http://stats.lib.np.edu.sg/ustats.aspx?url=http://search.ebscohost.com/login.aspx?direct=true&db=ccm&AN=106314540&site=ehost-live&scope=site>
- Augustin, F., & Freshman, B. (2016). The effects of service-learning on college students' attitudes towards older adults. *Gerontology & Geriatrics Education*, 37(2), 123-144, doi:10.1080/02701960.2015.1079705
- Bergman, E. J., Erickson, M. A., & Simons, J. N. (2014). Attracting and Training Tomorrow's Gerontologists: What Drives Student Interest in Aging? *Educational Gerontology*, 40(3), 172–185. <https://doi.org/10.1080/03601277.2013.802184>
- Boswell, S. S. (2012). “Old People are Cranky”: Helping Professional Trainees' Knowledge, Attitudes, Aging Anxiety, and Interest in Working with Older Adults. *Educational Gerontology*, 38(7), 465–472. <https://doi.org/10.1080/03601277.2011.559864>
- Bringle R.G. & Hatcher J.A. (1995) Service-learning curriculum for faculty. *Michigan Journal of Community Service Learning* 2 , 112–122.
- Chong, C. L., Seet, C. S. H., Nur Farzana, J., Sarah F. M. N., Nur Adilah, M., Siti N. S. H. Nur Adilah, M. S. (2017) Hearing the Voice of the Voiceless: Service-Learning and its Impact on Aspects of Social Awareness on Nursing and Optometry Students. Paper presented at the 6th Asia-Pacific Conference on Service-Learning.
- Leung, A. Y., Chan S. S., Kwan, C. W., Cheung, M. K., Leun, S. S., & Fong, D. Y. (2011) Service learning in medical and nursing training: a randomized controlled trial. *Advances in Health Sciences Education*, 17(4), 529-545. Do:10.1007/x10459-011-9329-9
- Lun, M. W. A. (2011). Student knowledge and attitudes toward older people and their impact on pursuing aging careers. *Educational Gerontology*, 37(1), 1–11. <https://doi.org/10.1080/03601270903534770>
- Ng, S. M. (2017, December 06). Elderly to make up almost half of S'pore population by 2050: United Nations. Today Online. Retrieved February 09, 2019, from <https://www.todayonline.com/singapore/elderly-make-almost-half-spore-population-2050-united-nations>
- Population SG. (2016, August 22). Older Singaporeans to double by 2030. Retrieved February 09, 2019, from <https://www.population.sg/articles/older-singaporeans-to-double-by-2030>
- Sook, L., & Bloomquist, C. (2015). Distinguishing service learning from other types of experiential learning. *Education for Information*, 31(4), 195-207. doi:10.3233/EFI-150952

Warshaw, G. A., & Bragg, E. J. (2016). The Essential Components of Quality Geriatric Care. *Generations*, 40(1), 28–37. Retrieved from <http://libweb.np.edu.sg/appv4/nwaccess.aspx?url=http://stats.lib.np.edu.sg/ustats.aspx?url=http://search.ebscohost.com/login.aspx?direct=true&db=ccm&AN=115240268&site=ehost-live&scope=site>

Biographical sketch of each presenter

Please send the biographical sketch of the presenters together with the proposal using the following format:

Presenter 1:

- i. Last name followed by first name: NAZRIN Banu Abdul Razack
- ii. Position/department/organisation/country: Lecturer, School of Health Sciences, Ngee Ann Polytechnic, Singapore
- iii. Short biography:

Nazrin Banu Abdul Razack has a strong interest in the crucial area of gerontology nursing. She is a natural educator and a servant leader as best exemplified by this quote: “My work is probably nothing more than a drop in the ocean but I am positive that every drop makes a difference”. Through her students, Nazrin hopes to the profession and change the way the future nurses views the world.
- iv. Contact information (address, email address, homepage)

Email: Nazrin_Banu_ABDUL_RAZACK@np.edu.sg
Website: http://www2.np.edu.sg/hs/aboutus/staff/Pages/hs-Nazrin_Banu_ABDUL_RAZACK.aspx
Address: School of Health Sciences, Ngee Ann Polytechnic, Block 81, Level 7, 535 Clementi Road, Singapore 599489

Presenter 2:

- i. Last name followed by first name: LU Mengya
- ii. Position/department/organisation/country: Senior Manager, School of Health Sciences, Ngee Ann Polytechnic, Singapore
- iii. Short biography:

Lu Mengya has over a decade of experience as a peri-operative nurse. In this role, Mengya has assisted in surgeries for all medical conditions and has even participated in the more exotic variations such as Robotic surgery! Mengya's teaching philosophy is identical to her personal philosophy of “see, think, act”. Through this, Mengya hopes to cultivate nurses who are “thinking” nurses and not mere “robots” awaiting instructions.
- iv. Contact information (address, email address, homepage)

Email: LU_Mengya@np.edu.sg
Website: <http://www2.np.edu.sg/hs/aboutus/staff/Pages/hs-lme3.aspx>
Address: School of Health Sciences, Ngee Ann Polytechnic, Block 81, Level 7, 535 Clementi Road, Singapore 599489

Presenter 3:

- i. Last name followed by first name: LEE Ho Yee Caroline
- ii. Position/department/organisation/country: Lecturer, School of Health Sciences, Ngee Ann Polytechnic, Singapore
- iii. Short biography
Caroline Lee is an experienced lecturer who have taught at Polytechnic and ITE levels. Professionally, Caroline worked in the field of critical care nursing within cardiothoracic and multi-disciplinary ICU setting for about a decade. Carol's teaching philosophy is to inspire the young not just to be technically proficient but also to guide them to be compassionate towards all patients particularly the less fortunate.
- iv. Contact information (address, email address, homepage)
Email: Caroline_LEE@np.edu.sg
Website: <http://www2.np.edu.sg/hs/aboutus/staff/Pages/hs-lch32.aspx>
Address: School of Health Sciences, Ngee Ann Polytechnic, Block 81, Level 7, 535 Clementi Road, Singapore 599489

Presenter 4:

- i. Last name followed by first name: Nasirudeen A M A (Dr.)
- ii. Position/department/organisation/country: Senior Lecturer, School of Health Sciences, Ngee Ann Polytechnic, Singapore
- iii. Short biography
Dr Nasir worked as a research fellow at the Institute of Molecular and Cell Biology before joining Ngee Ann Polytechnic as a lecturer. He has always been passionate about teaching. Imparting knowledge and mentoring students are two aspects of teaching that Dr Nasir finds most fulfilling and interesting.
- iv. Contact information (address, email address, homepage)
Email: Nasirudeen_AMA@np.edu.sg
Website: <http://www2.np.edu.sg/hs/aboutus/staff/Pages/hs-anm2.aspx>
Address: School of Health Sciences, Ngee Ann Polytechnic, Block 81, Level 7, 535 Clementi Road, Singapore 599489

Presenter 5:

- i. Last name followed by first name: Chong Ching Liang
- ii. Position/department/organisation/country: Senior Lecturer, School of Health Sciences, Ngee Ann Polytechnic, Singapore
- iii. Short biography
Ching Liang challenges his students to discover the impact of the pressure of discrimination on the Singapore society. He has the firmest of belief that his students will grow into the solutions of the future. Ching Liang has worked as a social worker, an oral history researcher, a labour researcher and broadcast journalist. All these past jobs have a common thread... his optimism in society's potential to solve inequalities.
- iv. Contact information (address, email address, homepage)
Email: Chong_Ching_Liang@np.edu.sg
Website: <http://www2.np.edu.sg/hs/aboutus/staff/Pages/hs-chongcl.aspx>
Address: School of Health Sciences, Ngee Ann Polytechnic, Block 81, Level 7, 535 Clementi Road, Singapore 599489