J Glob Health Sci. 2025 Dec;7(2):e33
https://doi.org/10.35500/jghs.2025.7.e33
pISSN 2671-6925·eISSN 2671-6933

Journal of Global Health Science JGHS

Original Article

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Impact of a short-term global health training program on competencies and career intentions in elderly care: a pilot study among public health students in the Philippines

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Received: Nov 4, 2025
Accepted: Dec 18, 2025
Published online: Dec 29, 2025

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ABSTRACT

Background: Population ageing and persistent global health threats demand educational approaches that build competencies and readiness for elderly care. We evaluated a short, structured international program embedded in a newly launched, government-funded employment-link program in Korea.

Methods: A single-group pre-post mixed-methods design was conducted with 10 third-year public health undergraduates from Bataan Peninsula State University who completed a 4-week immersion (institutional visits; supervised rehabilitation/long-term-care practice; sessions on digital health/health information management; structured cultural activities). Quantitative outcomes include the Global Health Competency Self-Confidence Scale (GHC-SCS), Professional Values Scale (PVS), Psychological Capital Questionnaire (PCQ-12), and a study-developed Employment Intention Survey. Analyses emphasized paired effect size (bias-corrected Hedges' g) with bootstrap 95% confidence intervals (CIs) and Holm-Bonferroni adjustment. Qualitative data comprised daily reflection journals and a post-program debriefing, thematically analyzed.

Results: Significant improvements were observed in GHC-SCS ($\Delta = +1.15$; $g = 1.10$; 95% CI, 0.65 to 1.55; $P < 0.01$), PVS ($\Delta = +0.55$; $g = 0.95$; 95% CI, 0.50 to 1.40; $P < 0.01$), and PCQ-12 ($\Delta = +0.63$; $g = 0.88$; 95% CI, 0.42 to 1.33; $P < 0.01$). Employment intention declined ($\Delta = -0.84$; $g = -0.90$; 95% CI, −1.35 to −0.45; $P < 0.01$). Four themes illuminated mechanisms: (1) health-system literacy and transferability (e.g., standardized documentation, fall-risk checks, caregiver education as "quick wins"); (2) cultural immersion and affective learning; (3) interprofessional teamwork and practice insight; and (4) professional identity formation with recalibration of near-term career intentions.

Conclusion: A deliberately structured, policy-embedded short-term program can strengthen global health competencies, professional values, and psychosocial resources while prompting

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Funding

This research was supported by the Ministry of Education of the Republic of Korea through an Official Development Assistance grant under the University Leading Global Development Cooperation Project, administered by the National Research Foundation (NRF) of Korea (grant number: 2023H1A7A2A02000081; funding period: 2023-2028). The project was implemented in collaboration with Myongji College. No additional external funding was received for this study.

Conflict of Interest

The authors declare that they have no competing interests.

Author Contributions

Conceptualization: Ro D, Lee Y, Mecararaeg EC, Jeon B, Castillo RD, Kang S; Data curation: Ro D, Guia RD, Cha M, Castillo RD; Formal analysis: Ro D; Funding acquisition: Lee Y, Jung H, Kang S; Investigation: Lee Y; Methodology: Ro D, Cha M, Jung H, Castillo RD, Kang S; Project administration: Ro D, Lee Y, Guia RD, Mecararaeg EC, Yoon S, Jeon B, Cha M, Jung H, Castillo RD, Kang S; Resources: Ro D, Castillo RD, Kang S; Supervision: Castillo RD, Kang S; Visualization: Ro D, Guia RD, Castillo RD, Kang S; Writing - original draft: Ro D; Writing - review & editing: Ro D, Lee Y, Guia RD, Mecararaeg EC, Yoon S, Jeon B, Castillo RD, Kang S.

realistic, informed career planning in elderly care. Large, comparative, and longitudinal studies with behavioral endpoints are warranted to test durability, identify high-leverage components (e.g., language preparation, mentored placement length, reflection dose), and assess whether recalibrated intentions translate into workforce entry and retention.

Keywords: Global health; Education, public health professional; Long-term care; Self efficacy; Career choice

INTRODUCTION

Health systems worldwide are facing unprecedented complexity due to the dual challenges of rapidly aging populations and the continuing burden of global health threats such as pandemics, non-communicable diseases (NCDs), and health inequities.[1,2] In Southeast Asia, these pressures are particularly acute: aging is accelerating across the region, increasing the demand for long-term and elderly care, while many health systems remain under-resourced and inadequately prepared to meet these needs.[1,3] Despite rising awareness, there is remains a significant gap in the availability of training models that equip future health professionals with the competencies required to address both local and global challenges in elderly care.[2,4-7] This gap reflects not only the limited number of formally evaluated training programs but also the scarcity of models developed and implemented within low- and middle-income country (LMIC) institutions, where local health system constraints and workforce needs differ from those in high-income countries (HICs). As a result, there is an urgent demand for innovative educational strategies that prepare young health professionals not only with technical expertise but also with the adaptability, resilience, and cross-cultural sensitivity.[8-10]

Against this backdrop, global health education has gained recognition as a crucial element in the preparation of the next generation of health professionals. Short-term global health immersion programs have emerged as a promising pedagogical approach to enhance cultural competence, professional values, and global health literacy among students.[11,12] At the same time, critiques caution that not all short-term programs yield lasting effects; outcomes are heterogeneous, and ethical concerns—including host-community burden, power asymmetries, and voluntourism—remain when programs are not grounded in reciprocal partnerships and sustainability principles,[13-17] Prior studies have shown that relatively brief international learning experiences can positively influence students' knowledge, motivation, and career orientation toward global health.[12,18,19] For example, the Fogarty International Clinical Research Scholars and Fellows Program demonstrated long-term effects on participants' career trajectories, increasing their likelihood of pursuing global health-related work.[18] However, most existing evidence originates from programs in HICs, often involving graduate students, while relatively little empirical evidence examining undergraduate programs situated LMIC contexts.[20,21] This gap is especially important given that most Official Development Assistance and global health initiatives target LMICs, yet LMIC-led or LMIC-based evaluated training programs remain limited.

Educational research also highlights that immersion experiences may influence more than just knowledge. They contribute to professional identity formation and strengthen psychosocial resources—such as self-efficacy, resilience, and optimism—that are critical for sustaining careers in healthcare.[20,22-24] These constructs hold particular importance in elderly-care workforce development, where emotional labor demands, high turnover

risk, and cross-cultural caregiving environments require strong psychological capital and value-based professional commitment.[25-27] Similarly, research with early-career nurses identified self-efficacy as a significant predictor of professional competency and workforce readiness.[22] These findings suggest collectively reinforce the need for global health training evaluations that include not only knowledge and skills but also broader dimensions such as identity formation, values, resilience, optimism, and adaptability.[20,22-25]

At the same time, global health education has been critiqued for insufficient attention to issues of power, ethics, and sustainability. Scholars emphasize the importance of reflective practice, ethical self-awareness, and critical engagement when students participate in training in different cultural contexts.[11,28,29] Without such reflection, immersion experiences risk becoming superficial or extractive rather than transformative. Frameworks such as the World Health Organization Global Competency and Outcomes Framework for Universal Health Coverage[8] and interprofessional global health competency guidelines[30] outline the broader set needed–ranging from cultural humility to ethical reasoning and collaborative leadership—reinforcing the need to align program evaluation with establish competency-based principles.

In Southeast Asia specifically, there is an additional policy imperative. As governments seek to strengthen elderly care systems, workforce development has become more pressing.[1,2,31] Organisation for Economic Co-operation and Development (OECD) reports similarly highlight the need to expand and professionalizing the caregiving sector to meet demographic challenges.[31] For LMICs such as the Philippines—where outward migration of health professionals continues—equipping students for both local service and global opportunities requires educational interventions that combine technical training with global competencies and structured reflection on professional futures.[32,33]

To address these gaps, the Bataan Peninsula State University (BPSU)-Myongji College (MJC) Employment-Link Invitation Program was launched in 2024 to provide undergraduate public health students at BPSU with a structured short-term training experience in South Korea.[34] Importantly, this program represents the first officially funded initiative by the National Research Foundation (NRF) of Korea under the Ministry of Education to invite and train foreign students in Korea's long-term care sector—addressing the policy priority of expanding foreign employment, especially in elderly care. This unique context highlights the program's novelty and national significance. The program included institutional visits, field practice in rehabilitation and long-term care facilities, and exposure to digital health and health information management (HIM) systems, all embedded within a cultural immersion framework. Previous evidence from Korea demonstrates the value of similar initiatives: American nursing students reported improved cultural awareness after a 2-week Korean clinical immersion[35] and Korean medical students developed stronger interest in rural and public health following a short extracurricular program.[36] Building on these precedents, the BPSU-MJC initiative sought to combine practical learning with cross-cultural exchange to enhance the competencies and career preparedness of undergraduate public health students. Its policy-embedded design suggests potential for sustainability and replication across institutions, particularly within Korea's international cooperation framework.[37,38]

The present study aims to evaluate the impact of this program using a single-group pre-post mixed-methods design. Specifically, it assesses changes in global health competencies, professional values, psychological capital, and employment intentions related to elderly care.

In addition, qualitative data from reflection journals and group interviews were analyzed to capture the lived experiences of students and the deeper learning processes that unfolded during the program. This exploratory evaluation contributes to the limited but growing literature on short-term global health training for undergraduate students in LMICs and provides insights into how such programs may influence both competencies and career trajectories.

METHODS

Study design

The study used a single-group pre-post mixed-methods design to assess educational outcomes of a short-term global health training program. The program was targeting multi-dimensional outcomes (competencies, professional values, psychosocial constructs) that were best captured by combining quantitative change estimates with qualitative accounts of students' lived experiences; mixing enabled triangulation of quantitative results with qualitative evidence, complementarity to explain how and why changes occurred, and planned integration (e.g., waving and joint displays) consistent with National Institutes of Health/Office of Behavioral and Social Sciences Research best-practice guidance for mixed methods in health research.[39-41] Mixed-methods approaches are commonly used in health professions education to increase the breadth and depth of program evaluation by complementing numerical outcomes with descriptive narrative accounts. and quantitative measures of competencies and psychosocial constructs were integrated with qualitative insights into students lived experiences.[39,40]

Participants and recruitment

This study population consisted of ten third-year undergraduate students enrolled in the Bachelor of Science in Public Health program at BPSU in the Philippines. All ten students were selected to participate in the 2025 BPSU-MJC Employment-Link Invitation Program, which was conducted in collaboration with MJC in South Korea. Recruitment occurred through an open call and orientation session led by faculty, where students were informed about the program's objectives, expectations, and evaluation components. Selection criteria included academic performance, expressed motivation, and faculty recommendations. Participation was voluntary. While no direct financial incentives were provided to participants, the entire program—including airfare, accommodation, and training expenses—was fully funded through the Korean Ministry of Education's Leading University for International Cooperation initiative in partnership with the NRF of Korea. The limited cohort size reflected the program's pilot design, which emphasized intensive mentoring and depth of exposure.[37]

The final group consisted of 7 males and 3 females, all in their third year of study. None of the participants had previously received formal training in elderly care, and only 2 reported previous overseas exposure. Because participants were selected based on the academic performance and motivation, some degree of position selection may influence outcomes; this is acknowledged as a limitation of the pilot design.

Setting and program description

The intervention was embedded in the BPSU-MJC Employment-Link Invitation Program, which took place between July and August 2025 as part of the NRF's Leading International Cooperation Program. The initiative was jointly organized by BPSU in the Philippines and MJC in South Korea.

The 4-week program combined multiple components. Students visited Korean hospitals, rehabilitation centers, and long-term care facilities to observe system organization and patient care practices. They engaged in structured hands-on practice in rehabilitation and elderly care environments under professional supervision. During all practice sessions, students were supervised by licensed staff in small groups (typically 2–3 students per supervisor), and no student performed direct patient care; all activities were observational or simulation-based, with limited task participation permitted only under continuous supervision. Technology-integrated sessions introduced participants to innovations in digital health and HIM. Finally, cultural immersion activities, including language exchange and guided visits, were incorporated to strengthen cross-cultural awareness. The curriculum was explicitly designed to enhance technical knowledge while simultaneously cultivating cultural sensitivity and ethical reflection, which are considered core competencies in global health education. A detailed weekly curriculum is provided in **Supplementary Table 1** to enhance transparency of program structure and sequencing.

Data collection procedures

Data was collected at 2 time points: before program initiation in July 2025 (pre-test) and immediately after completion in August 2025 (post-test). Quantitative instruments were administered electronically using Google Forms, distributed via email and faculty-facilitated Messenger groups. All 10 participants completed both rounds of surveys, yielding a 100% response rate.

In addition, qualitative data was obtained through 2 approaches. First, each participant wrote daily reflection journals throughout the immersion, documenting observations, learning points, challenges, and emotional responses. These journals were submitted through a shared Google Docs platform. Second, a group debriefing interview was conducted upon program completion using a semi-structured guide to elicit insights about cultural adaptation, perceived learning, and evolving career intentions.

Instruments

Four validated instruments were used for the quantitative component. The Global Health Competency Self-Confidence Scale (GHC-SCS), a 22-item tool, measured students' self-confidence across domains such as global burden of disease, health disparities, and cultural influences on health.[42] The Psychological Capital Questionnaire (PCQ-12) assessed self-efficacy, hope, resilience, and optimism through 12 items validated for use in educational and organizational contexts.[22,43] The Professional Values Scale (PVS), a 20-item measure of values such as altruism, justice, and dignity, was included given its extensive use in nursing and allied health education.[25,44] Finally, a 10-item Employment Intention Survey was custom-developed for this study, drawing on the Theory of Planned Behavior and adapted from prior research on career intentions among health student in LMICs.[33] To ensure methodological rigor, the survey underwent validation through expert content review and psychometric testing, including internal consistency reliability analysis (Cronbach's α) was then estimated in the study sample, with coefficients reported in the results.[45,46]

Qualitative instruments included daily reflection journals and the group debriefing interview, both of which were designed to capture lived experience and provide context for interpreting quantitative results.

Data analysis

Quantitative analyses were conducted in IBM SPSS Statistics, Version 29 (IBM Corp., Armonk, NY, USA). For each outcome, we computed paired difference (post-pre), inspected histograms and Q-Q plots, and tested normality of the paired-difference scores using the Shapiro-Wilk test (n = 10). When assumptions were met, we used Paired-sample t-tests; otherwise, Wilcoxon signed-rank tests (2-sided) were applied. Given the pilot, small-sample context, interpretation focused on effect sizes with 95% confidence intervals (CIs). Effect sizes were reported as bias-corrected Hedges' g for paired designs; where non-parametric tests were used, the matched rank-biserial correlation (r_rb) was additionally reported. CIs for effect sizes were obtained via non-parametric bootstrap resampling of pairs (5,000 iterations). Multiplicity across the 4 prespecified outcomes was controlled using the Holm-Bonferroni step-down procedure; $\alpha = 0.05$. No missing data occurred. Internal consistency for multi-item scales at each time point was estimated with Cronbach's α.

For the qualitative data, daily reflection journals and the post-program group debriefing were analyzed thematically following Braun and Clarke's 6-phase approach.[47] One researcher undertook initial coding, iteratively refined categories, and theme development. NVivo 14 (Lumivero, Denver, CO, USA) supported data management and auditability. To enhance credibility despite the single-coder structure, analytic decisions were documented through an audit trail, and preliminary themes were reviewed and discussed with a second researcher to ensure reflexivity and interpretive rigor. Discrepancies were resolved through discussion until consensus and representative quotations were selected to illustrate key findings.

Ethical considerations

The study was reviewed and approved by the Institutional Review Board (IRB) of Yonsei University Health System (IRB No. 2025-1504-002). Written informed consent was obtained from all participants. Students were assured of confidentiality and were informed that their participation in the research component would not affect their academic performance or program evaluation. The study was conducted in accordance with the principles of the Declaration of Helsinki.

RESULTS

Participant characteristics

All 10 participants were third-year students in the Bachelor of Science in Public Health program at BPSU (7 male, 3 female). Two reported prior overseas experience; non had received formal training in elderly care. This relatively homogeneous cohort provided a consistent baseline for assessing program related changes. Participant characteristics are summarized in **Table 1**; the study flow is shown in **Fig. 1**.

Quantitative findings

Pre- and post-program outcomes are presented in **Table 2**. Students showed statistically significant gains across 3 domains. GHC-SCS increased from 2.95 (standard deviation [SD], 0.35) to 3.65 (SD, 0.28), indicating stronger self-confidence in applying public health skills across contexts ($P < 0.01$; $g = 1.10$; 95% CI, 0.65 to 1.55). PVS improved from 4.21 (SD, 0.25) to 4.56 (SD, 0.31) ($P < 0.01$; $g = 0.95$; 95% CI, 0.50 to 1.40). PCQ-12 rose from 4.32 (SD, 0.41) to 4.85 (SD, 0.36), suggesting enhanced resilience, optimism, and self-efficacy ($P < 0.01$; $g = 0.88$; 95% CI, 0.42 to 1.33). In contrast, employment intention decreased significantly from

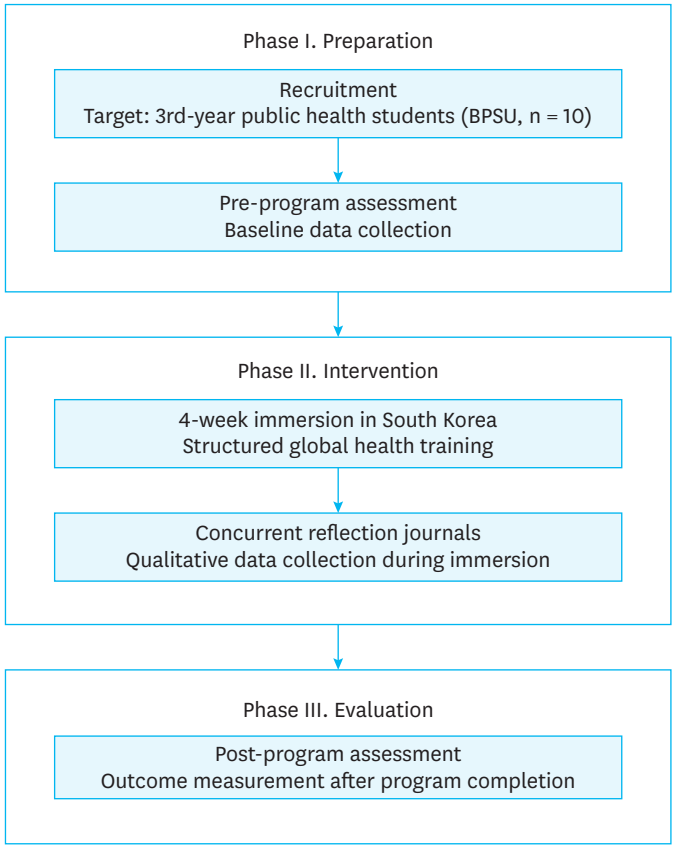

Fig. 1. Study flow diagram. Flow diagram of the study process, including recruitment of participants, pre-program assessment, 4-week immersion program in South Korea, concurrent reflection journals, and post-program assessment.
BPSU = Bataan Peninsula State University.

Table 1. Baseline characteristics of participants (n = 10)

Characteristic	Category	No. (%) or mean ± SD
Sex	Male	7 (70.0)
	Female	3 (30.0)
Academic year	3rd	10 (100.0)
Age (yr)		20.0 ± 0.0
Previous overseas experience	Yes	2 (20.0)
	No	8 (80.0)
Previous training in elderly care	Yes	0 (0.0)
	No	10 (100.0)

SD = standard deviation.

Table 2. Pre-post survey results (n = 10)

Scale	Pre-test (mean ± SD)	Post-test (mean ± SD)	Δ (post-pre)	Hedges' *g*	95% CI	*P*-value
GHC-SCS	2.95 ± 0.35	3.65 ± 0.28	+0.70	1.10	0.65 to 1.55	< 0.01
PVS	4.21 ± 0.25	4.56 ± 0.31	+0.35	0.95	0.50 to 1.40	< 0.01
PCQ-12	4.32 ± 0.41	4.85 ± 0.36	+0.53	0.88	0.42 to 1.33	< 0.01
Employment Intention	3.98 ± 0.42	3.61 ± 0.40	−0.37	−0.90	−1.35 to −0.45	< 0.01

Δ = mean (post) − mean (pre). Hedges' *g* is bias-corrected for paired designs; Confidence intervals were obtained via nonparametric bootstraps (5,000 resamples). Parametric (paired t) or non-parametric (Wilcoxon) tests used as appropriate; 2-sided tests; α = 0.05 with Holm-Bonferroni adjustment across outcomes. Higher scores indicate greater competency, professional values, psychological capital, and employment intention.
SD = standard deviation; GHC-SCS = Global Health Competency Self-Confidence Scale; PVS = Professional Values Scale; PCQ-12 = Psychological Capital Questionnaire.

https://doi.org/10.35500/jghs.2025.7.e33

3.98 (SD, 0.42) to 3.61 (SD, 0.40), reflecting a more cautious stance toward near-term work in elderly care ($P < 0.01$; $g = -0.90$; 95% CI, −1.35 to −0.45).

Given the small pilot sample (n = 10), inferences from ρ-values warrant caution; accordingly, we emphasize effect sizes and 95% CIs. The standardized mean changes for GHC-SCS ($g = 1.10$), PVS ($g = 0.95$), and PCQ-12 ($g = 0.88$) were large by conventional benchmarks, with CIs excluding zero. Employment intention showed a comparably large decrease ($|g| = 0.90$), with its CI entirely below zero. The widths of the CIs reflect small-sample imprecision; estimates should be considered preliminary—useful for hypothesis generation and sample-size planning. Conclusions were unchanged after Holm-Bonferroni adjustment across the 4 prespecified outcomes; adjusted ρ-values are reported in **Table 2**.

Qualitative findings

Across 4 weeks of immersion and a closing group debrief, students progressed from initial orientation to hands-on practice and—by the final week—a more grounded sense of their professional futures. Narrative braided analytic observation (e.g., mapping patient flow, documentation standards, safety checkpoints) with affective response (e.g., empathy toward older adults, discomfort at skill gaps, pride in small wins). To balance these standards, reflections were coded with paired indicators—at least one process/structure marker and one emotion/meaning marker—and resolved discrepant cases through memoed adjudication. We then organized themes using Kolb's experiential learning cycle to trace how concrete experiences moved through reflection to conceptual insights and, ultimately, experimentation; interpreted professional growth through professional identity formation lenses, and used Theory of Planned Behavior constructs to clarify how attitudes, norms, and perceived control shaped employment intentions.

Seeing the system

Students described that population ageing helped them understand how Korea's national insurance structure, together with digital health/HIM and team-based rehabilitation, functioned as interconnected components supporting prevention, continuity of care, and accountability within the system. As cycles of experience → reflection → conceptualization unfolded, reflections shifted from description to judgment, separating practices that could transfer immediately—basic HIM routines, fall-risk checklists, caregiver training, standardized documentation—from those requiring policy capacity such as financing and benefit design. Once student noted, "Everything felt so digitalized—records, follow-up, prevention—and that makes care smoother than what I'm used to" (P1, W2). By week 4, several students articulated implementable ideas, signaling positive attitudes toward feasible behaviors and early abstract conceptualization—"HIM basics and a falls checklist seem doable even before policy shifts" (P9, W4).

Cultural-affective learning

Small but deliberate practices—bowing correctly, using respectful forms of address, basic Korean—shifted students from observing to relating. Through reflective observation that centered dignity as a lived value, students described warmth and gratitude alongside ambivalence when comparing institutional models to family-based norms at home. "Basic Korean was a lifeline-it let me connect, not only watch" (P3, W2); "Time with the elders showed me caregiving is a calling, not just a task" (P2, W3). These moments illustrate values internalization within professional identity formation and prompted active experimentation in subsequent encounters.

Table 3. Qualitative themes, illustrative quotations, and practical implications

Theme	Core learning	Representative quotation
Health-system literacy & transferability	Student connected ageing, insurance, digital records, and team rehabilitation to continuity and accountability; distinguished quick wins (HIM basics, falls checklist, caregiver education, standardized documentation) from policy-dependent elements (financing, benefits design).	"Everything felt so digitalized—records and follow-up made care smoother." (P1, W2)
Cultural immersion & affective learning	Small cultural acts and use of basic Korean shifted students from observing to relating; the dignity of older adults was experienced directly; ambivalence noted when contrasting institutional care with family-based norms.	"Just knowing basic Korean made a big difference. It helped me talk to people, not just stand there watching." (P3, W2)
Interprofessional teamwork & practice insight	Role clarity, brief huddles, and documentation/safety routines improved coordination; supervised practice and mentoring supported safe progression.	"Everyone knew what they were doing, and the notes showed exactly what was happening with the patients, so it all felt really organized." (P5, W3)
Professional identity, values & career recalibration	Students articulated a "think globally, serve locally" identity; enthusiasm tempered by recognition of required steps—language proficiency, further training, and longer mentored placements.	"I'll need better Korean and more qualifications—then I can contribute." (P6, W4)

Quotations are anonymized and lightly edited for clarity and length.
HIM = health information management.

Interprofessional teamwork

Visits and supervised practice highlighted role clarity (nurses, therapists, social workers, physicians), brief team huddles, and a documentation/safety culture aligned care delivery. Students reported adopting concrete behaviors—closed-loop communication, deliberate task-sharing—and linked these to safer, kinder care. "Everyone was on time, knew their role, and the paperwork matched the care" (P5, W3). These experiences increased perceived behavioral control (skills and supports available) and marked the experimentation phase in Kolb's cycle, reinforcing mentorship and staged entry into practice.

Professional identity and recalibration

Many students articulated a "think globally, serve locally" identity and named values to carry forward (dignity, equity, accountability). At the same time, several recalibrated near-term intentions toward immediate employment in elderly care, citing the need for language proficiency, further training, and longer mentored placements before independent roles; "My motivation is high, but I accept I need more preparation right now" (P8, W3). Read through identity formation, this reflects prudent role-claiming; mapped to Theory of Planned Behavior, intentions were tempered by subjective norms and perceived control rather than diminished interest. In sum, analytic insights about systems and teamwork were inseparable from the affective experiences that made those insights actionable.

Themes, illustrative quotations, and practical implications are summarized in **Table 3**.

DISCUSSION

This pilot pre-post mixed-methods study indicates that a short, structured international program can meaningfully strengthen public health undergraduates' global health competencies, professional values, and psychological capital, while also reshaping near-term career intentions through first-hand exposure to the realities of elderly care.[48] Situated within Korea's newly launched, government-funded employment-link invitation track under the Ministry of Education and NRF, this initiative represents one of the earliest policy-embedded efforts to connect foreign undergraduate trainees with Korea's long-term-care learning and practice environments—highlighting both its novelty and national relevance.[37,38]

Quantitatively, we observed large, directionally consistent improvements across GHC-SCS, PVS, and PCQ-12, with CIs excluding zero even after multiplicity adjustment; in a small, single-group pilot, effect size and interval estimates are the most informative metrics.[41,49] Even within compressed timelines, a design that integrates language preparation, mentored practice, and structured reflection can transform exposure into durable learning gains; reflective writing and facilitated debriefs in particular support sense-making, empathy, and professional identity formation.[24,50,51]

In contrast, students' employment intention for elderly-care or global health roles declined from pre- to post-program. Read alongside the qualitative strand, this pattern is best interpreted as recalibration rather than disengagement. Students recognized language demands, safety protocols, and organizational pressures, leading to a more realistic appraisal of readiness. Similar patterns have been documented in studies where direct exposure to system-level and cultural constraints tempers initial enthusiasm.[26,27] Furthermore, recent findings shows that financial hardship, irregular hours, absenteeism, and limited patient engagement reduce participation in NCD elderly-care services even when motivation is present.[52,53] Within the broader context of persistent long-term-care workforce shortages across OECD countries, these findings suggest that educational interventions should be complemented by structural supports to sustain student interest,[54] through this program did not attempt to examine such system-level outcomes.

Students also distinguished transferable "quick wins" (e.g., standardized documentation, fall-risk checks, caregiver education) from policy-dependent elements (e.g., financing, benefits design), reflecting improved health-systems literacy.[33,55] This suggests that short-term immersion can help student move beyond surface-level observations toward a more nuanced understanding of which practices are realistically adaptable in their own contexts and which require broader institutional or policy change.

This study has several strengths. By applying a pre-post mixed-methods design, it was able to capture not only measurable changes in competencies, values, and psychological resources but also the lived experiences that explained how these changes occurred. The use of validated instruments for the primary constructs increased confidence in the reliability of findings, while the integration of daily reflection journals and a structured debrief added qualitative richness. The program's policy-embedded context, as part of government-funded employment-link initiative, further enhances the practical relevance of results and positions this pilot as an early contribution to workforce policy discussions. Analytically, the focus on effect sizes and CIs, combined with a conservative multiplicity adjustment, reflects best practice for pilot research and strengthens interpretability.

At the same time, several limitations must be acknowledged. The small sample size (n = 10) and single-group design restrict generalizability and prevent casual inference. Outcomes were measured only immediately after the intervention, leaving the durability of effects uncertain. The setting, limited to one sending and one host institution, also constrains external validity. Most outcomes were self-reported raising the possibility of social desirability or Hawthorne effects, and the Employment Intention Survey, through theoretically grounded, lacks external validation. In addition, data collection was not blinded, objective or behavioral outcomes (such as language certification or job placement) were not included, and qualitative coding relied on a single primary coder, which may introduce interpretive bias. Finally, despite correction for multiple comparisons, the

combination of a small sample and multiple outcomes reduce precision, underscoring the exploratory nature of the findings.

Further studies should involve larger and more diverse cohorts across multiple institutions, with longer follow-up periods to assess the sustainability of observed changes. Incorporating objective or administrative endpoints, such as credentialing, supervised practice, or employment outcomes, would provide stronger evidence of impact. Testing program components—such as the intensity of language preparation, length of mentored placements, and structured reflection—could clarify which features are most cost effective. Strengthening partnerships with government and industry will also be critical to ensure that educational gains translate into safe, stable, and sustainable workforce participation.

This pilot study shows that a short, structured international program can enhance global health competencies, professional values, and psychological capital among Filipino public health undergraduates. At the same time, employment intentions in elderly care declined, reflecting a recalibration of expectations and readiness rather than disengagement. Such adjustment may indicate a constructive step toward informed and sustainable career decision-making.

Because this was a small-scale pilot study, findings should be regarded as preliminary. Replication with larger, controlled cohorts is needed to confirm these trends and establish causal inferences. These findings suggest that well-designed immersion programs can simultaneously build competencies and foster deliberate career planning. To maximize impact, educators and policymakers should integrate structured reflection, mentoring, and workforce supports, including language preparation and supervised transition roles. Future research with larger and comparative designs, extended follow-up, and behavioral endpoints will be important to test the durability of gains, identify the most effective components, and assess whether recalibrated intentions translate to workforce participation and retention in elderly care.

ACKNOWLEDGMENTS

We thank the faculty and staff of Bataan Peninsula State University and Myongji College for their partnership and support in organizing the training program, as well as the participating students for their valuable contributions.

SUPPLEMENTARY MATERIAL

Supplementary Table 1

Weekly curriculum and activity schedule of the 4-week program

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