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Near-peer mentoring influences self-regulated learning strategies among medical graduates in high-stakes exams

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Abstract

INTRODUCTION: The Philippine Physician Licensure examinations is a high-stakes examination needed to practice medicine in the Philippines. Prior studies have indicated that performance in examinations might be influenced by student self-regulated learning (SRL) strategies and near-peer mentoring. This study examined how near-peer mentoring influenced SRL strategies of students in the context of these high-stakes exams.

METHODS: We conducted a constructivist qualitative research study involving six online focus group discussions with 30 mentees (8 male, 22 female; mean age 28.37) from different medical schools and universities in the Philippines, who participated in a voluntary near-peer mentoring program within a medical review center's hybrid licensure preparation program Data were analyzed following a six-step approach of thematic analysis.

RESULTS: We identified four themes describing the roles of near-peer mentoring in influencing mentees' SRL, termed the 4Cs of near-peer mentoring: Chaperone, Commandant, Cheerleader and Confidante. Twelve subthemes clarified these roles. Near-peers co-regulated the learning of their mentees due to shared goals, fulfilled psychological needs for competence, autonomy and relatedness, provided a psychological safe space outside of teachers, family and friends and were preferred over faculty mentors due to their credibility, relatability and customized approach to the mentee's context.

CONCLUSION: Near-peer mentoring was perceived to enhance the self-regulated learning of medical graduates through academic and psychoemotional support, fulfilling different key roles. These findings call for developing structured near-peer mentoring programs in high-stakes examination settings, with mentor training aligned to the 4Cs and further research on long-term outcomes.

PRACTICE POINTS

- Near-peer mentors influence self-regulated learning through four roles: Chaperone, Commandant, Cheerleader, and Confidante.
- Mentors provide academic coaching (goal-setting, time management, accountability) and psychoemotional support (validation, mental health).
- Near-peers co-regulate learning with mentees due to shared goals and provide a psychological safe space.
- Students prefer near-peers over faculty mentors for credibility, relatability, and customized advice.
- The 4Cs model can guide mentor training in high-stakes examination settings.

BACKGROUND

High-stakes examinations include admission, licensure examination and certification examinations for practice. They are considered the norm in medical education as mandated by professional organizations

that all medical doctors should go through as they transition to various phases of their training[1, 2]. One of the most important high-stakes examinations are the medical licensure examinations. Passing these gate-keeper examinations assure the public that physicians have the required competencies to practice medicine safely and effectively[1, 3]. However, these examinations may be a barrier to healthcare provision - with a 1:16,666 doctor-patient ratio (World Health Organization recommends 1:1,000)[4], the Philippine physician licensure examinations has an overall passing rate of only 69.20% for the past 14 years and may contribute to a shortage of physicians.

In this light, effective preparation for these licensure examinations is crucial to ensure additional new physicians to be included in the workforce. Success is enhanced whenever medical graduates can successfully practice self-regulated learning (SRL)[1, 5–7]. SRL describes an iterative process where learners attempt to achieve their goals given their own learning challenges through adaptive monitoring, planning and control of their thoughts, emotions and behavior[8]. In the socio-cognitive perspective, SRL is described as a cyclical process in three phases: forethought, performance, and reflection[9]. In these phases, learners plan and set their goals, apply specific learning strategies while monitoring their understanding, and in the last phase reflect on their goal-achievement in order to adapt their goals and approach. Social cognitive theorists propose that SRL strategies depend on the student's knowledge on the strategies, decision making, and performance outcomes[10]. This knowledge is not asocial; all processes in the triadic model are learned from emulating and transforming inputs from the people in the student's environment[9, 10]. Therefore, environments should be created that would spur students' efforts toward learning, and not towards avoidance goals, something which may also be done by students in contrast[11]. Learners who struggle with self-regulation may exhibit low self-efficacy, inefficient study strategies and failure to adapt to challenges, leading to underperformance in these high-stakes exams[6, 12].

Mentoring by a near-peer may support medical graduates in their self-regulation strategies. Mentoring involves a bonded and reciprocal relationship between a more-experienced mentor and less-experienced mentee using the processes of listening and reflection[7]. A near-peer mentor is a type of mentor one to a few years senior to the mentee[13] although the seniority may vary across different contexts. During the mentoring process, the behavior, knowledge, attitude, and motivation of both mentor and mentee might be changed by their interaction[14]. Perceived benefits by mentees include enhancement of SRL processes of setting goals, development of strategies for attaining these goals, time management and increased confidence[14]. The feedback provided by other people like a well-meaning mentor is essential for effective self-regulation of the medical graduate[6].

Students struggling with SRL during board exam preparation may be helped in adjusting their strategies through near-peer mentoring. However, during the dedicated preparation period for high-stakes licensure exams that typically takes a few months, the impact of mentoring on self-regulation processes of students has not been explored yet. SRL and near-peer mentoring have their own specific positive effects on students preparing for the physician licensure examinations. While research has been done on effects of each to student outcomes, there is dearth in the literature regarding the interaction

between the two[11]. How near-peer mentoring influences self-regulation strategies among medical graduates preparing for a high-stakes licensure examination is thus a gap in the literature worth pursuing.

METHODS

We conducted an exploratory qualitative study utilized focus groups discussions involving mentees in the middle of their preparation for the medical licensure examinations. A constructivist approach was utilized as a framework, as lived experiences by individuals involved in the study was explored in detail in order to explain the interaction of SRL and mentoring.

Setting. To prepare for these high-stakes licensure examinations, medical graduates commonly enroll in a “parallel curriculum” or medical review centers which covers “high-yield” concepts since this correlates with better board exam scores[15]. This study was conducted at a Medical Review Center in Manila, Philippines within a hybrid preparatory (mainly online, but with some onsite sessions) program for the Philippine Physician Licensure Examinations which lasted from December 2024 to April 2025. The Medical Review Center is the largest in the Philippines with thousands of students representing all 70 medical schools in the country. It has developed its own mentorship program based on the Whitmore’s GROW model[16] using near-peers (past program participants who have passed the licensure examinations recently). The mentorship program is purely voluntary on both mentor and mentee sides. Mentors are given prior training. Both mentors and mentees have undergone lectures in self-regulated learning strategies and how they can improve through iterative self-reflection. Mentors meet their mentees onsite and online at least five times during the entire season, and keep in touch through zoom sessions, phone calls and chat. Mentees relay personal and academic issues to their mentors during one-on-one mentoring sessions that last for 30–60 minutes each; mentors provide personal counselling, academic tips and advice to their mentees utilizing the GROW model as framework. Participating in the mentorship program is optional on the side of the enrollee of the Medical Review Center. Mentors and mentees are matched based on guidelines instituted by the Medical Review Center.

Participants. A total of 30 mentees (8 males and 22 females, with an average age of 28.4 years) from a pool of 500 people participated in this study. Participants were medical graduates from a variety of medical schools in the Philippines, enrolled in the Medical Review Center. Recruitment of mentees was done through written and personal invitations from the mentors for practical and privacy reasons, aside from formal announcements about the research study given through their academic forum threads of the Medical Review Center. They were thoroughly oriented about the study and the informed consent form, which they all signed prior to the focus group discussions (FGDs).

Data collection. The students enrolled in the Medical Review Center were given descriptions of 40 potential mentors, and liberally chose their top three picks. Mentee applications were sent sequentially from the first, to the second, to the third choice, with the mentor either accepting or declining the application depending on his/her availability and compatibility. Once paired with a mentor, the mentor

will then contact the student and schedule their sessions. All mentees were ensured to be paired with a mentor. The mentor-mentee assignments were not disclosed to the Medical Review Center.

A pilot FGD made of mentors was conducted in February 2025 to improve the guide questions and FGD procedure. Consultation with the thesis advisor was done after the pilot to finetune the interview guide. There were six online Focus Group Discussions (FGDs) via Zoom conducted midway (March 2025) during the medical board preparation of the medical graduates. FGDs were conducted online and not onsite to increase representation of mentees staying outside of Metro Manila, facilitate orderly arrangement of responses by mentees, and accede to personal preference of mentees of an online setup for logistical reasons. Saturation of data – no new codes, insights or themes generated - was reached at six FGDs. No further FGDs were deemed necessary.

There were six FGD groups in total having five members each, with each session taking approximately one and half hours. The FGDs were facilitated and moderated by the author. Mentees were also oriented and repeatedly encouraged to report in a frank manner both positive and negative experiences with the mentoring program; FGDs were consciously conducted in a safe space free from moral judgements, where mentees' opinions and viewpoints were listened to by the entire group.

FGD participants were required to turn on their videos, speak in turns as instructed by the author-facilitator, and provide comments to each other’s answers by raising their hand or by typing in the zoom chat box. Participants were oriented on how to maximize the online setup, and to check for technical issues before participating. FGDs were conducted in English and Filipino to address the comfort of the mentees. They were transcribed and translated by two research assistants with fidelity to the languages used during the FGD, but English translation was provided for all Filipino portions. Whisper was used for initial transcription while Google translate was used to check for certain Filipino words with no obvious English translation. All transcriptions and translations were counterchecked by the author. The two research assistants were doctors who have undergone through the same mentor program by the Medical Review Center, and were given appropriate instruction, orientation and training for their roles harmonious with all pertinent legal and ethical guidelines.

Data analysis. Data analysis was done using NVivo 15 for Mac, and was processed using the six-step framework of thematic analysis: data familiarization, code generation, theme identification, theme review, theme definition and report production (Kiger & Varpio, 2020). This was chosen due to good balance of methodological rigidity and flexibility, and its practicality in addressing the time and resource-limited context of this study (Isbej, Waterval, Riquelme, Véliz, & Bruin, 2024; Kiger & Varpio, 2020). The six step framework of thematic analysis is compatible with the constructivist nature of this study, where reality is shaped by the participants interpretation of it.

Ethical considerations. This project was approved by St. Cabrini Medical Center-Asian Eye Institute Ethics Review Committee (SCMC-AEI Ethics Review Committee) in 2025. Certificate of Approval was given to the author with SMC-AE ERC Protocol Reference No. 2025-014.

RESULTS

Near-peer mentors fulfill different themes in the course of mentoring. Based on the thematic analysis of the six FGDs, four themes were identified related to academic coaching and psychoemotional support of the mentors to the mentees – hereby entitled "The 4Cs" – the "Chaperone", "Commandant", "Cheerleader" and "Confidante" roles of near-peer mentors (Figure 1). For academic coaching, a near-peer mentor served as (1) a Chaperone, analyzing mentees' goals, optimizing time management, and helping troubleshoot academic concerns, and (2) a Commandant, monitoring program compliance and task performance, holding mentees accountable, and promoting practice tests and engaged in "real talk". For psychoemotional support, a near-peer mentor served as (3) a Cheerleader, validating student experiences and promoting physical and emotional well-being, and (4) a Confidante, addressing personal mental health issues related to medical board exam preparation. 12 sub-themes have also been identified that clarify and exemplify each theme (Table 1) as perceived by the mentees.

A near-peer mentor is a Chaperone. Mentees found that their near-peer mentors provided necessary structure for their board exam preparation, offering a unique and reflective perspective on goal-setting, scheduling, and time management. Mentors were able to provide solutions and suggestions for academic issues from the perspective of someone who had recently gone through the same program. Mentors helped mentees focus on the process rather than the outcome. They encouraged mentees to define their ideal, realistic, and minimum goals and adjust as needed. One participant said:

"I noticed that there was an improvement in my review style as compared to before and now I am more goal oriented on a daily basis. I'm not just focused vaguely on the upcoming board exam. […]. You set daily goals, you have something concrete to accomplish—like finishing a practice test. Little by little, those small wins add up, and that's how progress happens." – Participant 5, FGD 2

Mentors also suggested various options without dictating what mentees should do. This approach empowered mentees as adult learners, reinforcing their responsibility for their own success. One FGD participant shared the following:

"She wasn't the type of mentor who would dictate what I needed to do. Instead, she gave me the right to decide how I wanted to approach things. She would provide suggestions that suited me, but ultimately, the final say was mine. She was just there to guide me in the right direction." – Participant 5, FGD 2

Mentees appreciated that mentors helped them create customized schedules that considered their unique circumstances, such as personal problems, attitude, and aptitude. Mentors also helped mentees manage "backlogs"—undone tasks due to inefficiencies or distractions—by providing strategies to optimize their time. One of the FGD participants narrated what his mentor advised him that he found helpful in terms of scheduling and time management:

"She helped me create a daily schedule, dividing the hours—how many hours for sleep, how many hours for breaks. She asked me how long I was comfortable taking breaks, which was nice because I realized that if I

take a break at an awkward time when I'm already in the zone, it's hard to stop just because the schedule says so. […]. Then we added everything up like doing math—7 hours of sleep, time allocated for eating." – Participant 2, FGD 6

A near-peer mentor is a Commandant. Near-peer mentors were seen as a source of order and discipline, helping mentees stay accountable for their mindset and actions. They engaged in candid conversations and tracked progress on schedules, daily tasks, and practice tests. Mentors served as a mirror, helping mentees reflect on their mindset and productivity, which fostered self-accountability and discipline. An FGD participant said the following:

"…you know someone's tracking your progress. You know someone is there checking on how you're doing, if you're being productive, efficient, or if you're slacking off, or if you're having a hard time. Also, my mentor has set up an accountability sheet on Google Sheets for us. Through that, we can personally track our progress. And by doing so, there's this sense of accountability—like, wait, I know I haven't finished this yet, but I should have by now." - Participant 2, FGD 2

Mentees valued the frank, critical insights from their mentors, which served as a wake-up call and a perspective they might not receive from family or friends. One mentee remarked:

"… I decided to get a mentor to get an unbiased opinion on what I should do. […]. then she asked me, "Why would you do that? Why would you delay the board exam?", and then I stated my reason. She made me realize, "Wait, if that's your reason, what difference does it make if you take it now versus October 2025?" That's what pushed me. […]. That's how Doc [Mentor] [FB13] used "real talk" on me. […]. I really appreciated the unbiased opinion and perspective. 'Cause if I tell those things to a family member, or a friend, they would just comfort me or pity me when I fail." - Participant 2, FGD 5

Mentors tracked, compared, and benchmarked practice test scores. They also guided mentees to reflect on their mistakes and understand the reasoning behind correct answers, which helped them identify high-yield topics. A mentee reported the following:

"… the advice my mentor gave me, that before each subject starts, I should try to answer a practice test just to gauge what I know and what I don't know yet, so that during the review, I can pick up on what I feel are my strengths in the topics, and what are my weaknesses that I need to revisit later on." - Participant 1, FGD 2

Mentors used trackers to monitor mentees' compliance with reading assignments, video lectures, and practice tests. This feedback helped mentees optimize their use of the Medical Review Center's resources. A mentee relayed the following:

“Dr. [Mentor] had a tracker for us, individual trackers that had what videos we watched, the handouts, how much we finished, and the practice tests. […]. And then she also told us that it's up to us if we wanted to look at other people's progress. […]. for me, I would check if I was lagging behind or if I was just in the middle. Even though it wasn't scores yet, you get a sense of how you're performing.” - Participant 2, FGD 6

A near-peer mentor is a Cheerleader. Mentees often described their near-peer mentors as "friends who truly care" or "big brother/sister who look out for you." Mentors positively impacted their mentees' self-efficacy and provided validation by sharing their own similar experiences. Near-peer mentors acted as cheerleaders to their mentees, giving inspirational messages and promoting positive outlook despite adversities. One of the FGD participants shared the following:

“What she’s doing is really helpful—she gives me assignments, tracks my progress, and acknowledges my growth. It uplifts me because I realize, "Wow, I used to be like that, and now I’ve come so far." She always acknowledges my small wins. She reminds me not to jump ahead to the big picture that hasn’t happened yet, but instead, to focus on what I can do at the moment.” - Participant 1, FGD 4

Mentors, aware of the competitive mindset among medical graduates, encouraged mentees to avoid sacrificing their physical and mental health. They emphasized the importance of taking breaks and getting adequate sleep. A mentee remarked:

“She would always advise me to take breaks, particularly following the prescribed schedule of resting on Saturdays. […]. She always emphasized the importance of prioritizing mental health because it’s hard to study effectively when your mind doesn’t get enough rest. That reminder helped me a lot—to not just focus on studying all the time but to recognize that there’s life outside of it, that it’s okay to relax even for a short while.” - Participant 1, FGD 2

Mentors normalized the mentees' feelings and experiences, which helped reduce their emotional burden. They encouraged mentees to acknowledge their negative emotions while consciously seeking positive responses. An FGD participant shared the following:

“When you feel down right now, or feel tired right now, it means a lot to hear from your mentor that what you feel is valid. The good thing about being validated is for you to feel this is actually normal. To help you weigh whether you’re being too much, too emotional, too lazy or too slow. The validation that what you’re feeling is normal, lessens that negative feeling. It gives me energy to study again. So the validation does help to be honest.” - Participant 3, FGD 5

A near-peer mentor is a Confidante. Mentees felt that their near-peer mentors acted as a first-line support for mental health concerns, such as anxiety, depression, and burnout. They were also able to discuss personal problems that interfered with their preparation and receive advice on how to adapt. Mentors prompted mentees to self-reflect on their study tactics, performance, and overall well-being. This process of reflection often led to improvements. One of the mentees remarked:

"She asked me, "Can you expound on what went wrong?" So, I kept talking and talking […] I appreciated that she helped me discover that and we had to process my emotions at that time because during our first meeting, I was already crying. I opened up to her that October was a very dark time. I had suicidal ideations […]. After October, I really felt like I hit rock-bottom, which was unusual for me because normally, I can self-regulate." - Participant 2, FGD 3

Mentors screened for and attempted to minimize the effects of conditions like burnout, which several mentees reported as a common issue. They also addressed anxiety and depression. Several mentees reported:

"My homework [from mentor] last week was to take note of my level of energy. You mentioned something about total burnout. That's actually the reason why I have backlogs. I had two days just staring at the wall while the lecture was playing. […]. She made me realize that it's ok to pause because she did the same thing. She would pause and search google, which I thought was a bad thing before. I changed that now, because I realized we have the modality to pause." - Participant 4, FGD 3

"My anxiety was almost debilitating—I could only study for two hours a day, and the rest of the time, I would just lie down, close my eyes, or sleep. She really drilled it into me not to be afraid of failing. She kept saying, 'Don't be afraid of failing. Don't be afraid of failing. Don't be afraid of failing.' Because yes, failing is a possibility, but so is passing." -Participant 3, FGD 6

Other issues also manifested during mentoring. Aside from the four themes identified above, there were three important issues that came up during the FGDs. First, while most mentees were satisfied, some noted a few mentors were not as engaged. These mentors provided irregular or insufficient sessions, gave generic advice, and were slow to respond. Mentees reported the following:

"We don't have a Viber group, Doc—just private messages. She introduced herself and checked in on me, then I shared how I was feeling at that time, and that was it. Actually, Doc, she's quite busy, so she doesn't always get to respond on the same day. Sometimes, when I message her, she replies maybe two to three days later, but it's okay, Doc." – Participant 4, FGD 6

"[…] they were templated answers. It felt like she would say stuff she already said last week. That's why I enjoy the mentoring now, because of the feedback." – Participant 3, FGD 3

Second, mentees preferred mentors who they could relate to, and in turn can relate to them. They expressed a desire for a common ground with their mentors. While some were open to mentoring from any doctor who has taken the medical board examinations, most preferred someone who has undergone through the same experiences in more recent times. A mentee shared this sentiment:

"Of course, those people are already senior doctors or consultants. They're already on the pedestal. […]. I feel like my struggles may become negligible because it's been too long since they experienced taking the board exams. So of course, human nature is you tend to lowball your previous struggles. […] I need

someone not necessarily younger, but someone who I feel can relate to me because they're gone through it recently." - Participant 2, FGD 5

Third, the mentees expressed the desire for psychological safe spaces that they can discuss both problems in studying and in their personal lives – outside of their families, friends and peers. The mentoring sessions provided these safe spaces that they want free from negative repercussions. Mentees shared the following:

"[…] my fear was being judged that I'm not doing my part or am not giving my all. They don't really say it explicitly, but you have this feeling like it's implied." – Participant 2, FGD 3

"My mentor asked me, 'Maybe you're doing well based on what you're telling me. You're answering the practice tests, the additional quiz etc., but why do you think it's not reflecting?' So that one thing I didn't want to happen, did. I just kept crying in front of her for two hours. Our zoom meeting was supposed to be for just 30 minutes but it ended in two hours, which shocked us both, but she was very patient with me." – Participant 4, FGD 3

DISCUSSION

Based on the thematic analysis of focus group discussions with mentees, near-peer mentoring positively influenced and may improve the SRL strategies of medical graduates preparing for the Philippine physician licensure examinations in all three phases (forethought, performance and self-reflection phases) through academic coaching and psychoemotional support unique to each mentee. Academic coaching targeted the "brain" – it addressed the cognitive needs and desires of mentees in their preparation for these high-stakes exams, including the day-to-day study strategies needed to optimally learn the material given the time constraints. The psychoemotional support meanwhile targeted the "heart" – it addressed the affective part of the mentees' preparation – the mental and emotional comfort that they require and seek during stressful time of medical board exam preparation. This "brain and heart" model is manifested into four different roles that mentors played in their support of their mentees - the 4Cs, as a Chaperone, Commandant, Cheerleader and Confidante.

Using self-regulated learning (SRL) as a framework enables educators to identify struggling students and design tailored programs, as SRL strategies not only distinguish high- and low-achieving learners but also mitigate stressors of high-stakes licensure exams while enhancing academic performance in both traditional and online settings[1, 5, 6, 17–19]. In the variety of theoretical models describing the process of SRL, almost all models describe SRL in a cyclical process. The Zimmerman model, a cyclical framework of forethought, performance, and self-reflection phases, was chosen for this study as it integrates cognition, metacognition, motivation, and emotion, making it a practical and ideal approach to examine SRL among medical graduates preparing for licensure examinations [6, 11, 20] (Fig. 2). SRL strategies are associated with the best academic outcomes, compared to conventional strategies such as rehearsal, elaboration, and organization[5].

Mentors might play a crucial role in helping students regulate their learning more effectively[7, 21, 22]. Students struggle in performing SRL, especially if they choose what is expedient over what is effective in terms of learning during their medical board preparation[12, 23, 24]. As SRL often does not happen by itself, mentors provide both psychosocial advice and career support [14, 25]. Mentoring fosters empathy and relatability, providing mentees with motivation, skill development, stress reduction, and confidence, while offering mentors valuable teaching experience and professional growth[13, 14, 26–28]. Mentors need not be senior teachers - this study demonstrated that near-peers are effective among younger students.

As a Chaperone, near-peer mentoring gave guidance to mentees in terms of the SRL subphases of goal-setting (forethought phase), strategic planning (forethought phase) and time management (performance phase). This guidance is a form of scaffolding based on the mentees' specific learning needs similar to the zone of proximal development described by Vygotsky [29]. Near-peer mentors supported mentees in formulating practical daily study goals and suggested effective study strategies. These suggestions were not imposed on the mentees; mentees still had the final say. With mentors that were near-peers who had recently finished the program and succeeded in passing the medical board examinations, the mentees were aware that the recommendations were credible, effective and practical, and mentees would most likely follow[13]. Time management was identified by most mentees as a pressing concern since nearly all the mentees interviewed had backlogs. Mentees reported improvements in terms of better schedule, and implementation of tactics for backlogs/undone tasks due to near-peer mentoring. Mentees worked with their near-peer mentors side-by-side when a near-peer mentor acted as Chaperone – the atmosphere was collegial, the power dynamics was that of close partners or peers.

In their role as Commandant, near-peer mentors were more directive to mentees in terms of the SRL subphases of goal orientation/"accountability buddy" (forethought phase), outcomes expectation/"real-talk" (forethought phase), task strategies via practice testing (performance phase) and self-evaluation via program compliance and progress monitoring (self-reflection phase). Mentees reported that near-peer mentors fostered accountability by emphasizing personal responsibility for exam success and offering unfiltered, practical guidance. Mentors encouraged practice testing [30] which led to greater adoption of this strategy and improved performance in summative exams. They also provided individualized monitoring and reflection that the review center could not deliver due to its large population, enabling mentees to identify barriers, adjust strategies, and enhance both study habits and examination outcomes. When a near-peer mentor acted as Commandant, the atmosphere was frank and utilitarian, with the power dynamics of near-peer mentors leading their mentees. This was, however, not in opposition to the theme of Chaperone – near-peer mentors did not impose strategies but imposed instead accountability and discipline. The impact of this Commandant theme is potentially better self-motivation, self-control and self-judgment among mentees.

As Cheerleaders, near-peer mentors boosted mentees' confidence and morale across all SRL phases—enhancing self-efficacy in forethought, promoting health and balance in performance, and providing validation in self-reflection. Mentees consistently described mentoring sessions as a vital source of

inspiration and reassurance, often using the word “validation” to capture how their experiences and emotions were normalized by mentors who had faced the same challenges [28], and viewing mentors as successful version of themselves [14]. Strategies included motivational messages, sharing personal success stories, and reframing tasks to emphasize effort (e.g., ascribing success to effort rather than ability). This role fostered emotional relief, self-motivation, and resilience, particularly valuable for academically at-risk graduates preparing for licensure examinations [31].

As a Confidante, near-peer mentoring is collaborative with mentees in terms of the SRL subphases of self-evaluation (self-reflection phase) and self-satisfaction via identification, monitoring and mitigation of mental health issues (self-reflection phase). A near-peer mentor acting as a Confidante focuses on mental health, while those acting as a Cheerleader focuses on emotional well-being. Mentees reported being more reflective and introspective as a result of their mentoring sessions, triggering change in behavior that may lead to better performance [12, 32]. Mentees also reported appreciation for their near-peer mentors addressing the elephant in the room – mental health issues that medical professionals may be embarrassed to discuss in the open – including burnout, anxiety and depression. The mentoring sessions provided a psychological safe space for discussion of personal issues related to mental health – an issue that mentees may be hesitant to discuss with their parents, teachers and peers due to power dynamics, fear of negative consequences and other reasons [29]. In severe cases, the mentors refer mentees to psychiatrists in order to facilitate better management of mental health concerns. Mentees work side-by-side again with their near-peer mentors when a near-peer mentor acts as Confidante – the atmosphere is more open and non-judgmental, with the power dynamics of near-peer mentors working in close coordination with their mentees. The impact of this Confidante theme is potentially better self-affect among mentees – mentees who are truly self-regulators and with improved mental health. In some instances, it may potentially even decrease the incidence of self-harm among the mentees [33].

There are similarities and differences in terms of the results of this study compared with previous studies on mentoring. The mentorship relationship theory states that mentors have both career and psychosocial functions [14]. Near-peer mentoring in a high-stakes examinations setting will only have psychosocial functions (all 4Cs but especially as Cheerleader and Confidante). Academic coaching (Chaperone and Commandant roles) replaces the career functions since the overall goal in this context is to help the mentee pass the medical board examinations and not career development and advancement. Near-peer mentoring in a high-stakes examinations setting may be considered a milder form of cognitive apprenticeship where mentoring is combined to knowledge or skills transmission (e.g., test-taking skills) [14]. However, the focus of near-peer mentoring in this context is only problem solving rather than the deeper understanding of concepts. Benefits of peer mentoring identified in previous studies like support for personal development, stress reduction and ease of transitioning are also seen with near-peer mentoring in this context, and are also viewed as a valuable form of social and academic support[13]. Conventionally, the roles of mentor (e.g., facilitator, coach, monitor, exemplar) were defined by mentors rather than mentees but they are quite similar to the roles described by mentees in this study[34, 35]. In this study, near-peer mentoring in the context of high-stakes examination has a focus on mental health (Confidante role) that is not readily seen in other studies on mentoring which tend to focus

on professional rather than personal issues. This may be due to cultural differences or to the stressful situation the mentees find themselves in.

There were other key findings that came out of this exploratory study. Near-peer mentors must adapt to their mentees' needs and must not provide a one-size-fits all approach similar to classical assumptions on mentoring [14]. Additionally, provision of personalized schedules, customized strategies, and individualized approach to their issues and concerns were much appreciated. A "bad mentor" was described as a mentor that not only neglected the Chaperone, Commandant, Cheerleader and Confidants roles, but also some that give generic (non-customized) prescriptions. Finally, near-peer mentors that adapted to the mentee's specific context in an empathetic and regular manner were more desirable[29, 35].

While mentees were open to any doctor to serve as mentors, our results showed that most would prefer a near-peer, potentially due to less intimidation, better relatability and more empathy[13]. A faculty mentor may not be able to establish a psychological safe space due to power dynamics unfavorably on the side of the faculty mentor, may have forgotten his own medical board preparation experiences, and may not necessarily share the same concerns as his mentees, all in contrast to a near-peer mentor. Thus, near-peer mentors may empathize more with the mentee given his own recent struggles and subsequent success in the medical board examinations[13, 14, 29, 34]. In terms of the 4Cs – Chaperone, Commandant, Cheerleader and Confidante, a senior teacher may not give customized advice as a Chaperone, may be too overzealous as a Commandant, may not find enough common ground with the student as a Cheerleader or Confidante[13, 14]. Thus, we propose that a more senior medical teacher may be better positioned to offer career advice due to their career achievements and experience.

Near-peer mentors also co-regulated their mentees due to the shared goal of helping the mentee pass the medical board examinations that required collaborative problem-solving[14]. This co-regulation was done through good scaffolding, but in contrast to the studies of co-regulation in the clinical setting, there was no obvious shift in terms of focus, drive and approach [36]. This could in term lead to better intrinsic motivation leading to better learning and academic performance [27, 37]. It appeared that the co-regulation was stable and would be maintained until the actual medical board examinations. The end-goal of near-peer mentoring in a high-stakes examination setting is still, above all, to pass the exams; it does not necessitate that the student will transition from a better student to a better professional.

It is worth exploring the creation of near-peer mentoring programs in order to positively influence SRL strategies of medical students, medical graduates and medical residents. For those populations, academic coaching and psychoemotional support are warranted especially in high-stakes examinations setting (e.g., comprehensive examinations, objectives-structured clinical examinations or OSCE, final examinations in medical school and residency, oral examinations, medical residency entrance and certifying examinations). Given the results of the study, new mentors must be recruited based on their ability and commitment to the 4Cs – their roles as Chaperone, Commandant, Cheerleader and Confidante. Their training could also be aligned according to the 4Cs– they must be trained in effective

goal setting, time management and study tactics, be able to work in front of, side-by-side with, or behind their mentees, and positively address their emotional and mental health needs. The use of near-peer rather than medical faculty for mentoring programs may provide a more cost-effective way of academic and social support for new medical students and residents – medical students and young alumni could be utilized at a lower cost (and sometimes for free) than senior medical faculty. This could also free up the time of medical faculty to concentrate on teaching and research.

This study has several limitations. First, this study was based on a single author's perception and analysis of the phenomenon being studied, and while the author was consciously using the subjectivity in a positive manner in order to answer the research question, this may be unduly influenced also by his background as teacher and administrator. Second, language translation and cultural idiosyncrasies may also come into play during the interpretation of data. Third, this study was specific for those preparing for a high-stakes examination like the medical board examinations, and may not readily be transferable to other training contexts. Effort was made to address these limitations in coordination with thesis advisers, and quality standards in research were adhered to.

Regardless, this study offers key strengths that reinforce our findings. First, this study drew mentees from the largest medical review center in the Philippines, representing graduates of all 70 medical schools nationwide. This enhances the diversity and transferability of insights across varied academic backgrounds. Second, the study employed a constructivist qualitative design, conducted six well-structured focus group discussions until data saturation, and analyzed transcripts using a six-step thematic analysis framework in NVivo, ensuring systematic and credible interpretation of data. Finally, by situating the research within a real-world, high-stakes licensure preparation program and focusing on near-peer mentoring grounded in the GROW model, the findings are directly applicable to medical education practice, with clear implications for designing mentoring programs in similar high-pressure contexts.

Future research should examine to what extent the support of the near-peer mentoring also lasts beyond the exam and how it actually improved students SRL in the long term. Additionally, there is a need to investigate whether students actually performed better in the medical board examinations when they were supported by a near-peer mentor. The perspective of the near-peer mentors – how they viewed they roles, and how they adjusted their mentoring strategy in response to the mentees' context, is also worth studying. A more detailed study comparing near-peer mentors and senior faculty mentors may also impact future mentoring programs.

CONCLUSION

Near-peer mentoring positively influences SRL strategies of medical graduates preparing for high-stakes licensure examinations through academic coaching and psychoemotional support. There are four key roles - Chaperone, Commandant, Cheerleader and Confidante (i.e., the 4Cs) - providing academic and social support outside of teacher, family and friends during the stressful time preparing for their

examinations. This study provides a level of support to the synergistic effect of near-peer mentoring and SRL – if near-peer mentoring improves SRL, their combined effects on academic performance may be more than the sum of them taken individually. It is worth exploring the creation of near-peer mentoring programs especially in high-stakes examination settings, and aligning recruitment and training of mentors based on the 4Cs.

Abbreviations

4Cs	Chaperone, Commandant, Cheerleader, Confidante (the four roles of near-peer mentoring)
FGD	Focus Group Discussion
GROW	Goal, Reality, Options, Will (Whitmore's mentoring model)
NVivo	Qualitative data analysis software
OSCE	Objective Structured Clinical Examination
SCMC-AEI	St. Cabrini Medical Center-Asian Eye Institute
SRL	Self-Regulated Learning
WHO	World Health Organization

Declarations

Ethics approval and consent to participate

The study was performed in accordance with relevant guidelines and regulations (such as the Declaration of Helsinki). This study was approved by the St. Cabrini Medical Center-Asian Eye Institute Ethics Review Committee (SCMC-AEI Ethics Review Committee) in 2025 (Protocol Reference No. 2025-014). Informed consent was obtained from all individual participants included in the study.

Consent for publication

Not applicable. This manuscript does not contain any individual person’s data in any form (e.g., individual details, images, or videos).

Availability of data and materials

The datasets used and/or analysed during the current study are available from the corresponding author on reasonable request.

Competing interests

The authors declare that they have no competing interests.

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Authors' contributions

EPCB: Conceptualization, Investigation, Methodology, Writing – original draft, Writing – review and editing.

FB: Conceptualization, Investigation, Methodology, Writing – original draft, Writing – review and editing, Supervision, Project administration.

MCEGE: Data curation, Formal analysis, Writing – original draft, Writing – review and editing.

FG.: Data curation, Formal analysis, Writing – original draft, Writing – review and editing.

VJUT: Writing – original draft, Writing – review and editing.

MLCM: Writing – original draft, Writing – review and editing.

MSVJ.: Writing – original draft, Writing – review and editing, Validation, Supervision.

All authors read and approved the final manuscript.

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Figures

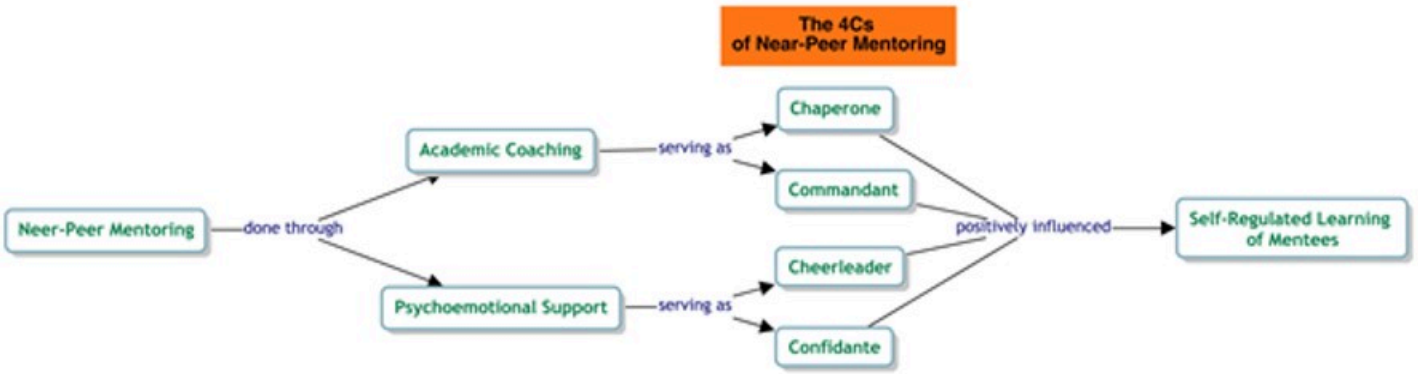


Figure 1

Concept map illustrating how near-peer mentoring enhances self-regulated learning of mentees through academic coaching and psychoemotional support, expressed in the four mentoring roles (4Cs): Chaperone, Commandant, Cheerleader, and Confidante.

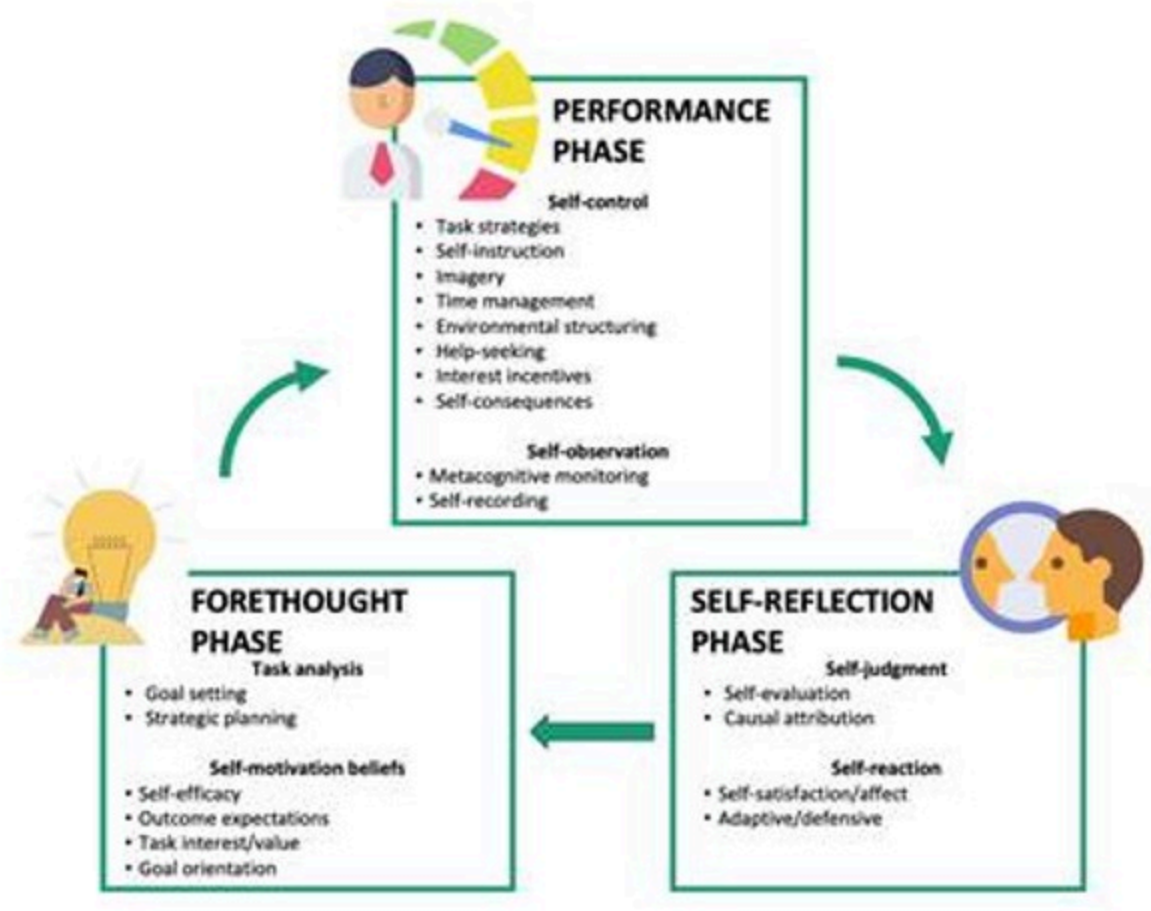


Figure 2

The cyclical Zimmerman model of self-regulated learning, illustrating the forethought, performance, and self-reflection phases with their corresponding subprocesses.