
Association Between Impostor Syndrome and Academic Self-Efficacy Among Medical Students

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ABSTRACT

Objective: Impostor syndrome (IS) is a psychological phenomenon characterized by persistent self-doubt and fear of being exposed as a fraud despite evident achievement. Medical students, given the high-stakes and demanding nature of their training, are particularly vulnerable to this experience. Academic self-efficacy, defined as one's belief in their capacity to perform academically, is a key determinant of student success and well-being. However, the association between IS and SE in the Philippine medical education context remains underexplored. The study aimed to determine the association between impostor syndrome and self-efficacy among medical students.

Methods: A cross-sectional analytical study was conducted among 146 Year 1-3 medical students at Far Eastern University - Dr. Nicanor Reyes Medical Foundation (FEU-NRMF) during the academic year 2025-2026. Multi-stage cluster sampling was employed for participant selection. Impostor syndrome was measured using the Clance Impostor Phenomenon Scale (CIPS), while academic self-efficacy was assessed using the Academic Self-Efficacy Scale (ASES). Associations were examined using the Fisher's Exact test, odds ratios with 95% confidence intervals, and Pearson and Spearman correlation analysis.

Results: A high prevalence of IS was observed among 95.2% of respondents meeting the diagnostic threshold. Academic self-efficacy was distributed relatively evenly across low, moderate, and high categories. A significant inverse relationship was observed between impostor syndrome and academic self-efficacy, with students who did not exhibit impostor syndrome showing notably greater odds of reporting high academic self-efficacy.

Conclusion: Impostor syndrome was highly prevalent among medical students and was significantly associated with lower academic self-efficacy. These findings emphasized the importance of addressing psychological well-being in medical education and highlighted the need for institutional support programs and further research across the various medical student populations.

Key words: impostor syndrome, academic self-efficacy, medical students, Clance Impostor Scale, cross-sectional study, medical education

Medical education is widely regarded as one of the most academically and emotionally demanding fields, with students experiencing heightened levels of stress, exhaustion, and burnout, especially during high-stakes evaluation periods (Avena et al., 2024).

This pressure-filled setting not only jeopardizes mental health and learning outcomes but also fosters self-doubt and internalized inadequacy—conditions closely linked to impostor syndrome and academic self-efficacy (Chua et al. 2025). Impostor syndrome (IS) describes the continuous belief of being unworthy of success or inadequate in spite of irrefutable evidence of competence. It consisted of perfectionism patterns, fear of failure, and challenges internalizing success. (Clance, 1985). Chemers

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et al. (2001) defined academic self-efficacy as a student's capacity to successfully perform a range of academic tasks. As Franchi and Russell-Sewell (2023) conducted a mixed-methods study at The University of Sheffield Medical School, findings indicate that the structure and culture of medical education can contribute significantly to impostor feelings. A recent study even found that nearly half of clinical year medical students experienced IS (Thaiyanto et al., 2024). The article entitled "Academic Factors Contributing to Impostor Syndrome: Nationwide Study" (2024) reported that students' perception of insufficient academic performance, even when they are objectively successful, can strongly contribute to impostor feelings, particularly when grades are treated as the sole measure of worth. Insufficient feedback or recognition from mentors and supervisors has been identified across disciplines as a consistent contributor to impostor feelings, leaving students uncertain about their competence despite objective success (Wang & Li, 2023). Further recent systematic review and metaanalysis by Salari et al. (2025), the impostor phenomenon poses a substantial concern in medical education as it reveals 30 studies involving over 11,400 health service providers reported a pooled global prevalence of 62% for IS. These findings underscore the significant magnitude of impostor feelings among medical students, with considerable important implications for their academic self-efficacy and well-being under scrutiny.

Impostor syndrome has been widely documented as a barrier to academic achievement, self-efficacy, and mental health, with studies consistently showing its complex interplay with cultural, institutional, and psychological factors. Several works have directly linked IS with academic self-efficacy: Franchi and Russell-Sewell (2023) highlighted how the hierarchical and competitive culture of medical education fosters impostor feelings. Batur et al. (2024) found that Turkish medical residents with stronger impostor tendencies reported significantly lower academic self-efficacy. A review by Wang and Li (2023) further pointed out methodological limitations in the literature, such as reliance on self-reports, cross-sectional designs, inconsistent measures, and a lack of subgroup analysis, which make it difficult to capture variations across populations and training stages. Reinforcing its global scope, Salari et al. (2025) reported a 62% prevalence of IS in healthcare education, underlining the magnitude of the issue but also the need for localized data. In the Philippines,

Abduhalim (2025) observed that IS coexisted with self-efficacy among students at Sulu State College, suggesting cultural and competitive academic influences. Austria et al. (2024) identified parental perfectionism as a predictor of IS among honor students and Apilado (2024) noted that academic pressures and transitional challenges heightened impostor experiences. Complementary findings by Chatterjee (2024) and Pákozdy et al. (2024) confirmed that IS undermines self-efficacy and happiness while reinforcing maladaptive perfectionism, with Pákozdy et al. also showing gender differences and the mediating role of IS in reducing well-being. Within medical education, Chua et al. (2025) documented prevalence rates as high as 60% and linked IS to burnout, depression, and anxiety, while Setiani et al. (2024) found over half of medical students, particularly women and those in clinical years, reported moderate to severe impostor feelings driven by evaluative pressures. Similarly, Diaconescu et al. (2024) revealed that IS mediates the effects of burnout on self-esteem and performance, and Thaiyanto et al. (2024) showed that among Thai medical students, high impostor scores were predictive of stress, anxiety, and depression. Studies by Abduhalim (2025), Ok et al. (2025), and Suriyasathaporn et al. (2025) indicate that, in certain contexts, medical students can experience high IS while maintaining high academic self-efficacy, suggesting a positive relationship between these constructs. Collectively, these studies show that IS consistently erodes confidence, amplifies perfectionism, and threatens mental health, with cultural, familial, and institutional contexts shaping its expression, thereby underscoring the urgent need for interventions that enhance resilience, promote belonging, and reform academic systems to reduce its prevalence and impact.

In the Philippine context, few studies have yet documented the prevalence and relationship between IS and academic self-efficacy among medical students. Most local research emphasized undergraduates or parental influences, leaving a gap in understanding how IS specifically interacts with self-efficacy during the stressors of medical training. Addressing this gap is crucial, as these psychological factors may directly contribute in affecting academic performance, confidence and motivation. These constructs are critical to understanding the internal experiences of medical students, yet they remain underexplored within the local context. The goal of this study is to describe the prevalence and examine associations

across year levels 1-3. Year Level 4 was excluded to ensure homogeneity since it represents the formative and pre-clinical phase of learning in medical school. The study conducted by Levant et al. (2020) showed that impostor syndrome is highly prevalent among third-year medical students, due to their transition from pre-medical phase to early clinical learning phases. However, clerkship Year Level 4 represents the merging of concepts learned in the premedical phase into practice, which is a vital component of the developmental process as future physicians (Franchi T & Russell-Sewell N., 2022). Multiple experiences of Year Level 4 students as well as various role expectations can be sources of variability that contribute to the validity and comparability of results. By providing baseline evidence, the paper seeks to guide future interventions and inform institutional support, ultimately fostering a more empathetic and responsive learning environment for medical students.

MATERIALS AND METHODS

Study Design

This study used a cross-sectional analytical design to investigate the association between impostor syndrome (exposure variable) and academic self-efficacy (outcome variable) among medical students.

A multi-stage cluster sampling methodology was utilized, wherein the student population was divided into clusters based on year level and section. A random number generator was used to select students at random from each cluster.

Setting

The study was done on the grounds of Far Eastern University - Dr. Nicanor Reyes Medical Foundation (FEU-NRMF). Data collection was carried out over a four-week period from February 27 to March 23, 2026. Recruitment and survey dissemination were conducted online using Google Forms and social media platforms, including Messenger, official class group chats, and student council communication channels. Follow-up reminders were sent every three days through the class presidents of the selected clusters.

Participants

Participants were selected using a multi-stage cluster sampling technique. Each year level was divided into sections, and students were randomly selected from each section. The list of sections was obtained with permission from the School of Medicine Dean. All students within selected clusters were invited to participate voluntarily. The study population consisted of FEU-NRMF medical students enrolled in the Academic Year 2025–2026. Criteria for eligibility required that assigned respondents be currently enrolled at FEU-NRMF and are medical students from Year Levels 1 to 3 while students who are on Leave of Absence (LOA) during the study period were excluded.

Variables

Impostor syndrome (IS), the independent variable in this study, measured using the Clance Impostor Phenomenon Scale (CIPS), a 20-item questionnaire with a 5-point Likert scale ranging from 1 (not at all true) to 5 (very true). Total scores of the scale range from 20 to 100. If a score is 41 or higher there is presence of IS, but a score below 40 IS is considered absent. Academic self-efficacy (SE) is the dependent variable, and it is assessed using the Academic Self-Efficacy Scale (ASES), a 40-item questionnaire with a 5-point Likert scale. Academic SE results are divided into low (below the 33rd percentile), moderate (33rd–67th percentile), and high (above the 67th percentile). The study also considers several confounding variables, including age (in years), sex (male or female), and year levels—composed of Year Levels 1, 2, or 3. Likewise, the effect modifiers identified in the study include structure and culture of medical education, perceived insufficient academic performance, limited feedback or recognition from mentors or supervisors and parental perfectionism and academic pressure.

Data Sources / Management

All responses gathered from the online questionnaires were recorded in Google Forms and stored in Google Sheets for initial processing. The authors reviewed the raw dataset to check for completeness and to identify potential errors such as duplicate or incomplete responses. The data were then organized and encoded according to the scoring guidelines of the Clance

Impostor Phenomenon Scale (CIPS) and the Academic Self-Efficacy Scale (ASES).

Once encoding and categorization were completed, the dataset was exported and analyzed using Jamovi Statistical Software for use in the study. This software allowed the computation of both descriptive and inferential statistics to address the research objectives. To ensure confidentiality and data integrity, all data collected were kept in a password-encoded folder that only the researchers could access. Data encryption techniques, including limited document-sharing access to data tables among corresponding members only, were applied for data storage and retrieval for a period of three years.

Bias

Potential sources of bias were carefully addressed through both methodological and ethical safeguards. Selection bias was minimized by employing a multi-stage cluster random sampling technique, ensuring that participants from different year levels and sections had an equal chance of inclusion. Response bias was reduced by maintaining strict anonymity and emphasizing the voluntary nature of participation, thereby encouraging honest and unbiased responses. The use of standardized and validated tools that have shown strong reliability and validity, such as Academic Self-Efficacy Scale (ASES) and Clance Impostor Phenomenon Scale (CIPS), helped reduce information bias. To further uphold ethical standards, informed consent was obtained electronically prior to participation. This consent outlined the goal of the study, its procedures, and participants' rights, including the right to withdraw without penalty. Only respondents who provided consent were included in the analysis, while those who declined were excluded. Confidentiality was upheld by avoiding the gathering of direct personal identifiers and storing all data in encrypted, password-protected files that are only accessible by the researchers. Additionally, measures were taken to reduce any psychological discomfort by letting participants skip questions and giving them access to counseling services if necessary. These combined methodological and ethical strategies helped reduce bias and ensured the integrity and credibility of the study findings.

Study Size

The sample size was calculated based on a hypothesis test for the difference in proportions of

low self-efficacy between students with and without impostor syndrome. The assumptions included a 50% prevalence of low self-efficacy among students with impostor syndrome and 30% among those without, with a 5% alpha error, 80% power, and a one-tailed hypothesis. Based on these parameters, the required sample size was 73 participants per group, a total of 146.

Statistical Methods

To characterize the properties of the continuous and categorical variables in the study, the authors calculated descriptive statistics such as mean, median, range, standard deviation, frequency, and percentage. The median range was also calculated. To investigate the relationship between individual variables, they performed univariate analysis using the Chi-square and odds ratio with a 95% confidence interval.

RESULTS

Participants

A total of 146 medical students enrolled at FEU-NRMF completed the survey. The majority of respondents were female ($n = 113$, 77.4%), while male respondents comprised 22.6% ($n = 33$) of the sample. In terms of year level distribution, 1st year medical students constituted the largest group ($n = 78$, 53.4%), followed by 2nd year students ($n = 54$, 37.0%), and 3rd year students ($n = 14$, 9.6%).

Table 2 shows a strikingly high prevalence of impostor syndrome among the study population. Only 7 respondents (4.8%) reported scores indicative of few IS characteristics (scores ≤ 40), classified as absence of IS. The remaining 139 respondents (95.2%) scored ≥ 41 , indicating the presence of IS. Among those with IS, the most prevalent category was frequent impostor feelings (scores 61–80), with 83 respondents (56.8%), followed by moderate IP experiences (scores 41–60) at 36 respondents (24.7%), and intense IP experiences (scores > 80) at 20 respondents (13.7%). The overall mean CIPS score was 66.86 (SD = 13.21), with a median of 68.00, and scores ranging from 31 to 95. The 95% confidence interval for IS prevalence was 91.7%–98.7%.

Table 3 shows that the mean ASES score for the entire sample was 136.36 (SD = 21.01), with a median of 135.50 and scores ranging from 85 to 196. The

33rd percentile was 127.00 and the 67th percentile was 144.00. Based on these cutoffs, 48 respondents (32.9%) were classified as having low academic self-efficacy, 52 respondents (35.6%) as moderate,

and 46 respondents (31.5%) as high. The distribution across the three categories was relatively balanced, suggesting a wide range of self-efficacy perceptions within the student population.

Table 1. Demographic profile of medical student respondents of FEU-NRMF (N = 146)

<i>Demographic Characteristics</i>	<i>Frequency (n)</i>	<i>Percentage (%)</i>
Sex		
Female	113	77.4
Male	33	22.6
Year Level		
1st Year	78	53.4
2nd Year	54	37.0
3rd Year	14	9.6
Age (years)		
Mean $\pm$ SD	24.37 $\pm$ 1.28	
Range	22-29	
Total	146	100.0

Note. SD = Standard Deviation. Year levels represent self-reported enrollment status during the academic year 2025–2026.

Table 2. Presence of impostor syndrome among medical students of FEU-NRMF (N = 146)

IS Category (CIPS)	Score Range	Frequency (n)	Percentage (%)
Absence of IS	≤ 40	7	4.8
Presence of IS	≥ 41	139	95.2
Moderate IS Experiences	41-60	36	24.7
Frequent IS Experiences	61-80	83	56.8
Intense IP Experiences	>80	20	13.7
Total	20-100	146	100.0

Note. CIPS = Clance Impostor Phenomenon Scale. Scoring criteria adapted from Clance (1985). IS = Impostor Syndrome. Percentages for IS severity subcategories are calculated from the total sample. Mean CIPS score = 66.86, SD = 13.21, Median = 68.00, Range = 31–95. Cronbach's α = 0.909.

Table 3. Levels of academic self-efficacy among medical students of FEU-NRMF (N = 146)

SE Category (ASES)	Score Range	Frequency (n)	Percentage (%)
Low	<127	48	32.9
Moderate	127-144	52	35.6
High	>144	46	31.5
Total	40-200	146	100.0

Note. ASES = Academic Self-Efficacy Scale (Gafoor & Ashraf, 2007). Percentile cutoffs are sample-derived: 33rd percentile = 127.00, 67th percentile = 144.00. Mean ASES score = 136.36, SD = 21.01, Median = 135.50, Range = 85–196. Cronbach's α = 0.935.

Main Results

The cross-tabulation of IS status and SE levels presented in Table 4 shows that among the 7 respondents without IS, 5 (71.4%) were classified as having high SE, 1 (14.3%) moderate, and 1 (14.3%) low. In contrast, among the 139 respondents with IS, the distribution was more evenly spread: 47 (33.8%) low SE, 51 (36.7%) moderate SE, and 41 (29.5%) high SE. Although this pattern suggests that IS absence tends to be associated with higher academic SE, the Chi-square test of independence did not reach statistical significance at the conventional alpha level of 0.05, $\chi^2(2) = 5.431$, $p = .066$. The expected frequencies in the absence-of-IS cells were below the minimum threshold of 5 required for reliable Chi-square interpretation, which limits the robustness of this categorical analysis given the highly unequal group sizes. Accordingly, SE categories were collapsed (Low+Moderate vs. High) and chi-square was re-attempted; however, cell count violations persisted. Fisher's exact test was therefore applied as the final test of categorical association. The result was statistically significant ($p = .032$), indicating that students without IS had significantly greater odds of reporting high academic SE compared to those with IS (OR = 5.976, 95% CI [1.114, 32.059]).

The odds ratio for IS status and high academic SE was OR = 0.167 (95% CI: 0.031–0.898), indicating that students with IS had significantly lower odds of being classified as high SE compared to students without IS. Conversely, students without IS had approximately six times greater odds of achieving high academic SE than students with IS ($1/0.167 \approx 5.99$). This OR was statistically significant, as the 95% CI did not include the null value of 1.0. The OR for low SE was OR = 3.065 (95% CI: 0.358–26.209), which was not statistically significant given that the CI crossed 1.0, likely due to the small number of respondents in the IS-absence group.

Other Analyses

Notwithstanding the limitation of the chi-square analysis, the continuous-level analyses revealed a statistically significant inverse association between IS and SE. Pearson correlation analysis yielded $r = -0.436$, $p < .001$, indicating a moderate negative relationship between CIPS and ASES scores. Spearman's rank correlation, which is less sensitive to distributional assumptions, produced a comparable coefficient of $\rho = -0.405$, $p < .001$. These results indicate that medical students who reported higher levels of impostor syndrome tended to report lower levels of academic self-efficacy (Table 4).

Table 4. Association between impostor syndrome and academic self-efficacy among medical students of FEU-NRMF (N = 146).

IS Status	Low SE n (%)	Moderate SE n (%)	High SE n (%)	Total n (%)
Without IS (Absence)	1 (14.3)	1 (14.3)	5 (71.4)	7 (100.0)
With IS (Presence)	47 (33.8)	51 (36.7)	41 (29.5)	139 (100.0)
Total	48 (32.9)	52 (35.6)	46 (31.5)	146 (100.0)

$\chi^2(2) = 5.431$, $p = 0.066$ | Pearson $r = -0.436$, $p < 0.001$ | Spearman $\rho = -0.405$, $p < 0.001$ | OR = 0.167 (95%) | CI: 0.031–0.898

Odds Ratio (High SE): OR = 0.167 (95% CI: 0.031–0.898); students without IS had approximately 6 times greater odds of High SE than students with IS. **OR (Low SE):** OR = 3.065 (95% CI: 0.358–26.209), not statistically significant.

Note. IS = Impostor Syndrome; SE = Self-Efficacy. Values represent frequency (row percentage). Chi-square test: $\chi^2(2) = 5.431$, $p = 0.066$; interpret with caution; 3 of 6 expected cells < 5, minimum expected count = 2.21. Odds Ratio (High SE): OR = 0.167, 95% CI = 0.031–0.898, statistically significant (CI does not include 1.0). Odds Ratio (Low SE): OR = 3.065, 95% CI = 0.358–26.209, not statistically significant. Pearson $r = -0.436$, $p < .001$. Spearman $\rho = -0.405$, $p < 0.001$.

DISCUSSION

Key Results

This cross-sectional analytical study examined the prevalence of IS and its association with academic prevalence SE among 146 Year 1–3 medical students at FEU-NRMF. The findings show three main observations: (1) a very high score of IS, with 95.2% of respondents meeting the threshold; (2) a balanced distribution of academic self-efficacy across low, moderate, and high categories consistent with reports from Suriyasathaporn et al. (2025) showing that medical students can simultaneously maintain functional self-efficacy alongside elevated impostor tendencies; and (3) a statistically significant moderate negative correlation between IS and SE continuous scores in line with findings from Batur et al. (2024), Pákozdy et al. (2024), and Chatterjee (2024). However, the limited number of respondents without IS prevented the Chi-square test for categorical relationships from reaching statistical significance. The original Chi-square test violated expected cell frequency assumptions and was replaced by Fisher's exact test after category collapsing. Resolving the violation, Fisher's exact test revealed a statistically significant categorical association between IS status and SE level ($p = .032$), with students without IS showing approximately six times greater odds of reporting high academic SE (OR = 5.976, 95% CI [1.114, 32.059]).

Limitations

Many limitations should be considered. The causality between IS and academic SE is limited by the cross-sectional design. The near-complete absence of respondents without IS resulted in an imbalanced comparison group, which likely affected the Chi-square test and reduced its ability to detect statistical significance despite a meaningful odds ratio. This now necessitated the use of Fisher's exact test after collapsing SE categories (Low+Moderate vs. High). While Fisher's exact test is appropriate for small, expected cell counts, the dichotomization of SE into two categories reduces granularity and limits interpretation of differences across the full low-moderate-high spectrum. This imbalance may have influenced the precision of the categorical analysis (odds ratio estimate) as reflected in the wide

confidence interval (OR = 5.976, 95% CI [1.114, 32.059]).

Despite these limitations, the findings are generally consistent with previous studies showing an inverse relationship between impostor syndrome and self-efficacy. The negative correlation observed between CIPS and ASES scores aligns with findings from Batur et al. (2024), Pákozdy et al. (2024), and Chatterjee (2024), which reported that stronger impostor tendencies are associated with lower self-efficacy. However, the prevalence of IS in this study (95.2%) is considerably higher than previously reported estimates, such as 62% among health service providers (Salari et al., 2025) and 22%–60% in medical education (Chua et al., 2025). This higher prevalence may reflect the demands of the Philippine medical education system, the competitive environment of FEU-NRMF, and cultural tendencies toward self-effacement and high expectations (Austria et al., 2024; Apilado, 2024). The predominance of early-year students may also contribute to increased impostor experiences, as early training-related stressors have been noted to amplify IS (Diaconescu et al., 2024; Setiani et al., 2024).

It is notable that there could be a potential response bias that has arisen across the data gathering implementation. It is important to acknowledge that while anonymity and voluntary responses have been taken into account in the study, the presence of self-reporting and social desirability biases could have played a significant role in affecting one's perception on Academic Self-efficacy and Imposter Syndrome as a result of self-interpreting and present emotional status as well as peer influences. Future investigations on the same subject matter can incorporate depth into the discussion with the use of qualitative methodology, specifically the Interpretative Phenomenological Analysis (IPA) using focus group discussions (Smith, JA, & Fieldsend M, 2021). This would allow for greater contextual insights into a medical student's experience of Imposter Syndrome and Academic Self-Efficacy.

Moreover, future studies might explore the use of subgroup analyses by utilizing Fisher's Exact test and One-Way ANOVA based on Year Level and Sex to further gain insights regarding the study population. The statistical intervention of Fisher's Exact test was deemed appropriate due to Chi-square assumption violations of not reaching the expected cell count of 5 in several cells. In this regard, Fisher's test will help investigate the associations between the existence

of impostor syndrome in different year levels, while the One-Way ANOVA can determine the significant differences in the Academic Self-Efficacy Scores means among year levels. With the determination of such analyses, this will be able to identify if there is a relative consistency among different population stages of the current study. Moreover, demographic factors, such as gender and academic performance or social support and resilience can be further explored as mediators affecting variability and likelihood of amplifying or decreasing impostor syndrome and Academic Self-efficacy, respectively.

Interpretation

The findings indicate that among medical students, a high prevalence of IS is associated with a lower academic SE. The moderate magnitude of the negative correlation suggests that while IS and SE are meaningfully inversely related, other factors may partially buffer this relationship. This interpretation is consistent with evidence that resilience may moderate the IS–self-efficacy relationship (Suriyasathaporn et al., 2025). Batur et al. (2024) similarly reported a significant inverse relationship between impostor tendencies and academic self-efficacy among Turkish medical residents, lending cross-cultural validity to the present findings. Diaconescu et al. (2024) further demonstrated that IS mediates the effects of burnout on self-esteem and academic performance, suggesting that the erosion of self-efficacy by IS may be part of a broader cycle of psychological distress in medical training environments. The high IS prevalence observed in this study is also consistent with Thaiyanto et al. (2024), who found that among clinical-year Thai medical students, high impostor scores predicted stress, anxiety, and depression, highlighting the broader mental health implications of persistent impostor feelings. Wang and Li (2023) noted that reliance on self-report measures and cross-sectional designs remain methodological limitations across the IS literature, a constraint that applies equally here.

At the same time, the coexistence of high IS prevalence and moderate-to-high self-efficacy in a substantial proportion of respondents (67.2%) suggests a more complex relationship. This pattern supports observations that students with high impostor tendencies may still report high self-efficacy in certain domains (Ok et al., 2025; Abduhalim, 2025). One possible explanation is that medical students maintain

high academic functioning despite self-doubt due to internalized performance standards, as described in medical education contexts (Franchi & Russell-Sewell, 2023). Additionally, the ASES may capture broader domains of academic functioning that are less directly affected by impostor feelings.

The study's findings shed light on practical implications necessary for upholding students' welfare and institutional support within the medical institution. With the high prevalence of Impostor Syndrome at 95.2% with Moderate Academic Self-Efficacy levels across medical students at FEU-NRME, the institution can strengthen counseling services and psychological support services addressing self-doubt, perfectionism, and academic stress among students. The following pragmatic course of actions are recommended: (1) Establish peer support systems for incoming students and safe discussion spaces of their academic struggles. The period of adjustment may contribute to heightened impostor experiences (Apilado, 2024). (2) Structured mentoring systems through the interprofessional collaboration between students, faculty members and staff would be beneficial in fostering assurance, belongingness and confidence in facing academic adversities among medical students. Effective mentors challenge a medical student's setbacks and shape their early perceptions in managing academic dilemmas; a concretization against lack of feedback and recognition due to incompetent feelings (Wang & Li, 2023). In this way, building proactive scaffolding strategies and a safe environment among medical learners will alleviate the increasing prevalence of Impostor Syndrome and boost academic self-efficacy perceptions across the years of medical training. Finally, (3) Resilience-building intervention programs through workshops, talk therapy, academic advising and mindfulness training will be simultaneously useful in gauging long-term adaptive coping and time management of a medical student. Other student services such as improving recreational layouts facilitated by student affair centers and regular health assistance check-ups may also contribute to decreasing the atmosphere of academic competitiveness and toxic culture, amplifying academic stress, burnout, social isolation and self-doubt (Avena & Chua et al, 2025).

Generalizability

The study's conduct within a single institution and the preponderance of early-year medical students,

who may not fully represent other medical student groups, limits its generalizability. Institutional and cultural factors specific to the setting may also influence both impostor syndrome and self-efficacy levels.

Despite this, the findings highlight the relevance of impostor syndrome in medical education and its association with academic self-efficacy. These results suggest the importance of further research exploring this relationship across different settings and populations, as well as the necessity for better understanding of the variables that may influence or buffer this association.

CONCLUSION

Upon the determination of Impostor syndrome (IS) and its association with academic self-efficacy (SE) through cross-sectional analysis, there is an equal representation of academic self-efficacy in low, moderate, and high groups among 146 medical students from Year 1 to Year 3 enrolled at FEU-NRMF. Second, there is a highly prevalent rate of IS at 95.2% met at its cut-off point. Third, significant moderate negative correlation between IS and SE scores were the primary findings. Fisher's exact test demonstrated a statistically significant categorical association between IS status and SE level ($p = .032$), with the absence of IS increasing the likelihood of reporting high academic SE by approximately six times ($OR = 5.976$, 95% CI [1.114, 32.059]). The original Chi-square test was not interpretable due to assumption violations, with Fisher's exact test applied after resolution failure behind category collapsing. In view of these results, there is an indication of the need for increased support among medical school institutions to assist medical students suffering from impostor syndrome, especially owing to their moderate level of academic self-efficacy. Considering these findings, strengthening programs on counseling, peer support, faculty and peer mentoring, and resilience-building intervention programs would be deemed beneficial.

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