

BACKGROUND

- Illinois House Bill 0135 will allow pharmacist in IL to prescribe hormonal contraceptives effective January 1, 2022.^{1,2}
- Studies conducted in other states with similar regulations identified the main pharmacist concerns related to prescribing hormonal contraceptives are patient safety, cost deficits resulting from little to no reimbursement for services, pharmacist time constraints, and liability.³⁻⁵
- Although the current SIUE SOP curriculum includes hormonal contraceptives pharmacotherapy, issues related to pharmacist prescribing have not yet been incorporated. The upcoming regulation indicates a need for incorporation of active learning strategies to address guidelines and potential issues with pharmacist prescribing of hormonal contraceptives.

OBJECTIVE

- To assess the educational impact on student confidence and readiness for prescribing hormonal contraceptive therapy upon graduation.
- To determine whether the current educational curriculum should be updated to include an interactive educational opportunity focused on the counseling and prescribing of hormonal contraceptives.

METHODS

Study Design

- Retrospective, observational, cross-sectional survey study
- Two phase study: Phase I was used for data collection and design of Phase II which utilized a pre- and post-survey with a simulated activity
- Survey Design: Five section questionnaire assessing demographic information, confidence based off curriculum, pharmacy work experience, experiential education, and overall perspectives

Study Population

- Third and Fourth professional year pharmacy (P3 and P4) students from SIUE School of Pharmacy Class of 2022

Study Measures: Dependent Variables

- The primary outcome was student confidence level on prescribing hormonal contraceptives based off pharmacy curriculum experience.

Study Measures: Independent Variables

- Age, gender, and confidence levels from APPEs and work experience were collected as independent variables for this study.

Data Analysis

- Samples were described using frequencies/percentages
- Analysis computed via Excel Algorithms

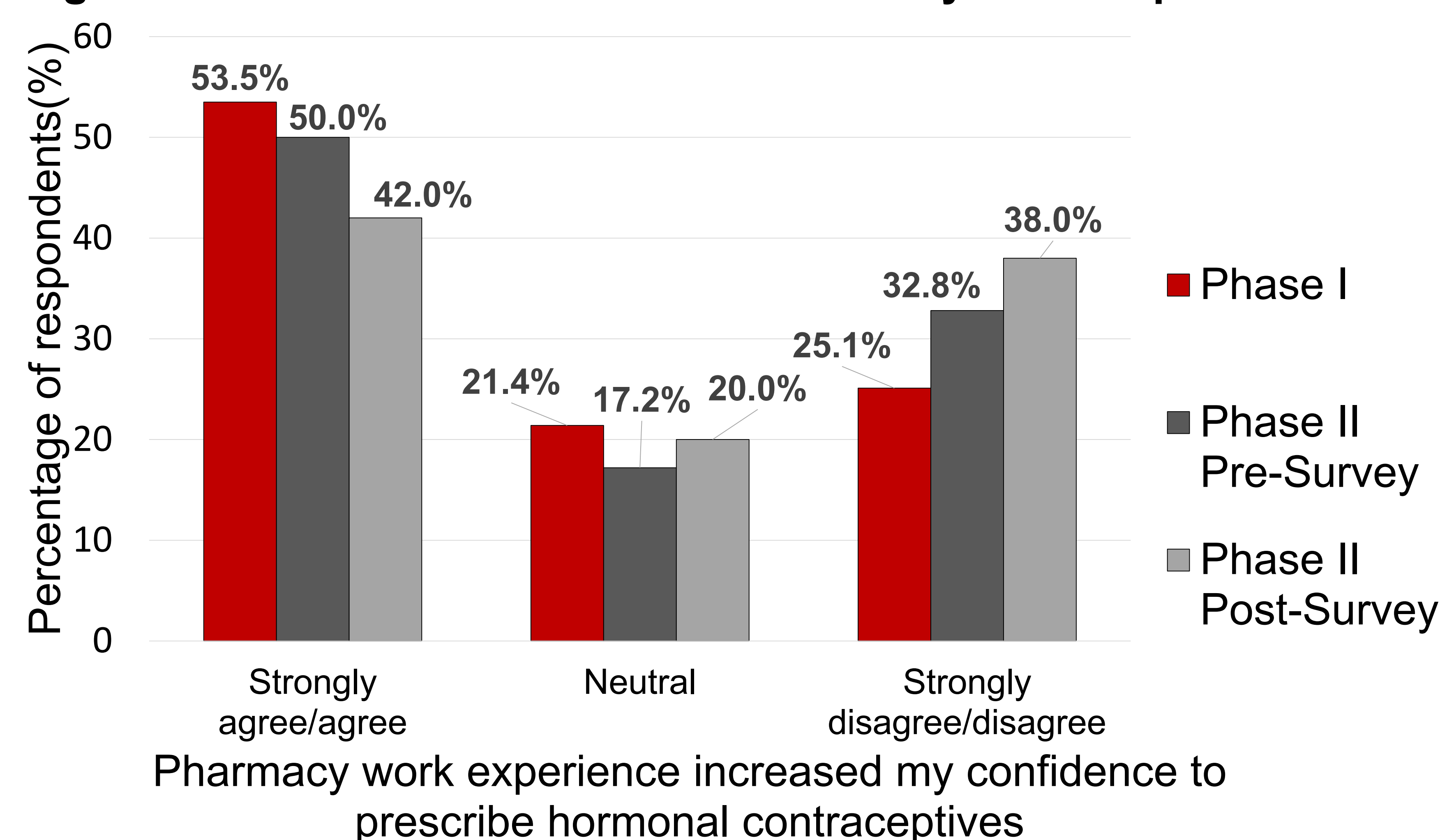
RESULTS

Table 1: Student Confidence from Pharmacy Curriculum

Survey Question~	Phase I N = 32 (%)	Phase II (Pre) N = 62 (%)	Phase II (Post) N = 54 (%)
The Women's Health therapeutics section prepared me to recommend and prescribe hormonal contraceptives.*	20 (62.5%)	52 (83.9%)	34 (53.0%)
The activities in the Skills lab courses prepared me to ask the appropriate questions to assess and recommend appropriate oral contraceptive products to patients	13 (40.6%)	32 (51.6%)	29 (53.7%)
I am confident in my knowledge of different options of hormonal contraceptives.	15 (46.9%)	37 (59.7%)	35 (64.8%)
I am confident in my ability to recommend a hormonal contraceptive based off patient demographics.*	11 (34.4%)	33 (53.2%)	38 (70.4%)
I am confident in my ability to recommend a hormonal contraceptive based off patient medical history.	18 (56.3%)	44 (71.0%)	41 (75.9%)
I am a confident in my ability to recommend a hormonal contraceptive based off patient social history.	16 (50.0%)	44 (71.0%)	45 (83.3%)
I am confident in my knowledge regarding legislation and regulations about my prescribing scope and rights.*	12 (37.5%)	23 (37.1%)	36 (66.7%)
I am confident in my ability to counsel a patient on appropriate use of an oral hormonal contraceptive product.	29 (90.6%)	55 (88.7%)	47 (87.0%)
I am confident in my ability to counsel a patient on appropriate use of a patch/transdermal hormonal contraceptive product.	25 (78.1%)	48 (77.4%)	42 (77.8%)

~ % strongly agree or agree; * p-value ≤ 0.05

Figure 1: Student Confidence from Pharmacy Work Experience



RESULTS

Figure 2: Student Perspectives on Educational Experience Opportunities during Didactic Curriculum

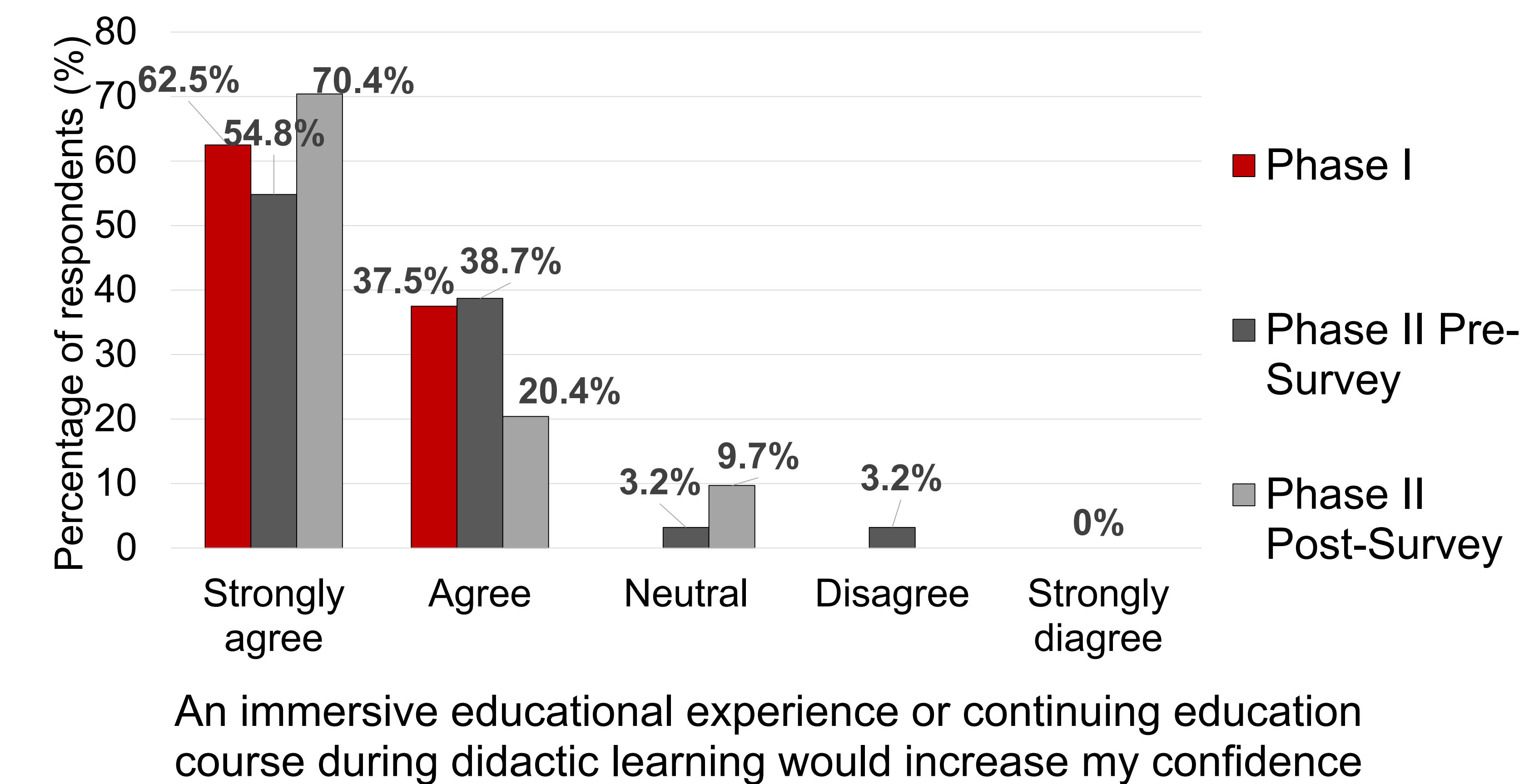


Table 2: Student Confidence Levels based off APPEs

Survey Question~	Phase I N = 32 (%)	Phase II (Pre) N = 62 (%)	Phase II (Post) N = 54 (%)
APPE/IPPE thus far have increased my confidence	3 (9.4%)	6 (9.7%)	8 (14.8%)
Community rotation increased my confidence	2 (6.3%)	8 (12.9%)	9 (16.7%)
Hospital rotation increased my confidence	0 (0.0%)	4 (6.5%)	4 (7.4%)
Internal medicine rotation increased my confidence	1 (3.1%)	---	---
Ambulatory care rotation increased my confidence	1 (3.1%)	---	---
Elective rotation(s) increased my confidence	2 (6.3%)	---	---

~ % strongly agree or agree

CONCLUSION

- Overall, this study showed a positive impact on confidence levels in prescribing hormonal contraceptives from the integration of a simulation activity.
- Survey results indicate that 51% (Phase I), 64.5% (Phase II Pre-Survey), and 69.7% (Phase II Post-Survey) of respondents strongly agreed/agreed in their confidence to prescribe hormonal contraceptives gained from the current pharmacy curriculum.
- More than 90% of all participants strongly agreed/agreed that a continuing education course and/or simulation activity would increase their confidence to prescribe hormonal contraceptives.
- We conclude that an immersive educational opportunity on prescribing hormonal contraceptives should be implemented into the pharmacy curriculum to prepare students upon graduation.