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## Assessing pharmacy student knowledge, intent to practice, and perceptions of current learning as it pertains to pharmacist furnishing of hormonal contraception in Pennsylvania

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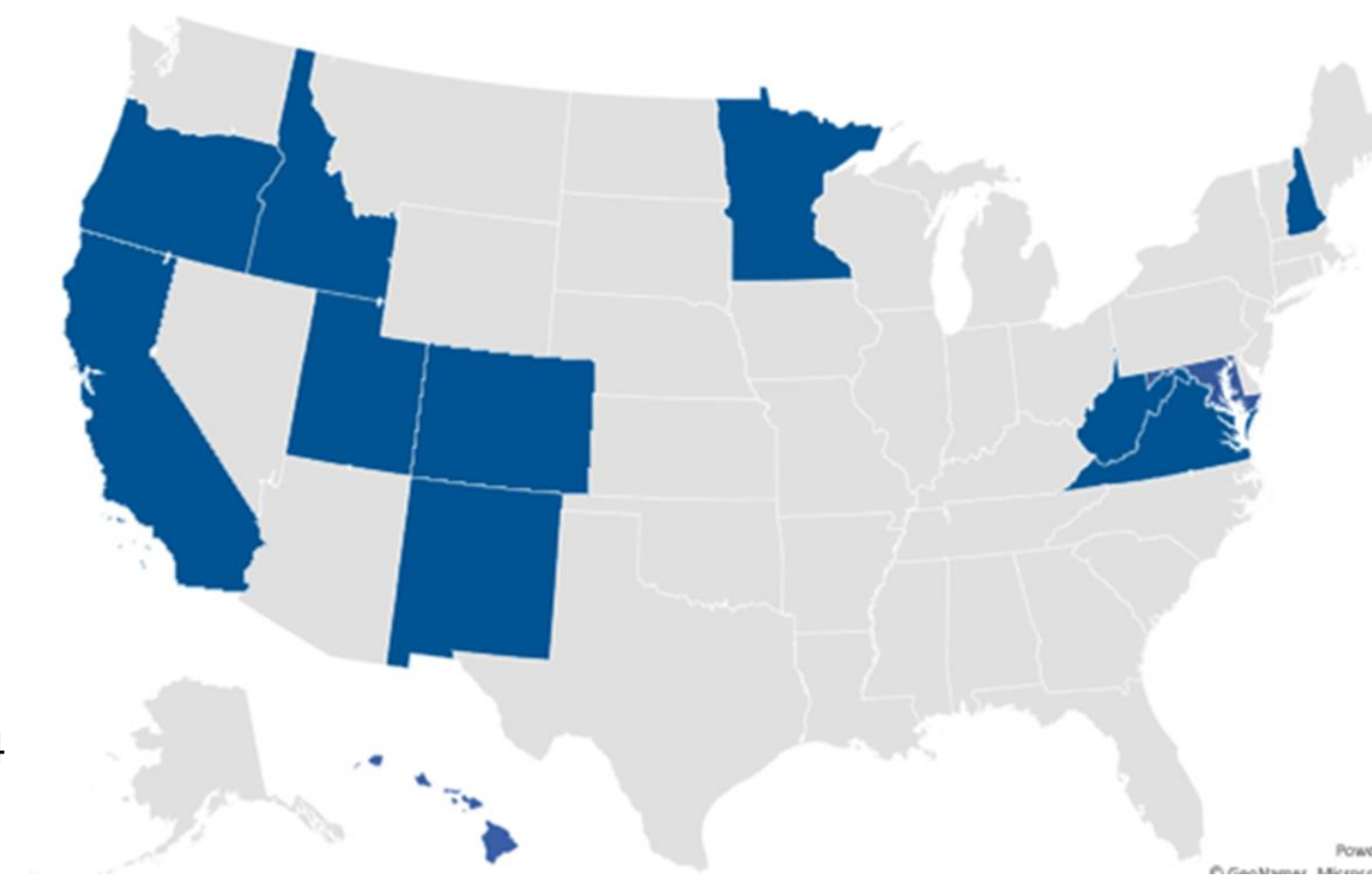


## BACKGROUND

As health care continues to evolve, pharmacists are increasingly relied upon to provide comprehensive, team-based care. Community pharmacists are some of the most accessible health care providers, offering healthcare services to people who may lack the means to receive care elsewhere.

According to the CDC, 45% of all pregnancies were unintended, although many factors influence this statistic, the CDC and the American College of Obstetricians and Gynecologists (ACOG) support expanding access to care and education.<sup>1,2</sup>

Jurisdictions that Allow for Pharmacist Prescribed Hormonal Contraception



- 41% of women would access hormonal contraception from their community pharmacy.<sup>3</sup>
- 25% of those women with undesired pregnancies said they would have been more likely to use contraception if it were available at their pharmacies.<sup>4</sup>

A barrier to legislative change is a fear that pharmacists furnishing hormonal contraception would deter women from going to routine gynecology check ups. However ACOG does not require a pelvic exam for initial contraception prescribing and considers community pharmacist access to be an important step in expanding care and referral.<sup>2,4</sup> Furthermore, to address these concerns pharmacist protocols incorporate screening for potential complications and history of gynecological care and limits the types of contraception offered. Additionally connection to gynecological services is a critical component of many protocols<sup>5</sup>.

## OBJECTIVES

Current Pennsylvania legislation does not allow pharmacists to offer contraception services; however, scope of practice is expanding across other states indicating the importance of training pharmacists and students to prepare for taking on this role.

Therefore the objectives of this study were to:

- 1 Assess student pharmacist knowledge of pharmacist prescribing of hormonal contraceptives and important details in order to safely and effectively prescribe
- 2 Assess student pharmacist attitudes and intention of offering this service if Pennsylvania allows for this innovative role
- 3 Assess student perceptions of curricular education to provide direct pharmacy access to hormonal contraception

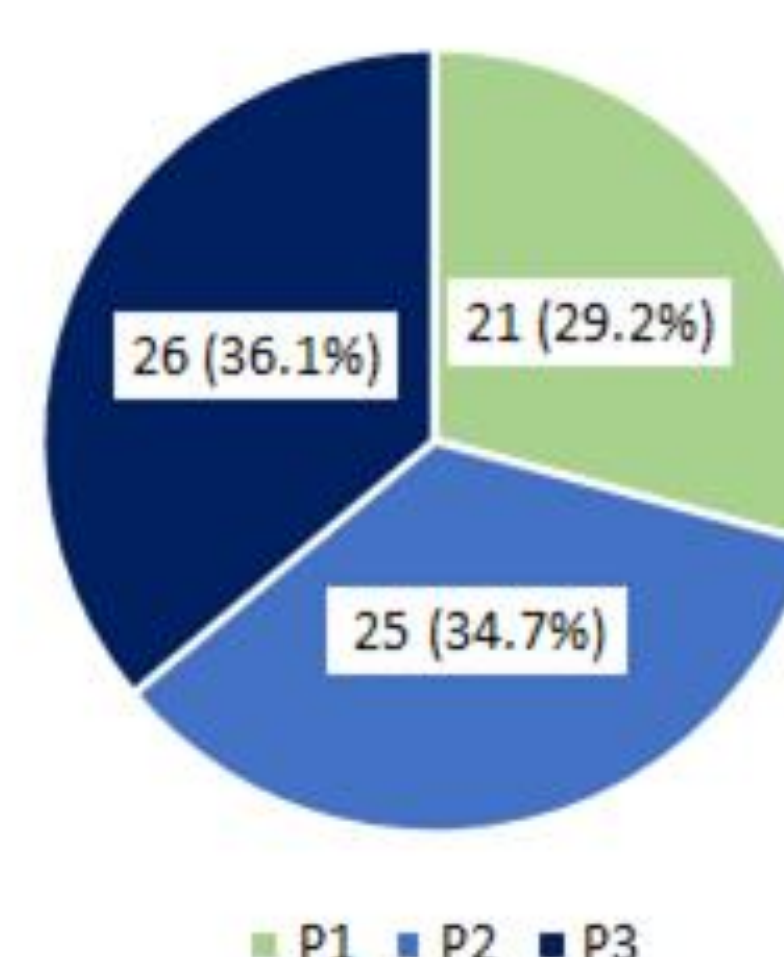
## METHODS

**Study Design:** An electronic survey was created and piloted in the fall of 2020. The survey included seven sections: professional experiences, future work settings, knowledge-based questions, attitudes, future intentions, curriculum perceptions, and demographics.

**Study Population:** Pharmacy students in their first through third professional year currently enrolled in one of the 7 Pennsylvania pharmacy schools.

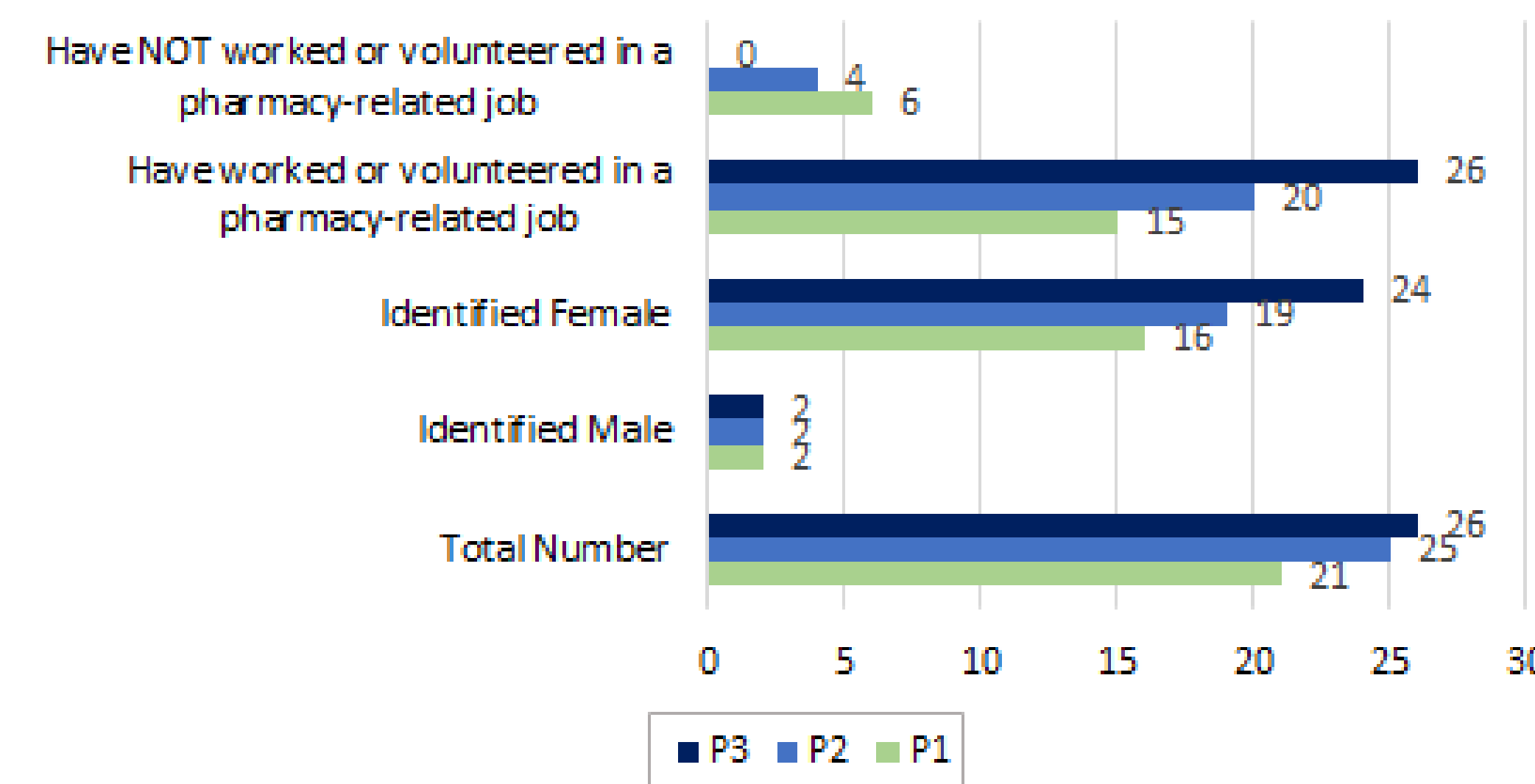
**Survey:** A recruitment letter containing the anonymous electronic Qualtrics survey was sent via email. The survey was closed after 4 weeks, and results were analyzed using descriptive statistics and chi-square analyses.

Number (Percent) of Students in Each Year



## RESULTS

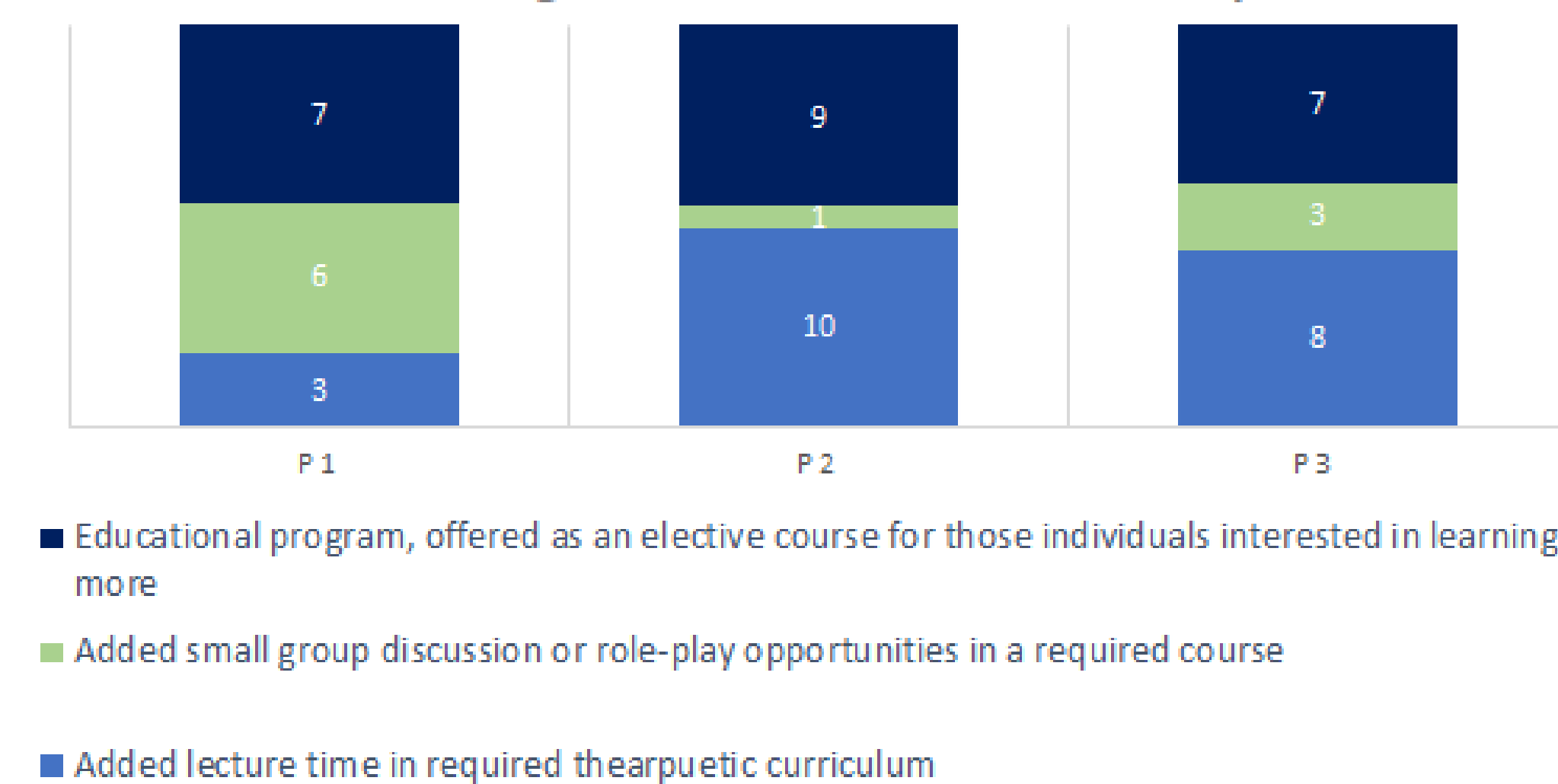
### Demographics of Survey Participants



### KNOWLEDGE-BASED QUESTIONS

19% of P1s scored a 100% on the five questions, opposed to 44% and 62% of P2s and P3s, respectively

### Preferred Method to Receive Additional Educational Training Related to Hormonal Contraception



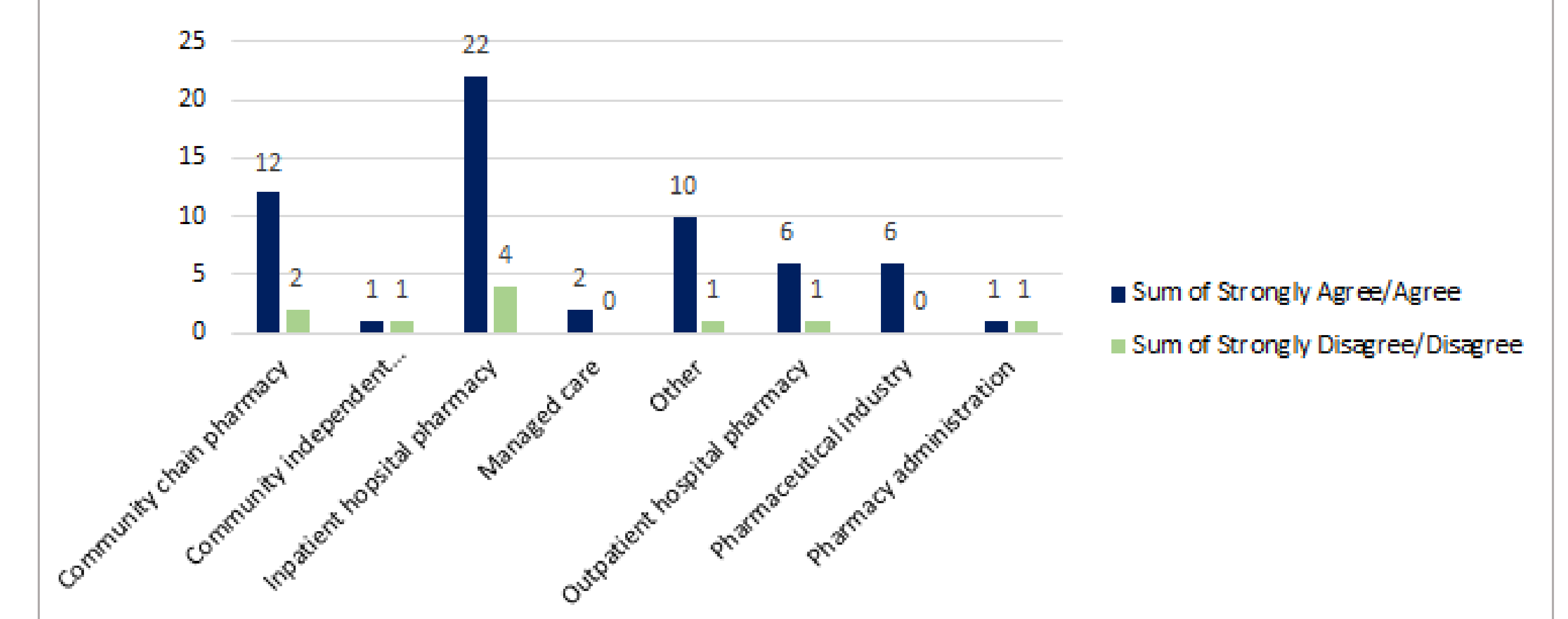
## DISCUSSION

- Survey results indicated participants had an overall positive attitude regarding pharmacists' involvement in providing contraception services and capability in prescribing hormonal contraception.
- Results of knowledge-based questions illustrated expected trends, showing progressively higher scores from P1s to P3s.
- The majority of survey respondents stated inpatient pharmacy as their future practice site with 84.6% intending to prescribe hormonal contraception if allowed to do so. Community-based pharmacy sites made up the second most frequent future practice site with 82.6% intending to prescribe hormonal contraception if allowed to do so.
- For P1s and P2, despite students feeling confident in their ability to recommend hormonal contraception, the majority stated that additional training is needed within their curriculum in order to do so. P3s felt the most confident in their ability to recommend a contraceptive product and had a lower percentage of students stating they needed additional training compared to other years.
- The most preferred method to receive this training differed across professional year. P1 students preferred an elective course or a small group discussion/role play opportunities opposed to P2 and P3s preferring either added required lecture time or an elective option.

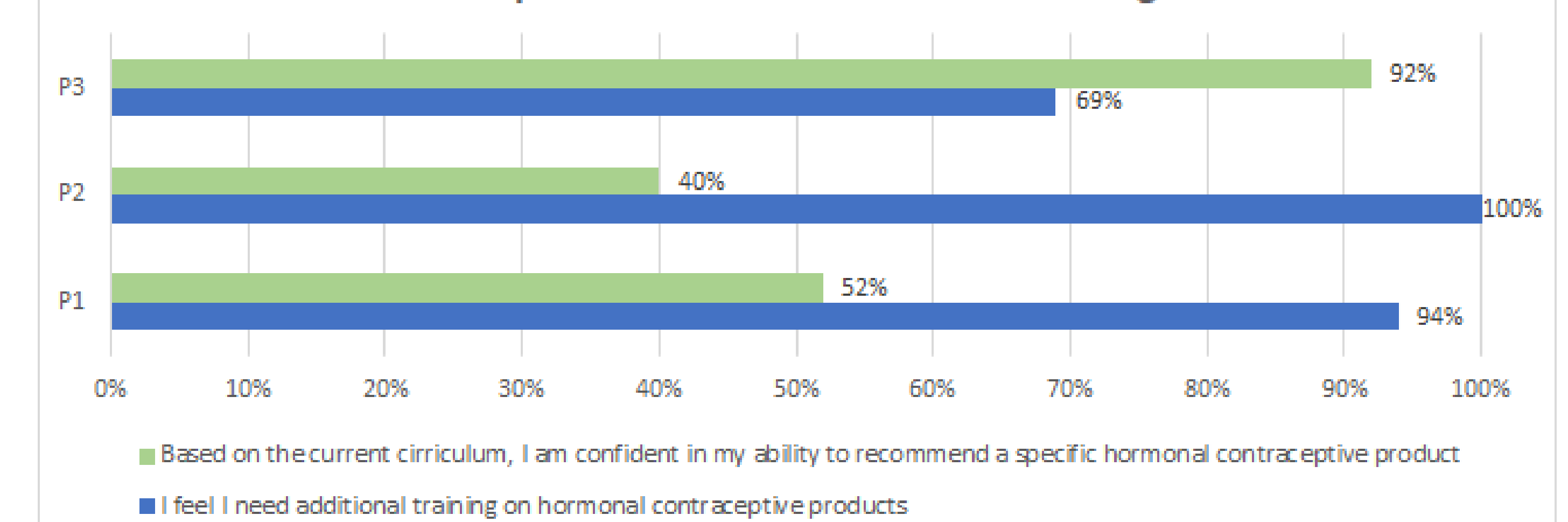
### LIMITATIONS

- It is difficult to determine when and to what extent contraception pharmacology or therapeutics is offered in various curriculum or if elective course is offered.
- The overall sample size was small, limiting the ability to determine statistical significance across results.
- Knowledge-based questions were not proctored, although participants were asked to refrain from using outside resources, this could not be guaranteed.
- Due to the low number of negative responses (strongly disagree/disagree) in most questions, statistical tests were not adequately powered to compare significance.

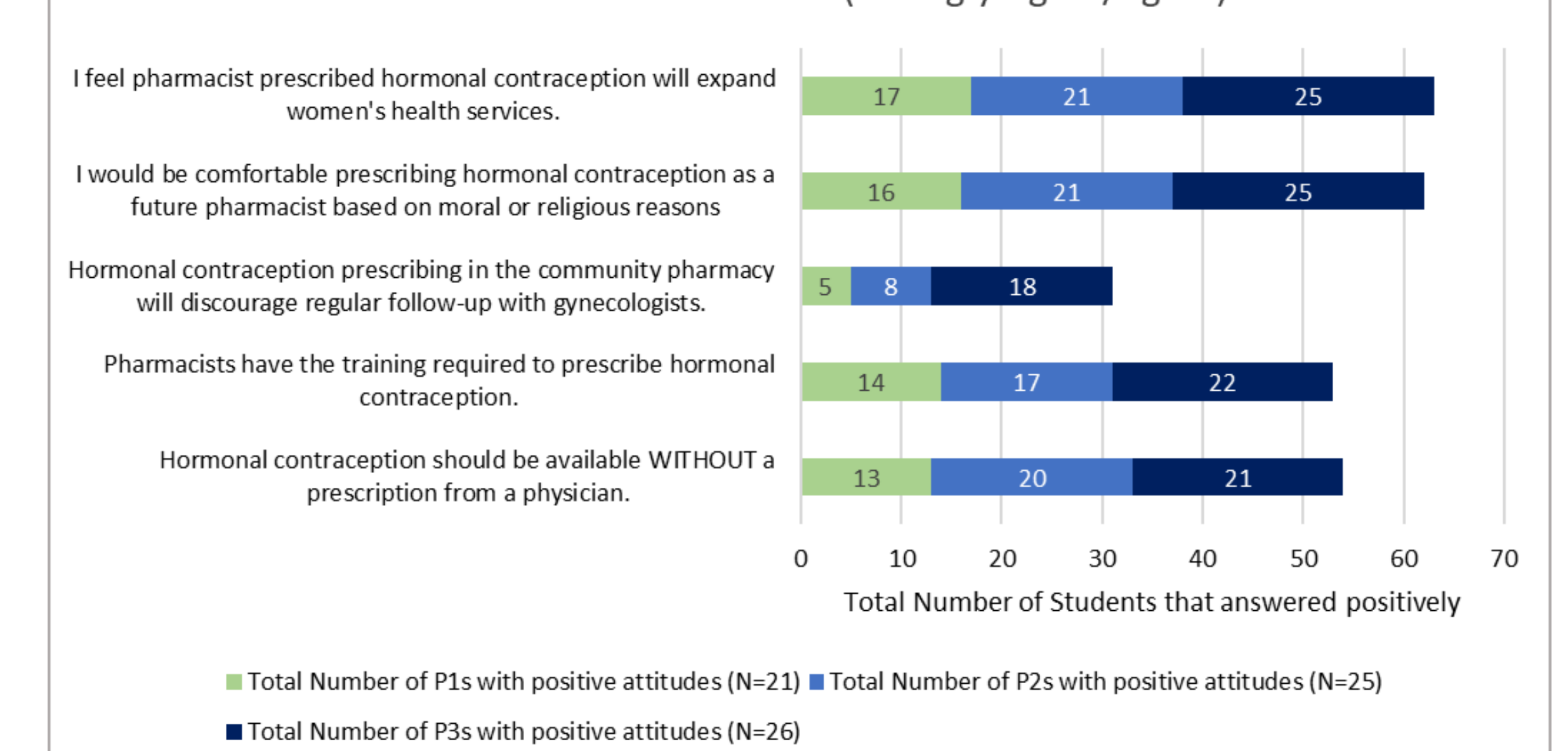
### Intention to Prescribe vs Future Practice Site



### Confidence in Ability to Recommend Specific Hormonal Contraception vs Need for Additional Training



### Students' Positive Attitudes (Strongly Agree/Agree)



## CONCLUSIONS

Results depict that pharmacy students in Pennsylvania overall showed competency in knowledge-based questions regarding hormonal contraception. Students in all pharmacy years, P1 through P3, had an intention to prescribe hormonal contraception in the future if there is an opportunity to do so regardless of future practice site. The need for additional training in multiple aspects of prescribing was shown to be a common consensus among students, with the majority of students suggesting added lecture time. Lastly, many students felt as though having pharmacists prescribe hormonal contraception without a prescription from a physician, would benefit women's health in general. The data demonstrates the need for future studies to assess additional students' opinions and how to adequately prepare student pharmacists for this possible innovative role in Pennsylvania.

## REFERENCES

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