

## INTRODUCTION

Individuals from underrepresented minority (URM) groups represent a small percentage of pharmacists and pharmaceutical scientists. The *Southern California Outreach for Pharmacy Education* (SCOPE) Saturday Academy exposes high school students from URM groups to pharmacy and pharmaceutical science careers through mini-lectures, a longitudinal project and hands-on learning. Our curriculum explores the following themes:

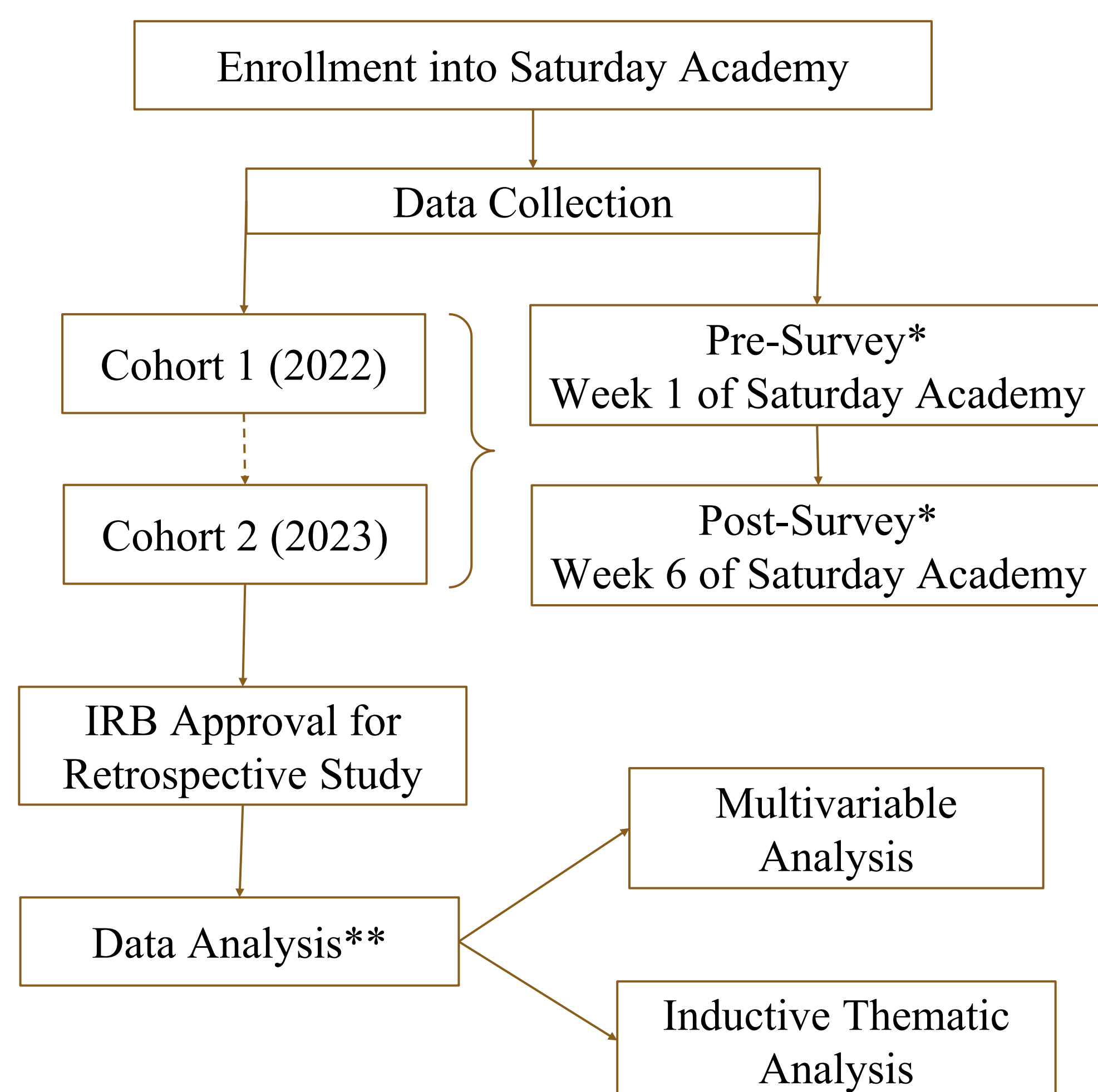
1. Research & Academia
2. Clinical Pharmacy & Digital Health
3. Pharmaceutical Industry
4. Compounding
5. Public Health
6. Health Policy & Economics



## OBJECTIVES

A six-session, hands-on educational curriculum in pharmacy and pharmaceutical sciences was designed and implemented in a program for high school students grades 9 through 12 from URM groups in a large, urban city. The objective of this study is to evaluate the impact of this program on the participants' awareness of and interest in pharmacy and pharmaceutical science career pathways.

## METHODS



\*Anonymous survey consisting of five 5-point likert scale questions and one open ended free response question  
 \*\*5-point likert scale was converted to a 3-point ordinal scale, and were analyzed for variance using a two-tailed F-Test, followed by a two-sample t-test, assuming either equal or unequal variances (alpha= 0.05 for all statistical tests); Qualitative data were analyzed using inductive thematic analysis

## RESULTS

**Table 1. Demographics**

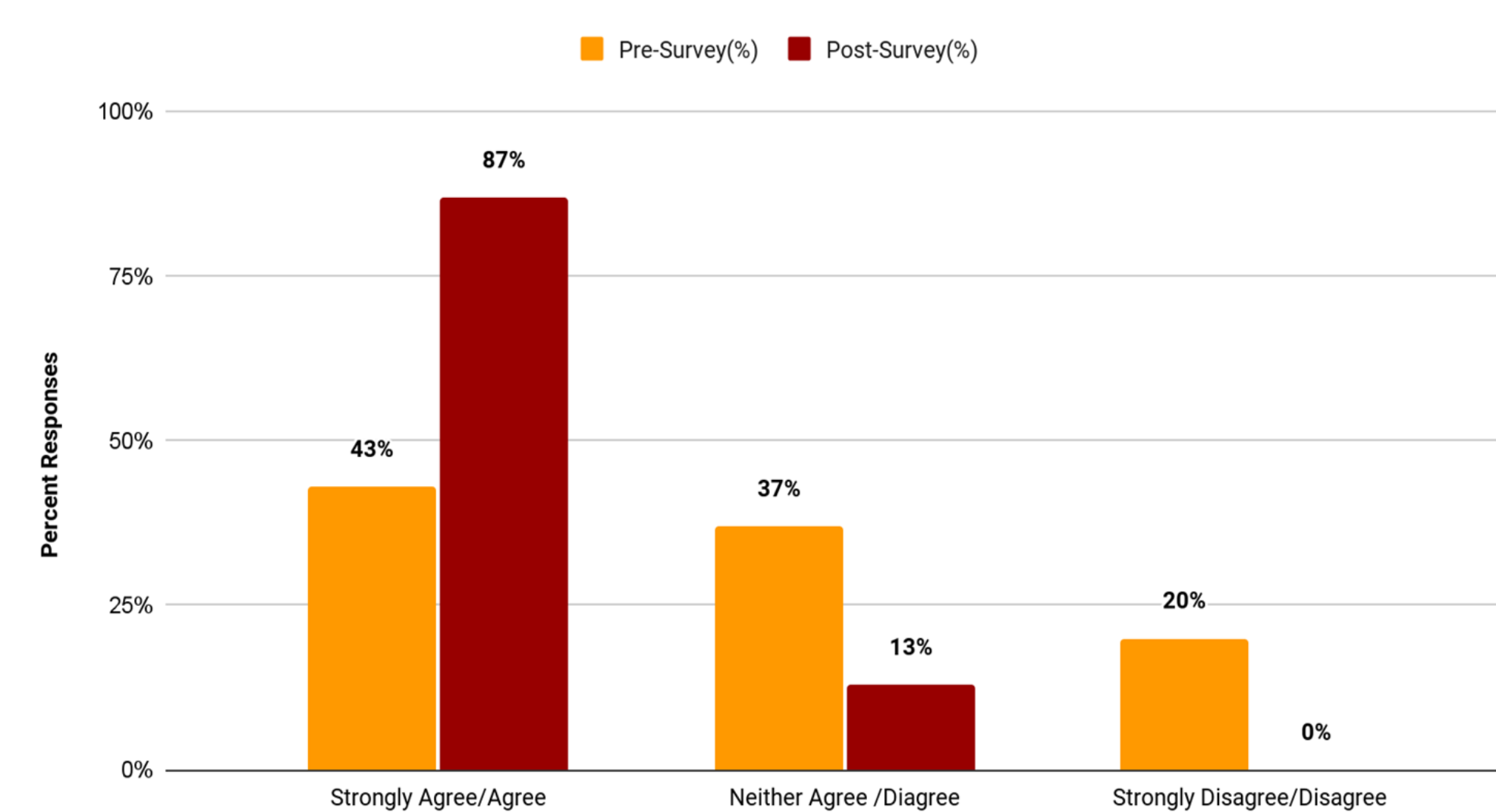
	Pre-Survey	Post-Survey
<b>Total Responses, n=47 (%)</b>	<b>35 (74.5%)</b>	<b>23 (49%)</b>
<b>Responses from URM (%)</b>	<b>21 (60%)</b>	<b>15 (65%)</b>

**Table 2. Percent change in mean survey in pre-survey versus post-survey**

	Pre-survey, n=35 Mean Response*	Post-survey, n=23 Mean Response*	Percent Change % (p-value)
<b>Q1</b>	<b>2.86</b>	<b>2.87</b>	<b>0.4% (p&gt;0.05)</b>
<b>Q2</b>	<b>2.77</b>	<b>2.74</b>	<b>-1.16% (p&gt;0.05)</b>
<b>Q3</b>	<b>2.23</b>	<b>2.87</b>	<b>29% (p&lt; 0.0001)</b>
<b>Q4</b>	<b>2.11</b>	<b>2.74</b>	<b>29%(p&lt;0.001)</b>
<b>Q5</b>	<b>2.57</b>	<b>2.61</b>	<b>1.44%(p&lt;0.05)</b>

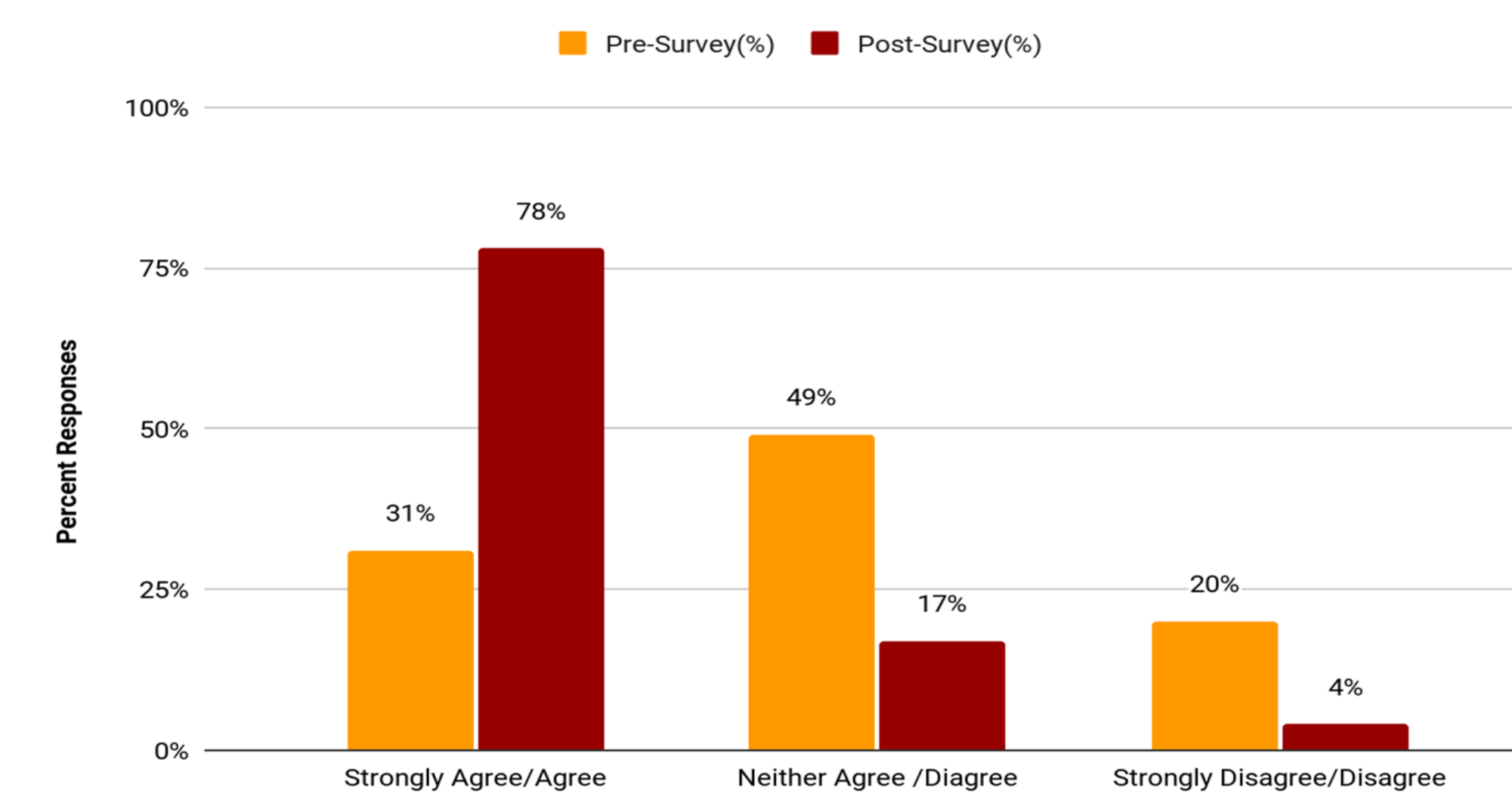
\*3= Strongly Agree/Agree, 2= Neither Agree/Disagree, 1= Strongly Disagree/Disagree

**Q3. I am confident in my knowledge about career options in pharmacy/pharmaceutical sciences or other healthcare professions.**



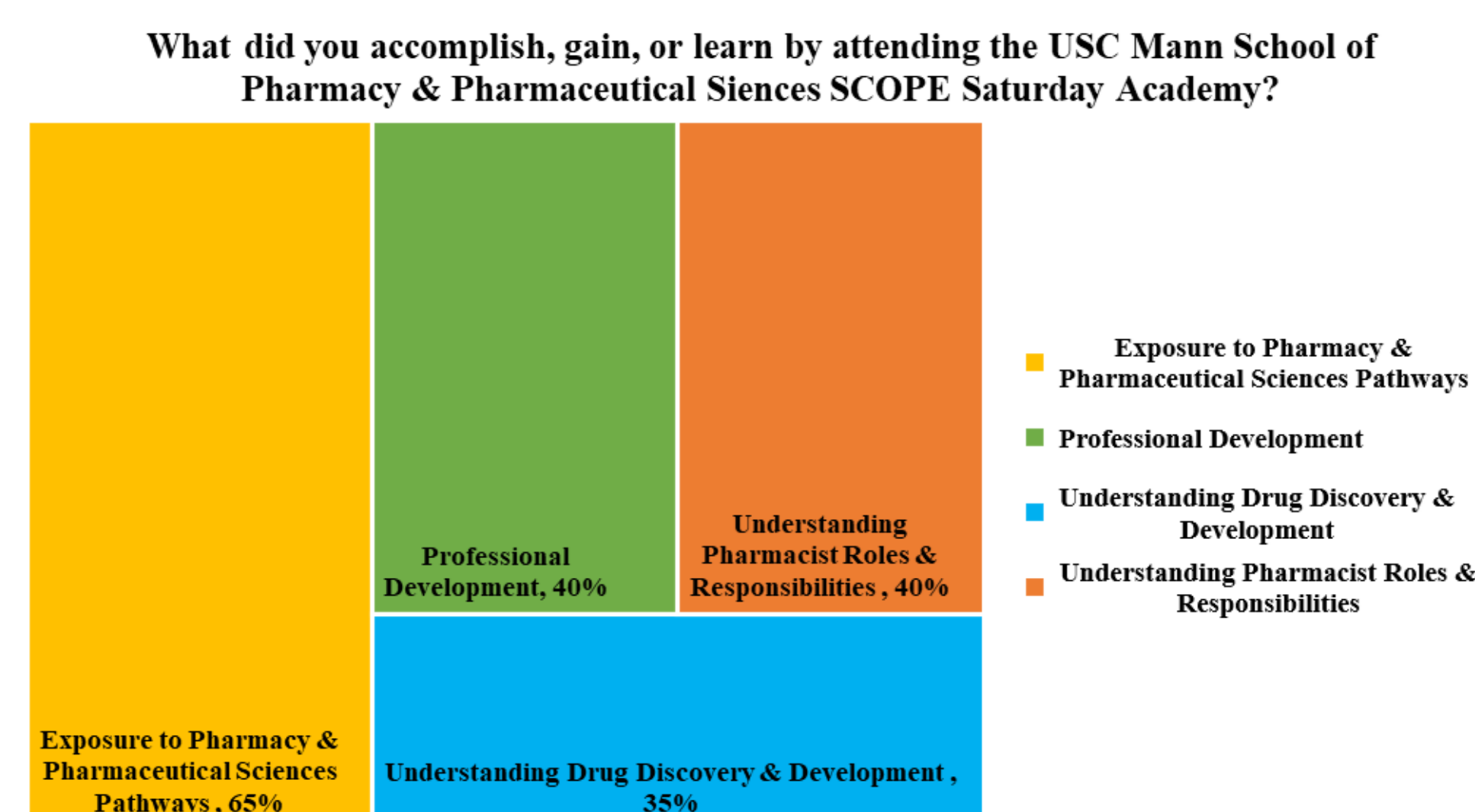
**Figure 1.** Change in confidence about knowledge of career options, Pre-/Post-survey response (%).

**Q4. I am confident in my knowledge about the steps needed to pursue a career in pharmacy/pharmaceutical sciences or other healthcare professions.**

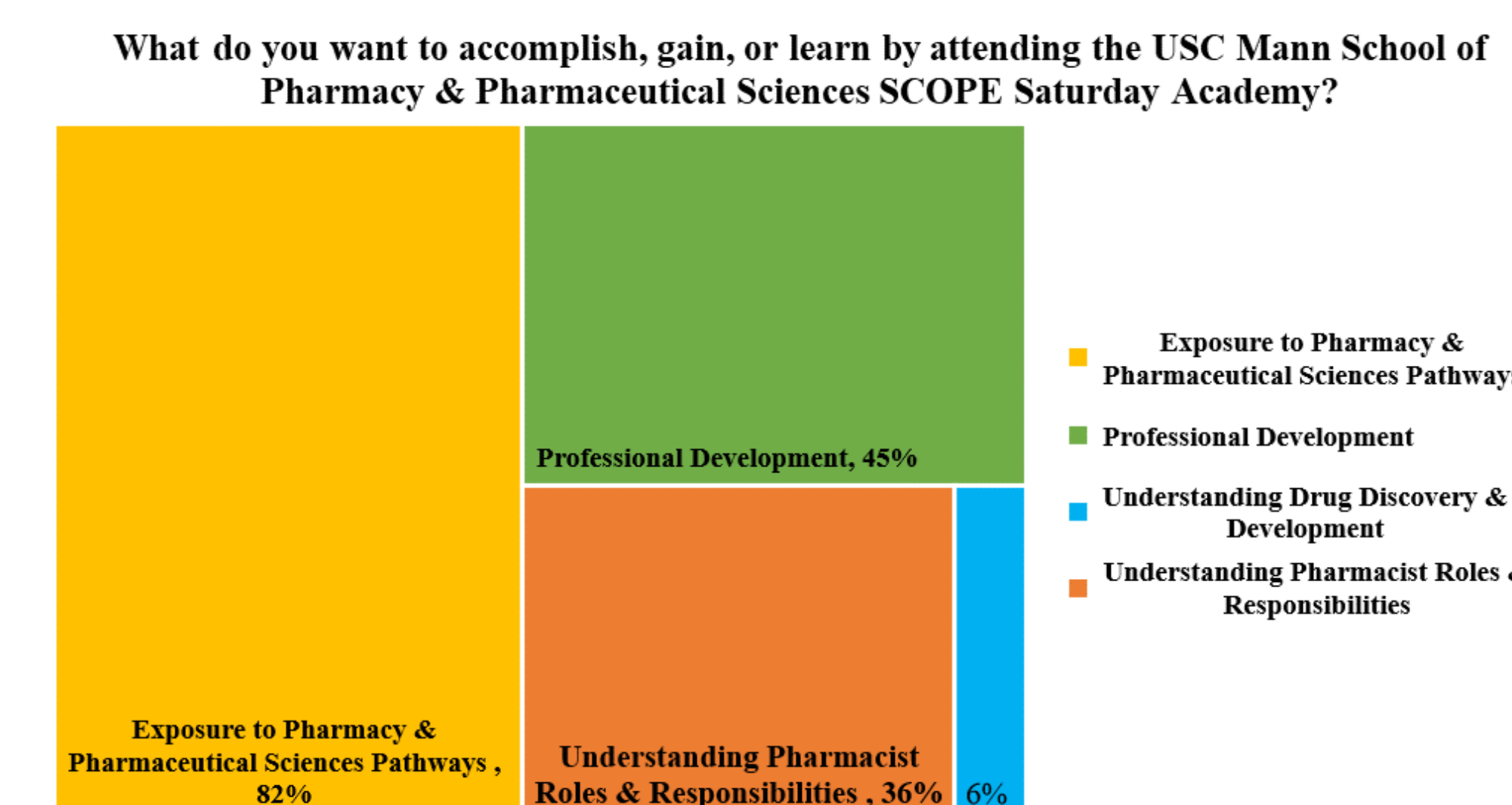


**Figure 2.** Change in confidence about steps to pursue career options, Pre-/Post-survey response (%).

## Inductive Thematic Analysis Results



**Figure 3.** Treemap depicting themes derived from pre-survey data using an inductive thematic analysis.



**Figure 4.** Treemap depicting themes derived from post-survey data using an inductive thematic analysis.

## SATURDAY ACADEMY COHORTS



2022



2023

## DISCUSSION

- Statistically significant increase in confidence were observed changes in participant responses for Q3 & Q4 from the likert questionnaire, both yielding a 29% increase in confidence towards careers in pharmacy/pharmaceutical sciences
- Q2 resulted in a minimal negative change in regards to interest in pursuing a future career in pharmacy/pharmaceutical sciences or other healthcare professions,
  - Though negative, no respondents in the post survey responded strongly disagree/disagree vs 3% in the pre-survey
- Thematic analysis resulted with the following themes (1) pharmacy and pharmaceutical science career pathways (2) professional development (3) drug discovery and development and (4) pharmacist roles and responsibilities
  - Theme (3) drug discovery and development had the highest growth from desired areas of growth (6%) to gained areas of growth (35%)

## CONCLUSION

Implementation of pipeline programs such as the SCOPE Saturday Academy can increase awareness of and interest in career pathways in pharmacy and pharmaceutical sciences for high school students from underrepresented minority groups.

## AUTHOR AFFILIATIONS

<sup>1</sup> USC Mann School of Pharmacy & Pharmaceutical Sciences, Los Angeles, CA, USA

<sup>2</sup> Keck School of Medicine of USC, Los Angeles, CA, USA