



# Pavlov's Office Hours



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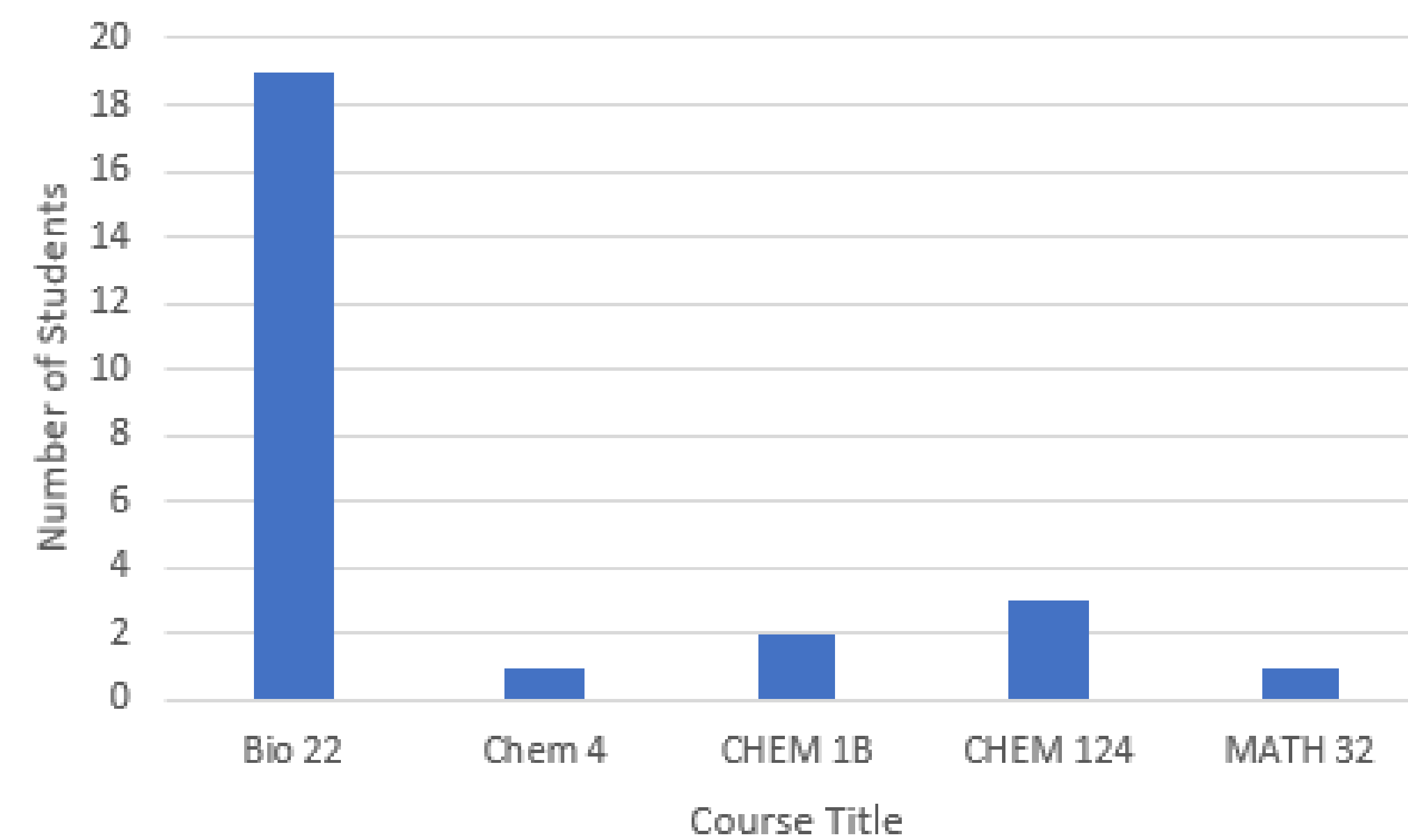
## Introduction

While office hours are often beneficial to students, many are not motivated enough to attend them. We conducted a study from weeks 5 to 14 of the Spring 2023 semester that measured the impact of classical conditioning on student behavior. Specifically, we investigated whether the use of positive reinforcement in the form of rewards such as candy or stickers would encourage more students to attend office hours. The study involved a control group with no rewards given, and an experimental group where rewards were announced every week beginning with week 9. Facilitators tracked attendance of students attending office hours. Our ultimate goal was to encourage more students to utilize the office hour resource provided by PAL to achieve academic success.

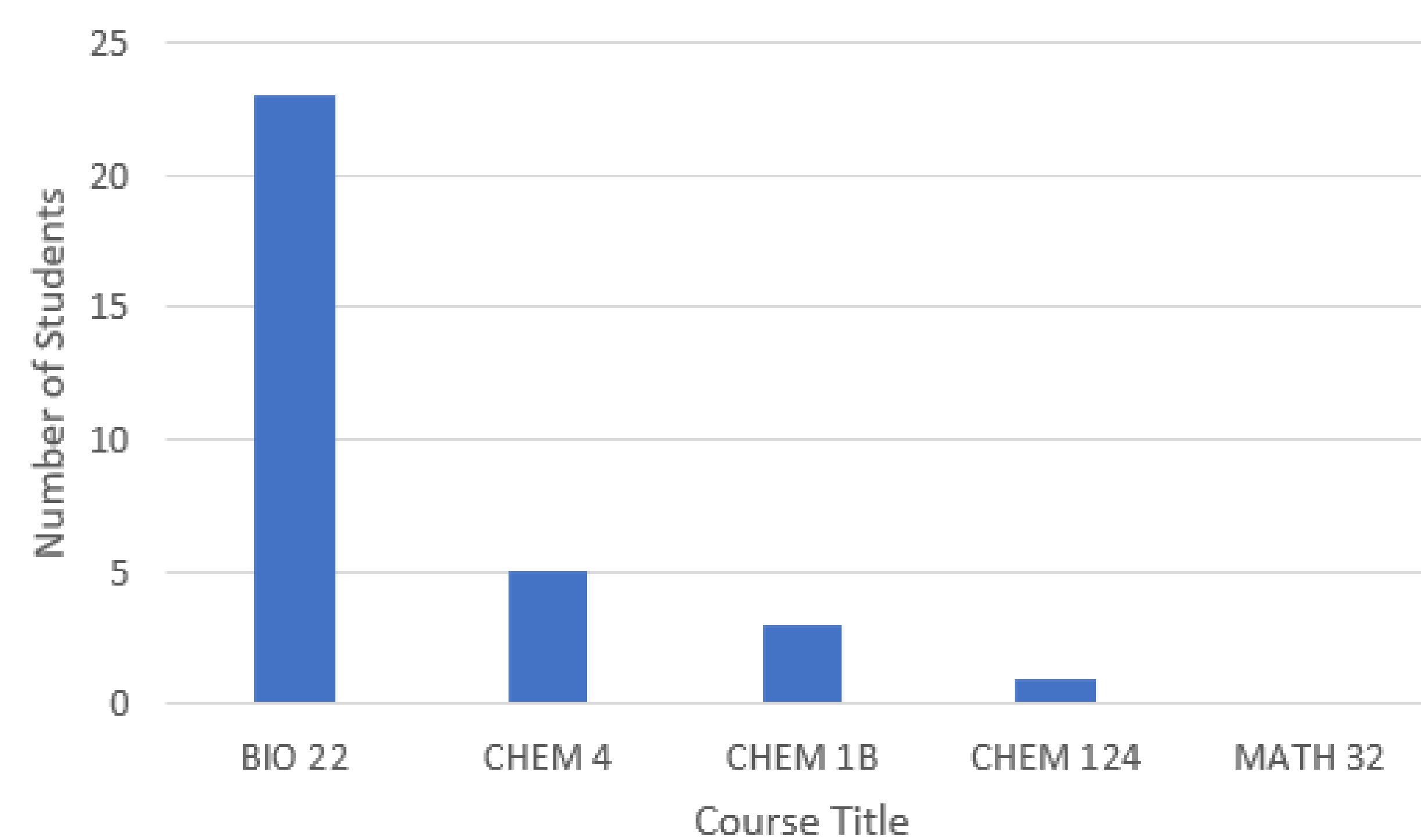
## Methods

A study has been conducted in PAL from week 5 to week 14, measuring the number of people that attend office hours. The focal point of our research pertains to a control group that receives no reward for their attendance, and an experimental group that received a reward. This study aims to find whether classical conditioning would increase the number of students that respond to this positive reinforcement by attending office hours more frequently. There were no rewards given to students from week 1 through week 8 of the study. Beginning in week nine, facilitators participating in this study rewarded students (candy, stickers, etc.) when students attended office hours. Facilitators tracked students who attended their office hours. Facilitators began the experimental period by making an announcement regarding the rewards for office hour attendance. Students attending office hours were properly documented by facilitators according to group (control or experimental).

Control Group Attendance (Week 5-8)



Experimental Group Attendance (Week 9-13)



## Results

Both the control group and experimental groups were compared. BIO 22 saw an increase from 19 students attending office hours during the control to 23 students in the experimental period. Chem 4 saw an increase from 1 student to 5 students, while Chem 1B increased from 2 to 3 students attending office hours. Chem 124 saw a decrease from 3 students to 1. Finally, Math 32 saw a decrease from 1 student to 0 students. The data collected was found to be insignificant with a p-value of .66 which was higher than the required  $<.005$ .

## Conclusion

While certain classes showed an insignificant change, Chem 4 and Bio 22 both showed a boost in attendance records. Chem 1B showed no significant change in attendance. Bio 22 results are likely attributed to the nature of anatomy which requires consistent practice to ensure mastery. Furthermore, there were three facilitators collecting data for one class likely inflating results. The results of Math 32 are difficult to analyze as the Control and Experimental group had no attendance thus the results can be labeled insignificant at best. Several students noted informally that the hours did not work with their schedules, and they did not feel the need to prioritize office hours attendance. There exist many barriers to students' office hours attendance, and offering rewards did not counteract these barriers as expected.

## References

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