Meditative Breathing's Effects on Athletes' Perception of Failure and Overall Mindset

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INTRODUCTION

When asked to define the world's most successful athlete, most people would initially describe them as strong, naturally athletic, and conditioned. However, this description neglects one of the most crucial parts of a successful athlete: their mindset. It makes or breaks a player.

A healthy, positive mindset factors into a player's perception of failure and their ability (or lack thereof) to rebound from mistakes. High school athletes' perception of failure in game time situations -- and their responses to their errors -- can hinder their performance in both short-term and long-term situations if they are not able to refocus their actions positively. I explored how meditative breathing techniques could refocus athletes, improving their performance.

SIGNIFICANCE

In order for high school athletes to be able to rebound from their mistakes in game time situations, they need to be aware of their perception of failure and be able to grow from their errors instead of being held back by them. Research is lacking on high school athletes' perception of failure. An article in Sports Psychology Today stated that "Dwelling on errors or missed chances during a game is the top distraction for athletes today" (Edgar, 2012). That research is based off Major League Baseball players and how early mistakes in games hinder athletes' performances, as they are not able to bounce back and keep performing to the best of their ability. A possible cause of this problem in youth athletes is that young athletes don't know how to use their mistakes as a learning opportunity, and thus allow themselves to be negatively affected by these mistakes. **One way to develop a remedy for the situation is to conduct a study that follows a team and compares how team members' performance is affected by errors before exposing them to measures they can take to positively learn and rebound from errors vs. after they implement these methods.**

Palo Alto High School is home to multiple sports and hundreds of student athletes. **By implementing the meditative technique of deep breathing, and teaching athletes to respond kindly to themselves following errors, student athletes could control their perception of failure, bounce back from errors, and our school athletics would see more victories.**

RESEARCH METHODOLOGIES

I used the inquiry approach of Action Research for my project. I used the data collection tool of measurement to collect the number of total points, turnovers, and shots taken by the team for each game I observed. I used the surveys I emailed to the athletes to gather information regarding their emotional outlook on using breathing techniques in games vs. not. To analyze my data, I used the data analysis techniques of **correlation** to draw a connection between the use of deep breathing and fewer errors and **summarizing** to explain my findings from my interviews.
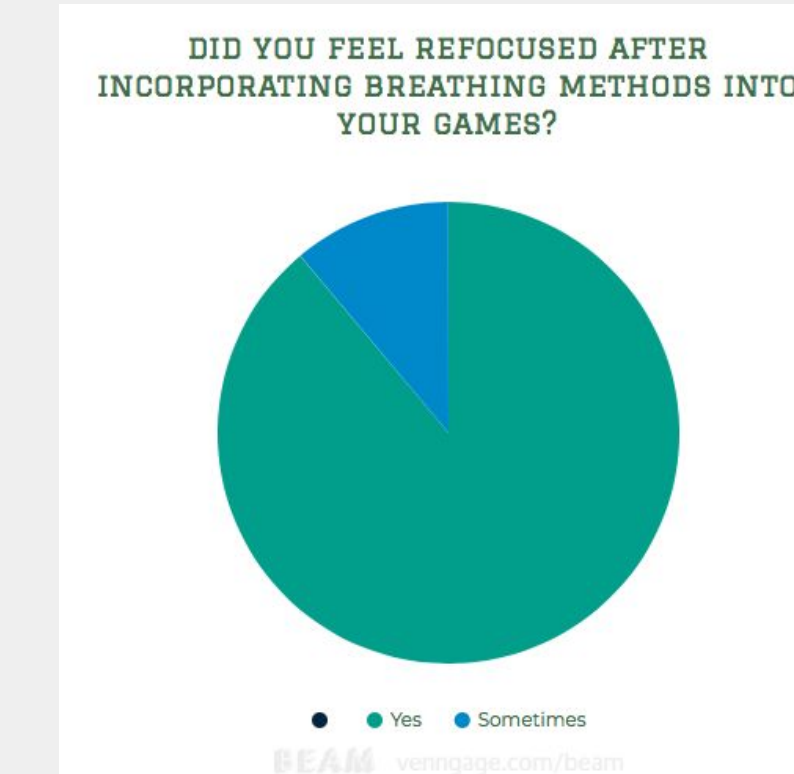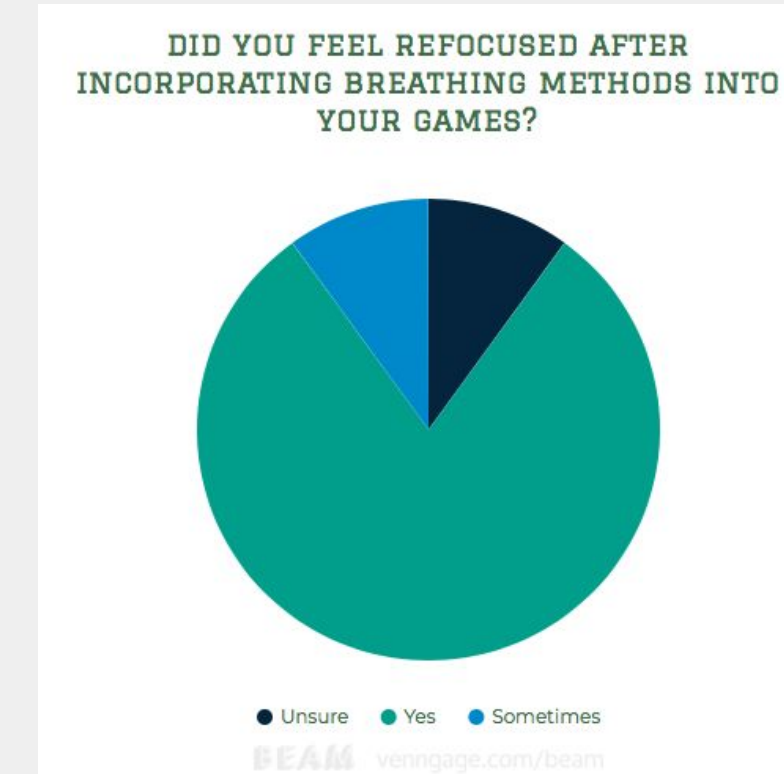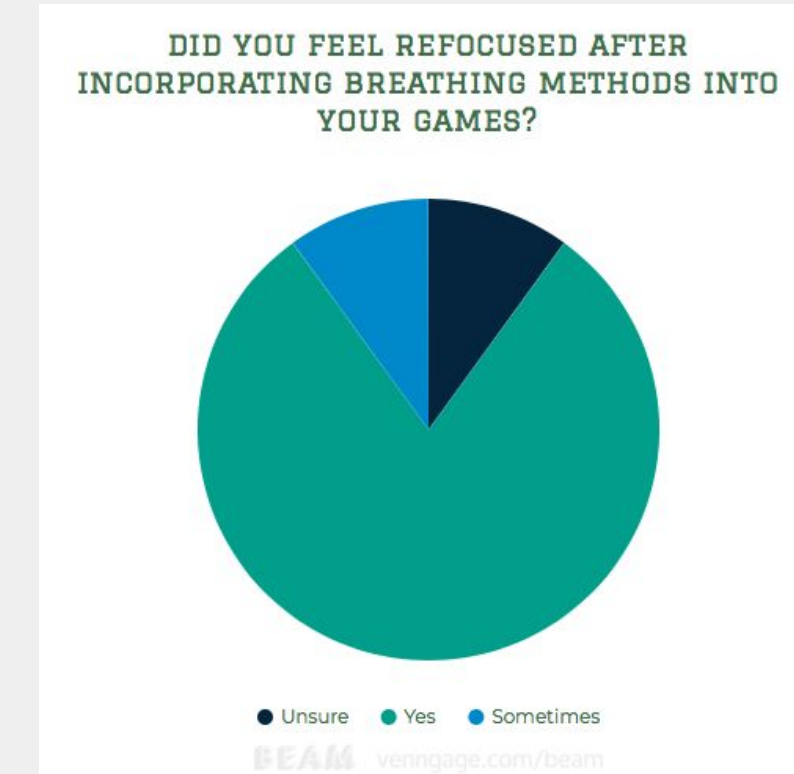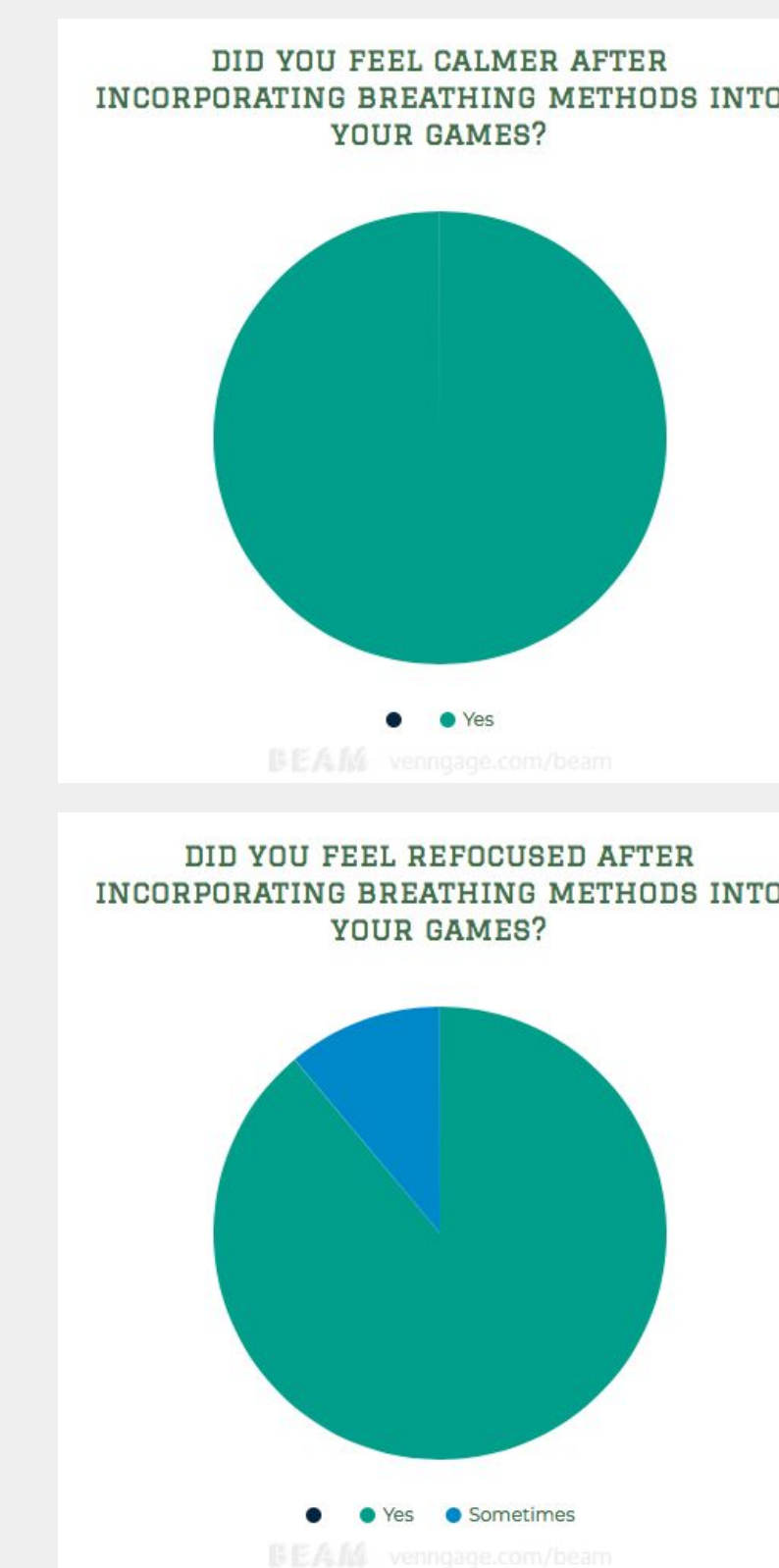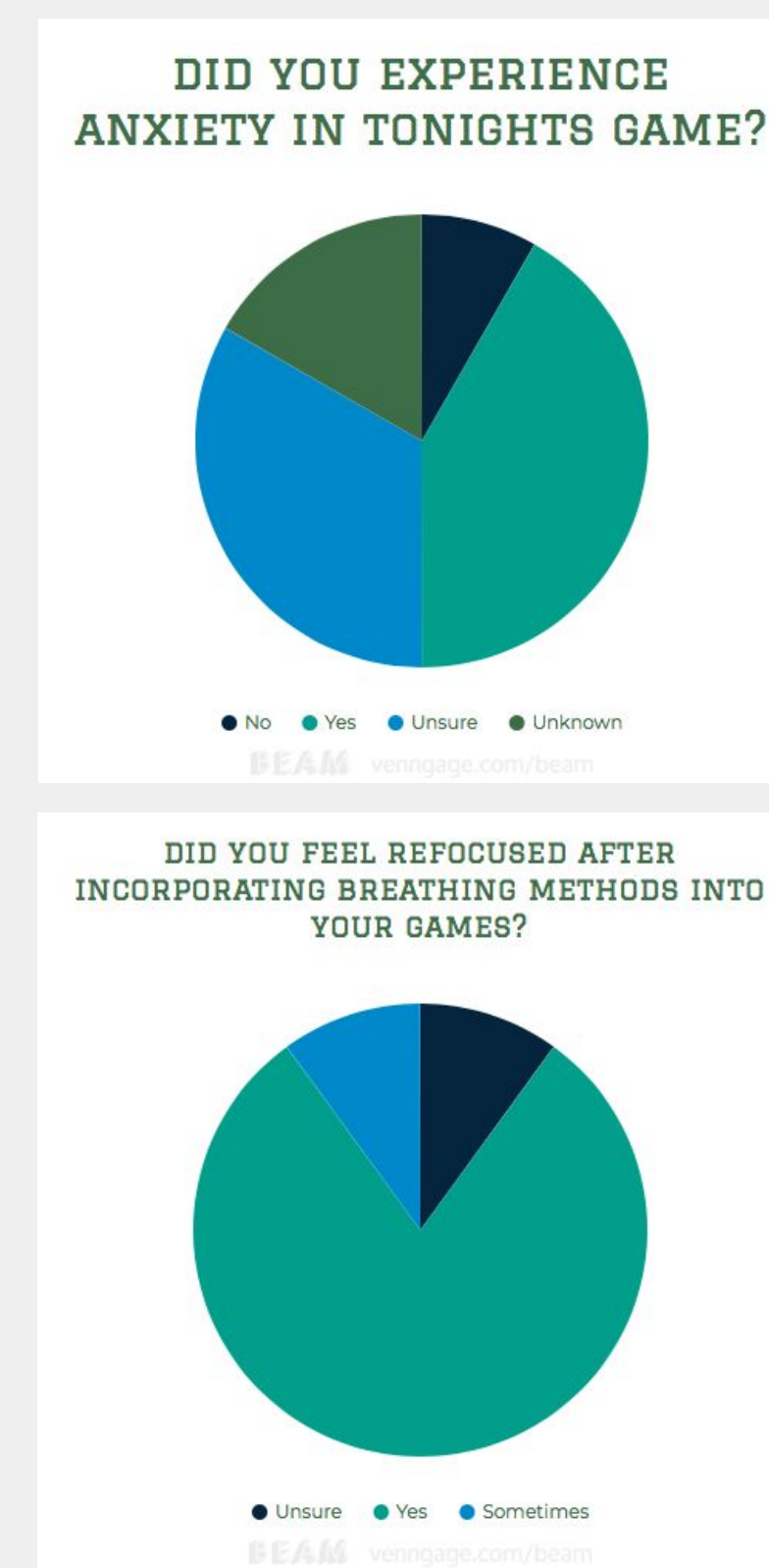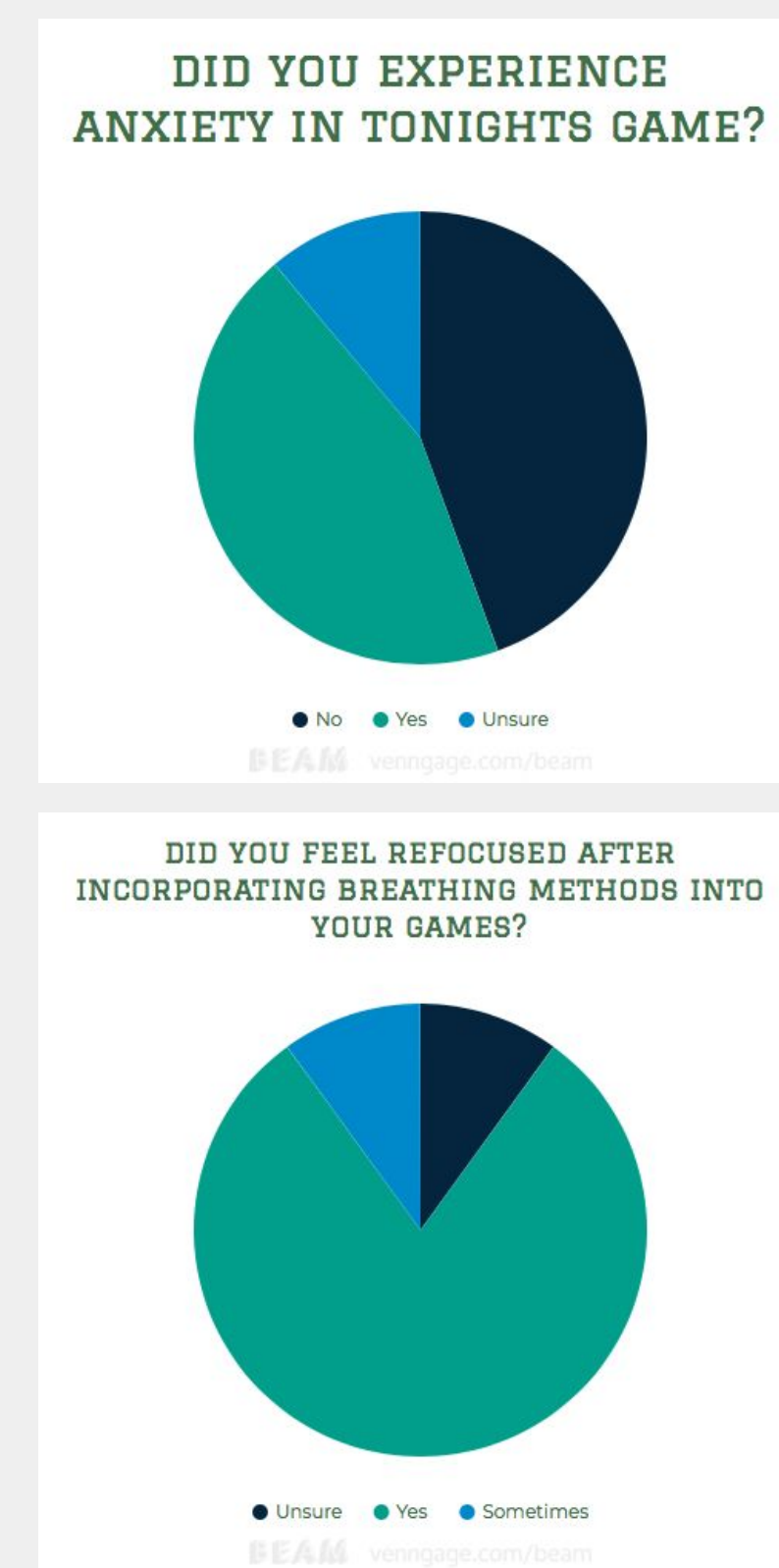
I followed the procedure listed below to gather my qualitative and quantitative data.
1. I observed and collected statistics from two control games in which I have not yet discussed implementing breathing techniques with my participants.
    a. I administered a survey following each control game.
2. I observed and collected statistics from two independent games in which I had previously discussed implementing breathing techniques with my participants.
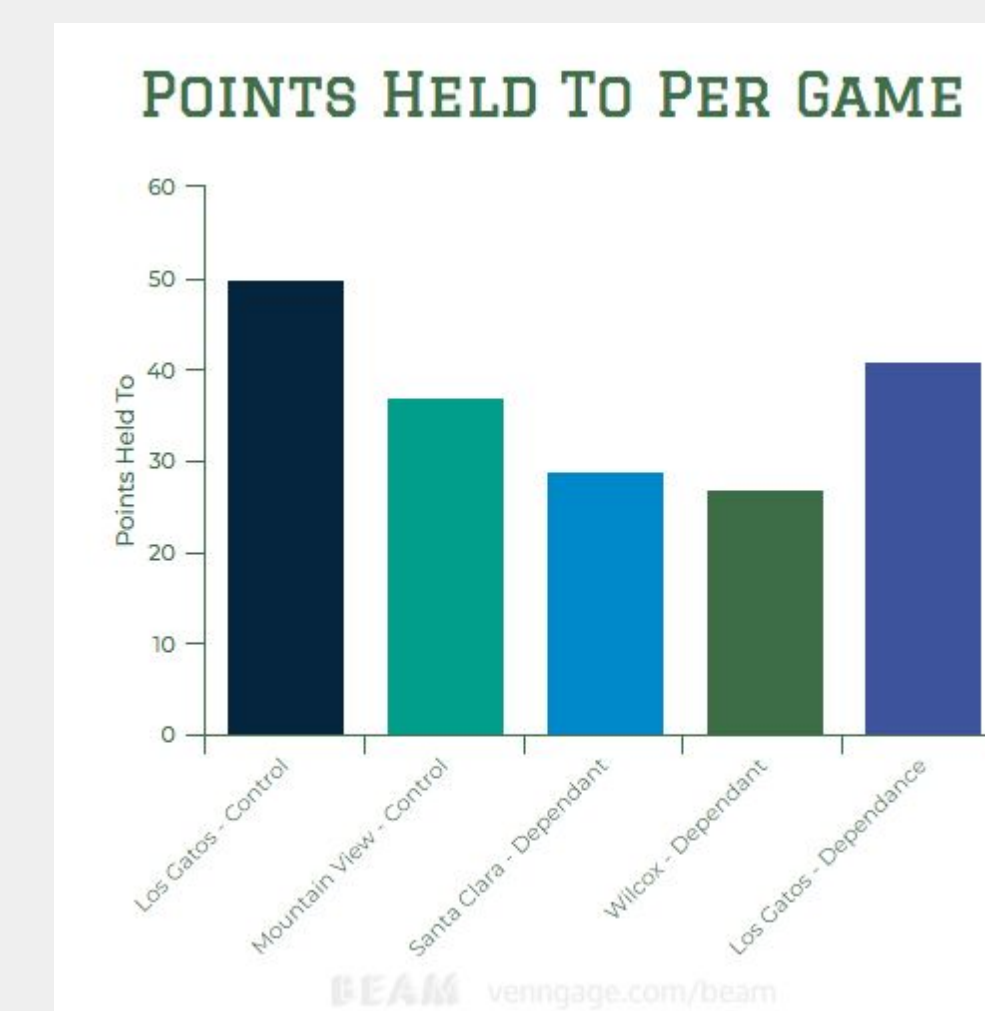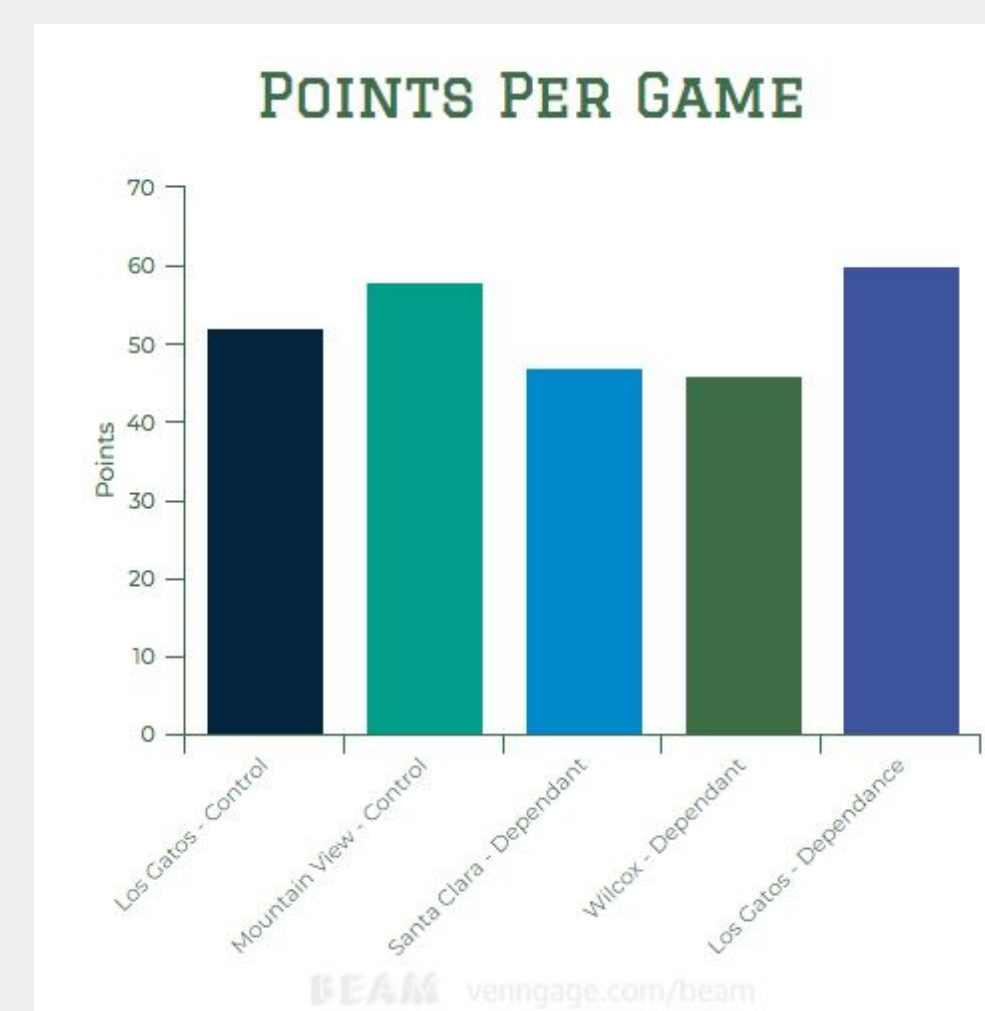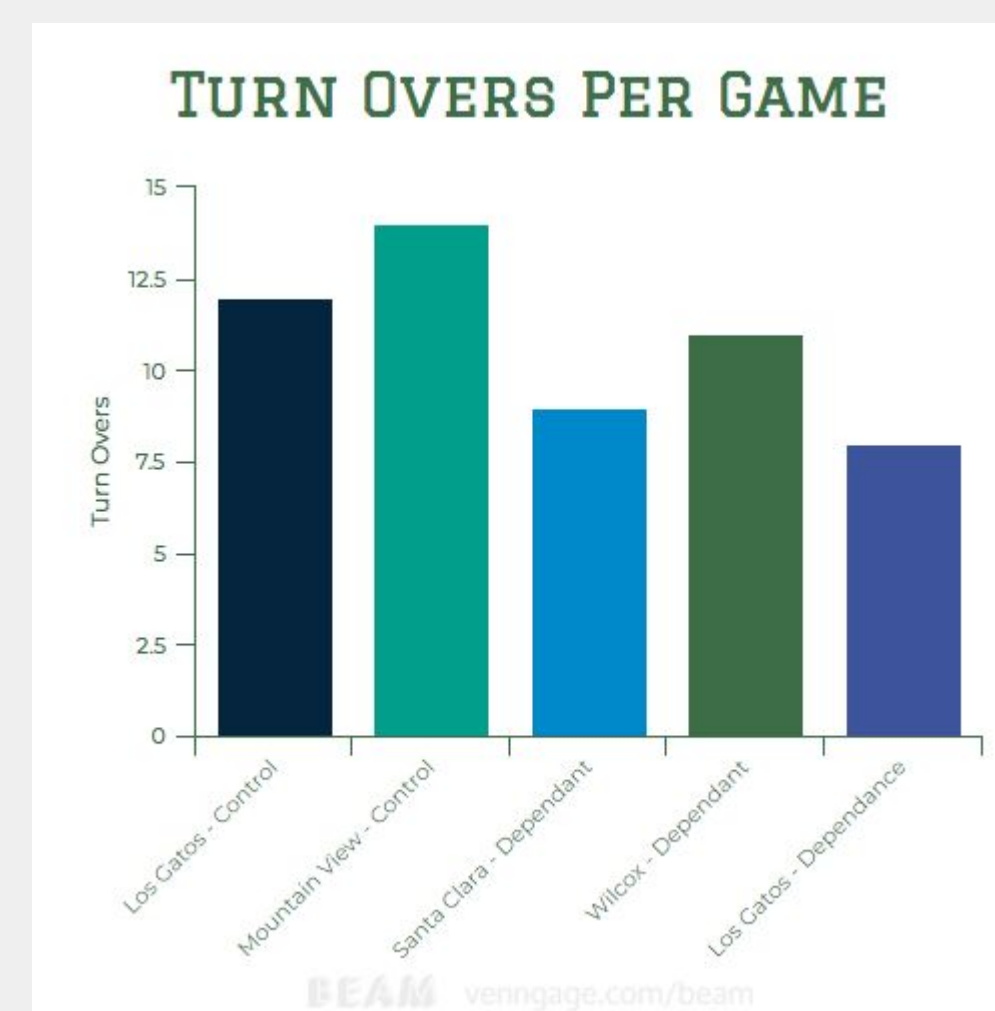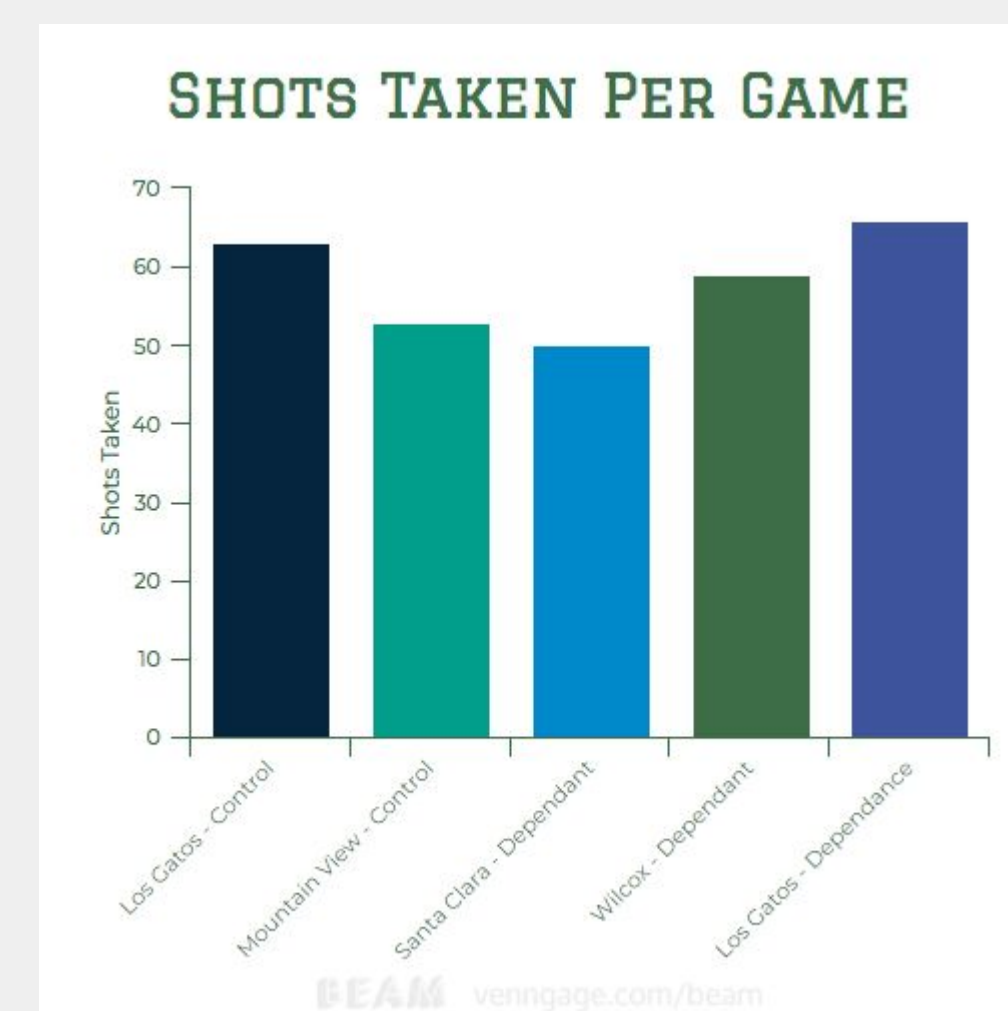   a. I administered a survey following each dependant game.

DATA AND FINDINGS

Qualitative Data

Quantitative Data

DISCUSSION, ANALYSIS, AND EVALUATION

From my data, I was able to conclude that meditative breathing has a definite effect on players' mindsets and emotional states in game time situations. In the survey I administered regarding the first control game, 44.4% of participants answered that they had experienced anxiety or stress during the game. In the survey for the second control game, 41.7% of participants answered that they had experience. In the surveys I administered following each of the games in which participants implemented the meditative breathing methods I introduced to them, 100% of participants answered that they felt calmer after taking deep breaths during games. In addition, for each of the three surveys regarding games in which participants implemented the meditative breathing methods, over 80% responded that they felt refocused after taking deep breaths during games. **From this data, I can conclude that meditative breathing can be used by athletes in game time situations to refocus players and allow them to attain a calmer state.**

My quantitative data was not as conclusive as the qualitative data I received from my surveys. There were no obvious trends in points, points held to, or shots taken from my control games to the games in which participants implemented the meditative breathing methods. However, the number of turnovers per game decreased once participants started implementing deep breathing into their games. **One reason my quantitative data was not more telling is because of the multiple external variables affecting each game in a different way (for example, the different skill level of the opposing team, the location of the game played, and the varying significance of each game), all of which could have contributed to skewing my data one way or another.**

CONCLUSIONS, IMPLICATIONS, AND NEXT STEPS

Incorporating meditative breathing methods into athletes' games will refocus them and make them calmer. However that will not necessarily cause them to improve their performance. In the future, breathing methods should be introduced by coaches at the beginning of sports seasons for the purpose of improving the emotional state during games.

The improvement of emotional states can contribute to players attaining a flexible mindset rather than a static one. According to Carol Dweck, one of the world's leading researchers in the field of motivation, a flexible (or "growth") mindset allows people to believe that through hard work and dedication, their basic abilities can improve.

By having coaches implement breathing methods at the start of seasons, the long-term results, emotional benefits, and fostering of a flexible mindset could lead to increase in ability after a longer duration of time. **By incorporating breathing methods into athletes' game time process, their emotional state will noticeably improve, and--following a significant amount of time--could be reflected in their play.**

ACKNOWLEDGEMENTS / REFERENCES

Works Cited:

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Edgar, Mike. "Letting Go of Errors and Mistakes." *Sports Psychology Today – Sports Psychology*, 11 Feb. 2012, www.sportpsychologytoday.com/youth-sports-psychology/letting-go-of-errors-and-mistakes/.