

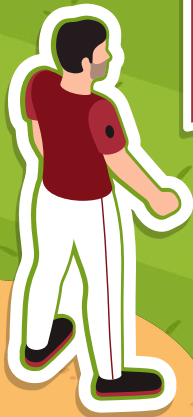
UNDER PRESSURE:

HOW GAME SITUATIONS AFFECT SWING MECHANICS

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WHY ANALYZE PRESSURE?



DATA AND VARIABLES



CALCULATE THE PRESSURE SCORE

- Which inning?
- Number of strikes and balls
- Current scores for both teams
- Number of outs
- If there are players on each base
- Batting score
- Runner up
- ...



bat_score_diff – difference between the batter's team score and the fielding team's score

close_game – indicates games with a score difference of two runs or fewer

losing_or_tied – shows when the batter's team is tied or behind

late_game – marks plate appearances in the 7th inning or later

runners_on – identifies situations where any base is occupied

two_outs – indicates that there are two outs in the inning

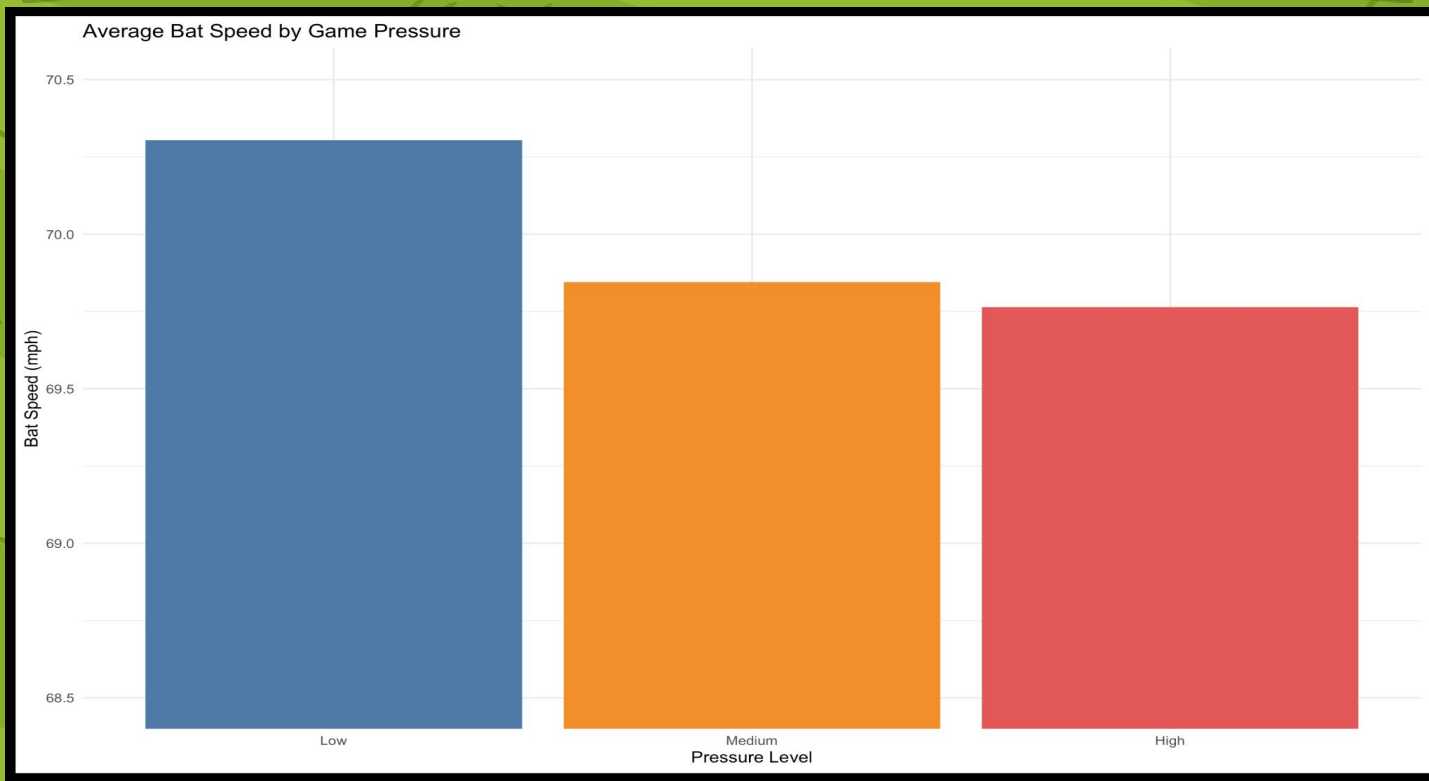
two_strikes – marks at-bats where the batter has two strikes

pressure_raw – total count of these pressure conditions (range 0-6)

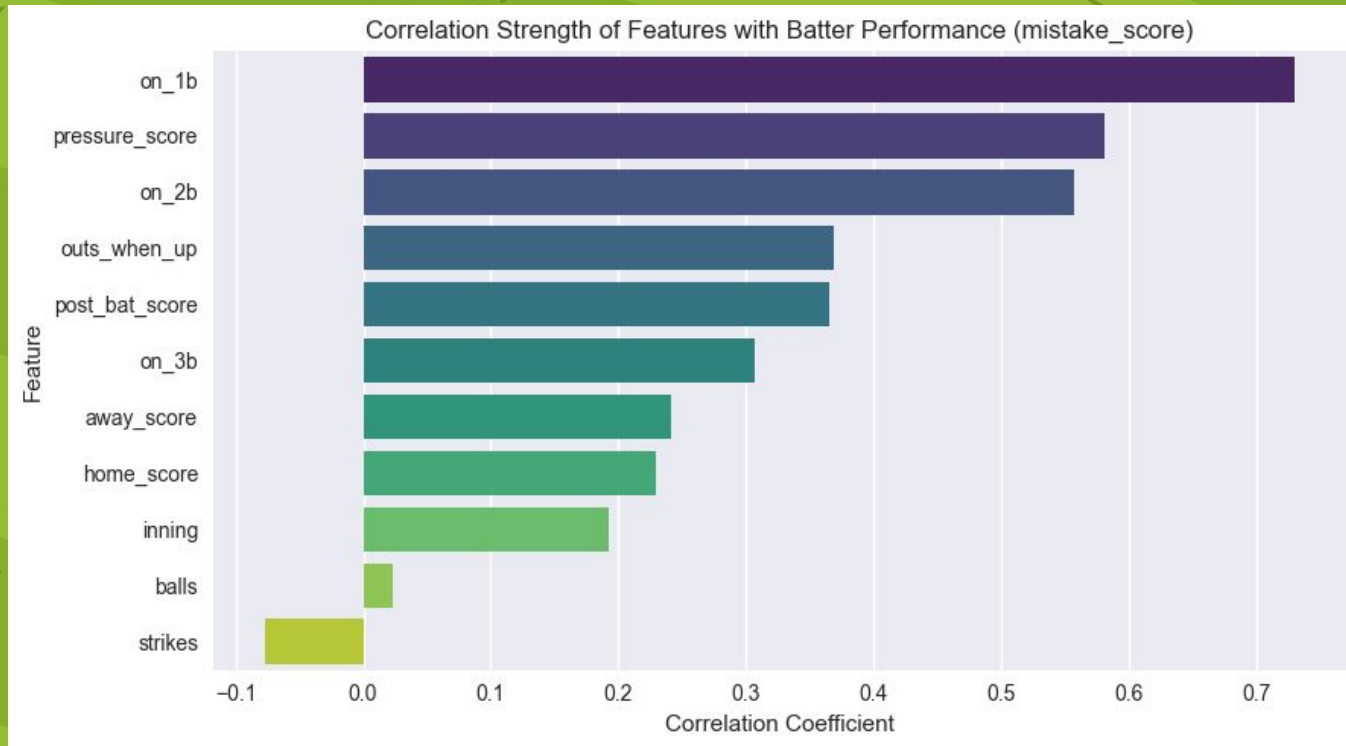
pressure_lvl – categorical variable summarizing pressure level as Low, Medium, or High



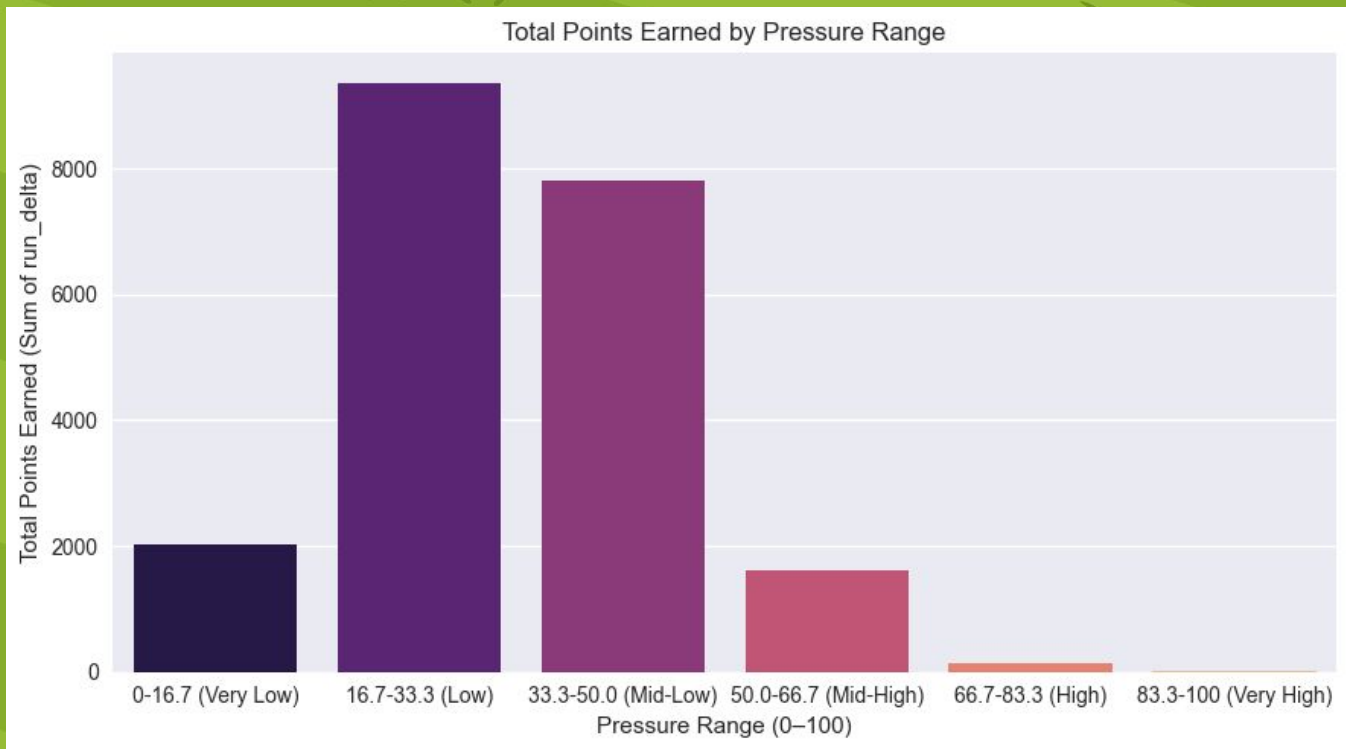
AVERAGE BAT SPEED BY GAME PRESSURE



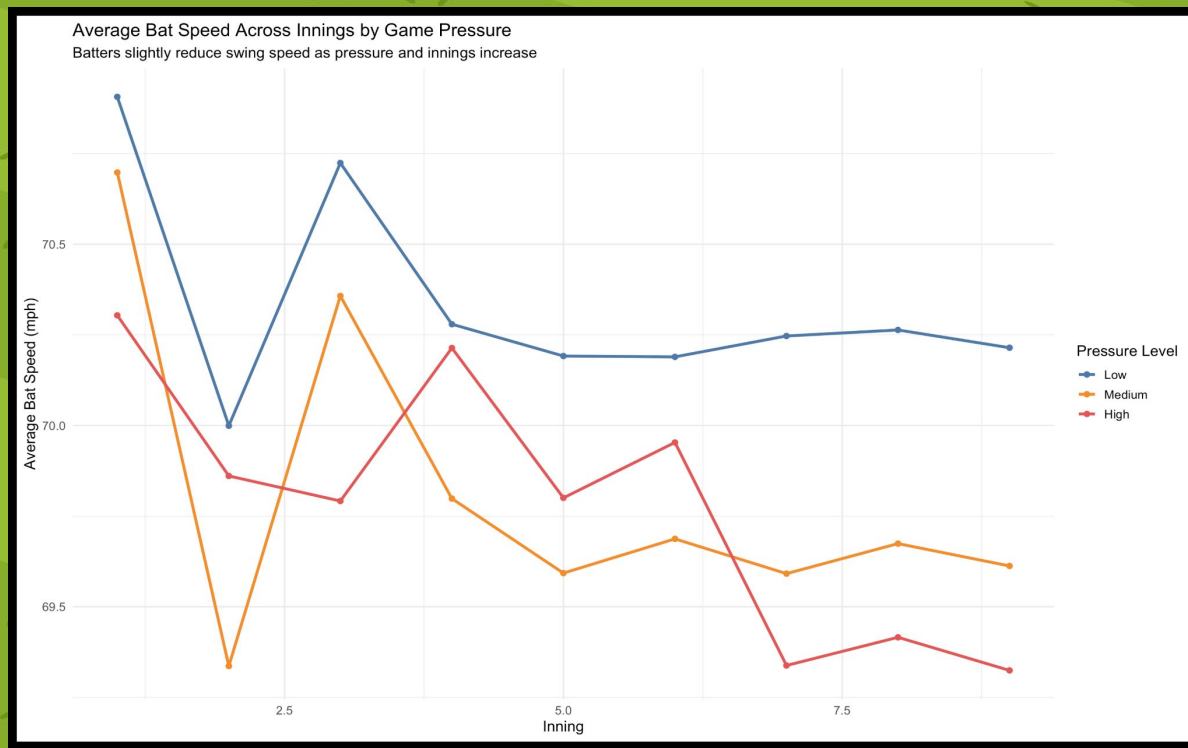
CORRELATION ANALYSIS



TOTAL POINTS EARNED BY PRESSURE



INSIGHTS



THE CONCLUSION

