

Example of data
collected through
questionnaires by the
assistant coaches,
manger...

[Sport & Tourism](#), [Basketball](#)



- This study report is about analyzing the connection between game (basketball) performance and mental strength along with the factors of gender and starter status. Aubrey Newland, Leslie Podlog and Maria Newton , Department of Exercise and Sport Science, University of Utah, Salt Lake City, UT 84112, USA. Laura Finch , Department of Kinesiology, Health & Physical Education, St Cloud State University, St. Cloud, MN 56301, USA. Colin R. Harbke, Department of Psychology, Western Illinois University, Macomb, IL 61455, USA.

- The purpose of the study was to analyze the connection between mental strength and college basketball performance, specifically studying possible moderating variables (gender and starting status). For research Psychological Performance Inventory-Alternative (PPI) has been used a measure of characteristics and skills along with mental toughness. It doubts that the terms consonant with mental toughness might be taken into consideration. Besides future research is also needed.

- This study on college basketball players focused on certain skills that are reflective of mental strength measured by the PPI-A. Still there is a need for analyzing mental strength that is seen in the sample. Paying attention only to those players who have shown persistent mental strength, it would be important to analyze the development and maintenance of mental toughness in college athletes too.

- About 20 college basketball teams that were contacted. Around 16 teams (7 men's and 9 women's) from 13 universities participated (9 Therefore there were a total of 197 participants were studied, females (105) and males (92). Of the entire sample, (72) were considered starters, having started in at

least half of the games in the season.

- The study was undertaken in (NAIA) and National Collegiate Athletic Association (NCAA) Division I, II, and III universities in USA.

- 197 basketball players are chosen (92 male and 105 female) to test the relationship between mental toughness and performance in USA.

PERF statistic is used as an indicator of basketball performance. PPI -A used as a measure of mental toughness.

Analysis of variance is used to examine starter and gender differences in mental toughness. Mental toughness and performance are not correlated according to results.

Female data Analysis shows relation between performance and starter symbol. Psychological skills do not play an important role.

Limitations of the research show that PPI-A as a measure needs improvement. The Data collection needs to be refined, doing away with a negatively worded questionnaire. More research required to explore relationship between mental toughness and confidence.

- Data was collected by the coaches and his team at their meetings through a questionnaire. Athletes gave their university and jersey number. Answers were to be given on a scale of 1(almost never) to 5 (almost always) according to the Likert Scale.

- Statistical Quantitative data has been used from the questionnaires.

Analysis of variance, correlation Pearson's " r" and regression were used to test the hypotheses. All statistics analyses were conducted using the SPSS 18. 0.

- The results showed that the association among the PPI-A scores and gender

was not significant ($F(1, 193) = 0.86, p = 0.35, \eta^2 = 0.004$). Males showed higher PPI-A values than the females. The starter status did not show a major effect on the values. $F(1, 193) = 0.02, p = 0.89, \text{partial } \eta^2 < 0.001$. Males showed to have more mental toughness than the females thus proving the second hypothesis to be true but partially. The first and third hypothesis show complex results, indicating that more research needs to be done.

- The whole process was initiated to study the relation between mental toughness and psychological performance for male and female basketball players. The whole process is simple to understand with the use of statistical tools. Female players need more encouragement and implementation of specific course that would increase their mental toughness. It is doubted that collecting data for a few matches and then drawing conclusions might give unfair results. Instead the research should be carried out over a period of one year. This would give more accurate results.