

Relationships Between NBA Combine Performance, Draft Selection, and Career Performance

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INTRODUCTION

Physical performance data collected during the National Basketball Association (NBA) combine has been shown to be associated with early career performance (1-3 years). However, the relationships between combine performance data, draft selection, and long-term career success have not been examined.

PURPOSE: To determine if NBA combine performance data is associated with NBA draft selection, as well as determining if NBA combine performance data and/or draft selection are associated with long-term NBA career success.

METHODS

- NBA combine data (2000-2011), draft selections (2000-2011), and career performance data (2000-2022) were accessed using publicly available databases.
- All draftees between 2000-2011 had a minimum of 10 years they could have played in the NBA.
- Only players who attended the NBA combine and were subsequently drafted were included in the analysis.

Combine performance data included in the analysis were:

- Lane Agility (AGILITY, seconds)
- Three-quarter court sprint (SPRINT, seconds)
- Standing Vertical Jump (VStand, inches)
- Maximum Vertical Jump (VMax, inches)
- Bench Press (BENCH, #reps lifting 185lbs)

NBA draft pick (PICK)

- Determined as the overall pick in the draft in which a player was selected
 - i.e. #1-30 first round, #31-60 second round

Career Performance (WS/48)

- Determined using Wins Shared per 48 minutes, which estimates an individual player's contribution to team success, while also accounting for playing time.

Partial correlations (controlling for position) were determined between:

- PICK and Combine Data
- WS/48 and Combine Data
- WS/48 and PICK

RESULTS

442 players met the following criteria and were included in the data analysis:

- Participated in the combine
- Drafted in the NBA draft

RESULTS

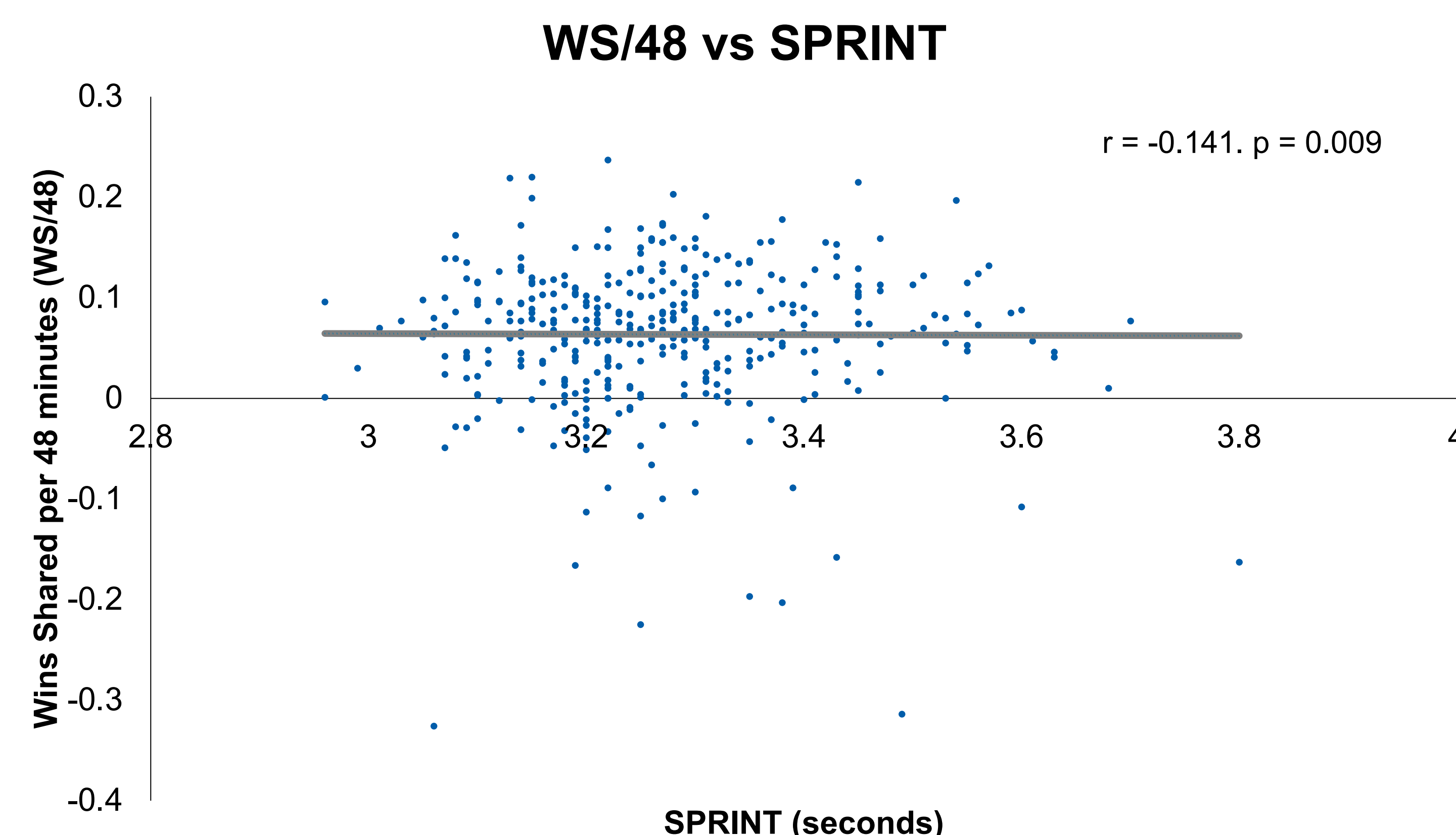
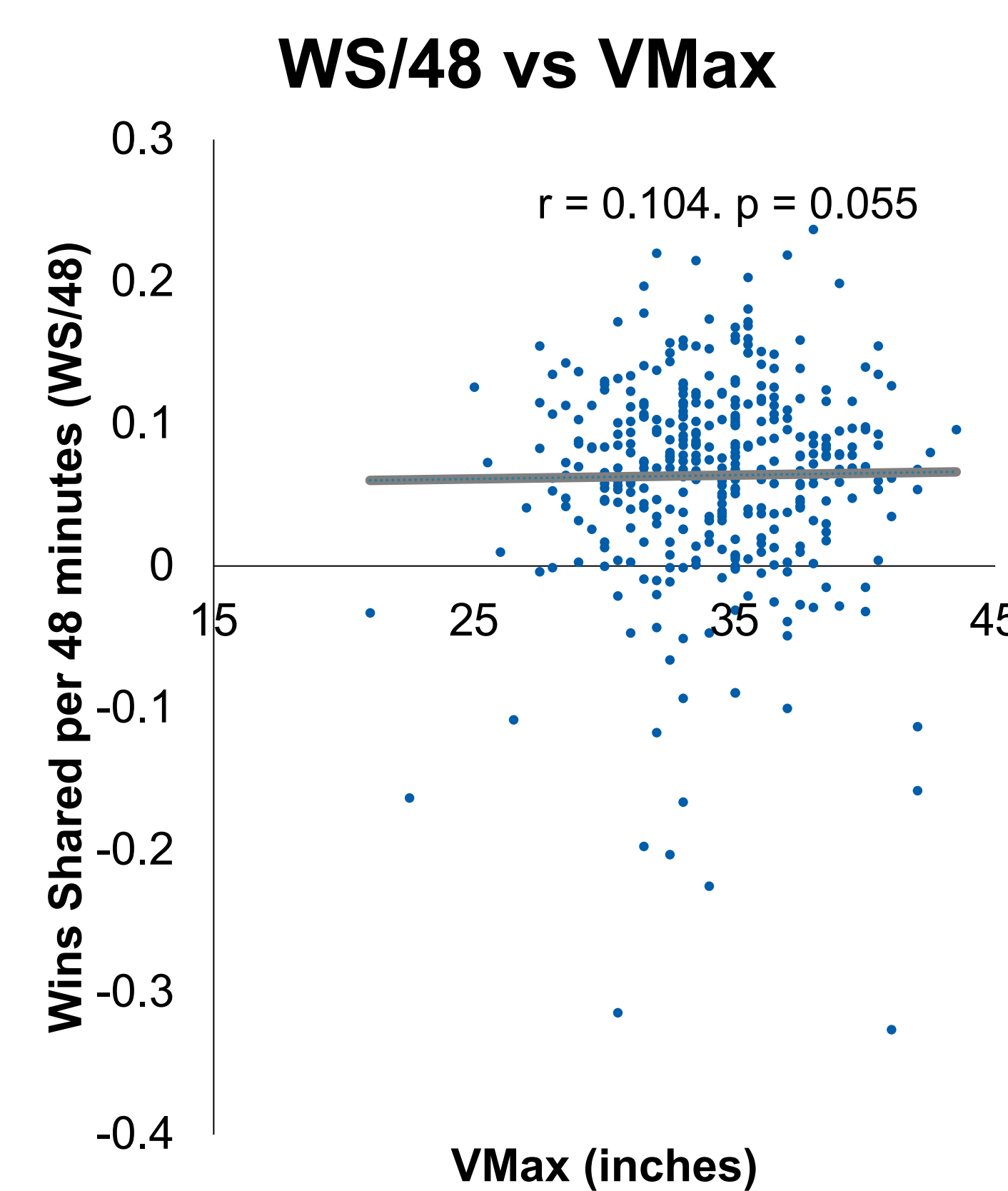
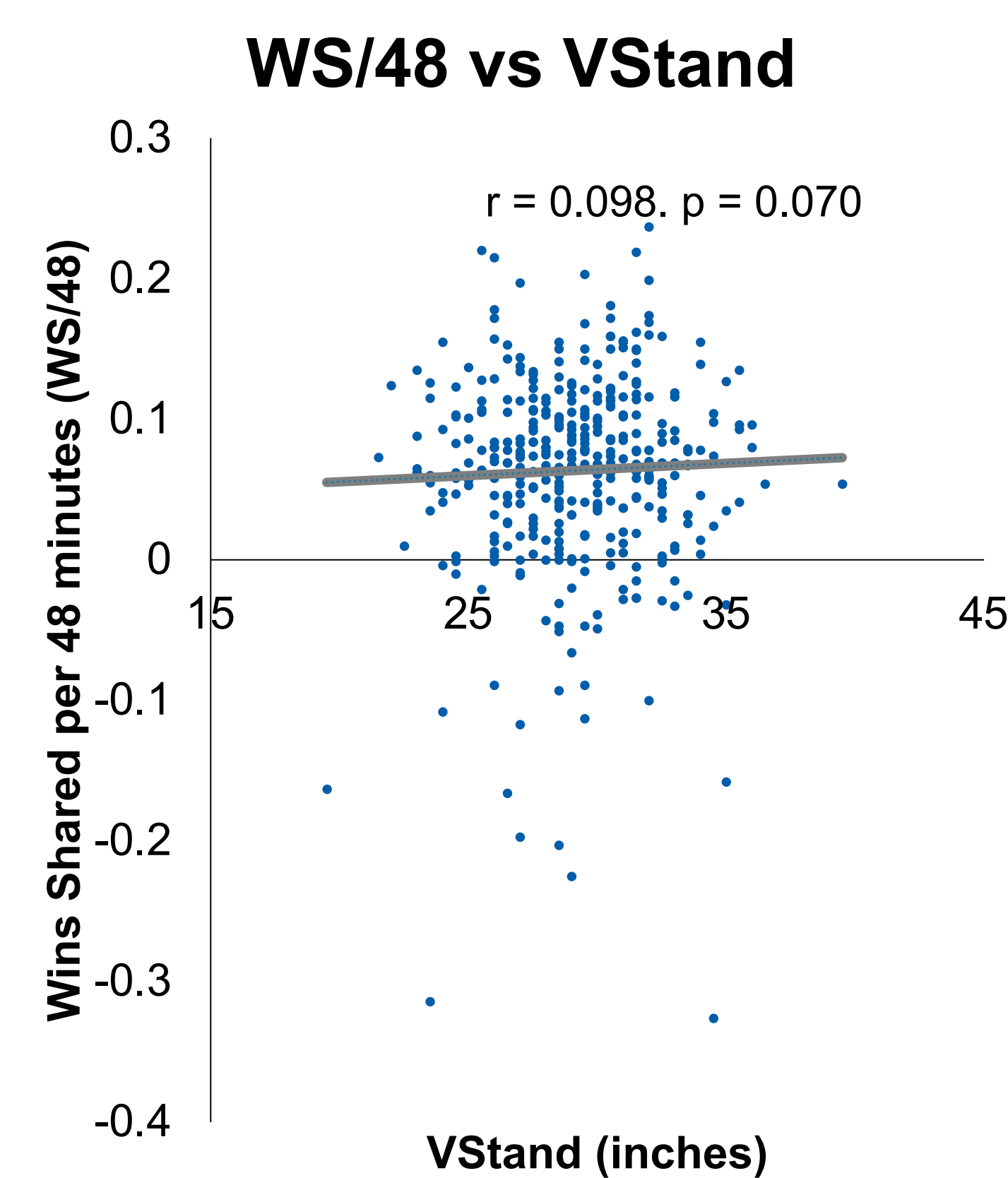
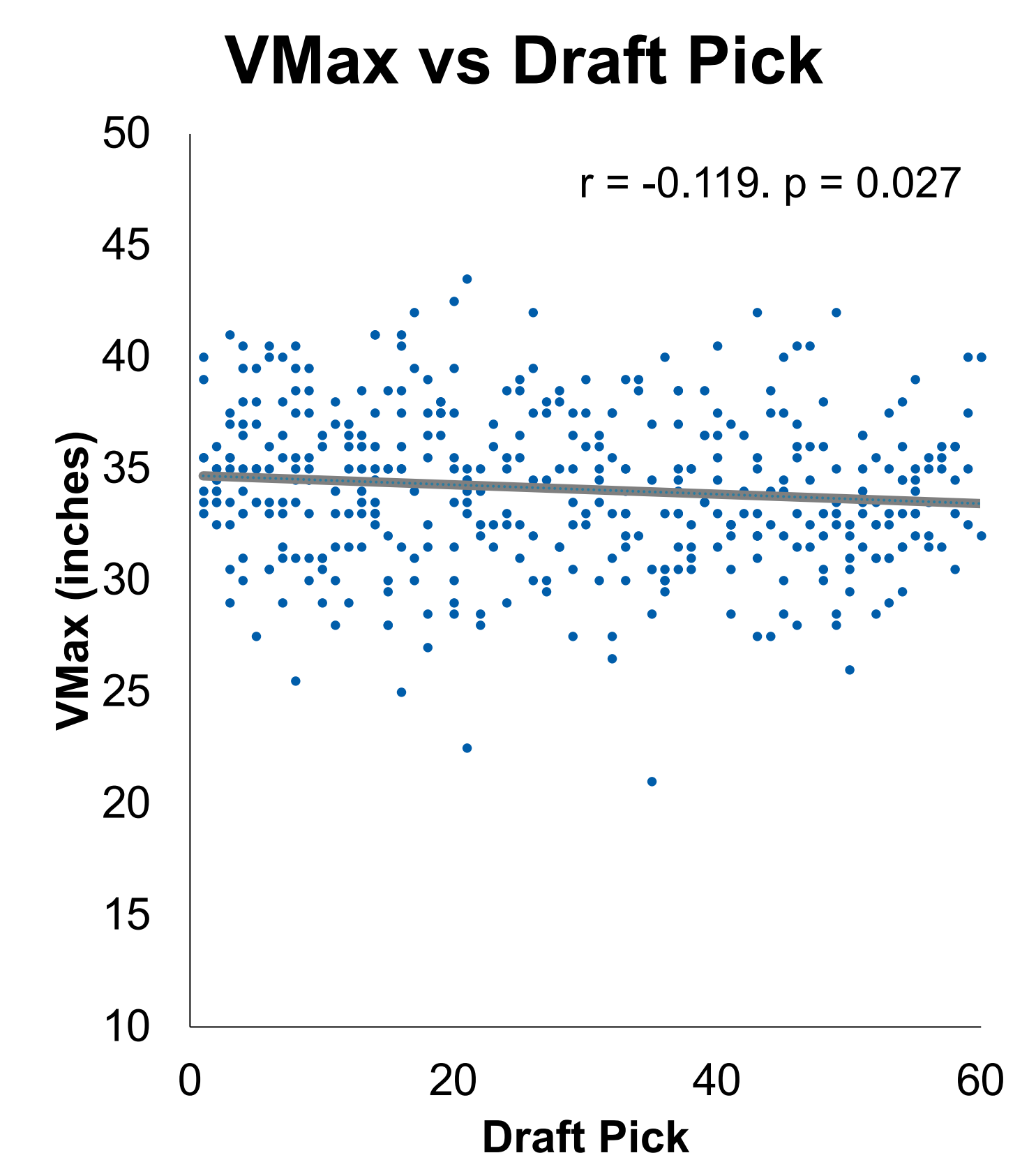
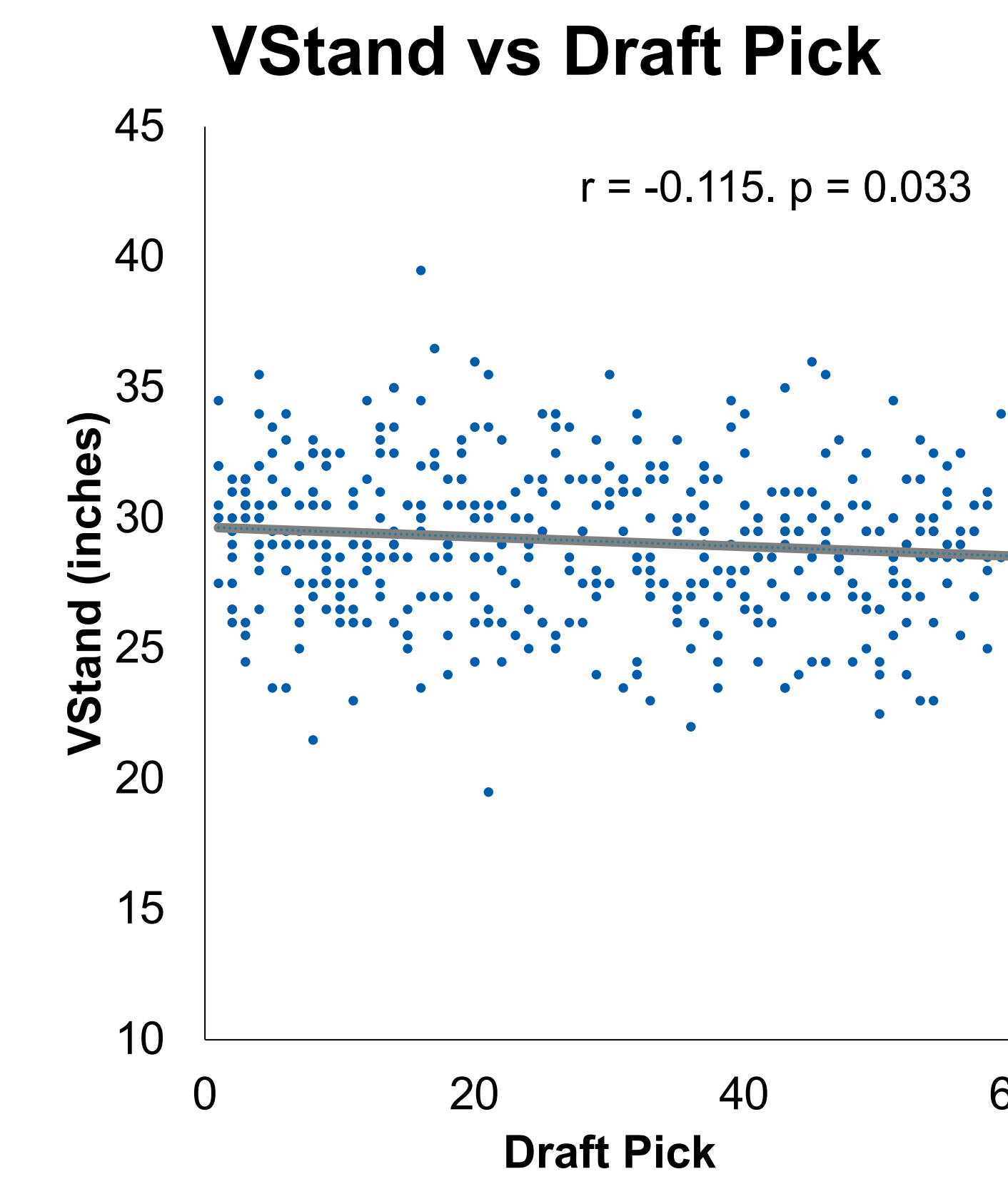
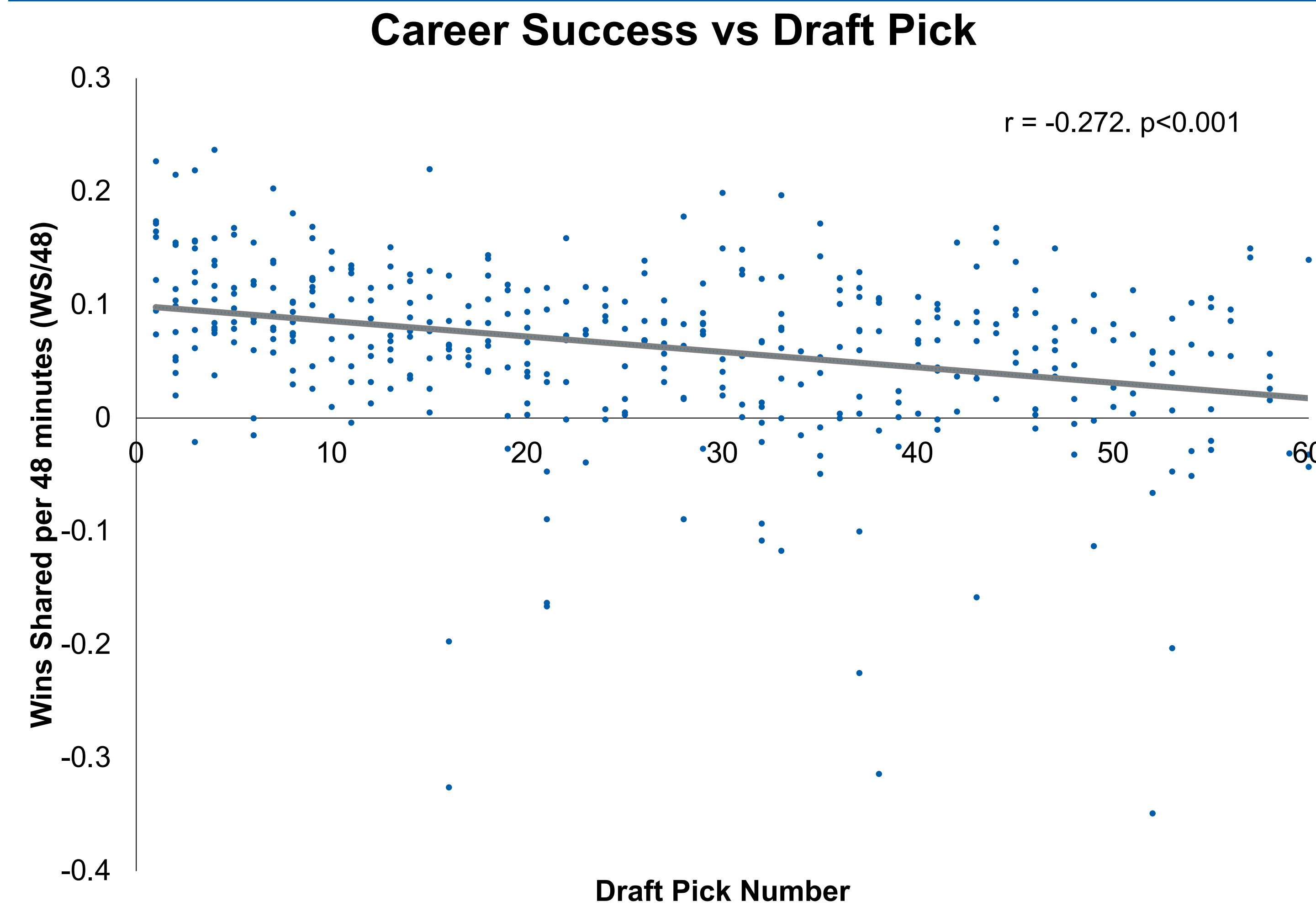


Table 1. Agility, Sprint, Bench Correlations with Pick, WS/48

Combine Test	Pick	WS/48
Agility	r = 0.045, p = 0.408	r = -0.059, p = 0.280
Sprint	r = 0.087, p = 0.107	r = -0.141, p = 0.009
Bench	r = 0.065, p = 0.232	r = 0.031, p = 0.572

KEY OUTCOMES:

- Strongest predictor of future NBA success was the pick at which a player was selected in the NBA draft
- Very weak relationships between NBA combine data and either draft pick or future NBA success were observed

CONCLUSION

- Physical attributes may be a large contributor to success at lower levels of basketball
- Above an undefined threshold, physical attributes fail to separate basketball players who are selected early in the draft, or go on to achieve long-term career success

PRACTICAL APPLICATIONS

- Physical performance testing in the NBA combine may confirm an individual's physical attributes, but does not assist scouts and coaches to identify future success

For more information about this study or the research group, please use the QR code

