

# **Chess Girls Don't Cry: Gender Composition of Games and Effort in Competitions among the Super-Elite**

## **Abstract**

The deterministic nature of chess makes the outcome strongly predictable in the endgames, especially among the elite. As a result, instead of ending in a checkmate or a forced tie, elite chess games end either in the resignation of the player in a losing position or a mutually agreed upon draw. These game-ending decisions are made several moves before the ending plays out on the chessboard. Hence, in win-loss (draw) outcomes, the players in the disadvantaged (advantaged) position have a margin within which they can put an end to the game. This margin means that the total number of moves in elite chess games depend on the players' personality traits. Theoretically, traits such as competitiveness, over-confidence, and risk tolerance, all more prevalent among males, must contribute to the length of the game, by delaying resignation or agreeing to a draw. In contrast, susceptibility to intimidation and stereotype threat, as well as an aversion towards struggling in a dominated position, must accelerate the completion of the games. Using a sample of super-elite games from 2000 to 2020 ( $N > 188,000$ ), the present paper examines whether the gender composition of games and the power relation between players associate with the number of moves. Male players are found substantially quicker to quit when dominated by a female than by a male. In contrast, female players' behaviour differs little as a function of the gender of the opponent. The implications are discussed.

**Keywords:** Gender; Competitiveness; Chess, Quitting; Effort

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