

The influence of body language and expected competency on gaze behaviour while forming an initial impression of a tennis player.

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The early judgements made of others have consequences for the perceiver and the person being judged (Higgins and Bargh, 1987, *Annual Review of Psychology*, 38, 369–425). A person's appearance provides immediate information on which judgements can be based (Pendry and Macrae, 1996, *Personality and Social Psychology Bulletin*, 3, 250-257). Currently no objective evidence exists to indicate where a perceiver's gaze fixates when encountering a performer and how this varies based on 1) player gender, 2) appearance and 3) reputation. The participants (N=107; M age=26.6, SD=5.2) all had normal or corrected normal vision and reported experience of playing tennis at a recreational level. Ethical clearance was obtained from the lead author's institution. The participants viewed one of six video sequences comprising; 1) description of the protocol, 2) control player, 3) reputational information (positive, negative, neutral), 4) target player (positive or negative body language). The target player approached the net post, removed their racket and walked to the baseline. Positive body language required eye contact with the camera, head up, shoulders back and a wide stance. Negative body language saw gaze fixed towards the ground, shoulders rounded and a narrower stance. Reputational information included the player's recent win/loss record and improvement/decrease in playing rating.

An Applied Science Laboratories eye tracking system with a 60Hz sampling rate was calibrated resulting in gaze position error rates of less than 1°. The videos were displayed on a 19-inch monitor with a resolution 1024 x 768 and a refresh rate of 85Hz with supporting chinrest to stabilize the head. Number of fixations, location of fixations and duration of fixations for a) the head and shoulder, 2) trunk and hip, 3) right arm (racket arm), 3) left arm, 4) racket, 5) right leg and 6) left leg was recorded. Data from the first 5 seconds after the player came in to view was analysed.

ANOVA revealed fewer fixations ($p=.005$), for a shorter total duration ($p=.012$) and contributing a smaller percentage of the total look time ($p=.023$) on the head region in the neutral expectancy condition for a female displaying negative body language. This pattern was repeated when observing a male player but in the positive body language condition. The results indicate that the gender of the athlete being observed interacts with prior held information (expectancy) and immediately observable cues (body language) to determine where a player looks when they first see an opponent in tennis.