

Name of Instrument: Ankle Injury Assessment

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Privacy Use Cost: \$

Public Use Cost: \$

Year Developed: 2000

Where to obtain Instrument:

- Contact author

Description of the Instrument

- To assess balance measurement (postural sway) as a predictor of ankle sprain susceptibility.
- To determine postural sway, participants stand on one leg at a time (right and left) for three trials of 10 seconds with their eyes open, then repeated with their eyes closed.
- Postural sway is the average degrees of sway per second for the 12 trials producing a compilation (COMP) score.
- Final COMP sway score is computed by adding the average COMP score for each of the trials and dividing by 12. High sway scores correspond to poor balance. Low sway scores correspond to good balance.
- Higher postural sway scores corresponded to increased ankle sprain injury rates ($p=0.001$); participants who had good balance (low sway score) had nearly 7 times as many ankle sprains as participants who had good balance (low sway scores) ($p=0.0002$)

Form of instrument:

- Injury Surveillance/Tracking tool
- Other: balance assessment test at high schools.

Method of delivery:

- Proxy Report (Certified Athletic Trainers recorded all ankle injuries.)
- In-person interview/assessment

Relevance to injury/ Percentage of the instrument specific to injury

- To predict risk for ankle injury based on balance.

Time to administer or complete the instrument

Methods of data analyses:

- Quantitative

Setting/sample instrument used in:

- Data were collected at five high schools during the first 2 weeks of the 1997-1998 and 1998-1999 basketball seasons.
- 210 participants (119 males, 91 females) were high school basketball players who did not sustain a time loss ankle or knee injury within the previous 12 months.

Was it pilot tested? Yes

Pilot test sample:

- 18 high school basketball players (9 males, 9 females) performed a standard balance assessment test battery and repeated it 4 days later.

Reliability Measures

- The intraclass correlation coefficient (the pilot study) for the compilation score (COMP) was highly reliable (0.884).
- Ankle injuries were recorded throughout the season for game and practice exposures.
- Participants were then divided into three categories of low to high COMP scores. 70 participants are in the low-sway (good balance) group; 70 in the mid-sway group; 70 in the high-sway (poor balance) group.
- The rate of ankle sprain injuries for participants in the highest COMP scores was 2.68/1,000 exposures. In contrast, the middle group had an ankle injury rate of 1.63/1,000 exposures, while the low group with an ankle injury rate of 0.40/1,000 exposures.

Validity Measures

Reference

- McGuine, T.A., Greene, J.J., Best, T., & Leverson, G. (2000). Balance as a predictor of ankle injuries in high school basketball players. Clinical Journal of Sport Medicine, 10, 239-244.

Other References

Keywords: ankle injuries, balance, injury, sports, risk.