



ASHE Conference

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**COGNITIVE EFFECTS OF
INTERCOLLEGIATE ATHLETIC
PARTICIPATION IN THE SECOND AND
THIRD YEARS OF COLLEGE**

**SAMPLE: MEN AND WOMEN AT 18 FOUR-
YEAR COLLEGES IN 15 DIFFERENT STATES**

**MEN: FOOTBALL AND BASKETBALL PLAYERS
ATHLETES IN OTHER SPORTS
NON-ATHLETES**

**WOMEN: ATHLETES
NON-ATHLETES**



DEPENDENT VARIABLES:

END OF:

- SECOND YEAR SCIENCE REASONING
- SECOND YEAR WRITING SKILLS
- THIRD YEAR CRITICAL THINKING
- THIRD YEAR READING COMPREHENSION



CONTROL VARIABLES:

PRE COLLEGE:

- COMPOSITE ACADEMIC ABILITY
- READING COMPREHENSION
- CRITICAL THINKING
- AVERAGE INSTITUTIONAL ACADEMIC ABILITY
- NCAA DIVISION I/NON-DIVISION I STATUS
- PERSON OF COLOR
- ACADEMIC MOTIVATION
- SOCIOECONOMIC STATUS

COLLEGE EXPERIENCE:

- PLACE OF RESIDENCE
- CUMULATIVE CREDIT HOURS COMPLETED
- TIME SPENT STUDYING
- WORK RESPONSIBILITIES



COURSES TAKEN IN 5 CATEGORIES

- SOCIAL SCIENCES
- MATHEMATICS
- ARTS AND HUMANITIES
- NATURAL SCIENCES/ENGINEERING
- TECHNICAL/PREPROFESSIONAL



ANALYSES

1) COMPUTED TOTAL AND DIRECT EFFECTS OF ATHLETIC PARTICIPATION (DERIVED INDIRECT)

2) COMPUTED ADJUSTED MEANS FOR ATHLETE/NON-ATHLETE GROUPS

3) COMPUTED SIGNIFICANCE OF PAIRWISE COMPARISONS FOR MEN

4) COMPUTED ESTIMATED EFFECT SIZES AND PERCENTILE-POINT DISADVANTAGES/ADVANTAGES

5) UNWEIGHTED AND WEIGHTED RESULTS REPORTED



RESULTS

1) INDIRECT EFFECTS WERE SMALL AND TRIVIAL

2) MALE NON-ATHLETES AND ATHLETES IN SPORTS OTHER THAN FOOTBALL AND BASKETBALL QUITE HOMOGENEOUS

3) COMPARED TO THE OTHER TWO GROUPS, MALE FOOTBALL AND BASKETBALL PLAYERS HAD SIGNIFICANTLY LOWER REGRESSION ADJUSTED MEANS IN SECOND-YEAR WRITING SKILLS AND THIRD-YEAR CRITICAL THINKING AND READING COMPREHENSION



**4) THE MAGNITUDE OF THE DEFICIT
AVERAGED ABOUT .33 OF A STANDARD
DEVIATION**

**5) LITTLE EVIDENCE OF BROAD-BASED
NEGATIVE EFFECTS FOR WOMEN ATHLETES**

6) NO SIGNIFICANT CONDITIONAL EFFECTS

7) NO IMPORTANT INDIRECT EFFECTS

