# IN-GAME DECISION MAKING OF HIGH SCHOOL COACHES WITHOUT THE GUIDANCE OF A CERTIFIED ATHLETIC TRAINER

RESEARCH METHODS IN HUMAN PERFORMANCE

**BRITNEY HODGES** 



- HIGH SCHOOL WILL MOST LIKELY BE FIRST JOB
- LESS COVERAGE AT THE HIGH SCHOOL SETTING
  - 39% OF HIGH SCHOOLS HAVE ACCESS TO A ATHLETIC TRAINER
    - KOREY STRINGER INSTITUTE (2013)



- INJURIES IN HIGH SCHOOLS ATHLETICS
  - ACCOUNT FOR 2 MILLION INJURIES
    - COMSTOCK (2006)
  - FOOTBALL HAS HIGHEST INJURY RATE
    - HIGHEST IN CATASTROPHIC
    - BASKETBALL
  - MOST COMMON
    - SPRAINS, STRAINS, AND CONTUSION OF THE LOWER EXTREMITIES
    - DURING PRACTICE

CHAMPION ET AL (1999)



- ROLE OF HIGH SCHOOL COACHES IN DEALING WITH INJURIES
  - OBLIGATED TO RENDER EMERGENCY CARE
  - UNCOMFORTABLE PROVIDING INJURY MANAGEMENT
    - FELT LIABLE
    - PREVENTION COURSES TO HELP AID IN INJURY MANAGEMENT STAPLETON (1984)



- LEVEL OF COMPETENCE OF HIGH SCHOOL COACHES TREATING SPORT RELATED INJURIES
  - ASSUME RESPONSIBILITIES FOR IMMEDIATE INJURY CARE
    - LACK ADEQUATE TRAINING
  - GAME SITUATION DATA SHEET
    - DECISION MAKING REGARDING INJURED ATHLETES
    - MORE CONCERNED WITH GAME SITUATION THAN PLAYERS' HEALTH FLINT (1992)



- IMPORTANCE OF HAVING A CERTIFIED ATHLETIC TRAINER
  - RESPONSIBLE FOR THE PHYSICAL WELL BEING OF ATHLETES
  - EDUCATION AND YEARS OF INJURY MANAGEMENT
  - SAFER TO HAVE A CERTIFIED ATHLETIC TRAINER



- DO COACHES MAKE APPROPRIATE IN GAME DECISIONS ABOUT INJURIES WITHOUT THE GUIDANCE OF A CERTIFIED ATHLETIC TRAINER?
  - COACHES MAKE APPROPRIATE IN-GAME DECISION MAKING WITH MORE EXPERIENCE IN COACHING
  - IS THERE A RELATIONSHIP BETWEEN COACHING EXPERIENCE AND IN GAME DECISION MAKING



#### **PARTICIPANTS**

- HIGH SCHOOL HEAD COACHES OF ANY SPORT
  - COACHING AT A SCHOOL WITHOUT A CERTIFIED ATHLETIC TRAINER
- 109 ATHLETIC DIRECTORS WERE SURVEYED
  - 23% RESPONSE RATE
- SELECTION
  - NATIONAL FEDERATION OF STATE HIGH SCHOOL ASSOCIATIONS
  - KOREY STRINGER INSTITUTE



#### INSTRUMENTATION

- GAME SITUATION DATA SHEET
  - EXAMPLE OF A SCENARIO
  - ONE OF YOUR STARTERS, DURING A GAME YOU ARE WINNING EASILY, SUFFERS A DISLOCATED FINGER.
    AFTER REDUCTION THE FINGER IS CHECKED FOR FRACTURES. IT DOESN'T APPEAR AS IF THERE ARE ANY
    FRACTURES PRESENT. THE FINGER IS GIVEN SOME SUPPORT AND THE PLAYER ASKS TO RETURN TO THE
    GAME
- 9 QUESTION PLAYER STATUS/GAME SITUATION SURVEY
  - DESCRIBES NINE SCENARIOS
  - PERMISSION FROM DR. FRANCES FLINT (1992)
  - COACHES' DEMOGRAPHICS



#### **PROCEDURES**

- APPROVED FROM MANCHESTER UNIVERSITY INSTITUTIONAL REVIEW BOARD
- HEAD HIGH SCHOOL COACHES WERE SENT THE NINE GAME SITUATION DATA SHEET VIA EMAIL
  - INFORMED CONSENT
  - DEMOGRAPHICS
- FOLLOW UP REMINDERS
  - 2 WEEKS
  - 1 WEEK



#### STATISICAL ANAYLSIS

- PASSWORD PROTECTED COMPUTER
- PASW SOFTWARE
- CHI SQUARE ANALYSIS
  - DEPENDENT VARIABLE WILL BE THE DECISION TO RETURN THE ATHLETE TO COMPETITION
  - INDEPENDENT VARIABLE WILL BE THE COACHES' EXPERIENCE LEVEL



#### **RESULTS**

- 36% OF COACHES HAD ACCUMLATED LESS THAN 10 YEARS
- 32% OF COACHES HAD ACCUMALTED MORE THAN 10 YEARS
- 36% OF COACHES HAD ACCULAMTED MORE THAN 20 YEARS
- 92% OF COACHES WERE CPR CERTIFIED

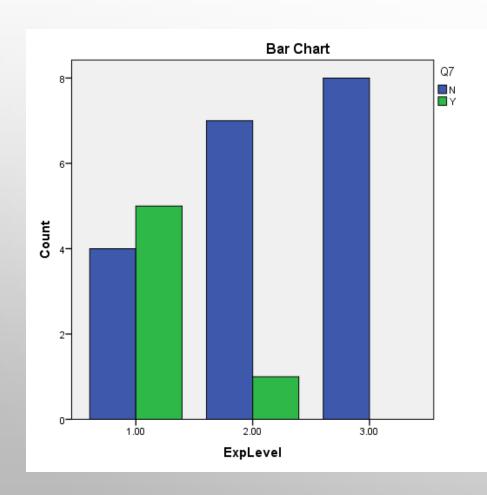


#### RESULTS CONT.

- CHI SQUARE ANALYSIS
  - NO EVIDENCE OF A RELATIONSHIP BETWEEN MAKING A DECISION TO RETURN AN INJURED PLAYER
     BACK TO PLAY AND THE LEVEL OF EXEPIENCE
  - QUESTION 7 FROM THE IN GAME DECISION MAKING SURVEY
    - DURING THE LAST 10 MINUTES IN THE GAME WITH YOUR TEAM CLEARLY LOSING, YOUR 8TH
      PLAYER (USUALLY 3RD INTO THE GAME) GETS A HAND IN THE WAY OF A HARD PASS AND
      HYPEREXTENDS AN ELBOW. IT IS CHECKED AND TAPED. THE PLAYER IS EAGER TO GET BACK ON
      THE FLOOR.



### RESULTS CONT.



Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	8.020°	2	.018
Likelihood Ratio	9.160	2	.010
N of Valid Cases	25		
a. 3 cells (50.0%) have expected count less than 5. The minimum expected count is 1.92.			



## CONCLUSION

• HYPOTHESIS WAS REJECTED REGARDING COACHES



## LIMITATION/DELIMITATION

- DELIMITATION
  - LIMITED TO HIGH SCHOOLS THAT DO NOT EMPLOY CERTIFIED ATHLETIC TRAINERS
- LIMITATION
  - RESPOND RATE



# QUESTIONS/COMMENTS