

# Urinary Incontinence Among Female High School Athletes: A Pilot Study

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### BACKGROUND

- Four different studies focused on elite female athletes found that 26.4%-28% of study participants experienced varying degrees of incontinence during athletics.
- 16% of college athletes surveyed (n=86) who experienced incontinence during athletics stated a negative impact on their social life, sports and exercising habits.
- Rates of incontinence varied depending on sport: low incontinence sports included golf, softball and swimming, whereas higher rates of incontinence were seen in gymnastics (67%), tennis (50%), basketball (44%), and field hockey (32%). Trampolinists had the highest rate of incontinence (80%).

#### AIMS

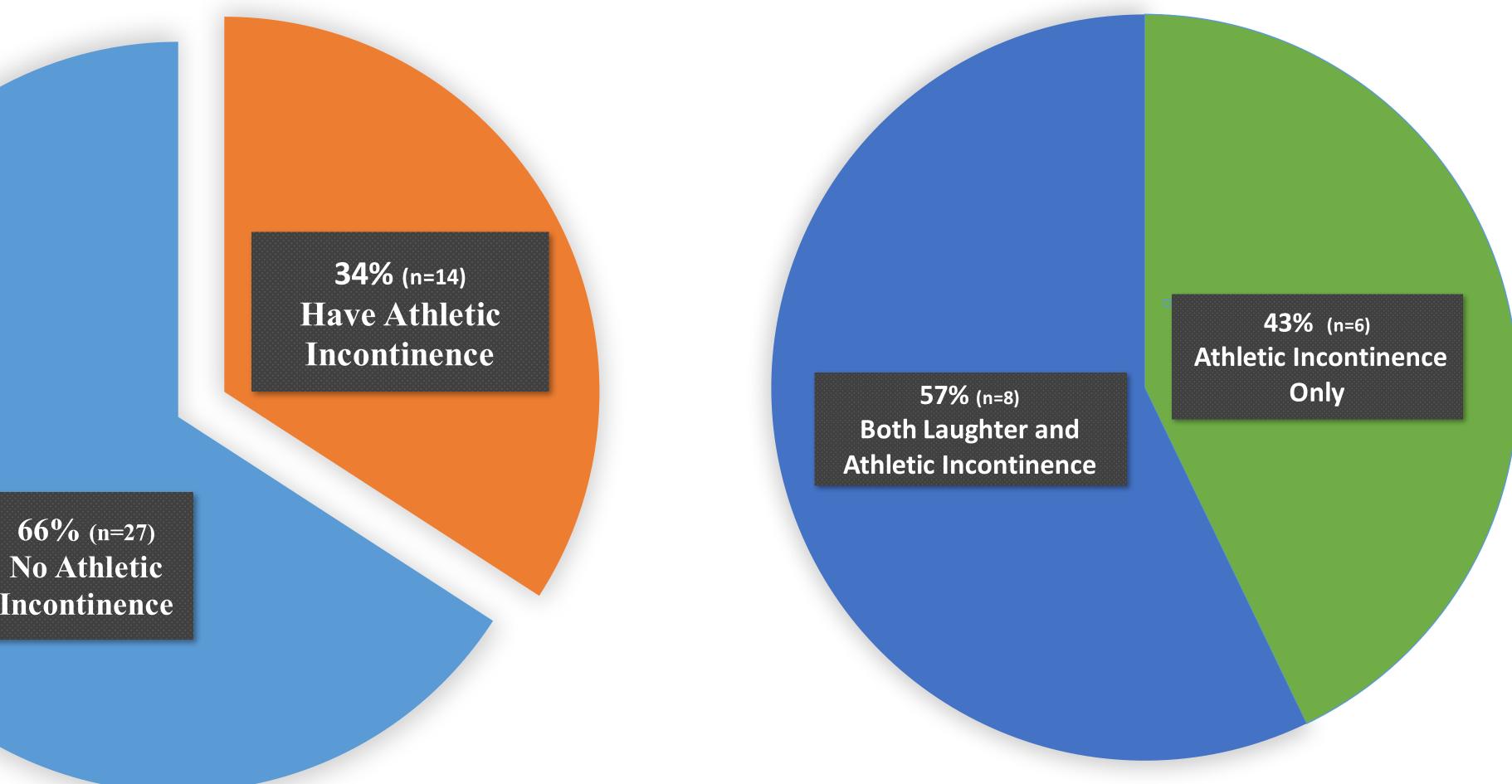
- Determine the prevalence of incontinence among high school female athletes.
- 2. Explore the potential relationship between rates of incontinence and activity levels.
- Explore any potential relationship between bowel habits and different types of incontinence.

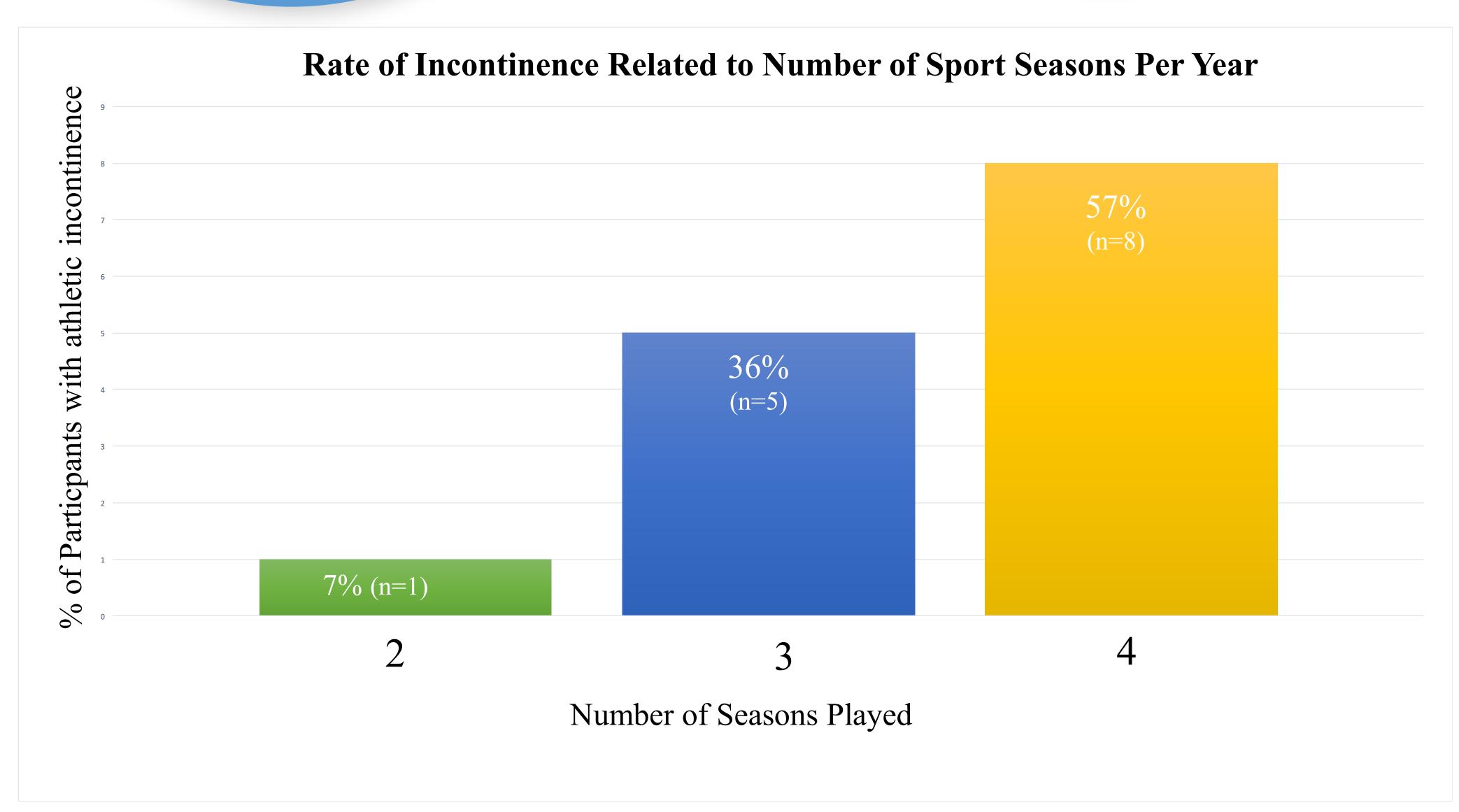
#### METHODS

- Obtained IRB approval and parental consent.
- Conducted an extensive literature review on the topic of incontinence during athletics.
- Distributed a 29- item questionnaire was distributted to 48 members of a local high school's field hockey, soccer and cross country team. 44 athletes completed the survey.
- Descriptive statistics were obtained using analyzed using SAS STAT software version 9.4.

# RESULTS

# Rate of Laughter Incontinence Among Girls **Prevalence of Incontinence During Athletics** with Athletic Incontinence





- 57% of participants with athletic incontinence play four season of sport.
- 77% of participants with laughter incontinence play four seasons of athletics.
- 100% of participants with ADL incontinence play four seasons of sport
- Among the participants that experience incontinence 75% report having daily bowel movements.
- Of those with incontinence, 80% report having a firm bowel patterns which is classified as type 2 or 3 stools using the Bristol Stool Scale

## CONCLUSIONS

- There is a high rate of athletic incontinence (34.15%) among high school female athletes surveyed in this study.
- These athletes predominantly have a firm bowel pattern, and this has yet to be discussed in research on women and athletic incontinence, or general teaching to adult women.
- There is a high rate of laughter incontinence among the high school athletes studied here who had athletic incontinence. The relationship between laughter incontinence and athletic incontinence warrants further study.
- Athletes who compete four seasons of the year have higher rates of all types of incontinence (athletic, laughter and during activities of daily living) compared to athletes who compete during fewer seasons of the year.
- A larger study of adolescents, including a wider variety of athletic activities and socioeconomic groups, as well as comparison to non-athletes is planned.

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