



# Does the Association between Contraceptive Knowledge and Condom Use Vary by Gender?



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## Introduction

- According to a World Health Organization 2024 report, there has been an alarming decline in adolescent condom use thus leading to an increase in sexually transmitted infections (STIs) and unintended pregnancies (WHO 2024).
- Condoms are a cheap and effective method of contraception and STI prevention thus clear understanding of the factors that affect their use could improve public health initiatives in mitigating risky adolescent sexual health behavior (Davids et.al, 2021; Stover & Teng, 2022).
- Significant research has been done on the effects of sexual health education programs on adolescent sexual health decisions, but little is known on how much of that knowledge is remembered and applied afterwards (Navarro-Prado et.al, 2023; Moreira et.al, 2023).

## Research Questions

- Is there an association between the score an individual gets on the contraceptive knowledge quiz and their response to whether they or their partner used a condom during sexual intercourse?
- Does this relationship differ between males and females?

## Methods

### Sample

- Individuals older than 15 and sexually active (n=541) were drawn from the National Longitudinal Study of Adolescent Health (ADDHEALTH), a representative survey of adolescents in the U.S. between the years 1994 and 2008.

### Measures

- Contraceptive Knowledge Quiz Score was created by scoring 10 true or false statements and calculating a total score out of 10 for each individual.
- Condom Use was measured with the question "Have you/has a partner of yours ever used a condom during sexual intercourse?" Possible responses were 1 (yes) or 0 (no).

## Results

### Univariate

- The histogram of the Contraceptive Knowledge Quiz Score was left skewed and centered around 7.

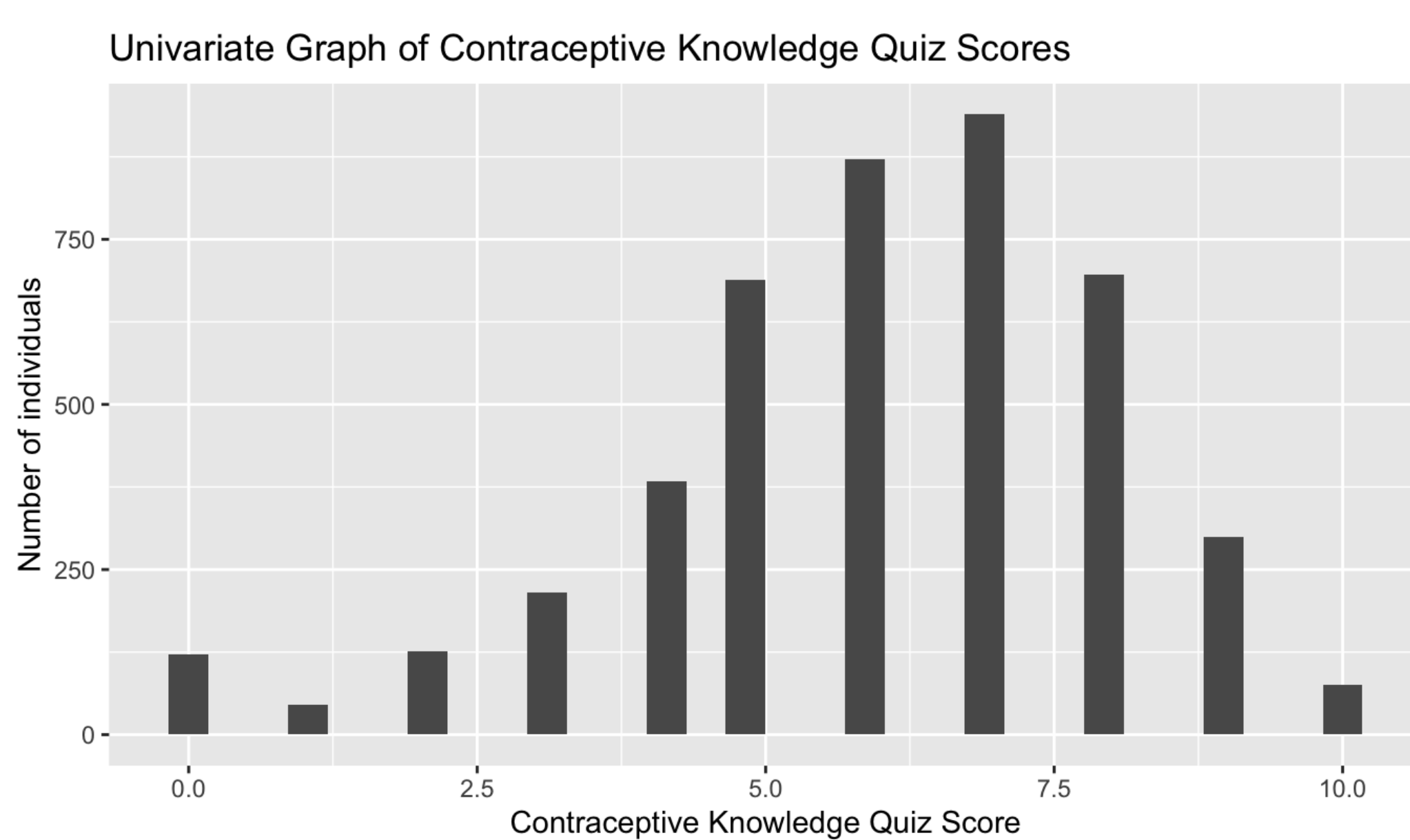


Figure 1: Graph of Contraceptive Knowledge Quiz Scores.

### Bivariate

- A logistic regression revealed that there was a **significant** association between Quiz Score and Condom Use (OR = 1.1129, p = 0.0318).
- As Quiz Score increased by 1 unit, the odds of an individual using a condom was expected to increase by a factor of 1.1129 (Fig. 2).

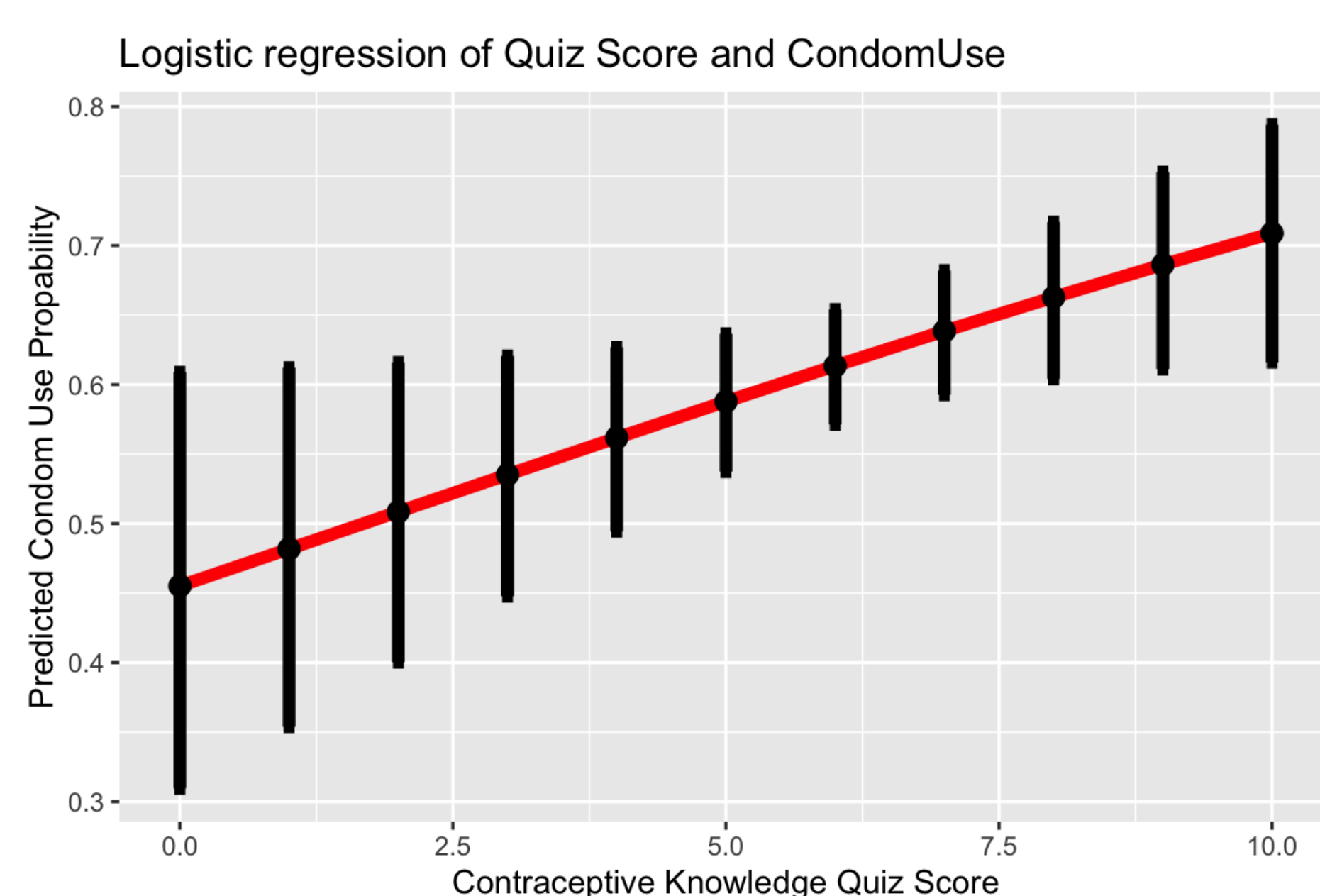


Figure 2: The Predicted Condom Use Probability for each Contraceptive Knowledge Quiz Score.

### Multivariate

- Multiple logistic regression analyses showed that quiz score was significantly associated with the likelihood of using a condom after controlling for gender (OR 1.18, p = 0.019).
- Gender is not a moderator of the relationship between quiz score and condom use (OR 1.88, p=0.215) (Fig. 3).

Multiple logistic regression of Quiz Score, CondomUse and Gender

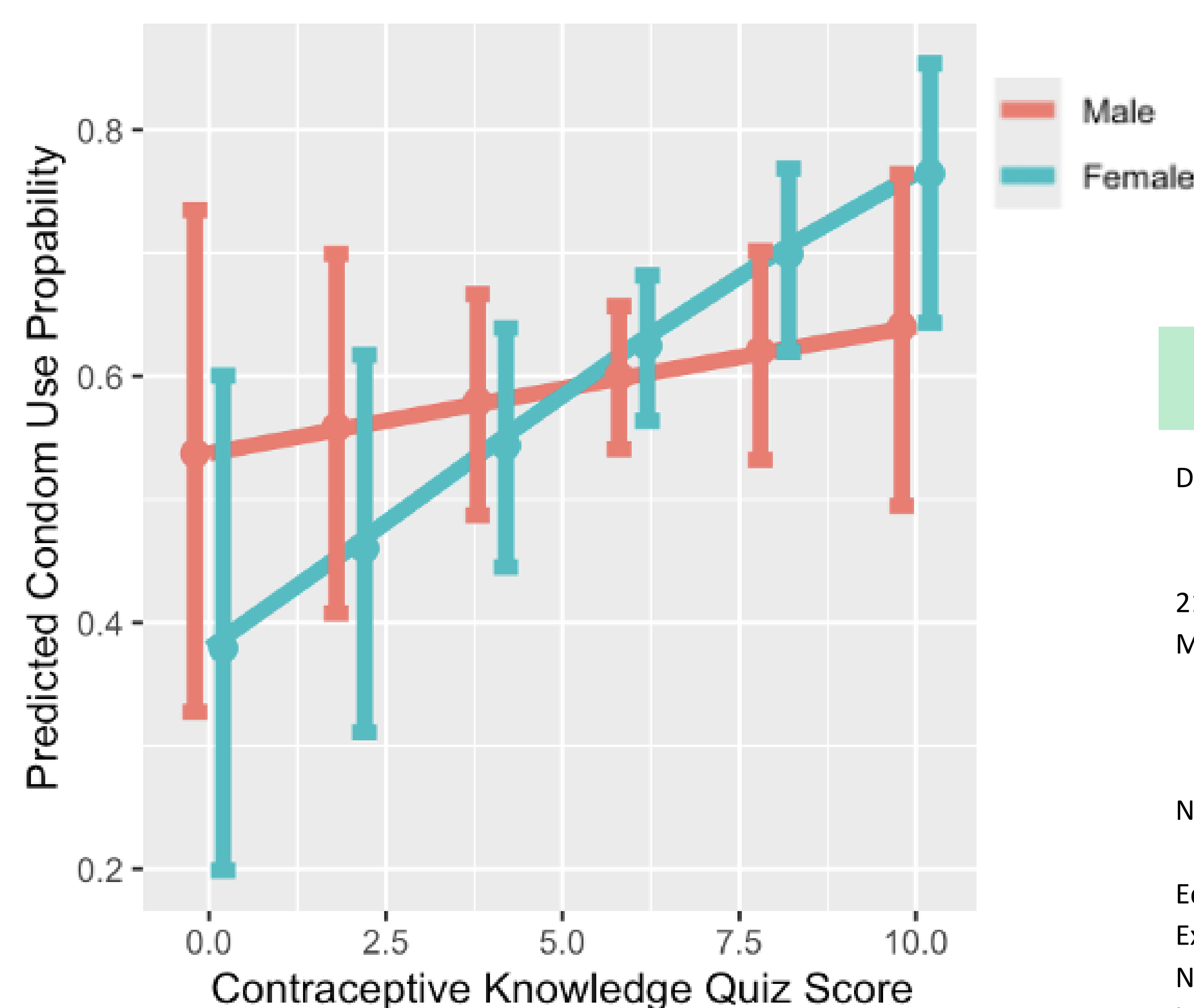


Figure 3: The Predicted Condom Use Probability for each Contraceptive Knowledge Quiz Score based on gender.

## Discussion

- As contraceptive knowledge increased, the likelihood to use a condom increased and there was no significant difference between males and females.
- These findings may contribute towards public health policies to combat risky sexual behaviors in adolescents.
- While the responses from the contraceptive knowledge quiz were used to represent retained knowledge from any form of sexual health education, future research to determine whether formal or informal education programs are better retained and thus more effective is required.

## References

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