

EXPLORING CREDIT CARD SPENDING PATTERNS: KEY INSIGHTS FOR BUSINESS DECISIONS



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PRESENTED BY: GROUP 3

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MEET THE TEAM

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PROJECT OVERVIEW

- **Objective:** Analyzing the link between customer behavior (time on card features) and dominant card (chosedom)
- **Data Source:** Customer behavior time variables from the credit card dataset.
- **Focus:** Correlation and significance testing (p-values) to understand key factors influencing card choice.



Data Preparation

- Data cleaning process
- Key variables analyzed (e.g., time0intro, timeminpay, etc.)



PROJECT OVERVIEW

Hypothesis 1:

Does the amount of time spent researching credit cards affect the decision-making process?

Explore if customers who spend more time researching are more likely to make informed decisions

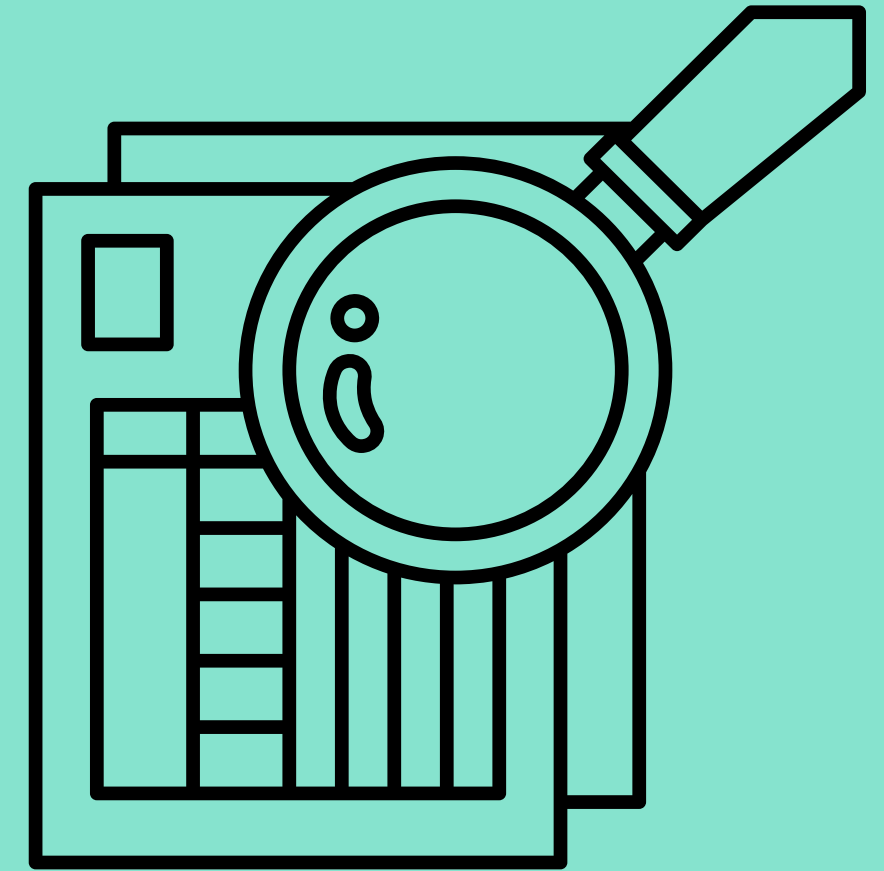
Hypothesis 2:

Do videos influence the decision to choose the right credit card?

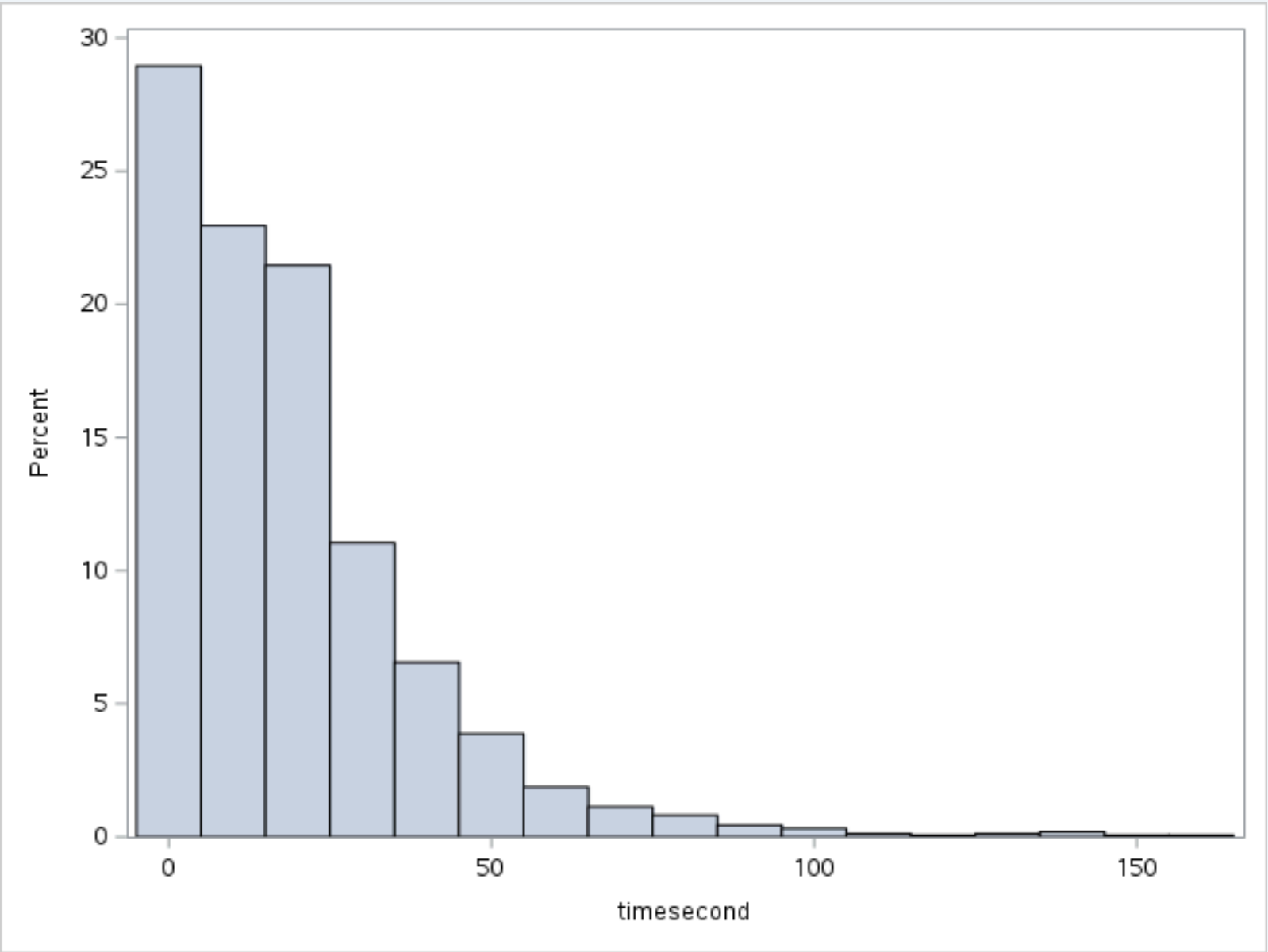
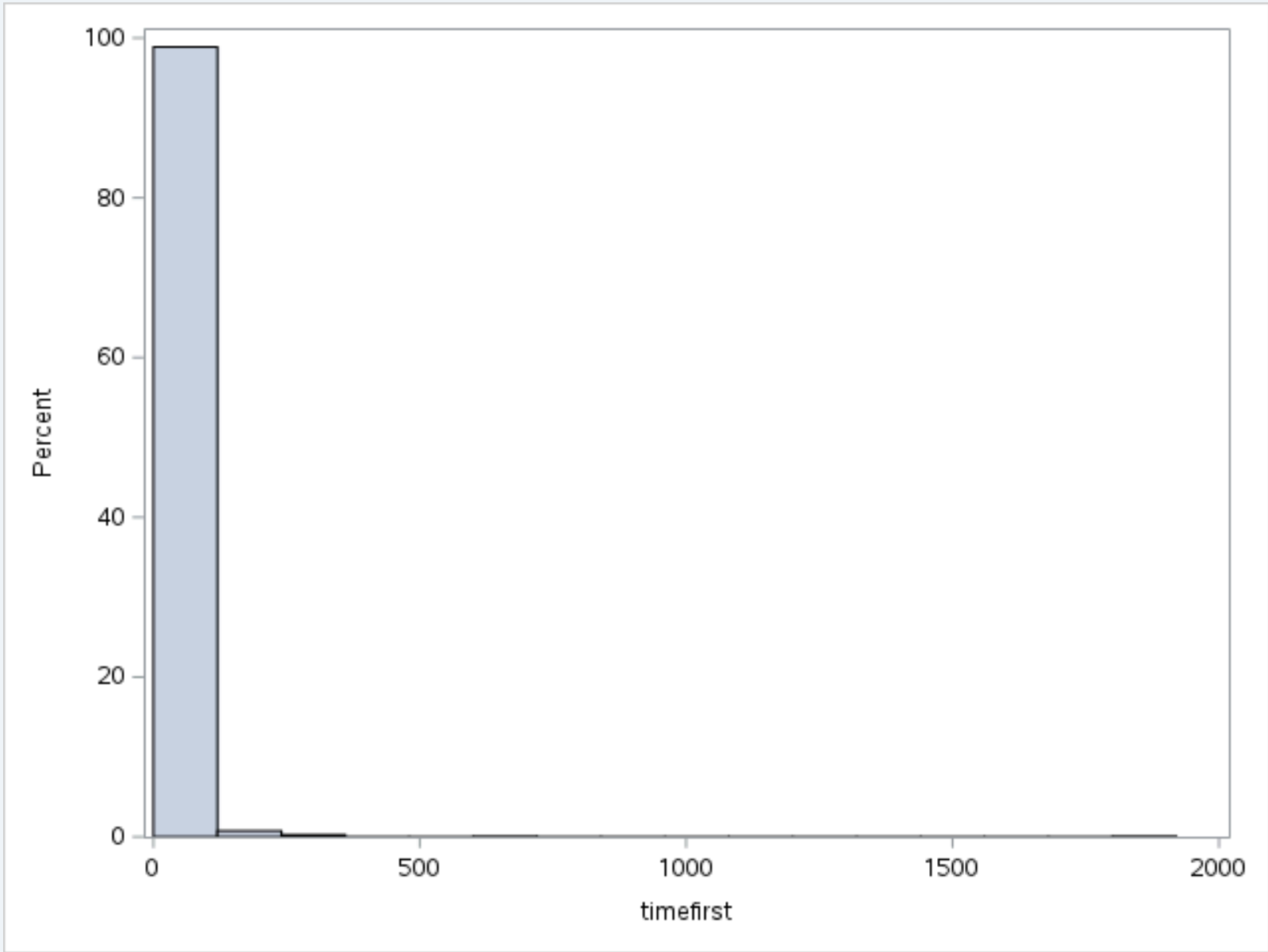
Analyzing the impact of videos on customer decisions



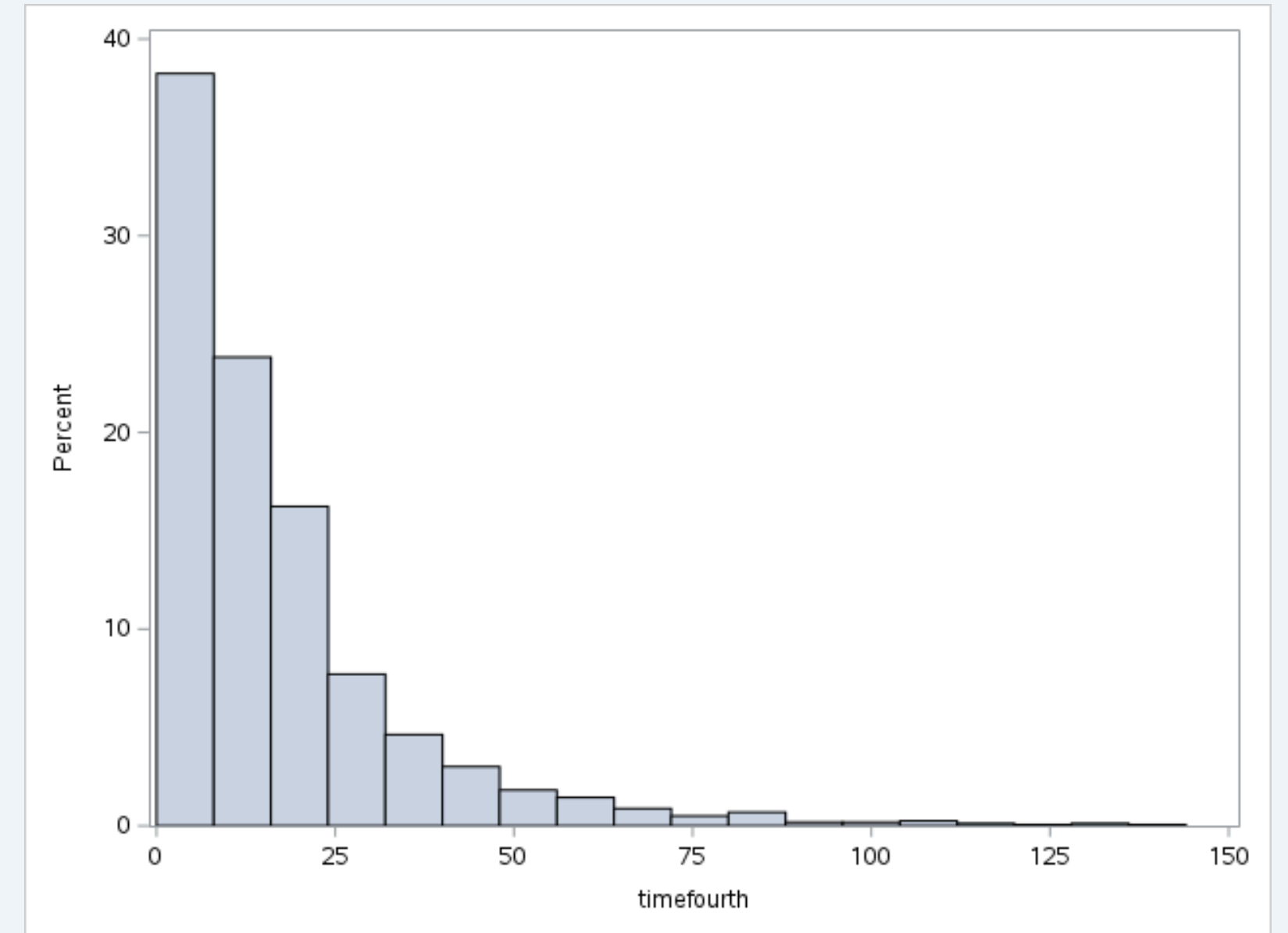
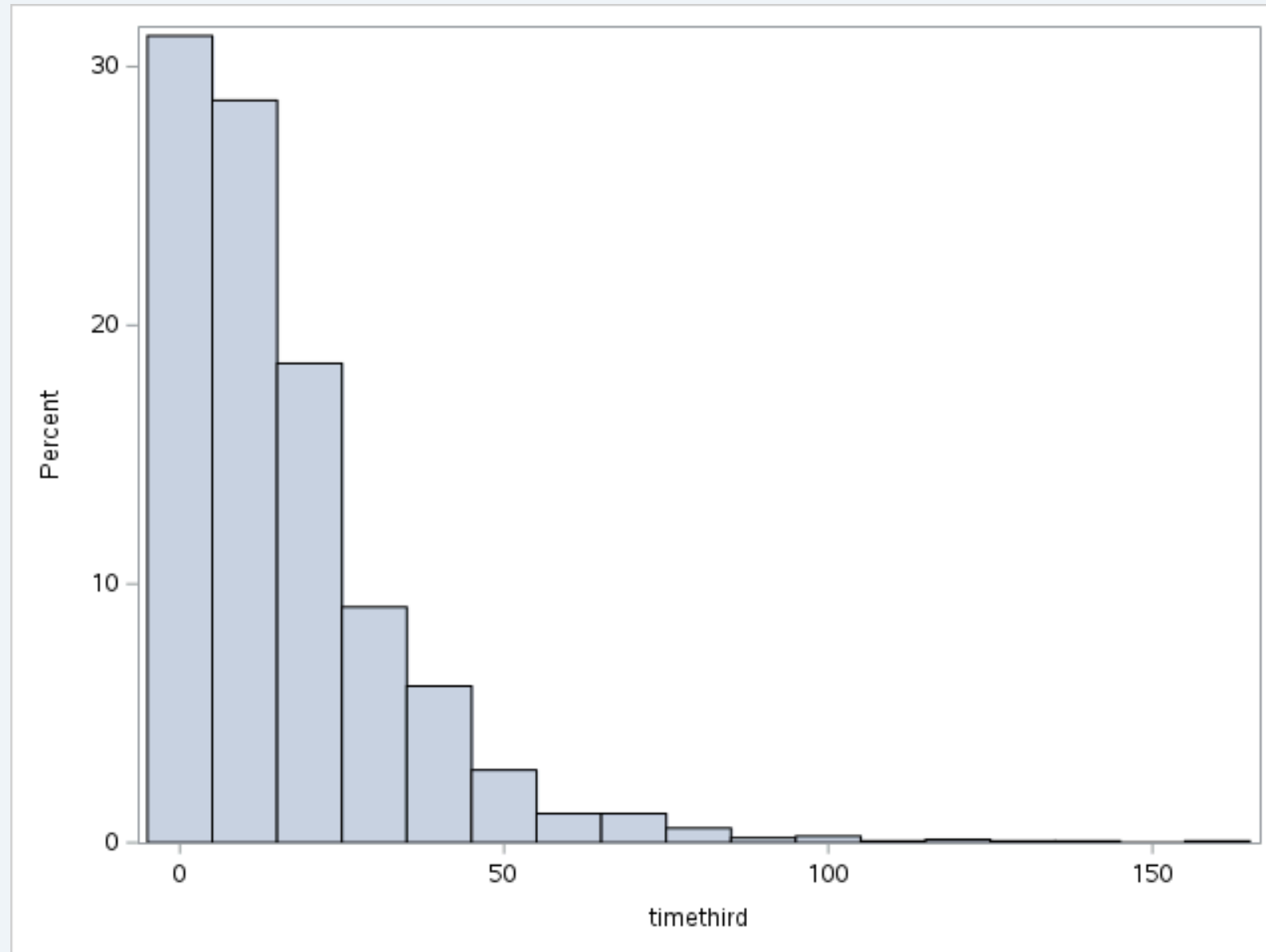
HYPOTHESIS 1



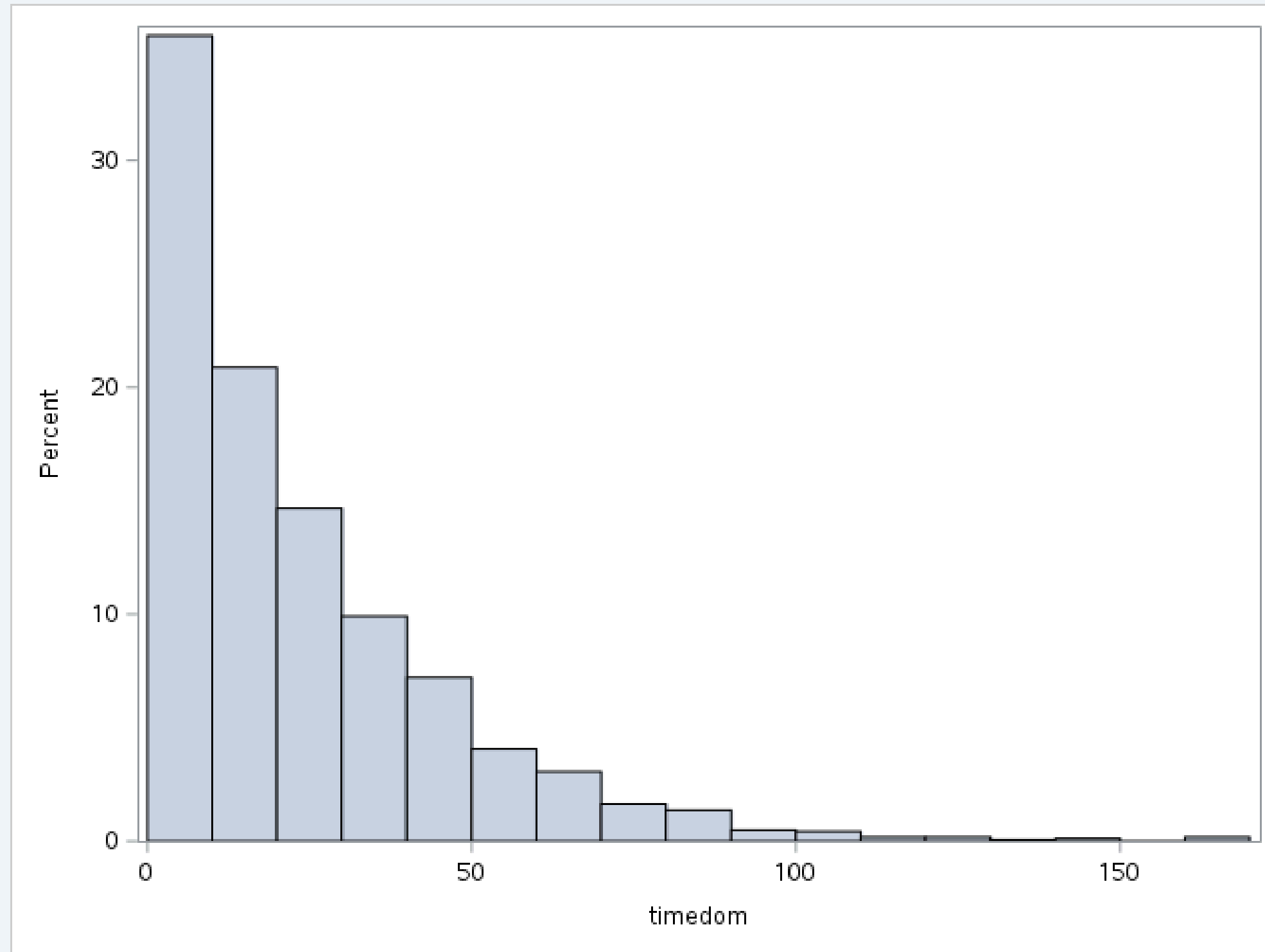
RESULTS (HYPOTHESIS 1)



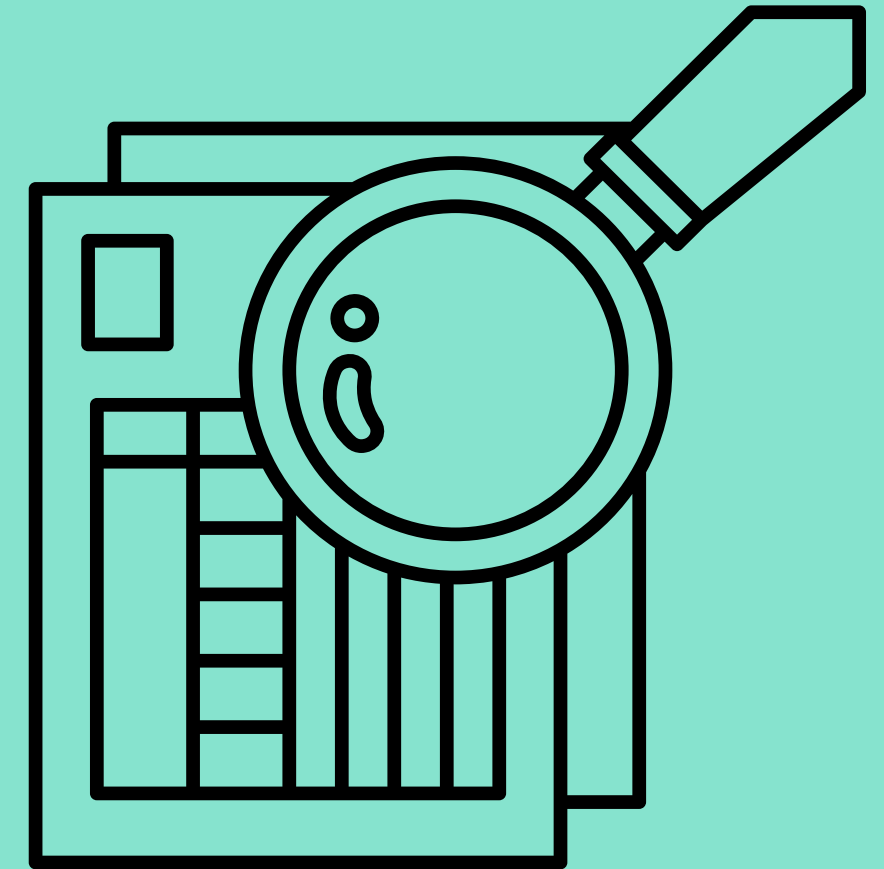
RESULTS CONTD.



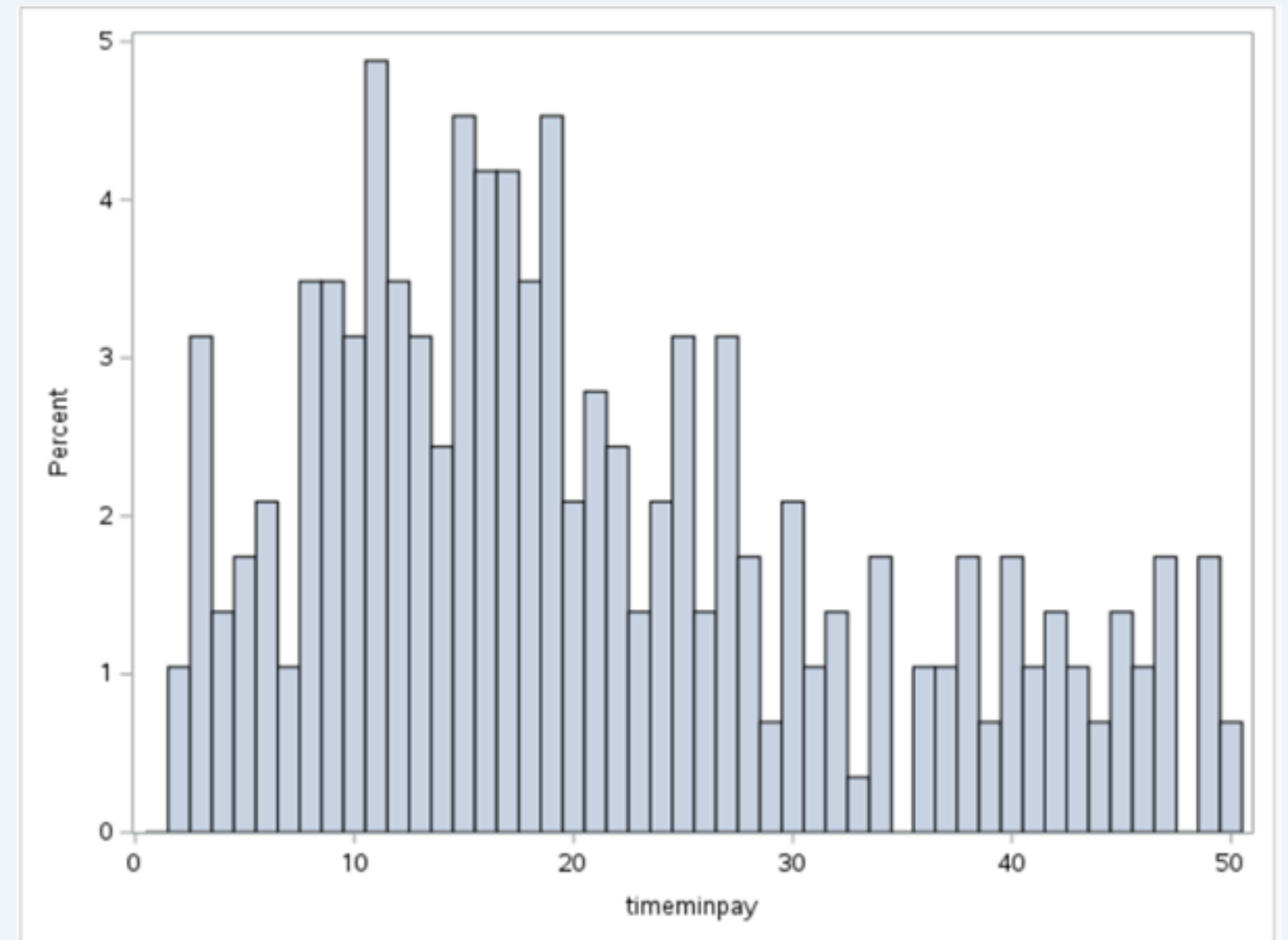
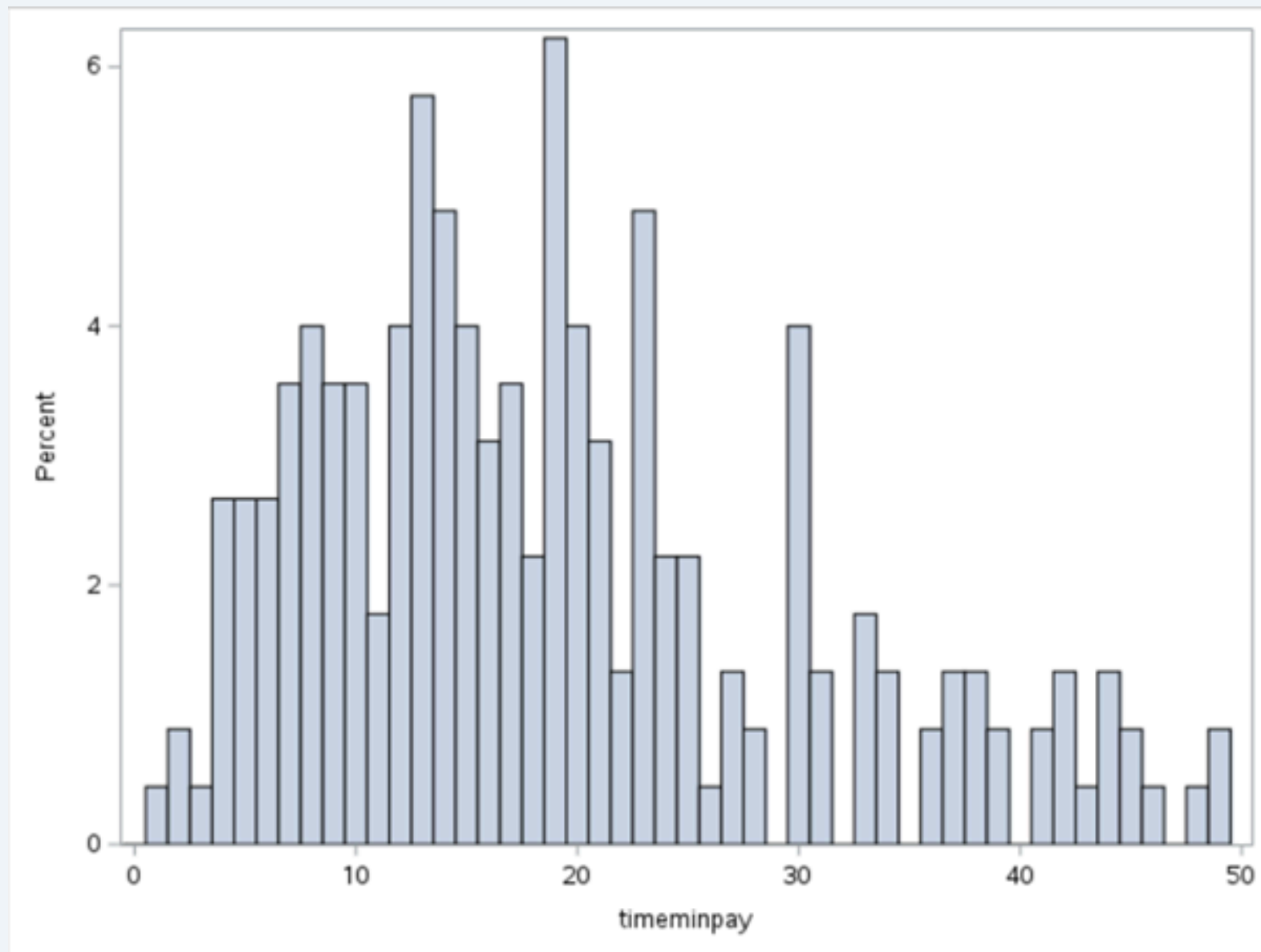
RESULTS CONTD.



HYPOTHESIS 2



TIME IN PAY FOR FEMALES



TIME IN PAY

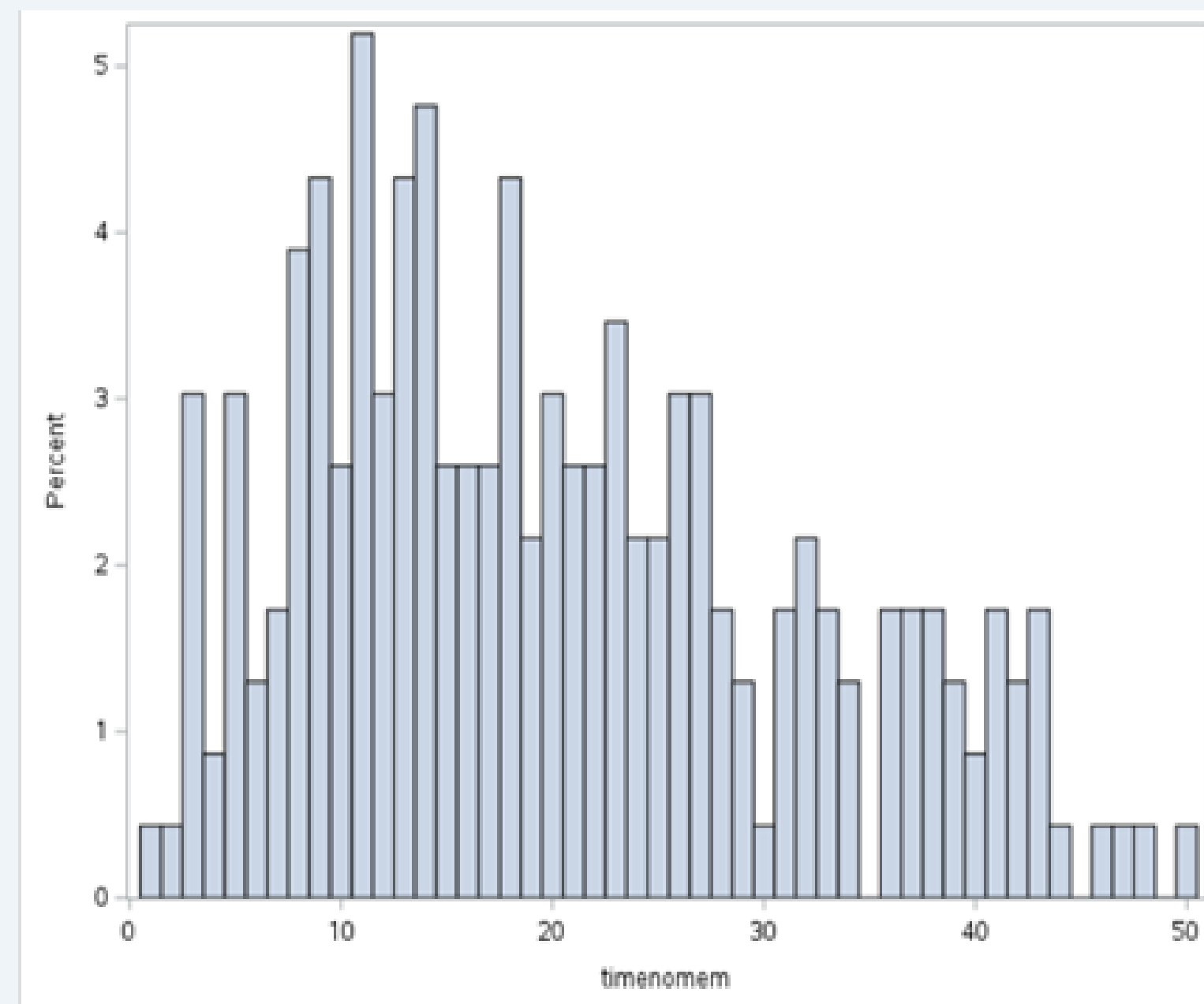
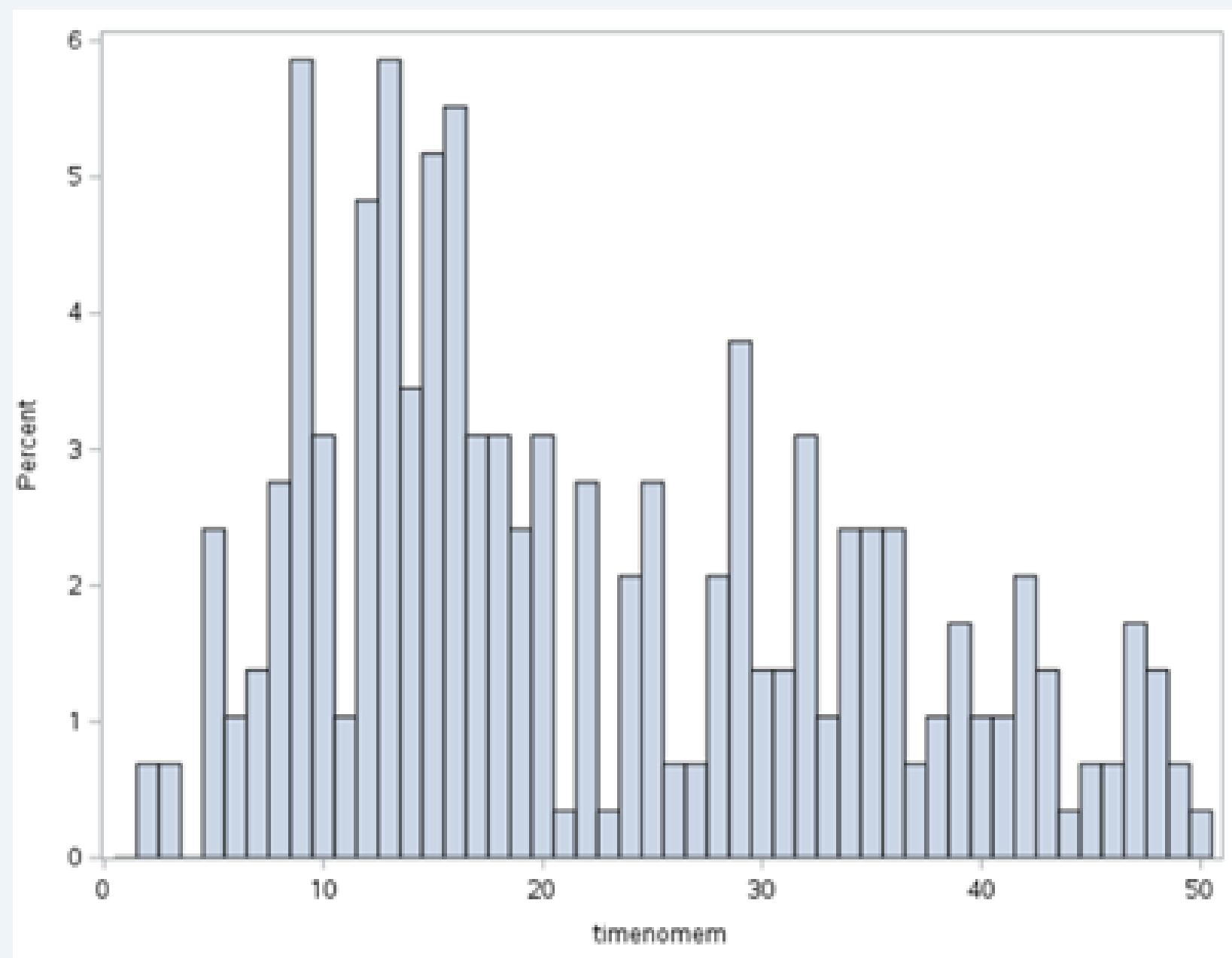
Females are spending longer time in the videos than males

Reasons:

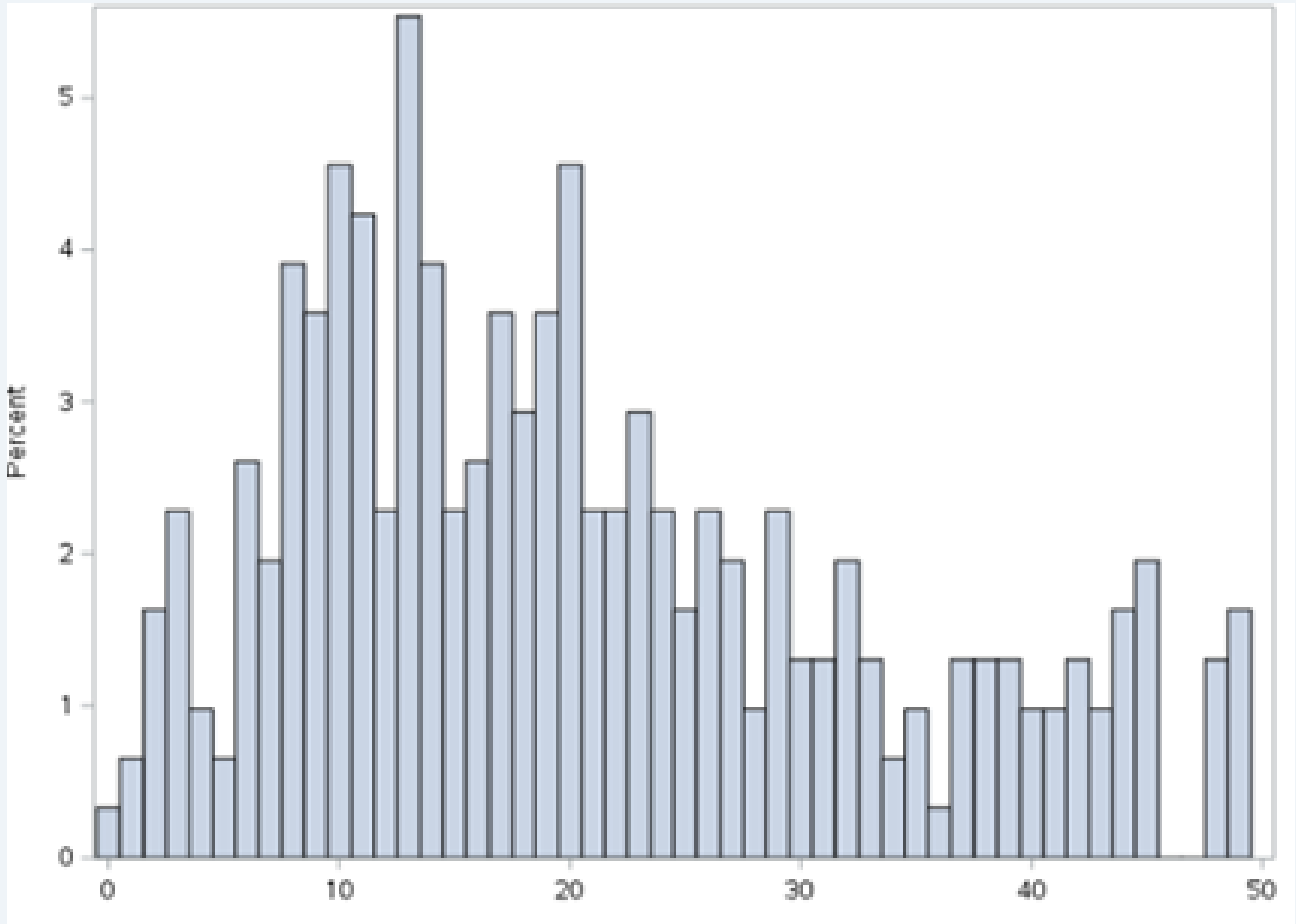
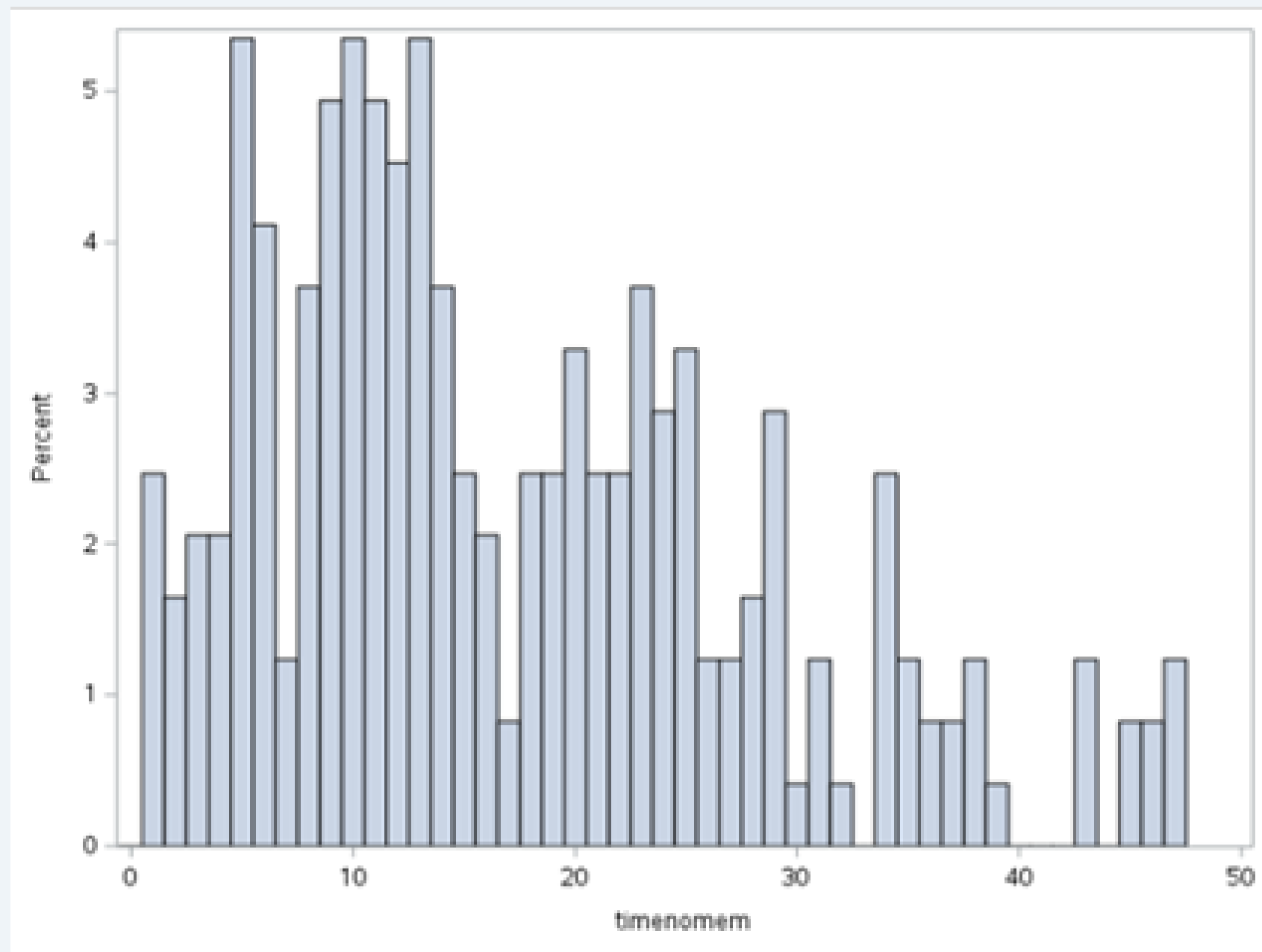
- Video itself is more informative for females



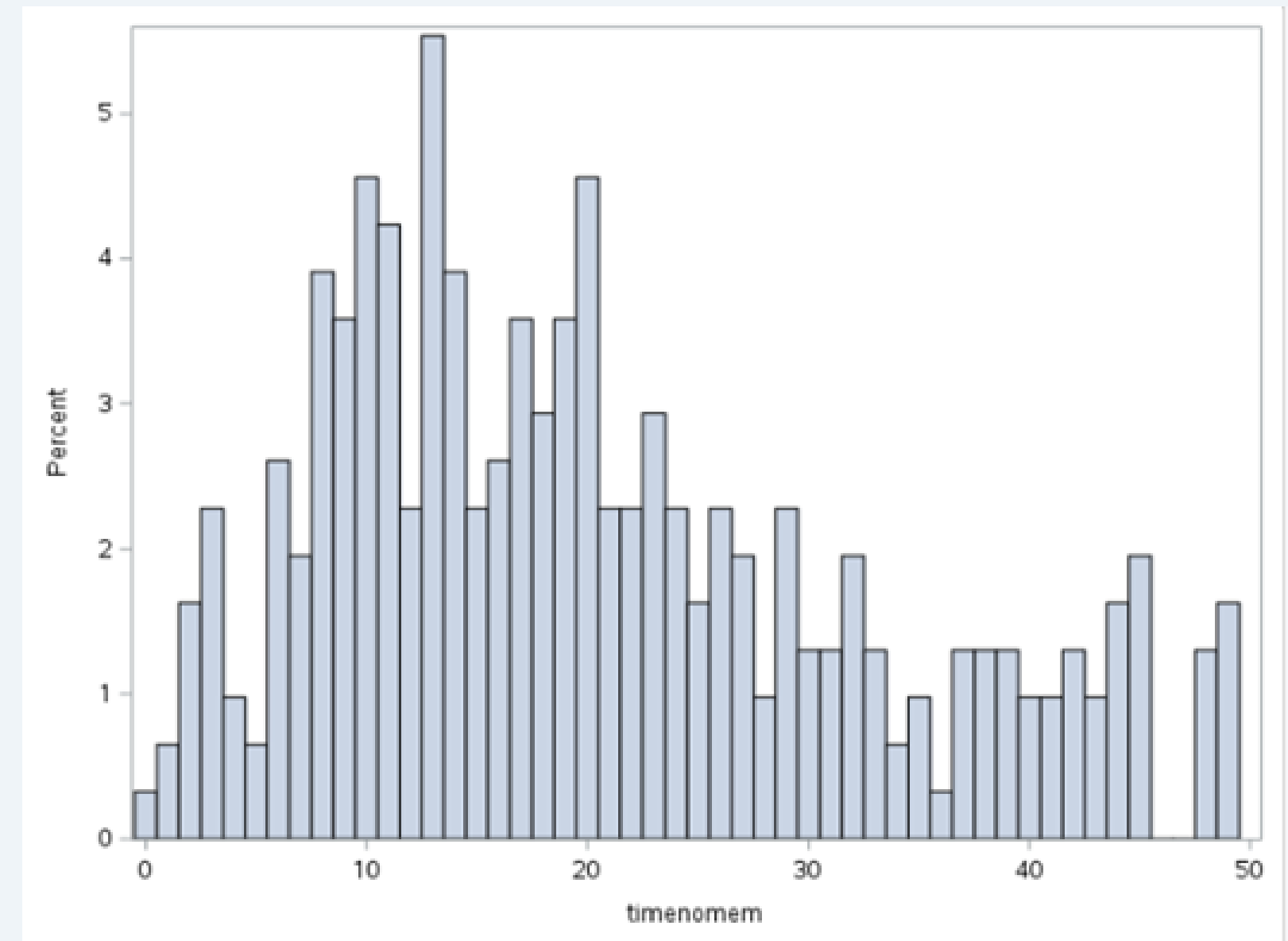
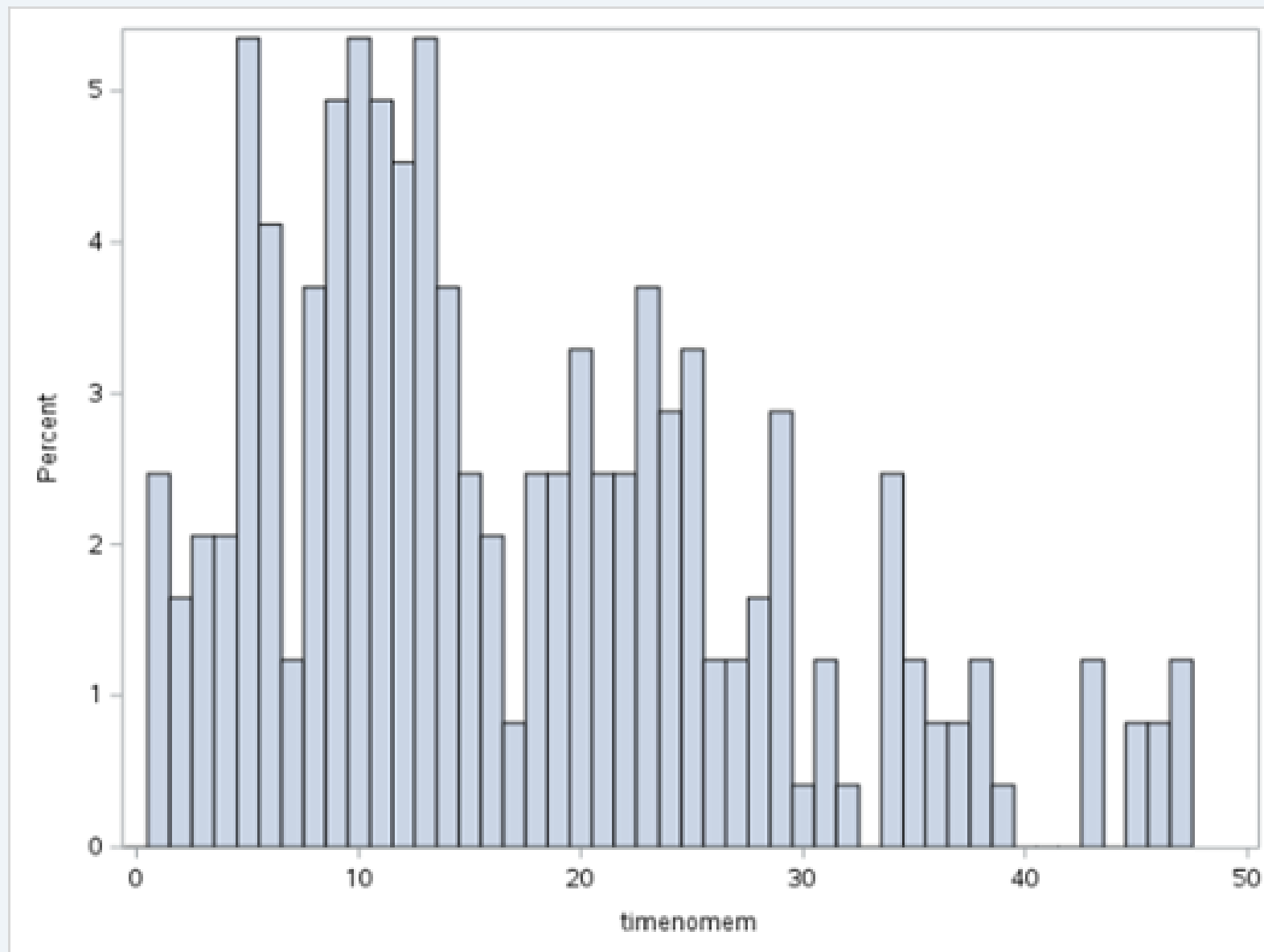
TIME NO MEMBERSHIP FEE FOR FEMALES



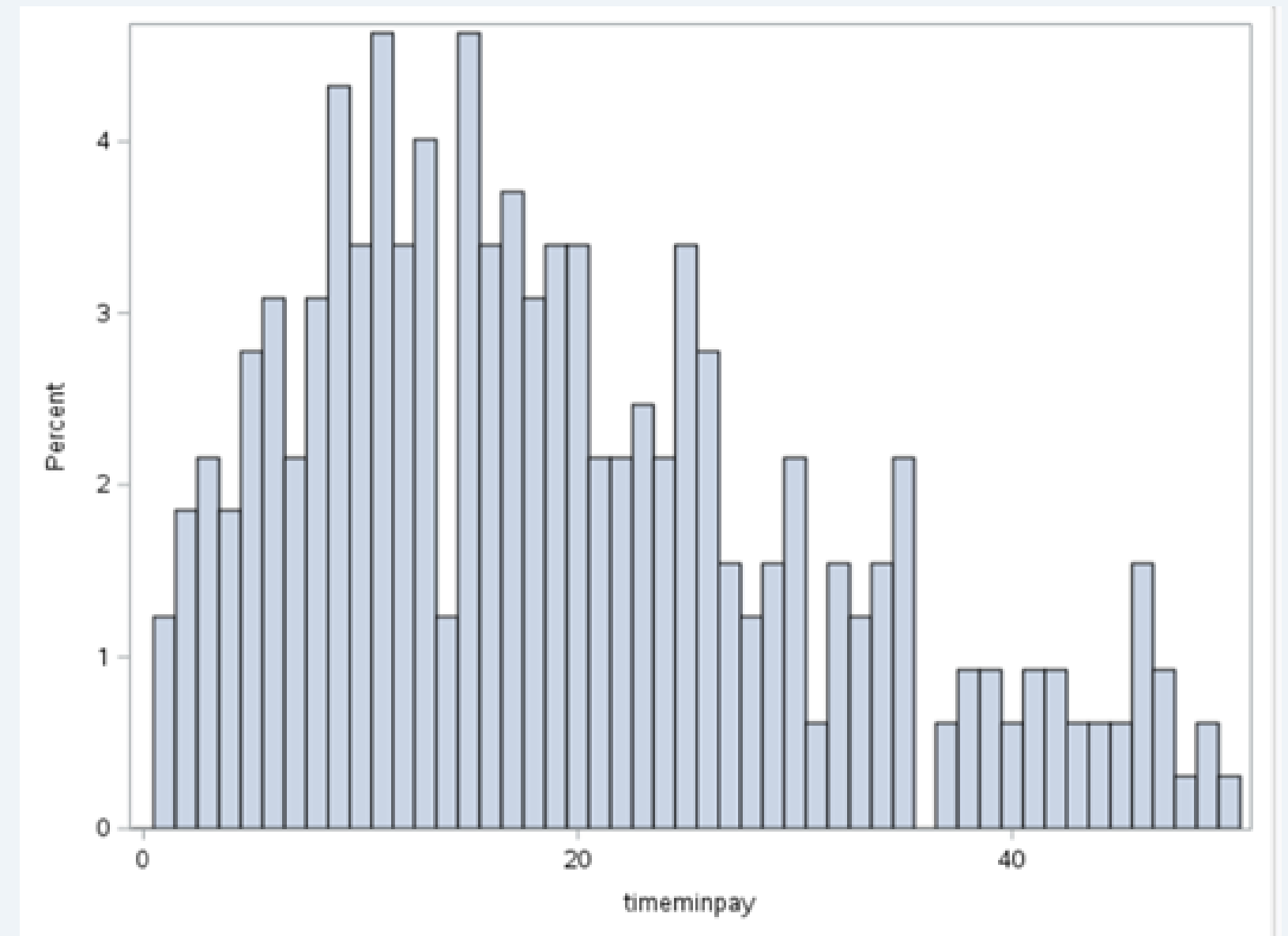
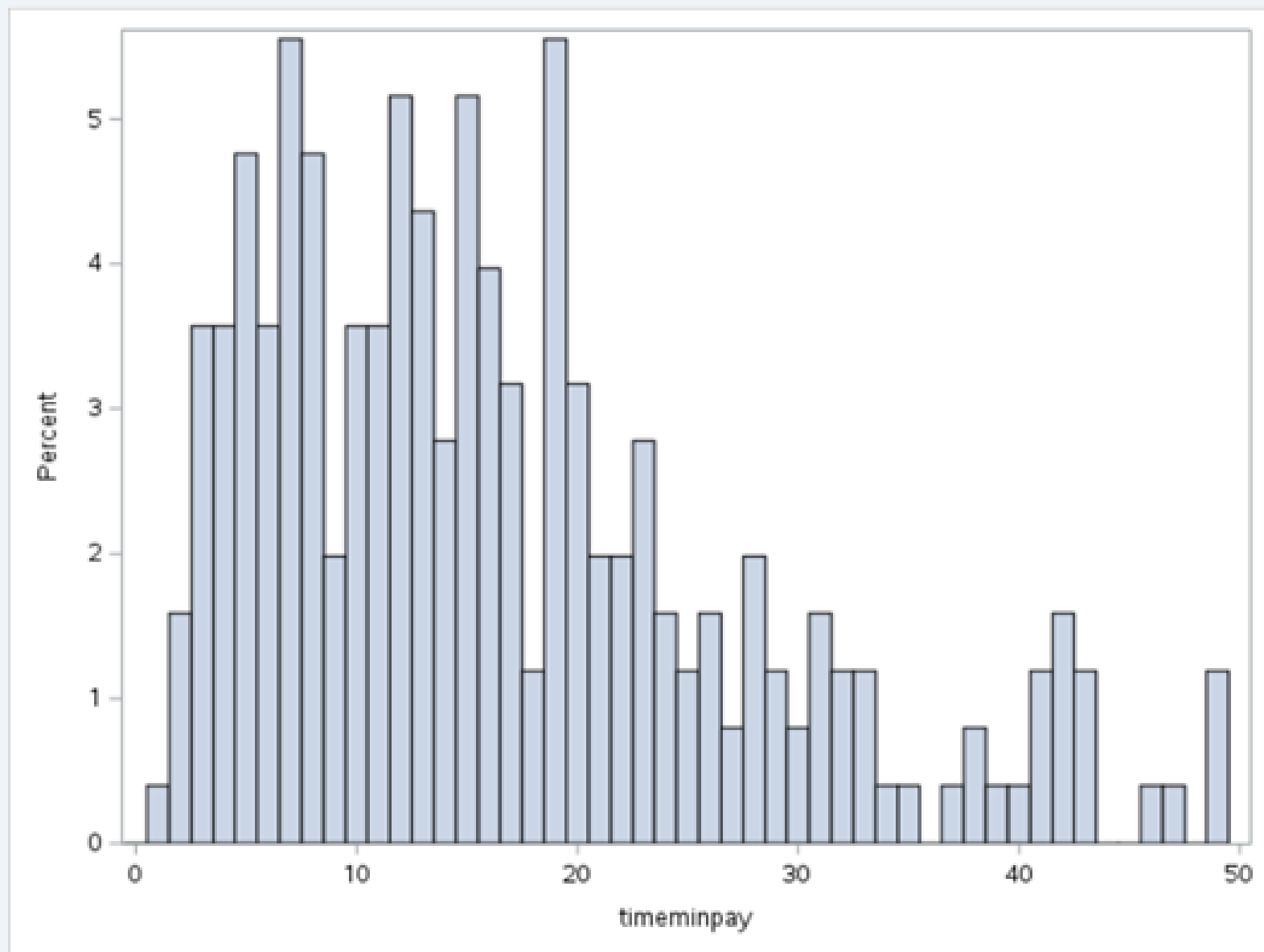
TIME NO MEMBERSHIP FEE FOR MALES



TIME NO PAY FOR FEMALES



TIME NO PAY FOR MALES



KEY FINDINGS & ANALYSIS

Hypothesis 1:

- **Significance:**
 - Based on the results, there are no significant impacts of the time spent on viewing credit card terms and making the right decision, as all p-values are less than 0.001 and therefore not statistically significant.
- **Correlation Analysis:**
 - Speaking of the correlation value, none of the results are above 0.5, indicating that the time spent on viewing credit card terms has minimal impact on making the right decision.

BUSINESS INSIGHTS

1. Insight from First Hypothesis

- The lack of correlation between viewing time and decision-making suggests that marketers should explore additional factors, such as content relevance and user intent, to drive conversions.

2. Insight from Second Hypothesis

- The distinct engagement patterns between genders indicate that personalized content strategies can significantly enhance user engagement and improve conversion rates.

CHALLENGES FACED

1. Lack of Significant Correlation

- Initial analysis showed no strong link between viewing times and user decisions, making it hard to draw actionable conclusions.

2. High Engagement Variability

- Engagement times were inconsistent across users, complicating efforts to identify a clear pattern.

3. Outlier Removal

- The presence of outliers required extensive data cleaning, risking the loss of valuable information.

4. Gender Behavior Differences

- Males and females displayed different engagement patterns, adding complexity to the analysis



FUTURE RECOMMENDATIONS

1. Test New Video Formats

- Experiment with shorter, focused videos to capture attention, especially for users who disengage early.

2. Tailored Content by Gender

- Create customized video content, with concise messaging for males and more detailed engagement for females.

3. Improve Data Granularity

- Collect more detailed demographic and behavioural data to enhance the accuracy of future predictions.



CONCLUSION

The analysis of user engagement with credit card marketing videos provided valuable insights into consumer behaviour. The initial hypothesis highlighted factors beyond viewing time, such as content relevance and user intent, significantly influence decision-making.

This refined approach revealed notable gender differences in engagement, and highlights the need for personalized marketing strategies. By focusing on targeted content that resonates with specific demographics, businesses can enhance user interaction and conversion rates. Emphasizing quality over quantity in content delivery will lead to improved engagement and greater customer satisfaction.



THANK YOU!

