

GOOGLE DATA ANALYSIS CAPSTONE: CASE STUDY 2

BELLA BEAT COMPANY

ADJEI ANTHONY JUNIOR

OUTLINE

- Introduction
- Scenario
- Objectives
- Method
- Results
- Conclusion
- Recommendation

INTRODUCTION

Bellabeat data analysis case study. In this case, study, working for Bellabeat, a high-tech manufacturer of health-focused products for women, and meeting different characters and team members. In order to answer the key business questions. using the following steps as a data analyst ;

- Ask
- Prepare
- Process
- Analyze
- Share
- Act

SCENARIO

As a junior data analyst working on the marketing analyst team at Bellabeat, a high-tech manufacturer of health-focused products for women.

Bella Beat is a successful small company, but they have the potential to become a larger player in the global smart device market.

Urška Sršen, co-founder and Chief Creative Officer of Bellabeat believes that analyzing smart device fitness data could help unlock new growth opportunities for the company.

analyze smart device data to gain insight into how consumers are using their smart devices.

OBJECTIVES

(Ask)

1. What are some trends in smart device usage?
2. How could these trends apply to Bella Beat customers?
3. How could these trends help influence Bella Beat's marketing strategy

METHOD:PREPARE

Using public data that explores smart device users' daily habits. a specific data set: Fitbit Fitness Tracker Data (CC0: Public Domain, dataset made available through Mobius):

This Kaggle data set contains a personal fitness tracker from thirty Fitbit users. Thirty eligible Fitbit users consented to the submission of personal tracker data, including minute-level output for physical activity, heart rate, and sleep monitoring.

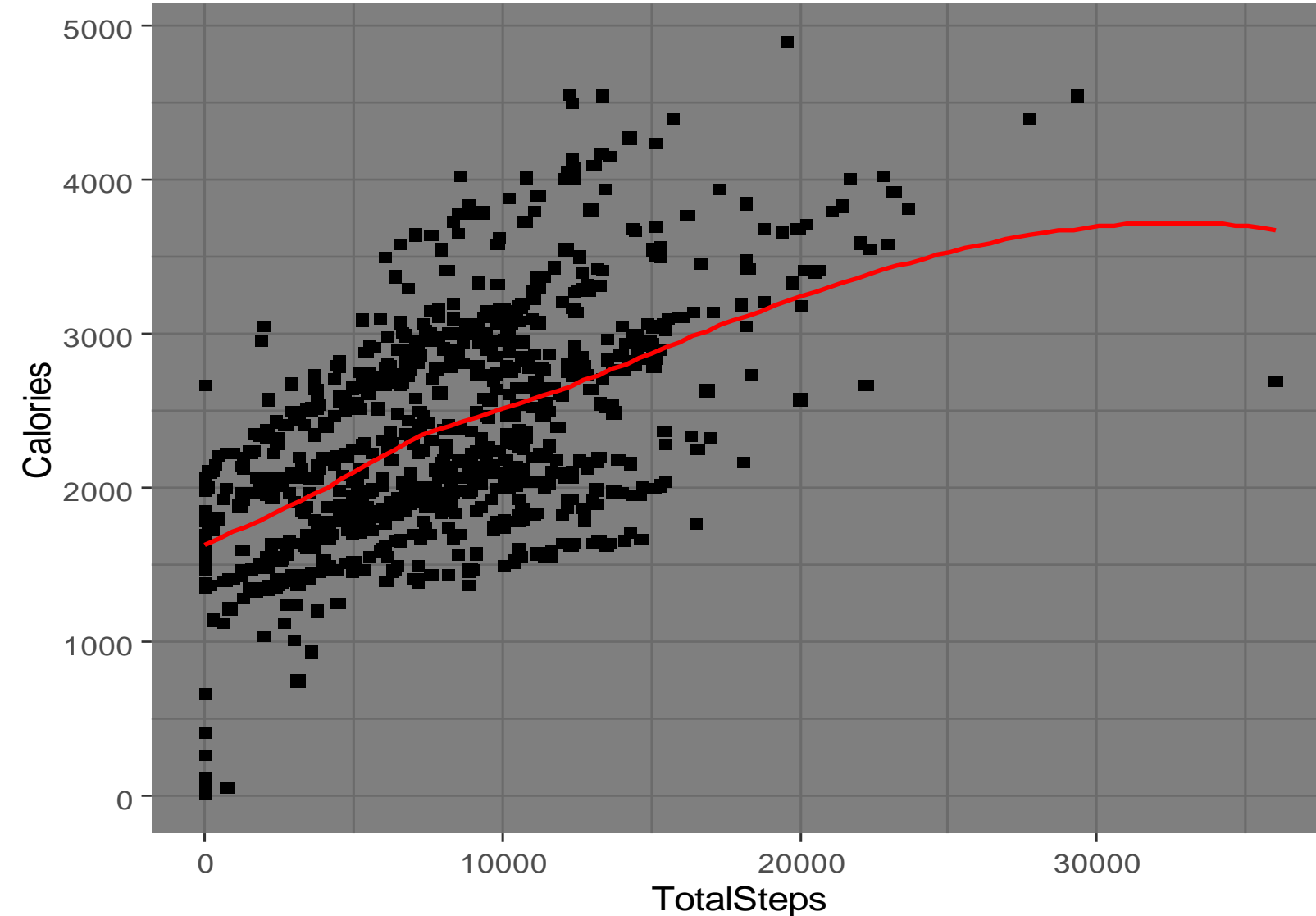
It includes information about daily activity, steps, and heart rate that can be used to explore users' habits.

METHOD: PROCESS

- Using R studio, the dataset was loaded and data cleaning was done
- Different dataset was merged
- Specific columns of the dataset were selected
- Missing values were checked and datatype
- Renaming of columns

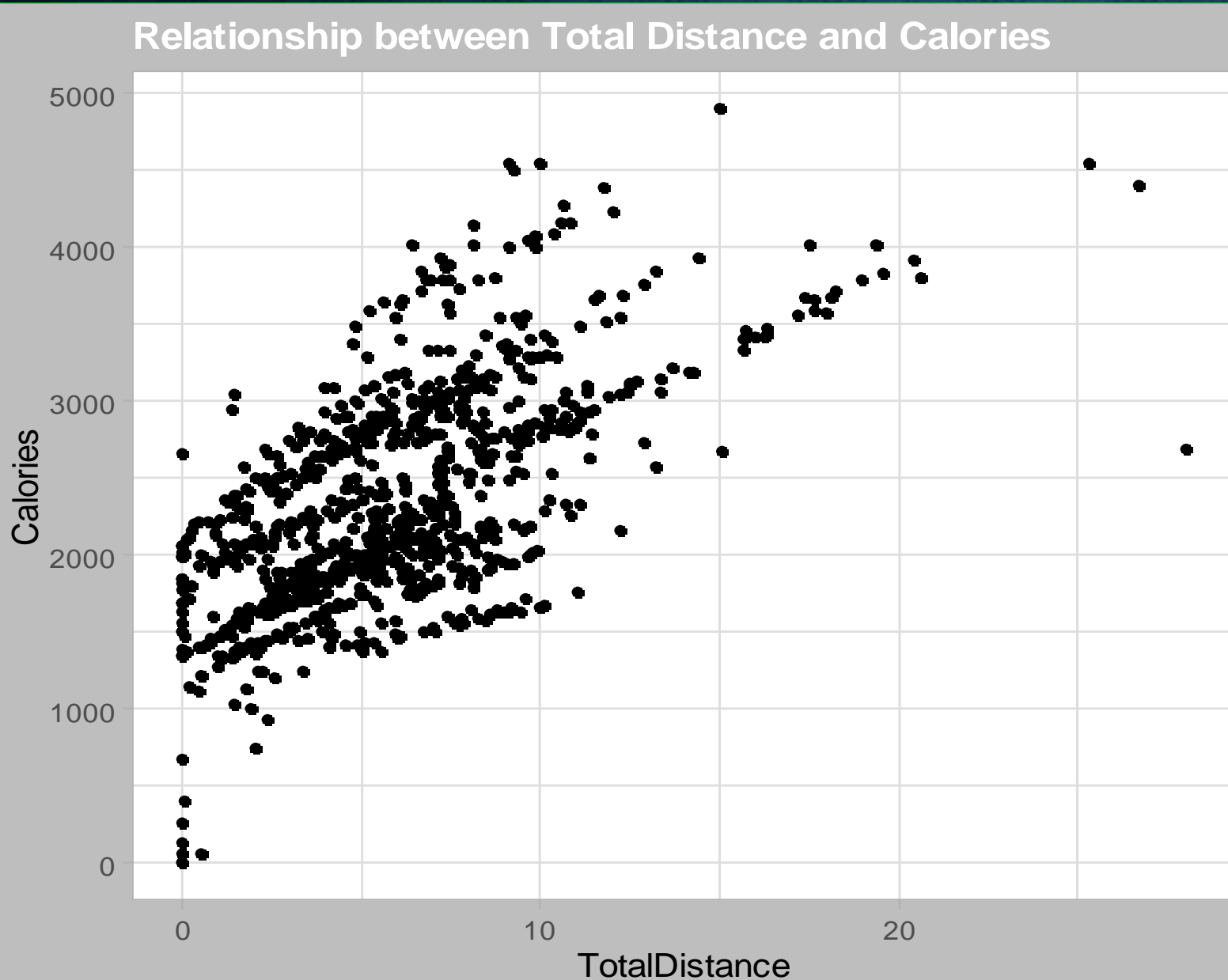
METHOD: ANALYSIS

Relationship between Total Steps & Calories



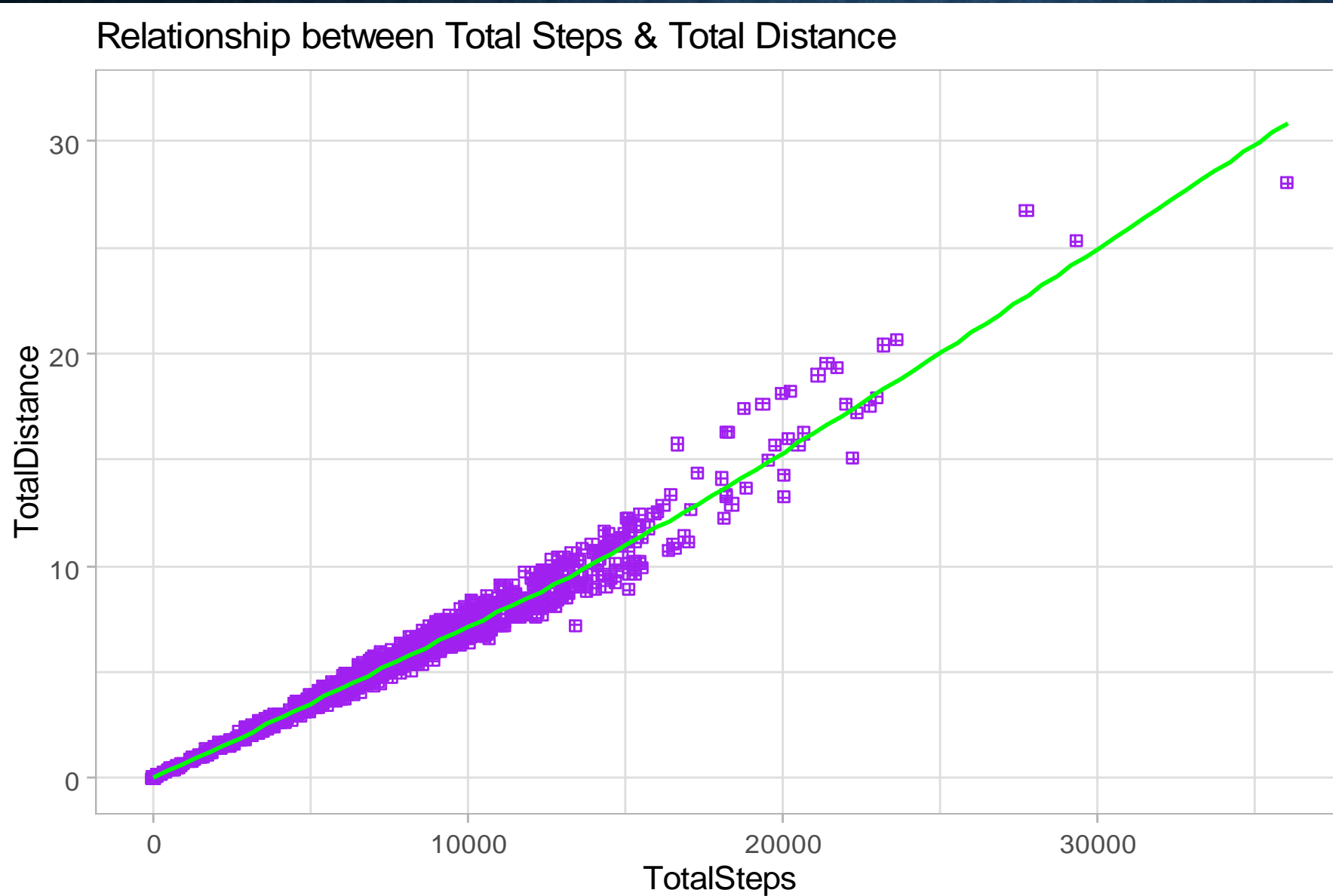
The total number of steps taken by users and calories burnt have been found to positively correlate.

METHOD: ANALYSIS



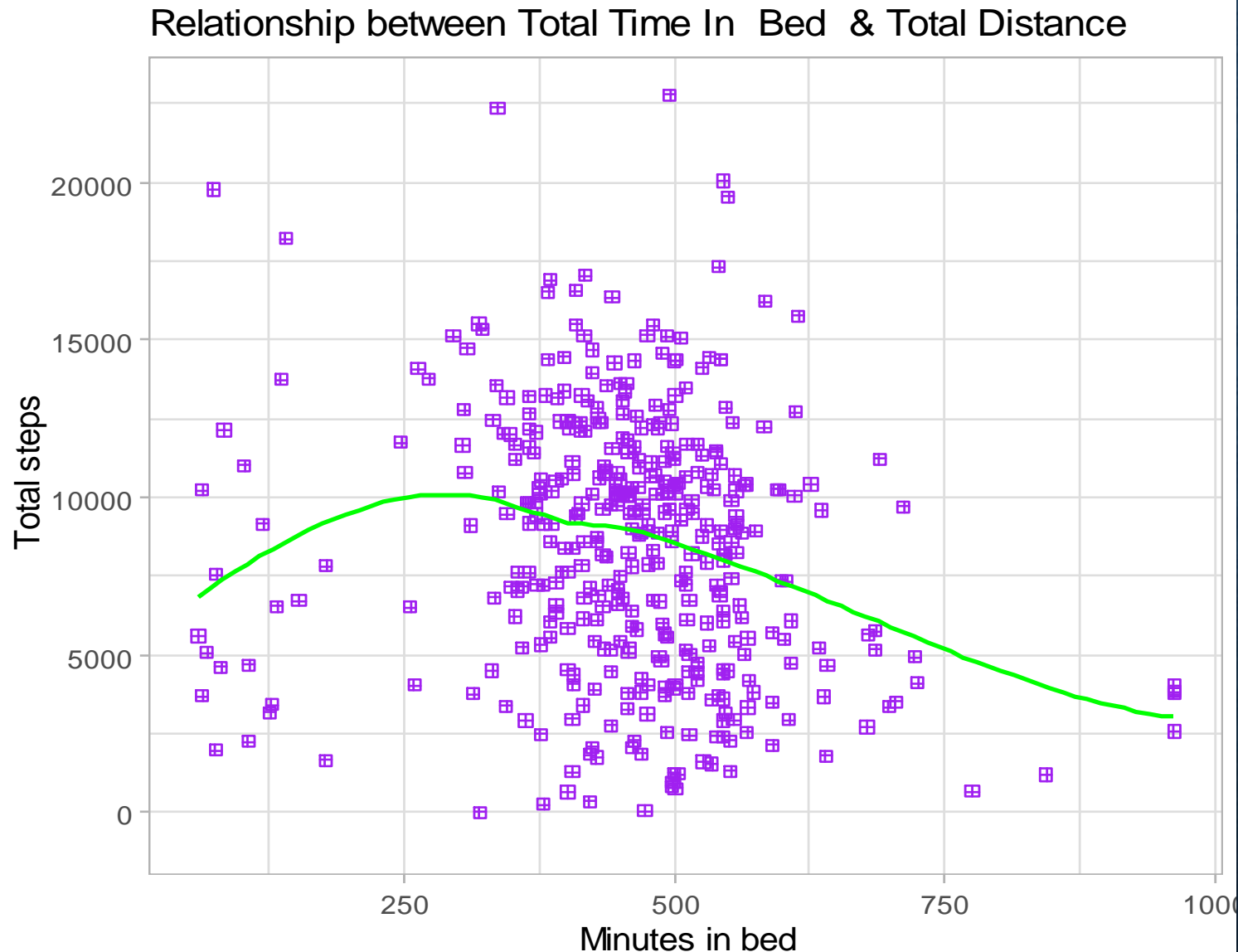
- Total distance traveled and calories burned have a tenuous positive association.

METHOD: ANALYSIS



- There is a strong positive relationship between Total steps taken and Total Distance

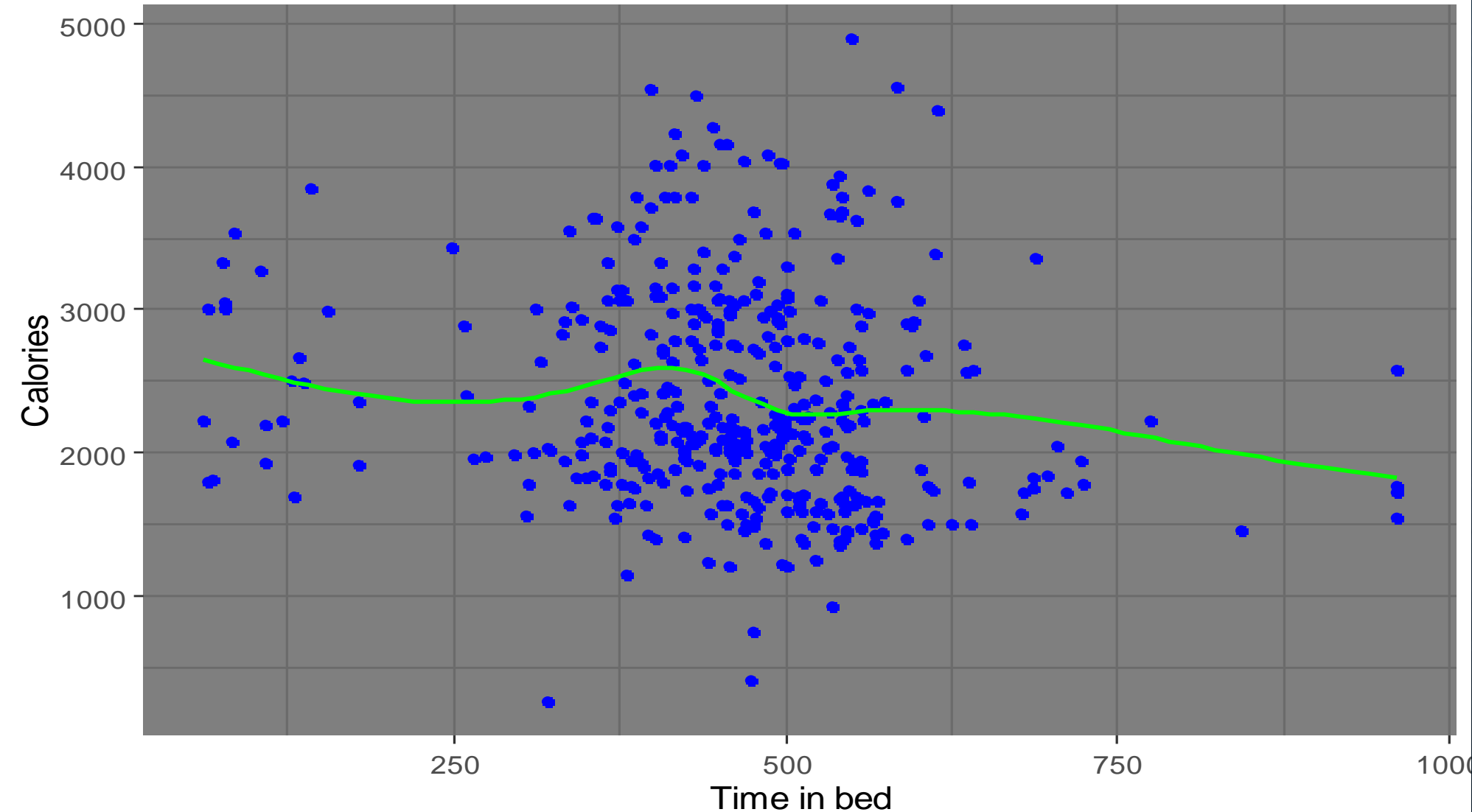
METHOD: ANALYSIS



The number of steps taken and the number of time spent in bed seem to be random but they also have a weak negative correlation

METHOD: ANALYSIS

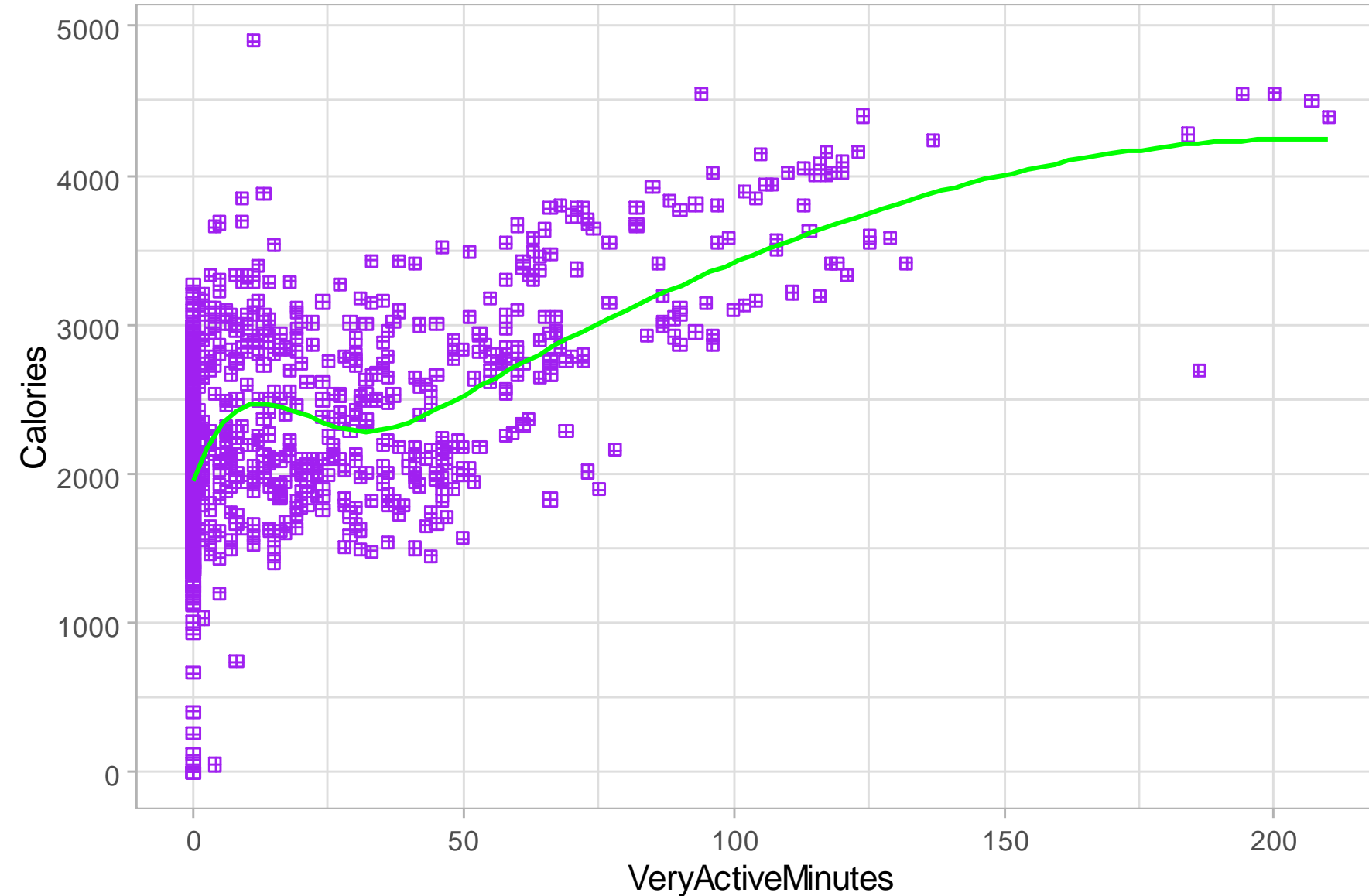
Relationship between Total Time In Bed & Calories



The calories burn and the number of time spent in bed seem to be random but they also have a weak negative correlation

METHOD: ANALYSIS

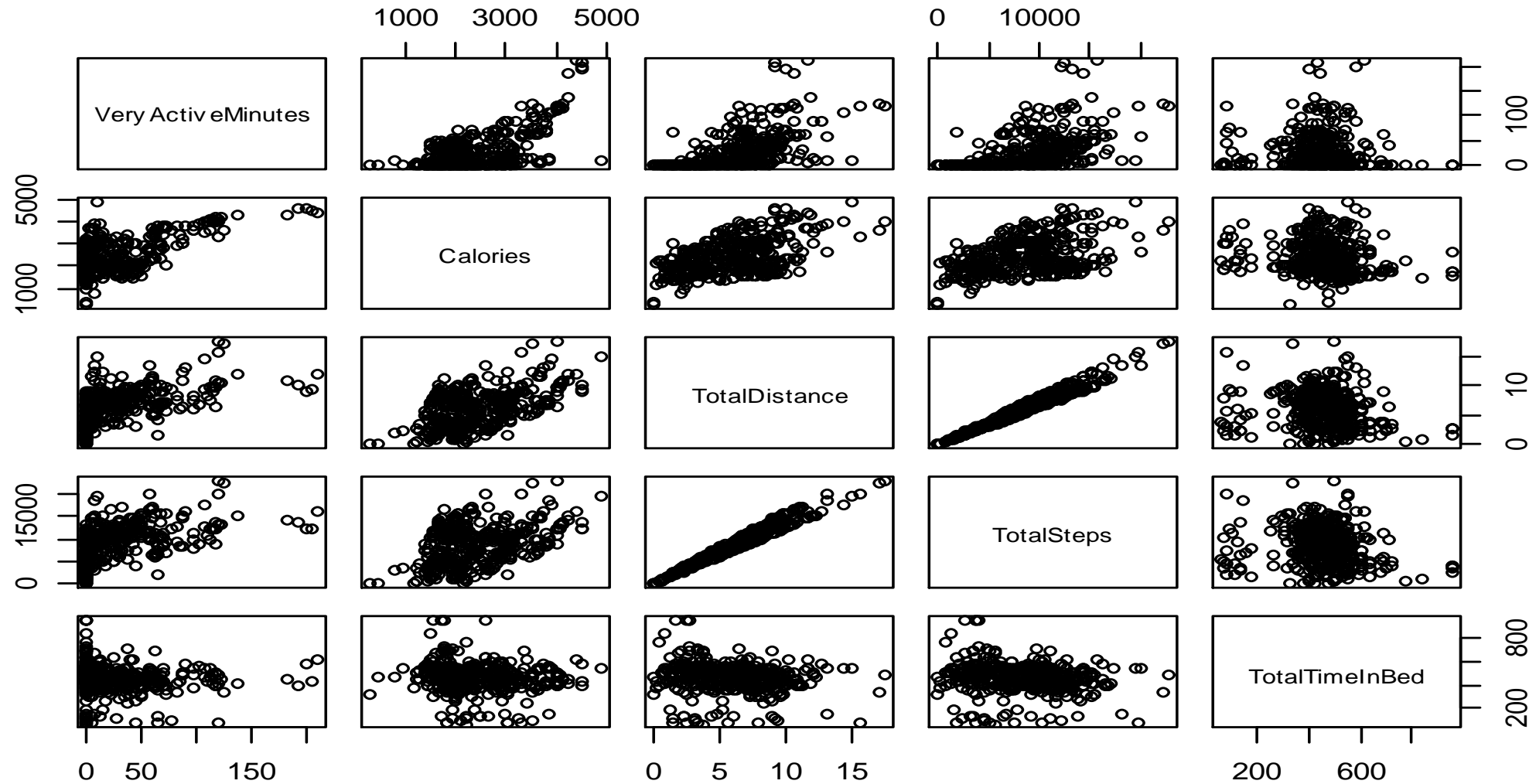
Relationship Between very Active Minutes and Calories



There is also a positive relationship between the very active minutes and calories burnt

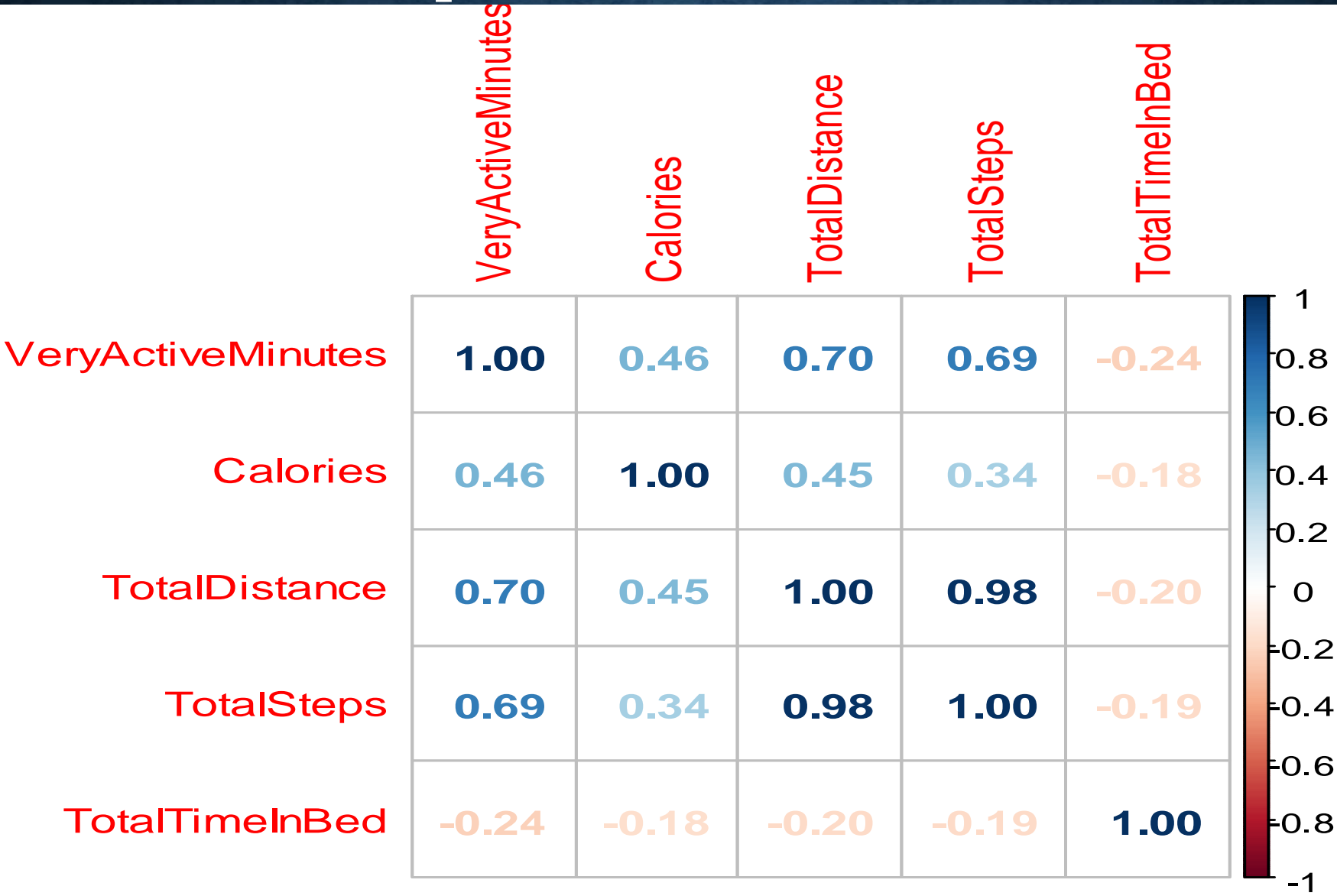
METHOD: ANALYSIS

The Relationship Between Various Actives



METHOD: ANALYSIS

The Relationship Between Various Actives



CONCLUSION: SHARE

1. What are some trends in smart device usage?

- The results from the data show that there is a positive relationship between High very active minutes, total distance covered, and total steps to calories burnt.
- A user who is very active for more minutes will have an increase in calories burnt and also any user covering more distance and taking more steps daily will also have an increase in calories burnt recorded by the device.
- A daily habit of spending more time in bed results indicate that a user will have fewer very active minutes, and also may not or will burn fewer calories during the day, and will also have fewer total steps counted by the device. More count on total steps helps in covering more distance.

RECOMMENDATION: ACT

2. How could these trends apply to Bella Beat customers?

- Bella Beat can ensure their customers on having more very active minutes or having more total steps count by their product will result in burning more calories, and customers who want to burn more calories can try having more walks and high very active minutes count by their device.

RECOMMENDATION: ACT

3. how these trends can inform Bella Beat's marketing strategy?

- Bella Beat company can set up a notification system on their device to inform users if they have lost or gained more calories using the trends.
- Bella Beat can use their device to predict customers' daily total steps, very active minutes, and total distance using their total time spent in bed. This may make people have an interest in their product.