# Case 2 MKT 524

Suppose you have collected the following sample data from twenty-six randomly selected Dallas area families regarding their Weekly Expenditures on Video Rentals and Weekly Expenditures on Dining Out:

Observation Number	Weekly Expenditures	
	Video Rentals	Dining Out
1	$12	$28
2	$12	$27
3	$6	$32
4	$13	$32
5	$7	$25
6	$10	$24
7	$8	$27
8	$4	$20
9	$4	$32
10	$13	$35
11	$5	$30
12	$9	$22
13	$12	$31
14	$9	$25
15	$12	$28
16	$4	$34
17	$14	$36
18	$10	$24
19	$5	$29
20	$18	$42
21	$15	$41
22	$6	$26
23	$6	$28
24	$4	$40

25	$11	$21
26	$9	$24

Explain your answers below in detail (use analytical tools such as correlation and regression when necessary)
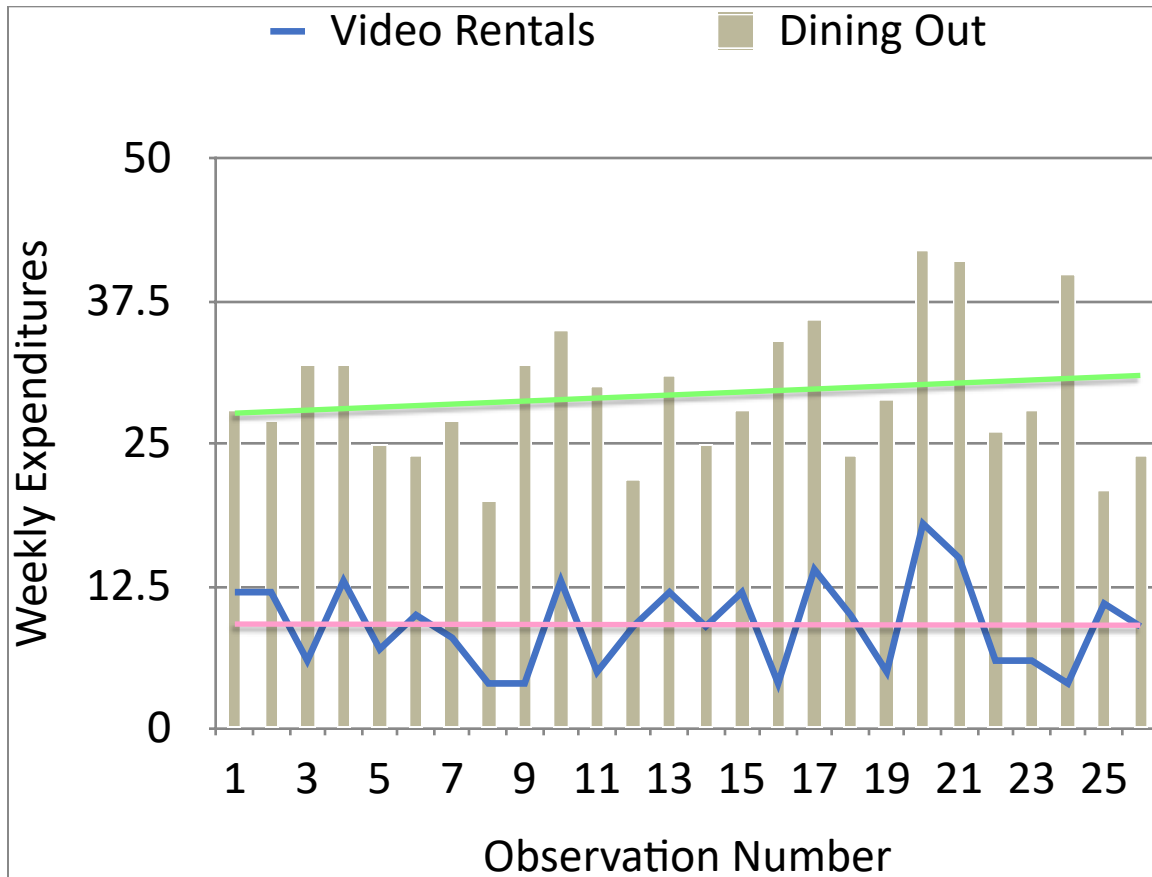
Q1: What is the relationship between weekly expenditures of video rentals and dining out?

To determine the relationship between weekly expenditures on video rentals and dining out, we can calculate the correlation coefficient between these two variables. The correlation coefficient is a statistical measure that indicates the strength and direction of the relationship between two variables.

When we calculate the correlation coefficient for the given data, we get a value of 0.442. This positive value indicates that there is a moderate positive correlation between the weekly expenditures on video rentals and dining out. In other words, as the weekly expenditures on video rentals increase, we can expect to see an increase in the weekly

expenditures on dining out, and vice versa. However, we should note that this correlation is not very strong, which means that other factors may be influencing these expenditures as well.

It's worth noting that correlation does not imply causation. Just because there is a correlation between these two variables does not necessarily mean that one causes the other. There may be other factors that influence both variables, or it may be that the relationship is simply a coincidence. Therefore, further investigation would be needed to establish causation.

Q2: If you were to reach out to these households, what other data would you be interested in collecting in order to understand their consumption behavior?

If I were to reach out to these households to better understand their consumption behavior, I would be interested in collecting additional data on factors that may influence their spending habits. Some of the data I would be interested in collecting include income level, age and household composition, employment status, and lifestyle.

Income is one of the most important factors that influence consumption behavior. By understanding the income level of the households, we can better understand their ability to spend on different activities such as dining out and video rentals.

Age and household composition can also have an impact on consumption behavior. For example, households with children may be more likely to spend on family-friendly activities, while households with older individuals may be more likely to spend on activities that cater to their interests.

Employment status can also influence consumption behavior. For example, households with individuals who are employed may be more likely to have higher disposable incomes, which may allow them to spend more on dining out and other leisure activities.

Understanding the lifestyle of the households can also provide insight into their spending behavior. For example, households that are more health-conscious may be more likely to spend on healthy dining options, while households with a love for movies may be more likely to spend on video rentals or other forms of entertainment.

By collecting this additional data, we can gain a more comprehensive understanding of the factors that drive consumption behavior and make more informed decisions about how to best serve these households.

Q3: What other types of products do you think these families would be interested in?

Based on the information provided in the sample data, it's difficult to make specific predictions about what other types of products these families would be interested in. However, we can make some general assumptions based on their spending behavior.

For example, households that spend more on dining out may be interested in other food-related products such as cooking appliances, cookbooks, and gourmet food items. Similarly, households that spend more on video rentals may be interested in other forms of entertainment products such as streaming services, DVDs, and video games.

In addition, we can look at demographic information to make more informed predictions about what other types of products these families may be interested in. For example, households with children may be interested in family-oriented products such as toys, games, and children's books, while households with older individuals may be interested in products related to health and wellness.

Of course, these are just general assumptions and would need to be validated with further research and data collection. Market research and consumer surveys can be useful tools in identifying the specific needs and preferences of these households and determining what other types of products they would be interested in.