Menstrual Cycle Effects on Consumption Desires, Product Usage, and Purchasing Behaviors

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1) Research Question

- Can a woman's food and appearance-related consumption desires, product usage, and purchasing behaviors be influenced by her menstrual cycle?

2) Theoretical Foundation

- The number of ways by which the menstrual cycle affects women's lives is staggering\textsuperscript{1}, yet its effects in the consumption setting has been minimally explored.
- During the fertile phase (21-14 Reverse-Cycle Days [RCD]; see Figure 1), women exhibit increases in mating-related desires and behaviors:
  - Sexual desires and activity\textsuperscript{2}, \textsuperscript{3}, \textsuperscript{4}, \textsuperscript{5}
  - Response to sexual stimuli\textsuperscript{6}, \textsuperscript{7}, \textsuperscript{8}
  - Extra-pair desires\textsuperscript{9}, \textsuperscript{10}
  - Response to sexual advances\textsuperscript{11}, \textsuperscript{12}
  - Grooming and sexiness of clothing\textsuperscript{13}, \textsuperscript{14}-\textsuperscript{16}
- During the fertile phase (13-1 RCD), women exhibit increases in activities and behaviors:
  - Caloric intake\textsuperscript{17}, \textsuperscript{18}
  - Hormonal effects:
    - Estrogen associated with mating drives\textsuperscript{19}, \textsuperscript{20}, \textsuperscript{21}
    - Progesterone correlated with eating drives\textsuperscript{22}
  - Evolutionary perspective:
    - Women in ancestral times had to make trade-offs between spending time on mating-related activities vs. food foraging.
- There's a growing body of research that examines the effects of the menstrual cycle on female consumers' behaviors.

3) Predictions

H\textsubscript{1}: Women's appearance-related consumption desires, product usage, and purchasing behavior will be on fertile days than on non-fertile days.

H\textsubscript{2}: Women's food-related desires, purchases, and product usage will be greater on luteal days than on non-luteal days.

4) Methodology

- A 35-day panel was used to track food and appearance-related consumption over the course of a full menstrual cycle.
- Participants were asked to:
  - Track every dollar spent in a shopping diary
  - Complete online surveys\textsuperscript{23} every evening
  - Survey 1: taken every day (N = 35)
  - Survey 2: taken on three specific days (N = 17)\textsuperscript{24}
- Dependent variables:
  - Consumption desires (9-point Likert-type scale ranging from -4 to +4)
  - Product usage (-4 to +4)
  - Purchasing behaviors (5)
- Analyses: repeated-measures analysis (General Linear Model, one-tailed)

5) Results

A) Consumption Desires

- Appearance-related desires:
  - Women reported a significantly greater desire to look sexy on fertile days than on luteal days [F(1,17)=5.60, p=0.031].
- Food desires:
  - Women reported significantly greater cravings for highly caloric foods on luteal days than on fertile days [F(1,17)=5.94, p=0.023].

B) Product Usage

- Appearance-related product usage:
  - Women reported using in greater appearance-related product usage on fertile days than on luteal days [F(1,17)=8.93, p=0.005].
- Food consumption:
  - Women reported consuming significantly more food on luteal days than on fertile days [F(1,17)=3.85, p=0.01].

C) Purchasing Behaviors

- Clothing purchases:
  - There were no significant differences between the amount of money spent on clothing on fertile days and the amount spent on luteal days [F(1,17)=1.00, p=0.33].
  - Across four 7-day sub-phases, the menstrual cycle did have a significant effect on amounts of money spent on clothing [F(1,17)=2.39, p=0.05].
- Food purchases:
  - Women reported spending significantly more money on food on luteal days than on fertile days [F(1,17)=4.01, p=0.005].
  - Across four 7-day sub-phases, the menstrual cycle had a significant effect on amounts of money spent on food [F(1,17)=6.09, p=0.02].

6) Implications

- The obtained effects on actual purchases constitute the first direct evidence of a menstrual cycle effect on women's consumer behavior.
- Our research is relevant to consumer welfare in that we are highlighting when women are most vulnerable to succumbing to cyclical temptations for high-calorie foods and appearance-enhancing products.
- From a managerial perspective, marketers could benefit from recognizing that food and clothing consumption behaviors follow distinct cyclical patterns and applying this knowledge to data mining and direct marketing strategies.
- Overall, our findings add to the growing body of work at the nexus of physiology and consumer behavior\textsuperscript{17}-\textsuperscript{19}.

Footnotes

- \textsuperscript{1} Women’s appearance-related consumption desires, product usage, and purchasing behavior will be on fertile days than on non-fertile days.
- \textsuperscript{2} Women’s food-related desires, purchases, and product usage will be greater on luteal days than on non-luteal days.

Methodological Details

1. Survey 1: taken every day (N = 35)
2. Survey 2: taken on three specific days (N = 17)

References


Picture Sources

- [Picture Sources]