Gender-based Consumer Behavior Impacts of a Pandemic: Two Semesters In

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ABSTRACT

Gender differences in consumer behaviors of college students in the US resulting from the move to online education as a result of a stay-at-home order relative to the pandemic are investigated. The findings of a survey of students who were forced to attend online classes due to the Covid-19 pandemic are reported. The students in the study had experienced two semesters of online education resulting from Louisiana’s emergency health order encouraging people to social distance, take precautionary health measures, reduce travel and basically stay home as much as possible. The impact of Covid-19 on retailing and spending habits of college students is discussed. Findings of consumer behavior impacts relative to gender are presented. The analysis revealed differences existed between male and female students in their spending patterns and consumer behaviors.

Keywords: Consumer Behavior, Gender, Pandemic, Students.

I. INTRODUCTION

Covid-19 entered the world stage in late fall of 2019, hence its name. By January 2020, countries in Europe, Asia, and the Americas began to announce unprecedented patient caseloads that were ballooning, as travelers carried the virus around the globe. In response, government edicts involving emergency health orders were proclaimed. These health orders changed everything. They sent students home and severely restricted activities of government and non-government organizations, restricted unnecessary travel and mandated precautionary health efforts. Retailers, including stores, bars, restaurants and others catering to consumers, found they were thrust onto the front lines of the battle against the virus. Retail operators found their business practices were restricted on an unprecedented scale.

Louisiana became the ninth state to fall under an emergency health edict including an expectation that people would stay home: a so-called stay-at-home order (SAHO). The edict sent most everyone home to face a scary and fast-changing environment. The edict fell on the heels of New Orleans’ Mardi Gras celebration as Louisiana’s caseload skyrocketed marking Louisiana as the fastest growth rate of virus spread (Ballard & Karlin 2020) in the country. Following the conclusion of Mardi Gras in New Orleanswhich Mackel (2021) mentioned was a super spreader event. Besides shutting all but essential businesses, people were expected to stay home except for trips needed to acquire necessities (Governor’s Order, 2020). Masks and social distancing became the norm. Impacts on consumer behavior and ultimately on retailing would be significant.

II. THE IMPACT OF COVID-19 ON RETAILING

For better or worse, people wore masks, social distancing as much as possible, reduced unnecessary travel, and in general, stayed home. Retailers, as did all found themselves facing a new reality. For many, as with bars and restaurants, closing was the result. For others, reducing hours and/or their operations were among the impacts. Successful retailers noted they survived at least in the short run by transitioning to curbside pickup, by drive-up shopping, through an increased online presence, offering special shopping hours for seniors, and through an increased level of vigilance with regard to hygiene.

While many bricks and mortar retailers suffered from the pandemic, online orders for home delivery of non-food items, store pickup of groceries, and restaurant pick-up of food surged in the Spring of 2020. According one industry estimate (Savitz, 2020) the US experienced a 70 percent year-over-year increase in spending on meal-delivery service during the last week in March 2020. Wal-Mart announced a 74 percent increase in e-commerce for the 1st Quarter of 2020, by far the largest increase ever, based upon...
both home delivery and store pick-up (Nassauer, 2020). Wal-Mart and Amazon combined, hired 330,000 new employees just to deal with the barrage of consumers during 2020. The sudden, increased demand from COVID-19 was thrust onto a food supply chain that was already in a state of transition to online sales, as industry leaders were already investing billions to build their own delivery capacity or system (Haddon & Jorgan, 2019).

Still, retailers were hit hard by the pandemic. In March 2020, year over year sales of apparel and accessories decreased 52%. Needless to say, department stores rely on clothing and accessory sales as a major revenue driver witnessed a sales decline of more than 25% (Kohan, 2020). The permanent closing of approximately 1,000,000 businesses by the end of September, underscored the weakening and changing business environment (Yelp, 2020). A representative from the National Federation of Independent Business predicted that one-fifth of small businesses would not last the year (Sraders & Lambert, 2020). The impacts of such market changes are likely to continue to impact consumer behavior.

One bright note involved stores offering curbside service. According to Evans (2020), retailers featuring curbside service reported increasing sales 52% year over year, during the first two weeks of December (Evans, 2020). Even the methods by which consumers paid for goods experienced changes. Apple Pay recorded an 85% increase (Evans, 2020). Buy now–pay later (BNPL) plans gained in popularity, with their use rising over 90% during the pandemic. Apple’s recent foray into BNPL (Andriotis, 2022) indicates they are taking such changes seriously.

III. SPENDING HABITS OF COLLEGE STUDENTS AND TEENS

Internal needs and motivations, including hunger, thirst, pain, perception, suffering, gender, and age are among numerous internal variables impacting behavior. One’s geographic location, need for esteem, need for self-actualization, and other external factors also impact one’s behavior. Such influences constantly play a role in motivating consumers and driving their behaviors.

College students play a large role in the economy through their purchasing behavior. Each year college students spend billions of dollars on food, snacks, alcohol, and other items (StateUniversity.com, 2021). Looking more closely at food and snack purchases, a nationwide survey of over 10,000 college students found that most college students spend $51 to $75 weekly on groceries; $11-$15 weekly on snacks; and $11 to $25 weekly on eating out at restaurants (Recess, 2021). This same study found that most students do not spend money on food delivery. Further, Jones et al. (2020) found college students were less concerned about disease transmission from buying home-delivered prepared food such as pizza, than the general population.

The dollar-volume of student purchases is not lost on marketers. And as marketers recognize, college students are often a reference group for teenagers, whose behaviors are influenced by the spending habits of college students. According to LexingtonLaw.com (2020), teenagers spend an average of $2,600 each, annually. As a result, the 46 million teens in the country spend approximately $119 billion in the US, annually.

IV. CONSUMER BEHAVIOR IMPACTS BY GENDER

A systematic review of 61 articles examining gender differences recently summarized the following differences between men and women with respect to online shopping. Men tend to be attitudinal and behaviorally more favorable towards online shopping. They had more favorable attitudes towards e-tailers, online purchases and repurchases and e-payments. While social influences affect both men and women when shopping online, women are more significantly influenced. Women were also more concerned with privacy, which affects their trust of online shopping more substantially than men (Kanwal et al., 2022).

In a study of 2000 online grocery shoppers, 45% of the shoppers were men. This study also found that 65% of male online grocery shoppers do most if not all of the household grocery shopping. The primary motivation for men was convenience. Convenience means shopping when they have time, avoiding crowds, and not having to wait in line (Medina, 2019). Aside from shopping for food online, there is evidence that men are more likely to make food purchases from restaurants, carryout, fast-food retailers, or other venues rather than shop in stores (Crane et al., 2019).

Looking more specifically at gender differences in consumer behavior among college students, Seock and Bailey (2008) investigated the gender differences among students regarding shopping orientations, online information searches, and apparel purchases. Seock and Bailey (2008) found female college students enjoyed shopping more, were more fashion and price-conscious, and were more confident. These results suggest females seek more hedonic experiences in shopping. Males were more concerned with convenience and time than females. Males tended to be functional or utilitarian. Females were also found to engage in more online information searches for apparel than males.

A study of undergraduate students in Thailand found males and females differed in the types of products purchased. The items that male students bought more of included games, alcohol, sport equipment, and computer equipment. Female students spent more on entertainment, clothes, cosmetics, school equipment, and gifts (Sereetrakul et al., 2013). This same study additionally examined gender differences and attitude toward saving and spending. In the study, five attitudinal factors were examined: 1) Positive attitude toward saving; 2) Lack of attention paid to money or richness; 3) Tendency to spend rather save; 4) Preference for using a credit card; and 5) Fondness for shopping. Females were more favorable in attitude toward saving and a fondness for shopping whereas males were either more favorable to spending money or they were more indifferent to money. No significant difference in a preference for credit card usage was discerned.

V. OBJECTIVES AND METHODOLOGY

In middle of spring 2020, students were quickly moved off-campus in response to the pandemic. Students would
continue their education, albeit through distance technologies. Changes in the educational and economic environments triggered an investigation into the behavior of students, and specifically their consumer behaviors. Restrictions on travel and socialization, and reductions in the number and locations of shopping and eating venues ostensibly caused changes in consumer behavior. While changes were expected, questions as to the impacts of changes by gender are of central concern. The present study comprised two surveys of students who were sent home beginning in March 2020 to finish the spring semester online and students who were online in the Fall of 2020.

The pandemic appears to have been an unprecedented “game-changer” in online delivery of higher education. Lederman’s (2021) data indicates undergraduate online enrollment increased 93.1% from 2019 to 2020, encompassing more than 5.8 million students. Distance education was the norm for most of the year 2020-2021, and still continues albeit to a lesser extent. The move online was celebrated by some and derided by others. Universities began to be on the receiving end of lawsuits by students who were dissatisfied. Such filings appeared to gain steam (Davis, 2020). Such suits cited dissatisfaction arising from the move to off-campus, a perceived decline in the quality of education and the absence of an expected campus life that was paid for but not received (Davis, 2020).

The overall objective of the study is to discern gender-based impacts on students’ consumer behaviors arising from the pandemic and subsequent health orders. Seven specific objectives were developed and used as the basis for investigating impacts. The questionnaire used and the study’s methodology received approval by the University’s Internal Review Board with the proviso students could opt out of any or all questions. The administration of the first survey was seven weeks after the move off-campus (end of spring 2020), and at the end of the fall semester (2020). Questionnaires were administered via Survey Monkey.

The specific objectives in the study include the following:

1) To investigate the usage of Instacart, Shipt, or similar grocery delivery services by gender.
2) To determine if purchasing online was impacted by gender.
3) To determine if gender impacted reports on the amount of food consumed through restaurants.
4) To determine if gender played a role in the amount of money saved.
5) To discern the impact of the role gender played in the amount of time spent surfing the internet.
6) To discern if gender played a role in the number of items purchased online.
7) To determine the role of gender on perceived access to textbooks after the order.

A convenience sample of eight business classes participated in the study. The questionnaire was administered online via Survey Monkey. The same questionnaire was administered in May and December.

Participants enrolled in more than one of the classes sampled were instructed not to participate but once. In spring, 294 questionnaires were returned and in fall, 337 were returned for a total sample of 631. As mentioned, as per university protocol, students could (and sometimes did) opt-out of answering specific questions.

VI. FINDINGS

Objective #1 was to investigate the use of Instacart, Shipt, or similar grocery delivery services by gender. Table I indicates the responses of the students.

<table>
<thead>
<tr>
<th>TABLE I: THE USE OF GROCERY DELIVERY SERVICES</th>
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<tbody>
<tr>
<td>Gender</td>
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<tr>
<td>Male</td>
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<tr>
<td>Female</td>
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<tr>
<td>Totals</td>
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</table>

Notes: n(row%)/Significance=0.008.

A minority of students reported using grocery delivery services more, after the move off-campus. Only 115 (19.4%) students reported using such services more. A majority of respondents (54%) reported using such services the same amount. The big surprise to the authors was that more than one-fourth (26.6%) of respondents who reported using such services less. The decrease was perhaps, owing to the increase in free time arising from the move off-campus and/or reductions in employment.

Comparing responses by gender using a Chi-Square test, a statistically significant difference (0.008) is noted. It appears females increased the use of such services more (23.7% v. 13.5%) than males.

Objective #2 was to determine if purchasing online was impacted by gender. Table II indicates responses relative to students purchasing online after the stay at home order.

Large numbers of males and females reported increasing purchasing online, after the health order. Indeed, almost one-half of males (49.2%) reported purchasing more, while almost two-thirds (64.4%) of females reported purchasing more. Only 9.1% of students reported purchasing less online after the order.

A majority of respondents (58.2%) reported increasing their online purchasing. Approximately one-third (32.9%) of student reported no change in such purchasing. Chi-Square indicates a difference between the genders at the 0.000 level. Clearly, females increased their purchasing online more than males (64.4% v. 49.2%).

Objective #3 was to determine if gender impacted reports on the amount of food consumed through restaurants. The impact of the stay at home order relative to purchasing food from restaurants is shown in Table III.

As per the governor’s order, universities required those students who could leave, to leave campus which resulted in most dorm residents leaving the campus and its related food services. As a result, it is not surprising a large group (46.1%) of students reported their consumption of restaurant food after the order, had increased.

No significant differences were noted between males and females with regard to their consumption of restaurant food.

<table>
<thead>
<tr>
<th>TABLE II: PURCHASING ONLINE</th>
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<td>Gender</td>
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<tr>
<td>Male</td>
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<tr>
<td>Female</td>
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<tr>
<td>Totals</td>
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</table>

Notes: n (row %) / Significance = 0.000.
Objective #4 was to determine the role of gender on the amount of money saved. Table IV displays the impact of the order on students’ savings.

A larger percentage of females reported saving more than males (24.3% v. 17.3%). At the same time, a larger percentage of males (34.3%) than females (28.4%) reported saving the same after the order.

The significance level of 0.086 indicates an expected significance in difference greater than the 0.10 level. The realization females reported saving more after the order may have arisen due to the restrictions on shopping on-site, in many stores after the order, than before.

Objective #5 was to assess the role gender played in the amount of time spent surfing the internet. The differences in gender were not enough to break the required 0.10 level. Few students (3.1%) reported surfing the internet more after the order than before. At the same time, the close percentages of male and female student (69.5% v. 72.1%) reporting spending less time surfing the net, is indicative of the similarities in their response levels among genders.

Objective #6 was to determine the role of gender on the number of items normally purchased online. Table VI indicates the impact on the number of items purchased over the internet pursuant to the order.

Objective #6 had the most surprising results of the objectives involving gender and consumer behavior. The Chi-Square test reveals a significant difference among the genders (significance=0). While less than 10% of both males and females reported increasing the number of items purchased online, after the order, a large difference appears to exist in the percentage of each gender reporting buying fewer items. Indeed, a large majority (59.5%) of females reported buying fewer items online. At the same time, less than one-half (40.4%) of males reported buying fewer items online.

Objective #7 was to determine the role of gender on perceived access to textbooks after the order. Table VII provides data relative to the impact of the order on students being able to access textbooks.

### TABLE III: Purchasing Food from Restaurants

<table>
<thead>
<tr>
<th>Gender</th>
<th>More</th>
<th>The Same Amount</th>
<th>Less</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>122  (49.0%)</td>
<td>69 (27.7%)</td>
<td>58 (23.3%)</td>
</tr>
<tr>
<td>Female</td>
<td>150  (44.0%)</td>
<td>112 (32.8%)</td>
<td>79 (23.2%)</td>
</tr>
<tr>
<td>Totals</td>
<td>272  (46.1%)</td>
<td>181 (30.7%)</td>
<td>137 (23.2%)</td>
</tr>
</tbody>
</table>

Notes: n(row%)/Significance=0.364.

### TABLE IV: Impact on the Amount of Money Saved

<table>
<thead>
<tr>
<th>Gender</th>
<th>More</th>
<th>The Same Amount</th>
<th>Less</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>43   (17.3%)</td>
<td>85 (34.3%)</td>
<td>120 (48.4%)</td>
</tr>
<tr>
<td>Female</td>
<td>83   (24.3%)</td>
<td>97 (28.4%)</td>
<td>161 (47.2%)</td>
</tr>
<tr>
<td>Totals</td>
<td>126  (21.4%)</td>
<td>182 (30.9%)</td>
<td>281 (47.7%)</td>
</tr>
</tbody>
</table>

Notes: n(row%)/Significance=0.086.

### TABLE V: Time Spent Surfing the Internet

<table>
<thead>
<tr>
<th>Gender</th>
<th>More</th>
<th>The Same Amount</th>
<th>Less</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>4    (1.6%)</td>
<td>72 (28.9%)</td>
<td>173 (69.5%)</td>
</tr>
<tr>
<td>Female</td>
<td>14   (4.1%)</td>
<td>81 (23.8%)</td>
<td>245 (72.1%)</td>
</tr>
<tr>
<td>Totals</td>
<td>18   (3.1%)</td>
<td>153 (26.0%)</td>
<td>418 (71.0%)</td>
</tr>
</tbody>
</table>

Notes: n(row%)/Significance=0.104.

The university where the study was conducted is one of a few state universities operating a textbook rental system, rather than a purchase system. Students get to “rent” their texts for the semester without having to purchase them. The rental system location is on-campus and as might be expected, had its services curtailed somewhat during the pandemic. A 5-point Likert Scale, ranging from Strongly Disagree to Strongly Agree was used to assess the statement, “since the order, access to textbooks has been difficult.”

Females were more likely to disagree or strongly disagree with the concept that access to textbooks after the order was difficult, than were males (50.8% v. 36.0%). Indeed, the Chi-Square test significance of .006 indicates females and males answered differently with regard to this statement.

The rental textbook system was operating during the pandemic, albeit with reduced access restrictions in place. Also, some textbooks became available from publishers through online access. It is perplexing to see the differences attributed to gender.

### VII. SUMMARY AND RECOMMENDATIONS

Changes in student consumer behavior during the pandemic were reported. There were differences between genders’ responses as noted in the discussion.

There was an increase in the use of grocery delivery services by some. However, males increased their use of such services more than females. Both males and females reported purchasing more, online, after the stay at home than before. However, a significantly larger group of females reported such as opposed to males.

The consumption of more restaurant-supplied meals by both males and females was witnessed. Some 46.1% of respondents reported eating more meals from restaurants after the order than before. There was no significant difference among the genders.

A larger percentage of females reported saving more money after the order than before. Perhaps that is owing to the fact that in-store shopping was severely curtailed during the pandemic, and females reduced purchases of clothing. In a study discussed earlier, female college students purchased more clothing than males and they demonstrated more...
fondness for shopping. It is intuitive that Covid-19 would hinder in-store shopping for clothing.

There was no statistically significant difference among genders relative to surfing the internet. The surprising finding concerns the relatively small percentage of respondents (3.1%) who reported surfing more after the order. A majority of all respondents reported surfing the internet less after the order, than before.

Relative to the number of items purchased online, females were more likely to report a decrease in the number of items purchased online (59.5% v. 40.4%) than did males. At the same time, only 7.9% of all respondents reported increasing the number of items purchased online. Perhaps this finding can be partially explained by differences in the types of products males and females purchase as seen in the study by Sereetrukul et al. (2013).

Finally, relative to textbook access, females as a group reported having fewer problems accessing textbooks after the order, than did their male counterparts.

The duration of pandemic-related, consumer behavior remains to be seen. While many students have returned to schools, outbreaks of the virus are still occurring. Such outbreaks may prevent a return to normalcy for many. Consumer behavior impacts resulting from the pandemic are many and deserving of continued study.

REFERENCES


