



COVID 19 & Impulsive Spending

Rebekah Miller: Mentored by Dr. Jared Hansen

ABSTRACT

Everyone responds to negative emotions in a different way. One response less frequently spoken of is shopping, commonly referred to as "retail therapy". In 2020 the world was thrown into chaos by the spread of the COVID-19 pandemic and the subsequent lock downs, riots and overrun hospitals. In this study we wanted to look at the correlation between anxiety and shopping behaviors, primarily impulsive vs cognitive purchasing. With a voluntary survey (N=81) we found that 46% (N=37) of people used shopping therapeutically to some extent. We also found a positive correlation between those that used shopping as a way to relieve stress and an increase in financial stress. Their self realized mental health as well as their physical health showed a negative correlation in comparison to the amount of impulsive shopping these individuals relied on. These results also correlated to an decrease of satisfaction related to religion which will be explored further in future research.

INTRODUCTION

In March of 2020 the World Health Organization declared COVID-19 a global pandemic; what ensued was chaos as toilet paper was flying off shelves and healthcare workers were bruisied from wearing the necessarily-heavy PPE. With the world in a state of panic, every person was grasping for a sense of normalcy and something to ease the anxiety associated with a dangerous virus spreading like wildfire. Whenever psychologists talk about anxiety, the big question they ask is "How do we cope with this anxiety?"

Thomas Gray proposed a theory he called the Behavioral Inhibition System. Gray postulated that there is a neurological system which determines our reaction to different emotions. Just like Newton's Third Law, every emotion has an opposite and equal reaction. This theory proposes that very strong emotions, positive or negative, have an equally strong reaction. (Zuckerman,Joireman, Kraft& Kuhlman, 1999). One significant issue that is faced in any study regarding anxiety is the fallacy of self realization. Two people could feel the same emotion in the same way and report completely different numbers on a 1-7 scale. In late 2020 a voluntary survey, was responded to by 7,326 Chinese people to assess how COVID-19 had impacted their mental health. In this study, 35.1% of the total respondents reported an increase in anxiety and 20.1% reporting an increase in depression. (Yeen, Ning 2020).

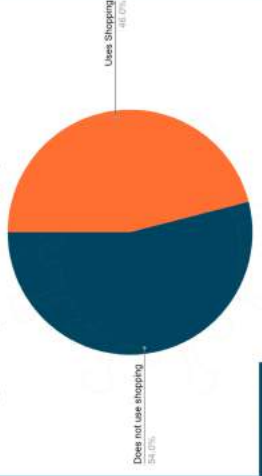
The purpose of this study is to see if there is a correlation between the increase of anxiety due to the pandemic and impulsivity, primarily in shopping/spending habits. At the beginning of the pandemic, basic supplies were flying off the shelves in surprising numbers and suppliers were having trouble keeping production up with demand. This scarcity caused even more panic and the cycle continued for weeks. After seeing so much panic leading to spending, we wanted to see the correlation between the two: was anxiety causing spending, or was spending causing anxiety? We also wanted to look at how the people who did use shopping as an outlet were affected in other ways pertaining to their mental health.

The rest of this report proceeds as follows.

RESULTS

Frequency descriptive statistics were first computed to understand how individuals escape the pressures, stresses, anxiety, and other negatives of the pandemic and how it has changed their lives. The information in the table indicates that different people escaped the pressures and stresses of the pandemic in different ways. Approximately 46% used shopping to some extent. Others focused on using other activities.

Percentage of People Who Use Shopping to Relieve Stress

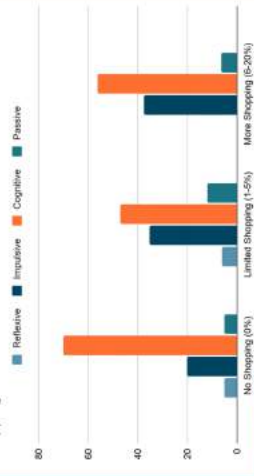


GRAPH 1.1

RESULTS CONT.

The answers to the shopping question were divided into three groups. The first group is composed of people who didn't shop to escape pressures and stresses etc. (i.e., they marked zero percent). The second group consisted of people who indicated 1% to 5% as their answer to the question on shopping to escape pressures and stresses etc. The third group consisted of people who indicated 6% to 20% (the maximum percentage indicated). Survey respondents were asked to answer the question "How would you describe your shopping habits, on average, DURING the COVID-19 Pandemic" with answer choices being "reflexive, impulsive, cognitive, passive". Comparing those three groups, (no shopping, a little shopping, more shopping to deal with pressures and anxiety during COVID) across the shopping habits results in the following graph.

Shopping Behavior and Amount



GRAPH 2.1

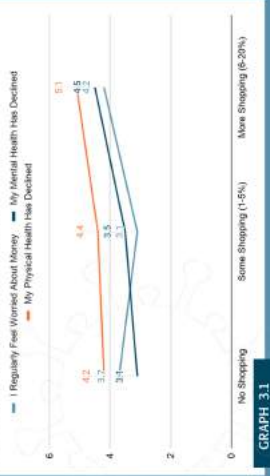
RESULTS CONT.

There is a significant shift between impulsive and cognitive shopping habits comparing those who did not engage in shopping to help with stress versus who did so a little bit and those who did so more. In summary, the majority of those who did not engage in shopping to help with COVID19 related pressures/stress/anxiety shopped using a cognitive approach to purchasing while shopping. However, the groups who did a little shopping and then more shopping to help with COVID19 related pressures/stress/anxiety had higher percentages who were impulsive when shopping (instead of the intentional/cognitive approach). Taking the analysis one level deeper, several psychographic wellness related questions were asked of the respondents. Comparing those three groups provides some interesting findings:

RESULTS CONT.

Each participant was asked to rate a set of statements on a scale of 1-7 with one being disagree and 7 being the maximum agreement. The statements that correlate with this graph are "I am regularly worried about money", "I feel like my mental health has declined", and "I feel like my physical health has declined". The average for each group is shown below.

Shopping and Self Described Anxieties



GRAPH 3.1

RESULTS CONT.

The data indicates that those who engage in more shopping as a way of dealing with COVID-19 related pressures, stresses, anxieties, etc., are more worried about money (4.2 average) versus those who engage in less or no shopping for those purposes. Likewise, the group who indicates they engaged in more such shopping also indicated higher levels of agreement with statements on feeling physical health decline (4.5) and mental health decline (5.1). All three groups indicate similar levels of disagreement regarding having more doubt that there is a God, but the more shopping groups indicated they are less satisfied with their religious experience than the other two groups and they feel more distant to others who share their religious affiliation. This part of the study will be explored deeper in future studies.

CONCLUSION

In this study we found the correlation between using shopping as a way to relieve stress and anxiety based around the COVID-19 pandemic. Our results showed a positive correlation between people who used shopping as a way to relieve stress and an increase of financial worry, a decrease of mental health and a decrease of physical health. We then compared the three groups of shopping as a stress reliever and how the subjects rated their spending habits, the four groups were impulsive, cognitive, passive, and reflexive. Specifically we looked at impulsive and cognitive spending in comparison to the three spending groups. The more a person relied on shopping the more impulsive their spending type was. In this study a positive correlation was also found between shopping for stress relief and a lack of religious satisfaction, this is the concept I hope to explore in my next research project.

METHODS

A voluntary survey was used to gather the information, this survey consisted of qualitative and quantitative answers to create the widest amount of research possible. After the survey was created it was posted on social media with instructions on how to complete, the survey was accepting responses for one week in March 2021 and was closed on March 24 2021. With the addition of existing research we compared past studies with our own and used data analysis to compare these two results.

A random snowball sample design was used to gather data. The survey was live for one week in March 2021. Approximately 80 individuals completed the survey. The majority of the sample lives in Utah (76%). The sample was 70% female, 30% male. Approximately 80% identified themselves as white for their ethnicity. The average age was in the low 20s, with a range from 18 to 69. Approximately 38% had a bachelors' degree and 28% have some college but have not yet received their degree. The majority of the survey questions were seven-point Likert agreement questions (1 = strongly disagree, 7 = strongly agree).

There were a few open ended essay questions.

DISCUSSION

Through this study we found a positive correlation between impulsive shopping behaviors and using shopping as a way to relieve anxiety. 46% of our total sample reported using shopping as an outlet to a certain extent (N=36) with the maximum percent of shopping to relieve stress being 20%. Taking into account the previous information we sorted the sample into three groups. No shopping (N= 36), some shopping 1-5% (N=17) and more shopping 6-20% (N=16). Each group was then split into impulsive, cognitive, passive and reflexive. As shopping increased the self described cognition decreased and the impulsivity increased. With the no shopping rating their impulsivity at 20% and cognitive at 70%, some shopping at 38% and 47% respectively and, more shopping at 35% impulsive and 56% cognitive. This jump in impulsivity also correlates to an increase in worry surrounding money, a decrease in mental health as well as a decrease in physical health. For the previous three other unaccounted for factors could be affecting these and well, including lock down, inability to socialize and physical activities being limited to account for social distancing. According to Thomas Gray the intensity of an emotion needs a equally strong reaction. This correlates to our data, the higher the stress on money and declination of health the more money spent in order to relieve stress. It is clear that the more a person depends on shopping to help deal with the pressures and anxiety of COVID-19 the more impulsively their shopping becomes and generally less satisfied they are with life. This is apparent especially when comparing the mental health of each group. The "No Shopping" group had an average rating of 3.1. "Some Shopping" had a mean of 3.5 and the "More Shopping" group averaged 4.5 on a seven point scale.

Blustein, D. L., Duffy, R., Ferrerini, J. A., Cohen-Scaal, V., Cramer, R. C., & Allan, B. A. (2020). Unemployment in the time of COVID-19: A research agenda. *Journal of the Academy of Marketing Science*, 48(3), 394-404.

Lee, M. Y., Kim, Y. K., & Park, S. H. (2020). The impact of COVID-19 on online shopping: A study on the Korean market. *Journal of Business Research*, 114, 1-10.

Sundström, M., Hjelm-Lidholm, S., & Radon, A. (2019). Clicking the boredom away-Exploring impulse fashion buying behavior online. *Journal of Retailing and Consumer Services*, 47, 150-156.

Wagner, T. M., Jain, B., & Janda, R. (2008). Consumer Cognitive Associations with Store Environmental Marketing. *Journal of Business Research*, 61(1), 1-10.

Zuckerman, M., Joireman, J., Kraft, M., & Kuhlman, D. M. (1999). Where do motivational and emotional traits fit within three factor models of personality? Personality and Individual Differences, 26(1), 107-120.

Huang, Y., & Zhao, N. (2020). Generalized anxiety disorder, depressive symptoms and sleep quality during COVID-19 outbreak in China: A web-based cross-sectional survey. *Psychiatry research*, 286, 11294.