Spending Behavior Treatment Phase

Treatment Phase Report

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As a group we are studying our spending habits and intensity in how much we are spending. The participants were interested in studying the behavior surrounding their spending decisions. This was done by specifically looking at the different stimuli of the spending. If they are alone or with people, how much cash flow we receive, needs vs wants, and cash vs credit/debit cards were a few of the stimuli. By observing these different stimuli the participants are able to use that information to treat and change their spending behavior.

Esther Cyubahiro

Description of the Experiment

- Behavioral definition of the target behavior: For this purpose of experiment, spending was defined as using every dollar whether through cash or card. Spending was mostly through card.

- Treatment method used: Self-management

- Dates of the experiment: Baseline 1 September 12-25, 2018. The treatment phase 1 began a week after the baseline phase, October 2-8, 2018. The baseline phase 2 started from October 9-16, 2018. The final 7-day treatment was October 17-22, 2018

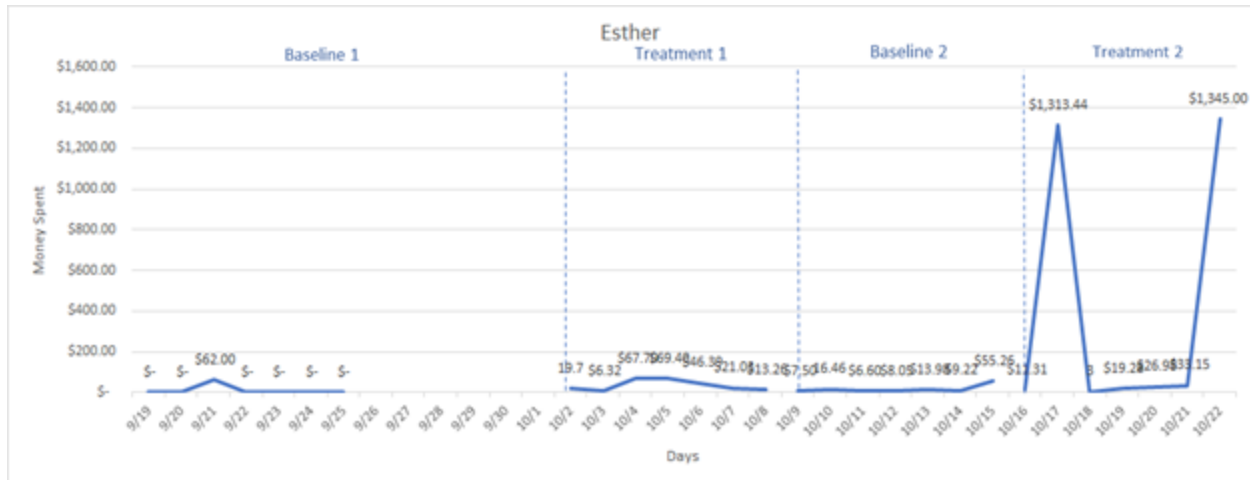- Dimensions: latency and Intensity of the money spent.

*Figure 1:*A line graph illustrating the frequency of Esther's spending rate during the baseline and

treatment phases of this study

Narrative of the Process of the Experiment

Interval unstructured observations were conducted. The observations were unstructured because

I did not change my daily routines to fit the experiment. I kept a record on my phone (notes app)

each time I spent money. The observations were interval because the spending behavior did not

occur every day so the observations happened only when money was spent. During the baseline

period, there was no latency between the trigger and the behavior, however, during the treatment

phase, there was enough latency (delay; to allow me to think through the behavior) before the

spending.

Summary of Observations

During the baseline period there was no treatment involved. However, during the baseline

period I was able to control the behavior of spending more than the treatment period (*as shown

in Figure 1).* The graph demonstrates that there was either minimal or no spending during the

baseline period. The graph also shows that spending increased during the treatment period and

decreased during the baseline period.

The Self-management treatment was successful during the first treatment period. Every week I had a budget and I purposely told myself that I was not going to spend above my budget. As shown in figure 1, the treatment during the first period was successful. The reason for its success is that I was intentional and willing to change the habit. Nonetheless, self-instructions was not the only thing that hindered me from spending, there were confounding variables that factored into my spending. During the baseline period, I had to suspend my card due to fraud transactions. Due to the suspension of my card, I was more careful and alert to all the spendings.

Self-management was successful until the final treatment period (*as shown in figure 1*). One of the reasons for the failure is that the phase fell under the time period of holidays. Holidays, especially christmas, is a time to be with the family so I had to make sure I buy my ticket as quickly as possible before the prices mount up. The spending was even more intense because it is an international flight and I was purchasing the ticket for two people.

Overall, the treatment I set up for myself was not intense enough to minimize the spending behavior. For example, there were times where I went over my budget due to triggers like hunger, friends, birthday dinners etc. The treatment was also not successful enough because I was the one monitoring my own spending. I believe that if I had someone else helping me manage my spending then the treatment could have impacted the behavior.

Madeline Landes

Description of the Experiment

- Behavioral definition of the target behavior: Within this experiment, spending was
  defined as the use of either cash or credit/debit card in exchange for goods or services.

- Treatment method used: Positive punishment (1st treatment phase) and negative
  punishment (2nd treatment phase)

- Dates of the experiment: The first baseline phase was from September 12-24. The first
  treatment phase was between September 25-October 2. The second baseline phase was
  between October 3-16. The second treatment phase was between October 17-28.

- Dimensions: Intensity of money spent was recorded.
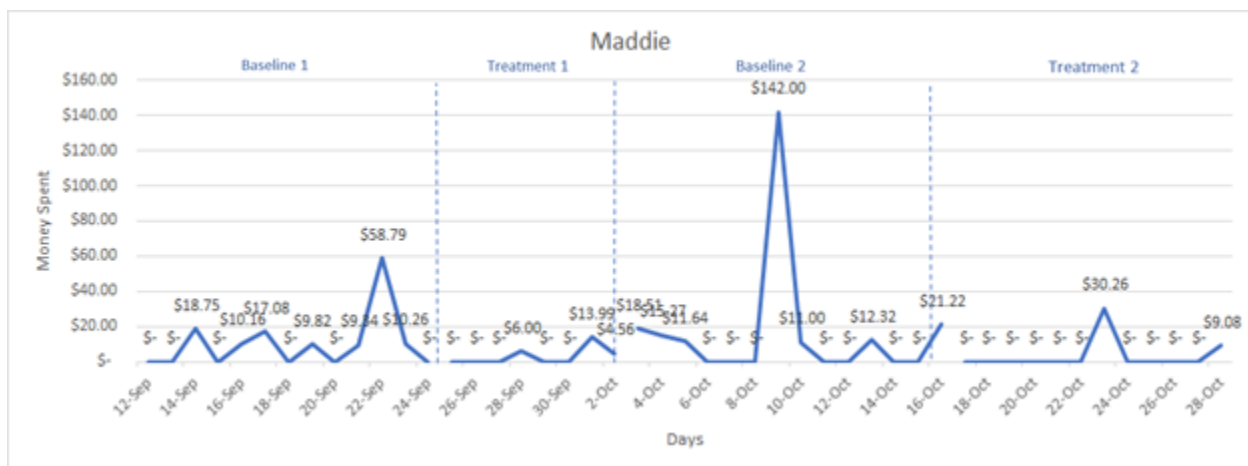
Figure 2: A line graph which recorded intensity of money spent by Madeline, depicting the
baseline and treatment phases of this experiment.

Narrative of the Process of the Experiment

Throughout the experiment, the spending included continuous unstructured observation
which meant that I did not set up circumstances that would influence the spending behavior. This
also meant that the entire time through the experiment I did not stop the tracking of my spending
behavior and it was constant. My spending behavior was observed and recorded on my phone in
the notes section after each time I spent money and then transferred every few days to my laptop,

where I had an extensive observation chart including intensity, dates, what the money was spent

on, and who it was spent with.

Summary of Observations

During the baseline phases, there was no treatment involved. This meant that the intensity

of spending was recorded because it occurred with no stipulations on the money that was spent.

There were no stipulations on how, where, when, with who, or why the money was spent as well

as any other stipulation that was possible.

During the first treatment phase, the treatment included asking friends and my boyfriend

to help me limit my spending each time we went out, and I was convinced to buy something, to

ask me if I needed to buy it or not. If the spending was not necessary, I asked them to criticize

my reasons which made me rethink my spending intensity. Although this limited the impulsive

purchases I was making, it did not rule them out entirely as I would not always listen to my

friends or boyfriend in those circumstances. During the second treatment phase, the treatment

involved removing my credit card from my wallet which limited the amount of money spent

during purchases used by the credit card. Instead of completing treating the spending behavior,

this method of treatment also raised the amount of money spent using my debit card, as that was

the card I was using more frequently before the experiment as a whole began.

Throughout the treatment phases, the triggers observed were different sales going on or

hunger within myself that I could not control as both of these influenced the intensity of money

spent. Another antecedent stimuli included spending time with friends, as it is close to

Thanksgiving my friends were having parties which also meant that I was encouraged to bring

food and no one wants to show up as a guest empty-handed. Knowing this meant that in order to

not show up empty-handed I had to spend money to bring something with me. These were

confounding variables as well because I could not control what the sales were or when they were going on, when I was hungry, and when my friends were having parties where I would need to bring something with me.

Sydney Lawson

Description of the Experiment

- Behavioral definition of the target behavior: For the purpose of this experiment spending was defined as the exchange of your own money for goods or services through cash or credit/debit card.

- Treatment method used: Positive Punishment

- Dates of the experiment: Baseline 1 was from September 30th to October 6th. My Treatment was the following week from October 7th to October 13th. Baseline 2 was from October 14th to October 20th. The treatment that followed was from October 21st to October 27th.

- Dimensions: Intensity of money spent was recorded.
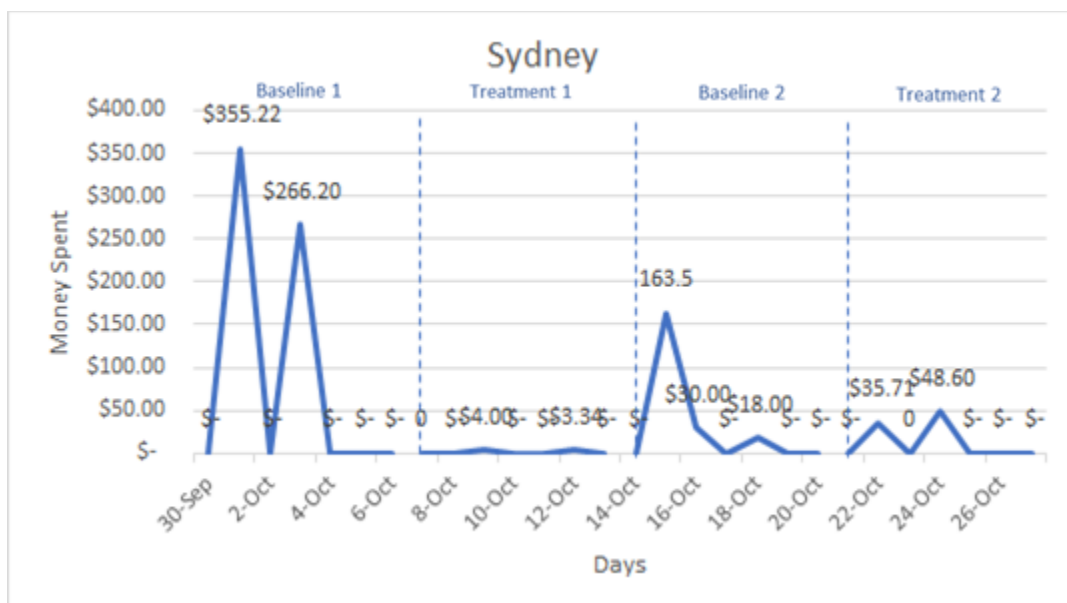
Figure 3:

Narrative of the Process of the Experiment

Continuous unstructured observations were conducted in my baselines and treatments. I recorded my spending on my phone after each exchange for both the baseline and the treatment. For each transaction I recorded how much money was spent, what it was spent on, and if I was with people. I kept a detailed list of these different factors on my laptop. For the baseline I spent money like usual, only using my debit card. For my treatment I only carried around cash, it gave me a visual amount of money that I had to spend.

Summary of Observations

On the first day of the baseline I had spent a significant amount of money due to it being at the beginning of the month and having to pay certain bills, etc. rent and utilities. I also made other purchases including entertainment/shopping and restaurants/dining; things I did not need. The second day I spent money on a car wash, a textbook for class and groceries. I did not really need the car wash and the groceries I could have spent less on, but I had to purchase the textbook to be successful in my class.

For the second week in total, the treatment phase/cash only phase, I spent a significant amount less than the baseline week. For the entire week I spent money on coffee and food for a total of seven dollars. I limited myself to forty dollars of cash and that visual of the cash helped me to spend a significant amount less.

When I allowed myself to use my debit card again for the second baseline I spent more than the week before on restaurant/dining, shopping/entertainment and then misc. Compared to the first baseline I improved my spending by three hundred dollars.

In the last treatment phase I alloted myself forty dollars in cash. I went over that budget by eight dollars, spending it on different miscellaneous items. In this treatment phase I had to use my credit card to buy gas, because I earn cash back.

In my observations I was more likely to spend money with my friends. On the weeks I had my debit card I was more likely to say yes to going out with friends because it was easier to say yes to spending money. When my friends asked to go out when I had cash I was less likely to go out with them or I would try to suggest a different activity that did not involve spending money or a significant amount less than the original proposed activity.

I am a visual person so having that set amount of cash helped me better visualize how much money I was spending and how much I would have left over if I did purchase something. When using a debit card it is easy to be ignorant at the amount of spending on a week to week basis. The use of cash was effective because I wanted to save the money for the more fun and exciting events with my friends. I had to compromise and pick and choose which activities I wanted to do more. The goal of the study was to decrease spending and with my certain expenses, the treatment was successful and helped me save money.

Samantha Lipscomb

Description of the Experiment

- Behavioral definition of the target behavior: For the purpose of this experiment spending was defined as the exchange of your own money for goods or services through cash or credit/debit card. Purchases made due to tuition payment, law reasons, or life and death situation were excluded.

- Treatment method used: Positive Punishment

- Dates of the experiment: Baseline 1 was from September 19-25, 2018. Due to unexpected

  delays, there was a one week gap between baseline 1 and treatment phase 1. Treatment

  phase 1 began October 2, 2018 and lasted until October 8, 2018. Baseline 2 was from

  October 9-15, 2018. The last treatment phase was from October 16-22, 2018.

- Dimensions: Intensity of money spent was recorded.
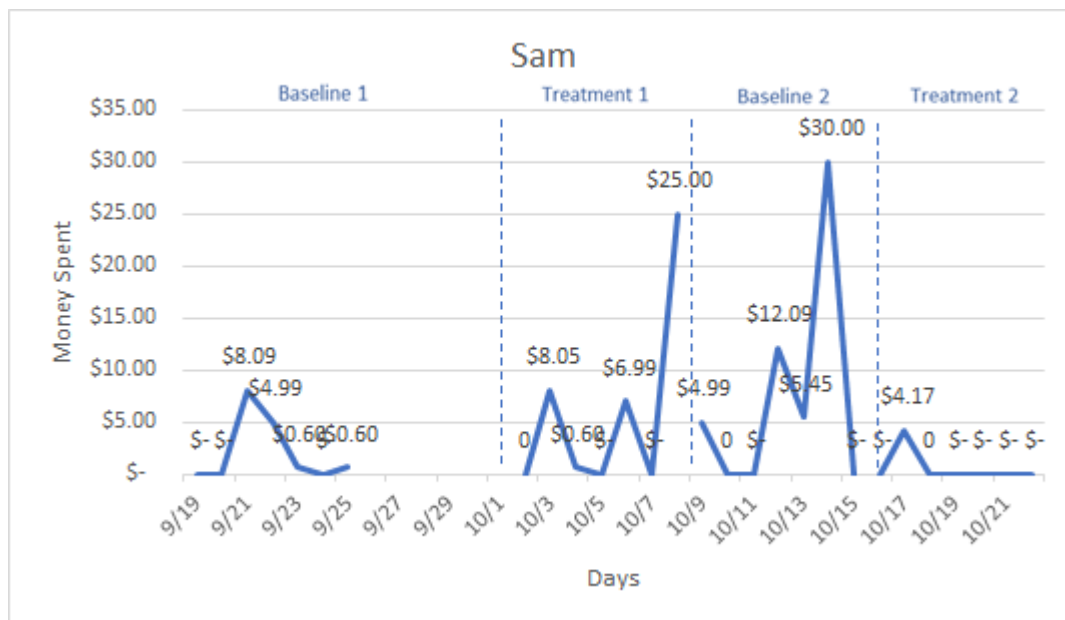
Figure 4: A line graph depicting Samantha's spending intensity throughout the baseline and

treatment phases of this experiment.

Narrative of the Process of the Experiment

An automatic record of spending was kept on the participant's phone everytime she used

her card. For cash purchases, a separate record was kept on a notes app on the participant's

phone. During the treatment phase, every time the participant wanted to spend money, she would

have to call or text her mother and tell her how much she was spending and what she was

spending it on. This served as both a latence extender because it added an extra step in the

purchasing process. It also served as a positive punishment because the participants was prone to lecturing the participant about her spending.

Summary of Observations

During the first baseline, the participants spending was often, but in fairly small amounts. Usually, it was impulse spending on food. To counteract that, the treatment increased the amount of time in between the spending prompt and the actual action. During the first phase of treatment, the treatment was only partially effective. It took about two or three times of the participant having to engage in the positive punishment for the effect to work. After a week of treatment, the participant began to weigh the consequences of her behavior more seriously and by the time the second round of treatment came to pass, the treatment was more effective. This was the opposite of what was expected to happen. What was expected was that the treatment would be incredibly effective at the beginning of the experiment, but later after the participant had become more accustomed to it, the effectiveness would lessen. Instead, the participant was more tolerable of the punishment at first, but then quickly surpassed her levels of tolerance and the behavior decreased. One issue with the treatment was that it controlled for frequency more than it controlled for intensity. The participant could still spend the same amount of money and limit the amount of punishment she encountered if she spent more money in one go, instead of if she had spread out like she previously was doing. This was eventually solved when the behavior stopped all together, but it would have been more effective if there had been a consequence for the intensity of the money the participant spent during treatment as well as the treatment for frequency. The treatment did positively affect the latency of the behavior. During the treatment phase, the amount of time between the prompt and the behavior was significantly increased not only because of the extra step added to the process, but also because the participant spent much

more time considering if it was actually worth doing the behavior. This was another factor that worked well in lowering the frequency of the spending behavior. Future research would benefit from recording actual length of latency in studies, as this study has no actual data for latency and thus most draw purely from observation.

Lina Perea

Description of the Experiment

- Behavioral definition of the target behavior: For the purpose of this experiment spending was defined as the exchange of your own money for goods or services through cash or credit/debit card.

- Treatment method used: Positive Punishment

- Dates of the experiment: Baseline 1 started on September 19 and ended on the 25th, 2018. Due to unexpected delays, there was a one week gap between baseline 1 and treatment phase 1. Treatment phase 1 began October 2, 2018 and lasted until October 8, 2018. Baseline 2 was from October 9-15, 2018. The last treatment phase was from October 16-22, 2018.

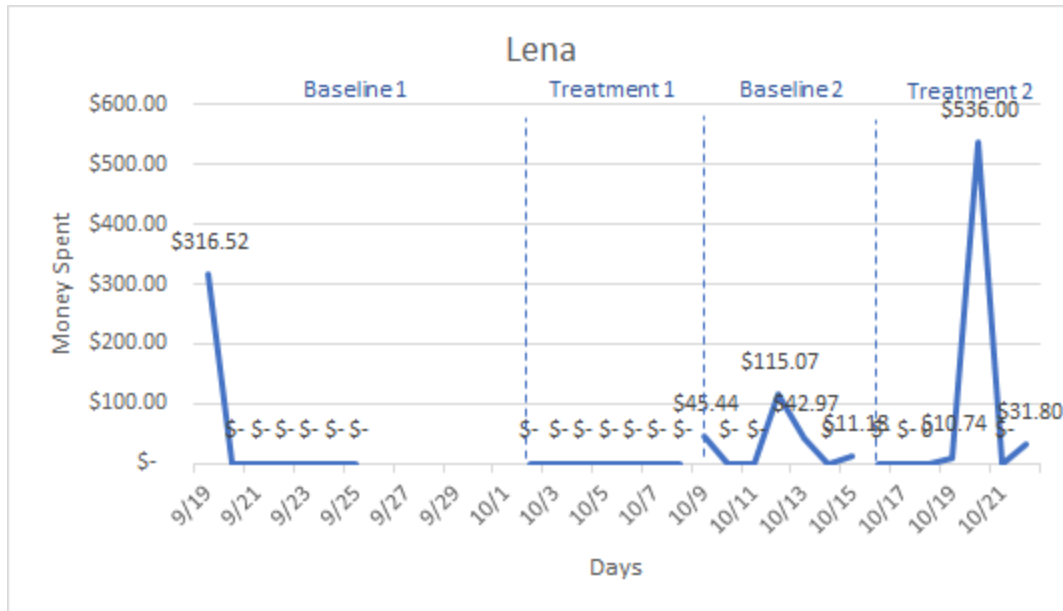- Dimensions: Intensity of money spent was recorded.

Figure 5: A line graph illustrating the frequency of Lina's spending intensity during the baseline and treatment phases of this experiment.

Narrative of the Process of the Experiment

Throughout the experiment, a continuous unstructured observation was used during both baseline and treatment phases. The recording of the spending was continuous and the observations where unstructured, no behavior was altered in order to fit the experiment. Every time money was spent it was was recorded on the credit card banking app including the specific details of what the money was spent on.

Summary of Observations

During the baseline phases there was no treatment involved. The intensity of the spending was recorded since there were no conditions addressed of what the money should have been spent on, where, when, how, or why the money was spent.

During the first treatment phase, the participant set a budget of $50.00 for every week. As shown in figure 5, the treatment during the first week of the phase was not successful. The reason being is that the participant had to travel to Connecticut for a friend's wedding and visited

her grandma during her trip. The travel expenses to Connecticut included train ticket, food, groceries for her grandma and wedding gift, it all totaled to $316.52. After the participants' travel to Connecticut she committed to not spending money on anything since she had gone over her set budget for that week. If the participant needed to spend money it was only going to be for emergency purposes. From the end of baseline 1 (September 21st) to the beginning of treatment 1 (October 9th) the participant did not spend any money. However, compared to the first baseline, the participants' spending behavior increased significantly on the second baseline (as shown in *Figure 5*).

When treatment stopped during the second baseline phase, the behavior increased slightly, but tried to commit to her $50.00 weekly budget (as shown on *Figure 5)*. During the second baseline the participant was not as successful as she had hoped she would have been. During the second treatment phase, the participant had an immigration related emergency and had to travel home. Participant once again tried to commit to the $50.00 budget, but had to go over her budget limit to buy a flight ticket home.

I believe the treatment could have been a good fit for the participant if she was not triggered by her shopping addiction and if she did not have to travel home for immigration purposes. The participant realized that she needed to adjust her spending by setting a weekly budget and if she went over the budget she would not spend any money unless it was an emergency or immigration related, which is a good indication that the participant gave her best effort for the treatment to be more effective.

The most profound observation during the second baseline is that the behavior was triggered by sales form her favorite brands. The majority of the expenses during this phase was done due to her shopping addiction.

The treatment of punishment for money spent was not as successful as the participant had hoped. Because the goal of the study was to decrease the spending behavior, the goal was not as successfully met, the treatment was somewhat successful. The participant could have had an effective treatment if she was not triggered and did not have an immigration related emergency.

Dasol Pyo

Description of the Experiment

- Behavioral definition of the target behavior: For the purpose of this experiment spending was defined as the exchange of your own money for goods or service through cash or credit/debit card.

- Treatment method used: Negative Punishment

- Dates of the experiment: Baseline 1 was started from September 19-25, 2018. The treatment phase 1 began October 2, 2018 and lasted until October 8, 2018. The baseline 2 was measured from October 9, 2018 to October 15, 2018. The last treatment phase was from October 16-22, 2018.

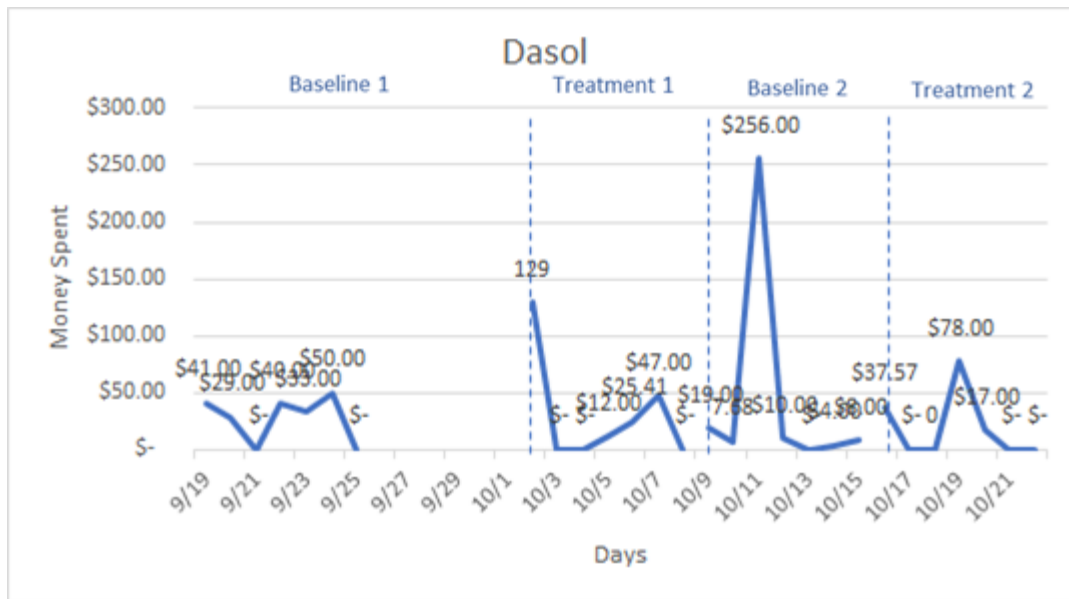- Dimensions: Intensity of money spent was recorded.

Figure 6:

Narrative of the Process of the Experiment

I used continuous unstructured observation during my baselines and treatments. I recorded my spending behavior on my iPhone, I recorded every purchase I made. I recorded all my expenses on the app WepleMoney. Through this app, I was able to keep an automatic record by connecting it with my banking app. In order to get a precise idea on my spending behavior, I recorded: item purchased, amount spent, and card used. During this research, I took out all my money in cash and divided it by five and restricted myself to a weekly allowance which reset every Monday. So, after I spent all of my weekly allowance, I was not supposed to spend anymore which was my negative punishment.

Summary of Observations

For the baseline 1, I tried to show my usual spending behavior. I spent most of my money on restaurants. On September 19, 20, 22, 23, 24, I ate outside for lunch and especially, on

September 19,22, I spent extra, because I ate outside for 2 meals. I also have bad habit of shopping online. Usually, before I go to sleep, I search for random things that I do not necessarily need, and end up buying it anyway. Also, I am not the person who spend money within a spending-plan. I spend whenever I have a spontaneous feeling.

In the treatment 1, I used negative punishment in which I set to a limit during a week. If I spent more money than I allowed myself for the week, then I could not spend anymore. However, on the first day of the treatment 1 (10/2), I bought my shoes online which took a large portion of my weekly allowance; thus, for two days I restricted myself from spending. Also, I frequently checked my balance to calculate how much I should spend for the day. However, even if I failed to spend within my limit comparing with treatment 1, my spending of food was reduced 2 times.

For the baseline 2, I was aware of the need to cut down on unnecessary spending habits. So, I tried to spend money only on what I needed; except for the third day (10/11) of baseline 2 in which I spent money again by shopping. Regardless, by the sixth day, spending behavior was decreased. Eating meals outside and online shopping spending was decreased. However, I still noticed I spent a lot of money on things I did not need.

In the treatment 2, I succeeded in spending within my weekly limit. On the first day (10/16) and fourth day (10/19), I spent most of my money because I bought groceries to encourage myself to eat at home. I noticed that I did not spend much money for four days because I frequently ate at home and I stopped shopping online as often. This assignment was helpful to me because it helped develop my habit of checking my bank account every night. Always making sure of my current balance has helped me in restricting my over spending habits.

Jack Reed

Description of the Experiment

- Behavioral definition of the target behavior: For the purpose of this experiment spending was defined as the exchange of your own money for goods or services through cash or credit/debit card.

- Treatment method used: Self-management/Goal setting

- Dates of the experiment: Baseline 1 September 12-25, 2018. The treatment phase 1 began a week after the baseline phase, October 2-8, 2018. The baseline phase 2 started from October 9-16, 2018. The final 7-day treatment was October 17-22, 2018.

- Dimensions: Intensity of money spent was recorded.
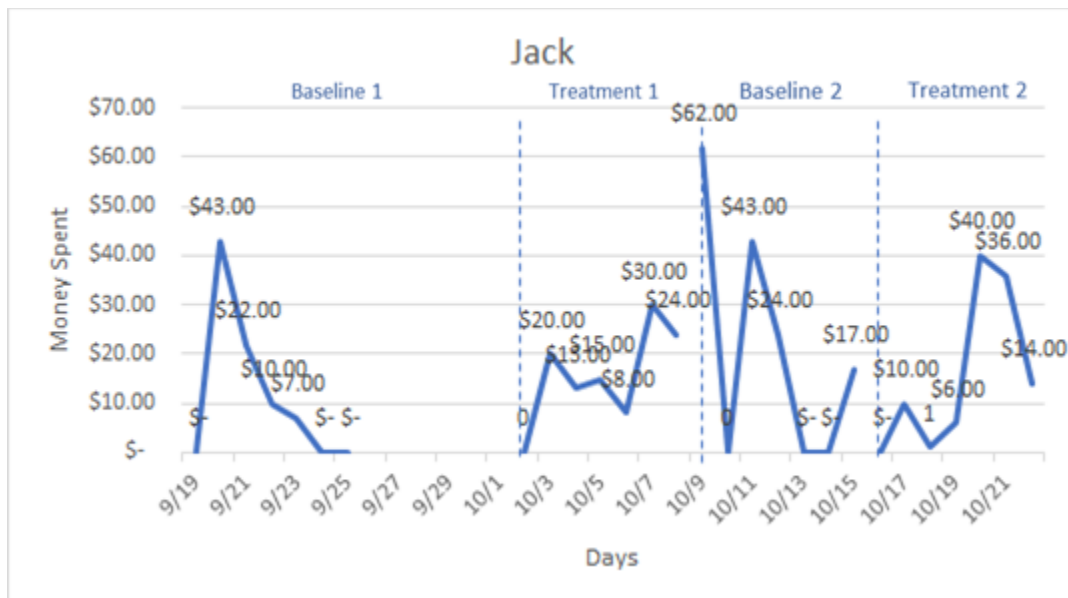
Figure 7:

Narrative of the Process of the Experiment

Continuous unstructured observation was used during both my baseline and treatment phases. The recording of my spending did not stop and my behaviors were not altered in order to fit the experiment. My spending record was kept on either the notepad on my iphone or within my

banking app that is also on my iphone. I did keep many notes that gave specific details about the context in which my money was spent; however, spending was infrequent enough that some occurrences of the behavior were not recorded because I was able to recall the situation based on the amount that was spent.

Summary of Observations

During both of the baselines phases there were no goals in place to prohibited me from spending. My first baseline phase was unique to any of the other of the three phases because I had still had a comfortable amount of money to spend and I had recently decided to start living a healthier lifestyle so I was delving deep into the world of nutrition and wellness. During my first baseline I was was buying a lot of things that I felt I needed, but also was new to this healthy living so I was definitely spending some extra money on things that were good, but at the same time not absolutely necessary. These things included a book on foods that I should and should not eat, different things to add to my cooking arsenal, and organic food items. It should also be mentioned as well that I was new to storing vegetables so there was definitely some food that went to waste. Other things that I spent money on were mostly cheat meals, some different drinks that I enjoyed at a coffee shop, gas, and rent. Most of the time when money was spent that probably should not have been, it more than likely involved a friend or a group of friends.

During phase one of the treatment, my goal was to only spend money on things that were necessary like food, gas and rent. When it came to food though, it wasn't just buying food that was enough for me to survive, but that met the organic standards that I desired to hold to. I just didn't want to buy things such as different cooking supplies, books, and nutritional items that I was buying on impulse. I did pretty well with accomplishing this. One confounding variable was

that I was low on funds and was not working at the time, so this was a reinforcement for me to resist impulse.

Phase two of my baseline was similar to my phase one baseline in the sense that I was not keeping track of specific goals. However, this phase looked similar to phase 1 of my treatment. I believe this was partially due to the effectiveness of the goals that I set and also to the confounding variable that was me being in a state of awareness due to the lack of funds in my bank account. There still was some spending when it came to things that I wanted, but again this seemed to revolve more around friends.

Finally, my second treatment phase looked similar to my treatment phase one and my baseline phase two. I did not change my treatment because I was content with what my spending behaviors looked like. I believe that phase one for my treatment was effective because my spending goals brought a little reality into my life and allowed me to see that I was not in a position to be spending money on certain things at this time in my life. It is also a little hard to tell how effective the treatment is mainly because I needed to be careful with my money so that I did not run out.