## **Purpose**

To investigate why my participant used (or did not use) her cell phone when I manipulated the independent variables.

## Experiment 1

My participant was one of my Caucasian female friends who is 27 years old. She is going to nursing school and babysitting part time. She lives in a house in Trenton, Michigan with her boyfriend who works for his father's landscaping company, so he has his phone on him off and on throughout the day and is free to use it and interact with her. Also, she frequently interacts with her family and the mother that she works for.

My first experiment took place at Target in Woodhaven, Michigan on Thursday, August 2, 2012 at 4:00pm. I chose Target because we both shop there often and she would not think it was weird for me to ask her to go with me. I did not want her to suspect an experiment. It was also close to her birthday, making it easier for me to take charge of paying for what we decided to purchase. This helped influence my decision to use her as my participant.

My **hypothesis** for my experiment at Target was: If I am busy paying at the cash register, my participant will pick up her cell phone. To test this hypothesis, my **independent variable** at Target was me being busy paying at the cash register. This presented two factors, either her paying or me paying. My **dependent variable** at Target was my participant's cell phone use. There were two possible outcomes of her using her cell phone or not using her cell phone while I was paying at Target. My possible **confounding variables** at Target were whether or not the cashier talked to my participant, if my participant knew someone else nearby, or if my participant went to buy coffee at the in-store Starbucks.

My procedure included taking my friend to Target a few days before her birthday. Since it was almost her birthday, I insisted that I would pay for our merchandise. To control whether or not she went to Starbucks when I was later paying, we stopped at Starbucks when we first walked into the store and both got a drink. Throughout our time shopping, I kept the conversation going to avoid any silence. Once we got to the checkout, I insisted on paying and she allowed me to do so.

My participant's performance was predicted. As we shopped and talked, my friend did not take her phone out of her purse. However, while I was talking to the cashier, fumbling through my purse for my credit card, swiping it, and signing, my friend took her phone out of her purse and hit a button to check the screen. She then placed the phone back into her purse. Her phone was only out for a moment, but she did check it while I was busy and not initiating conversation with her.

My hypothesis was valid. At Target, my participant checked her phone while I was paying for my merchandise. Luckily, none of the confounding variables interrupted my

experiment and distracted her from my intentions. We stopped at Starbucks before shopping to avoid that variable, we did not run into anyone that she knew near the checkout, and the cashier only spoke to me. Without any of these confounding variables coming into play and without my attention, my participant turned to her cell phone as I had predicted.

## Experiment 2

I focused on the same participant in both experiments. She is a Caucasian 27 year old. She is going to nursing school and babysitting part time. She lives with her boyfriend who works for his father's landscaping company, so he has his phone on him off and on throughout the day and is free to use it and interact with her. Also, she frequently interacts with her family and the mother that she works for.

My second experiment was at Outback Steakhouse in Southgate, Michigan on Thursday, August 2, 2012 at 6:00pm. I chose Outback Steakhouse because it is one of the busiest restaurants around where we live and there is usually a wait to get a table. It was a Thursday evening, which seems to be a popular night for people to go out to eat. Sure enough, it was a popular night and we had to wait 20 minutes for a table.

My **hypothesis** for my experiment at Outback was: If we are silently waiting for a table at a restaurant, my participant will pick up her cell phone. My **independent variable** at Outback was me talking to my participant. This presented two factors, talking to my participant or sitting in silence while waiting for our table. My **dependent variable** was the same at Outback Steakhouse as it was at Target. This dependent variable was my participant's cell phone use. There were two possible outcomes of her using her cell phone or not using her cell phone while we were waiting for our table at Outback. My possible **confounding variables** at Outback were if there was no wait at the restaurant or if someone else that my participant knew was waiting too.

My procedure included taking my friend to Outback Steakhouse after going shopping at Target together (where experiment 1 took place). During the car ride, I kept the conversation going. That way, when we got to the restaurant and there was a wait, it would not be weird for us to sit in silence because we had already been talking all day. One of the reasons that I chose Outback Steakhouse was because they are usually busy and you have to wait for a table. Once we arrived at Outback, the hostess took our name and informed us that it would be a 20-minute wait until we would be seated. This was perfect because it was long enough where my participant might take her phone out of her purse and short enough where we would not leave the restaurant and go somewhere else with a shorter wait. It worked out to where we were both seated on the bench in the lobby and I leaned back to silently relax and people watch. I purposely did not talk to my friend, the participant.

My participant performed how I predicted. As I looked at other people in the restaurant and did not spark a conversation or make eye contact with her, she took her phone out of her purse. Out of the corner of my eye, I watched as she clicked a button to check the screen and then proceeded to type a text message using her thumbs. After sending the

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one message, she put the phone back into her purse. Shortly after, the hostess called us to be seated at our table. After being seated at our table we went back to conversing and her phone was not seen at our table.

My hypothesis was valid. Just like at Target, my participant checked her phone at Outback Steakhouse as well. However at Outback Steakhouse while waiting for our table, she not only checked her phone, but also sent a text message. My conclusion was that she was killing the time that we had to wait by spending time on her cell phone.

After the experiment and later on in the evening, my participant checked her phone again on the car ride home; I assume this was to see if whom she text messaged at the restaurant had responded. She sent another quick text message and put her phone away again. This occurrence did not influence my data, but I thought it was interesting to take note of every time I saw her use her cell phone when we were together that day.

#### Interview

\*Note: Both experiments were implemented on the same day using the same participant so I administered one interview after the experiments. I chose to interview her once at the end so she did not suspect my observations when completing the second experiment. (This one interview was suggested by Sandra in a previous email.)

Summarizing my interview, I note that my participant keeps her phone around her at all times for the most part. She said that she checked it at Target because she probably got a notification and at Outback because she was probably bored while waiting for our table. The most interesting response was when I asked if she used her phone to kill time. Her response was a simple and confident "no," yet I think that if she was bored at Outback then she was checking her phone to kill the time until we were seated at a table. However, she must interpret this differently. After analyzing my experiment and interview, I later asked my participant one more question, which can be found in Appendix C. In her answer to this additional question, she explained that she believed killing time to be wasting time. She assured me that she was not wasting time; that her notifications were important and necessary to respond to. Overall, I see my interview as helpful in understanding my experiment. In my opinion, she was quickly checking a notification while at Target, but I considered her to be killing time while at Outback. However, she interprets this differently. This goes back to social science being a very "hard science" with all of the open interpretations that it allows (Berliner, 18-20). As stated in her interview, my participant was fully aware of and comfortable with her cell phone use in public. She did not act embarrassed about using it when with me and did not apologize as if she saw anything wrong with her actions. She considered it is perfectly acceptable to check her cell phone because she sees so many others doing the same in public.

After conducting two experiments and an interview with my participant, my thoughts on my hypotheses are supported. In both of my situational experiments, my participant checked her cell phone when I manipulated the independent variables, proving my

hypotheses accurate. This did not surprise me at all. It is so common in our technology-driven society for people to check their cell phones while in public and while with other people. When there is a slump in conversation (when I was paying at Target and when we were silently waiting for a table at Outback), my hypotheses have proven to be accurate. My participant checked her phone in both situations and did not seem to think that this action was rude in any way. I believe that the general public has similar views to my participant. After all, she claimed in her interview that "everyone does it" and she is generally correct. Almost anywhere you go, you see various people using their cell phones in public, often oblivious to who or what is going on around them.

For further information, a copy of my interview questions and answers are found in Appendix B and Appendix C.

### Reflection

Regarding when adults use their cell phones, my data indicates that people will use their cell phones with other people around in both stores and restaurants. This is true not only when others are around in public, but even when the cell phone user is with somebody that they know. According to my data, my participant did not see it as rude or out of line when using a cell phone in public when around someone that she knew. In fact, my participant saw this as a very common practice that she sees many others doing as well. Based on my data, given a silent moment that is not filled with action, it is very likely that people will check their cell phones due to someone trying to communicate with them via their cell phone or just simply being bored.

In regards to my group's data and when adults use their cell phones, my group members found similar results. According to Elise's data, when she left the table while at a restaurant with her participant, her participant immediately checked his cell phone. However, when she was at a restaurant with three other people and she left the table, her participant did not check his cell phone. This supports the hypothesis that people feel uncomfortable and feel the need to kill the time by using their cell phone while sitting alone or in silence in public. In a similar way, when Jessica checked her cell phone at a restaurant, her participant also checked her cell phone. However, unlike in my experiment, when Jessica stopped the conversation and did not talk for a period of time, her participant did not check her cell phone. This may be because she was trying to think of what to say to Jessica next, whereas when Jessica was using her cell phone, her participant knew that it must be a good time to check her cell phone as well. In Sara's study, her participant used her cell phone when Sara used her cell phone after they were finished eating. However, her participant did not use her cell phone while they were eating even when Sara did. This was probably because she was preoccupied by eating and did not feel uncomfortable like she had nothing to do with her hands. All participants in all of our experiments were aware that they checked their cell phones and thought it was ok to do in that situation. Overall, this tells me that adults are comfortable with using their cell phones in public when those that they are with are preoccupied as well.

The implications that this data has on our society is that we are relying more and more on technology to fill the gaps in our social interactions. This is frightening because people are becoming increasingly uncomfortable in social situations and feel more at ease when hidden behind their technology's screen. I am supportive of new technologies and how they make our lives easier, yet I still believe that people need to know how to handle face-to-face social situations. Everyone will eventually need to talk to somebody of higher status in person and it is important to know how to do this. At the rate we are moving based on my group's data as well as what I observe on a day-to-day basis, it will soon be uncommon to see people sitting at a restaurant without everyone in the party having their cell phones in front of their faces, text messaging or checking social networks.

If I had the chance to follow-up with further experiments or interviews I would reverse the roles. Instead I would encourage my participant to pay the bill at Target and I would immediately take out my cell phone. I would also use my cell phone while waiting for a table at a restaurant. Then, I would ask my participant similar interview questions about how she felt when I was using my cell phone around her in public. It would be interesting to see what she thought when she was on the other end of it. Furthermore, I would be interested to see if she thought I was being rude or if I made her feel uncomfortable. By reversing the roles, I may cause my participant to think twice before pulling out her cell phone in public, just as creating these experiments has done for me.

#### Additional Thoughts:

Although my hypotheses were supported through my interview and experiment, I think that if I were to perform this same experiment with more than one other person, the results would differ. For example, if I were paying at Target and I had two friends with me; I think that the likelihood that they checked their cell phones would decrease. Also, if we were waiting for a table at Outback Steakhouse and I purposely sat silently, I think that the other two participants may still talk and the likelihood of them checking their cell phones would decrease. These new hypotheses are supported by one of my group member's experiments and interviews. Elise found that when eating dinner with one other person and excusing herself from the table, he checked his cell phone, where as when she ate dinner with 3 other people and excused herself from the table, he did not check his cell phone. When doing research, there are endless possibilities and ways of going about obtaining data. Depending on how you design your experiment, your results and data could be greatly varied.

## Appendix A - Experiment Descriptions

Experiment 1:

Participant: One female cell phone owning adult

Setting: Target in Woodhaven, Michigan on Thursday, August 2, 2012 at 4:00pm

Hypothesis: If I am busy paying at the cash register, my participant will pick up her cell phone.

Independent variable: Me being busy paying at the cash register (two factors = me paying or her paying)

Dependent variable: my participant's cell phone use (two possible outcomes = use or non-use)

Possible confounding variables: The cashier talks to my participant; my participant knows someone else nearby; my participant goes to buy coffee at the in-store Starbucks

Procedure: I went to Target with my friend (participant). To control if she would go to Starbucks while I was paying later, we went when we first walked into the store.

Control: I talked to my friend while shopping.

Experimental: I stopped talking to my friend while I was paying for our merchandise.

#### Results:

Control: My friend did not pick up her phone while we were shopping throughout the store.

Experiment: My friend did check her phone when I was paying, but did not send any text messages or make any phone calls.

Hypothesis: Validated - Although my participant did not send any text messages or make any phone calls, she did take her phone out of her purse and checked it while I was paying.

## Experiment 2:

Participant: One female cell phone owning adult

Setting: Outback Steakhouse on Thursday, August 2, 2012 at 6:00pm

Hypothesis: If we are silently waiting for a table at a restaurant, my participant will pick up her cell phone.

Independent variable: Talking to my participant (two factors = talking or sitting in silence)

Dependent variable: my participant's cell phone use (two possible outcomes = use or non-use)

Possible confounding variables: There is no wait at the restaurant; someone else that my participant knows is waiting too

Procedure: I went out to eat at Outback Steakhouse with my friend (participant). I chose Outback Steakhouse because there is usually a wait for a table.

Control: I talked to my friend during the car ride to the restaurant.

Experimental: I did not talk to my friend while waiting for our table.

#### Results:

Control: My friend did not pick up her phone while we were driving to the restaurant.

Experiment: My friend did check her phone and send a text message while waiting for our table.

Hypothesis: Validated - While waiting in silence for our table at the restaurant, my participant checked her phone and sent a text message.

## Appendix B: Interview Questions and Responses

- 1. How long have you had your cell phone? This specific phone I've had for a few months, but I've owned a cell since I was 15, so 12 years.
- 2. What do you usually use your cell phone for? I play games on my phone and call or text people.
- 3. Do you keep your cell phone on you at all times of the day? My cell phone is always with or near me all day.
- 4. How many times an hour do you check it for notifications? It depends if I'm bored or busy. If I'm at work or school and bored maybe every hour, otherwise once every few hours.
- 5. What kind of notifications do you receive the most often? My most frequent notifications are for texts and Facebook.
- 6. Do you check your cell phone when others are around? Yes, sometimes.
- 7. Were you aware that you checked your cell phone when we were at Target and Outback?

Yes.

- 8. What made you check your cell phone when I was checking out at Target? Probably because I got a notification.
- 9. What made you check your cell phone when we were waiting for our table at Outback? I was bored while waiting.
- 10. Do you think that you check your cell phone to kill time? No.
- 11. Do you think that it is rude for people to check their cell phones in public or when they are with other people?

No. Everyone does it and you never know if it will be an emergency.

## Appendix C - Afterthoughts: Follow Up Question After Analyzing

12. What do you consider killing time?

I think that killing time is wasting time. I was not wasting time on my phone; I had a purpose. I can't remember, but I either had a text message or Facebook notification that I was checking.

# Appendix D – References

Berliner, David C. <u>Educational Research: The Hardest Science of All</u>. Educational Researcher, Vol. 31, No. 8, pp 18-20.