



**A BEHAVIORAL APPROACH TO RELATIONSHIP
BUILDING: OPTIMIZING MYSTERY SHOPPING
COMMUNICATION**

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1. Abstract

Today email plays a crucial role in establishing and maintaining business relationships, both within a company and with external contacts. This paper attempts to propose communication strategies leveraging behavioral sciences bases on a case study of a company that serves as an intermediary between companies and mystery shoppers. The proposed strategy aims to generate more mystery shopping task completions and new shoppers' signups through improved communication (primarily through emails) between the intermediary company and mystery shoppers. The improvement of communication is executed through a redesign of the company's current email communication which can be tested through potential experiments. Prior to this, survey design is proposed to better inform the redesign of the company's current email communication and general advice given to the company to achieve its paramount goal i.e. more mystery shopping task completions and new shoppers' signups.

2. Introduction

Communications is fundamental to the existence and survival of humans as well as to an organization. Managers spend approximately 70 to 90 percent of their time communicating with employees and other internal and external customers (Madanchian and Taherdoost, 2016). Communication is a process of creating and sharing ideas, information, views, facts, feelings, etc. among the people to reach a common understanding (Madanchian and Taherdoost, 2016). While decisions are often dependent upon the quality and quantity of the information received, effective forms of communication can educate people, direct desired behavior, and build up a harmonious relationship between parties involved by eliminating misunderstanding.

At the dusk of the 21st century, many organizations are virtual and have remote locations. Management is challenged by how best to motivate and effectively communicate with employees rarely seen in-person, working from distant facilities. As such, today most business communications and transactions are conducted via Computer-Mediated Communication (CMC) and email is the most familiar type of CMC (Madanchian and Taherdoost, 2016). In fact, email plays a crucial role in establishing and maintaining business relationships, both within a company and with external contacts. Corporations may want to consider adopting effective email communication protocols as part of a strategic internal communications plan to improve staff relations, trust, and productivity; and to increase profitability.

This paper will propose communication strategies leveraging behavioral sciences for a company which serves as an intermediary between companies and mystery shoppers. The mystery shopper is a job where a company pays individuals to pose like a regular customer and then provide feedback to the companies on things such as how clean the store was. The relationship between mystery shoppers and the intermediary company is bound by an external contract and the

interactions between shoppers and the company are conducted 100% of the time through email and online systems. Therefore, without any in-person connection and communication, companies have been facing challenges in ensuring on-time and high-quality completion of shopping tasks. Behavior sciences techniques have been proved successful in public policy areas by changing the ways government communicate with citizens. For instance, the UK government simply changed the letter sent out by tax collection authority by adding a statement to the letter that the vast majority of taxpayers pay their taxes on time. This is based on Cialdini's early research on social norm which suggested that people are more likely to comply with a social norm if they know that most other people comply (Cialdini, 2007). In UK's government's randomized trial of 140,000 taxpayers, the group that received social norm message gave the best results: a 15-percentage-point increase in the number of people who paid before the six-week deadline, compared with results from the old-style letter, which was used as a control condition (The Behavioral Insight Team, 2012).

Behavioral intervention, though sometimes is accused of lacking long-term effect, often comes with the merit of low-cost implementation and can be highly effective if designed appropriately (Thaler and Sunstein, 2008). Aiming at designing behavioral interventions applicable in improving communications in the workplace, in the following sections, I will first define the problems the company is facing in with mystery shoppers and how improved communication can help with the situation. To better understand the behavior of the mystery shoppers to inform the design of later sections, it is vital to collect data on them. The next session hence will propose a survey to explore habits, attitudes, and motivations of shoppers to inform a better behavioral intervention. The final section introduces an intervention design that includes a controlled trial in two major forms of email communication i.e. scheduler email and reminder

email used by the intermediary company currently. The goal of this experimental design is to understand how behavioral elements both individually and combined may improve the current records of on-time and high- quality completion of shopping tasks. By taking these recommendations into account, the company can both improve the experience for their shoppers and receive the benefit of more signups and more completed shops.

3. Problem Statement

Mystery Shoppers are hired as independent contractors by stores, financial institutions, restaurants, retail establishments, department stores, service providers, and other similar businesses to measure customer service, product quality, and the general environment of the aforementioned establishments. Their main responsibilities include making purchases and filing reports on their overall shopping experiences. The company in concern for this paper serves as intermediary connecting businesses and mystery shoppers to make sure that businesses have qualified shoppers conducting shops as required and deliver qualified reports or surveys that can provide important customer experience insights for the business. At the same time, shoppers will receive rewards as determined before each shopping.

Nevertheless, the company is currently facing two major challenges. The first is the low response rate. Mystery shopping opportunities are sent out on a daily basis through a scheduler email, which contains the information on current opportunities with relevant locations, rewards, and eligibilities. To engage in an opportunity, the shopper has to reply to the email to indicate their intention. The number of active shoppers as defined by as users who have conducted shopping within the past 3 to 6 months, however, is very low. The second problem is the on-time submission. It's been found out that even for shoppers who have started a shopping opportunity, that being said,

received detailed shopping tasks, often give up half-way or failed to submit the required deliverables on time. And for those who have submitted on time, 5 to 10% of the deliverables are not qualified due to inconsistencies, poor shopper quality, possible fraud, and scenario breach. Poor shopper quality and scenario breach are two major reasons that happen 21% and 69% of the time when deliverables are not qualified. Scenario breach means that a shopper did not follow the exact scenario that is required for the shop. The scenario breach would require a re-shop which is often time-consuming.

The behavioral science approach proposed in this paper will center around the topic of generating more mystery shopping task completions. More specifically, to increase the response rate to scheduler email and improve on-time submission with increased qualified submission.

4. Survey

It is no coincidence that the behavioral science and data science revolutions have been growing simultaneously. Our behaviors are collected as data and then data informs our behavior. It seems like a rather obvious first step in finding out how to make people conduct more shops by asking them why they conduct shops at all. Therefore, to better inform and examine the behavioral design and general advice that will be proposed in the later sections of this paper, a survey is designed to understand the current shopping habits of mystery shoppers and to what extent their behavior is influenced by their community in general. This section will start with the theoretical framework underlying the survey design and then get deep into specific questions in this survey.

4.1 Theoretical Framework: Social Norms Theory

The core of social norm theory is to understand the nature of collective behaviors i.e. why people act the way they act? And why people engage in them is critical for the design of appropriate interventions. While some people act in a certain way purely out of their preferences and considerations, often people make decisions dependent or conditional on what other people do or expect them to do.

Cristina Bicchieri classifies collective patterns of behavior into four categories which are customs, moral rules, descriptive norms, and social norms and proposes systematic ways of measuring this behavior through components that form this behavior. Both customs and moral norms are independent and unconditional behaviors. A custom is a pattern of behavior such that individuals unconditionally prefer to conform to it because it meets their needs, which is often supported by personal normative belief (Bicchieri, 2016). Moral norm, by contrast, different from custom in that moral belief becomes an independent motivation to conform to a certain behavior i.e. people think it is ethically right to do so (Bicchieri, 2016).

Descriptive norms and social norms are conditional actions, meaning that an individual's decision on a certain behavior is influenced by how others behave or how they think others believe they should behave. The group of people who matters to their decision are known as reference network (Bicchieri, 2016). A descriptive norm is a pattern of behavior such that individuals prefer to conform to it on condition that they believe that most people in their reference network conform to it (Bicchieri, 2016). Thus, there is what is called an empirical expectation involved in descriptive norm i.e. beliefs about what we expect others to do (Bicchieri, 2016). The social norm is found not only people believe most people in their reference network conform to it but also that most people in their reference network believe they ought to conform to it (Bicchieri, 2016). Thus, aside from

the empirical expectation, social norm also involves normative expectation i.e. beliefs about what personal normative beliefs we expect others to have (Bicchieri, 2016).

Collective behavior, defined as spontaneous and unstructured behavior of a group of people in response to the same event, situation, or problem, has two forms i.e. localized collectivity and dispersed collectivity (Goode, 1992).¹ Mystery shopping as a collective behavior happens in dispersed collectivity form. Mystery shoppers have a common concern and focus that they can often share through online platforms such as Mystery Shopping Forum that provide an interactive environment where shoppers can communicate with each other. However, shoppers are often not in close proximity to each other. For the purpose of the informing the experimental design as well as general advice in the later section, it is crucial to first understand mystery shopping through measuring key components of behavior as stated in Social Norm Theory. For instance, measuring normative expectation and empirical expectation can help examine to what extent the behavior of the mystery community has an influence on the shopper's behavior. If the influence is strong, making norms salient in a particular setting can be a powerful tool to encourage certain behavior. This includes making people aware of what other people are doing and what other people think should be done.

4.2 Survey Design

Current Shopping Habit and Demographics The first part of the survey intent to understand the current shopping habits of mystery shoppers and their demographics (Appendix A Figure 1). The key questions include the frequencies at which the shopping is conducted, the time

¹ **Localized collectivity** refers to a relatively large number of people in close proximity to each other and has a common focus or concern; **dispersed collectivity** refers to people who are concerned about a common concern and influence each other's thinking but are not within close proximity.

of the week shopping is conducted, and whether the mystery shopping app is used when conducting mystery shopping. By understanding the frequencies and time of the week shopping is conducted, the companies can send out scheduler emails at a more appropriate time. Namely, a time that shoppers are just about to conduct regular shopping and time they are more likely to check email. According to UK Behavior Insight Team, same offer made at different times can have drastically different levels of success. For instance, it has been found that sending people to text message prompts to pay their court fines 10 days before bailiffs were due to arrive increases payment rates by two to three times (The Behavioral Insights Team, 2015). While using the mystery shopping app provided by the company's technology team can better streamline shopping process till submission, only 50% of the current shoppers are using the app. The question around app usage is hence aimed at separating people who are not using the app at the moment and behavioral designs such as salient prompt reminding shoppers to use the app may be introduced to the group specifically.

Factual Belief Factual belief is formed by the facts a person saw, experienced and learned (Bicchieri, 2015). This part of the survey is to understand the experience that shoppers had based on the current support and communication from the company (Appendix A Figure 2). Factual beliefs can either served as a deterrent or a stimulus towards a certain behavior. If the current experience makes shoppers perceive mystery shopping a cumbersome process, the shopper will be less likely to engage in the shopping. Additionally, as factual belief can always be replenished by the input of knowledge, the company can still reverse the negative factual belief by making instruction clearer, or online system easier to operate. As such, the key questions include asking how clear/easy the current process is for signing up to become a mystery shopper, signing up the for a new shopping task and instructions for each shopping task.

Personal Normative Belief/Attitudes This section of the survey is aimed at understanding the actual attitudes or motivation of a shopper towards mystery shopping (Appendix A Figure 3). Questions in this part consist of a series of statements e.g. Being an xxx (company name) mystery shopper is lucrative. Respondents will be asked to state their agreement on seven points Likert-type scale. The result of this part of the survey will be particularly useful for further psychographic segmentation of shoppers which is a way to group shoppers according to their shared beliefs, values, attitudes, and interests (Weinstein, 1994). For customers with different attitudes, the company may design different communication strategies. For example, for the customer who found mystery shopping lucrative, opportunities with high rewards can be more frequently promoted to these shoppers to increase the chance of engagement.

Normative and Empirical Expectation To what extent does making the community more salient may influence the behavior of shoppers is the major questions to be answered in this part of the survey (Appendix A Figure 4). Major questions will attempt to elicit the extent to which the shoppers think his/her fellow shoppers' behavior may influence their decision making. A hypothetical situation is introduced such as "*If 90% of your fellow shoppers submit report/survey on time every time...*" to find out the potential effect of introducing norm.

4.3 Data Analysis

Exploratory data analysis can be used to understand the result of the first part of the survey i.e. current shopping habits. Histograms might be useful in understanding the frequencies of each option occur which will help reveal the time of the week that most of the shopping is conducted and vice versa. As mentioned beforehand, sending scheduler email just before conducting mystery shopping may yield higher response rate and histogram may provide insightful information for it.

By adding the information on demographics, exploratory data analysis will be able to visualize the frequency of conducting a shop, the usage of the app as relates to the specific demographics. For instance, it might be that relatively senior shoppers are not tech-savvy enough to use the app to fill in the survey or report. Special in-person support, for instance, may be provided to this type of shoppers.

Further, the questions relate to measuring factual beliefs are answered in the five-point Likert scale. Again, exploratory data analysis can be applied to understand the percentage of each level of answer compared to total i.e. the number of individuals who think the signing up process is “*somewhat clear*” or above as a percentage of the total number of respondents to the question. The question that has the majority of answers below “*somewhat clear*” may indicate the current deficient of the system and a need for improvement. To further explore the relationship between positive factual belief and the frequency of conducting a shopping, a dummy variable can be created by collapsing different options into two categories. In particular, answers considered as the positive (adequate) level of factual belief are from respondents who answered “*somewhat clear*” or above. Conversely, answers considered as the inadequate level of factual belief are anywhere below. Logistic regression can then be used to analyze the relationship between the two. If a positive and significant coefficient is found, then it might suggest that building up a positive factual belief through improving instructions and shoppers’ operation system can be an effective strategy.

Turning to measure the attitudes and motivation of shoppers, psychographic segmentation can be conducted through factor analysis. The major purpose of segmentation is to break down large groups of current shoppers into smaller groups that are “similar” in terms of their beliefs and attitudes. While there are a number of attributes described by the statements designed in the survey, factor analysis creates new, fewer in number, variables from the original set. It helps to identify

conceptually or benefit dimensions underlying expressed a measure of attitudes and beliefs (Doyle, 1972). To better visualize data, additionally, clustering analysis can be used to look at all dimensions at once. K-means clustering is probably the most popular clustering (or partitioning) method for segmentation but requires pre-specification of the number of clusters required. The method works by assigning each observation to a cluster and then calculating the distance between each point in that cluster and the mean value of all the observations in that cluster. The points are assigned to the clusters to minimize the total (squared) distance between each observation and the corresponding mean.

Finally, empirical and normative expectations, or more specifically, in this case, the extent to which people make decisions dependent or conditional on what other people do or expect them to do can be explored through the distribution of answers. For instance, in a seven-point Likert scale, if the percentage of the responses with an answer of "*Maybe*" or above exceeds 50% in a hypothetical situation question, this may indicate the dependency of mystery shopping behavior. As such, introducing social norm to the content of emails might be an effective strategy.

5. Email Communication

5.1 Theoretical Framework: EAST Framework

When designing email communication, the EAST framework was especially helpful to keep in mind. The EAST framework was developed by the UK Behavioural Insights Team and publicized in early 2012 (The Behavioural Insights Team, 2015). To give a brief description, EAST is an acronym for its four elements to keep in mind when thinking about behavior change: Easy, Attractive, Social and Timely.

Specifically, making it easy includes harnessing the power of defaults, reduce ‘hassle factor’ of taking up a service, and simplify messages (The Behavioural Insights Team, 2015). Default options are usually ‘powerful’ in the sense that people usually have a strong tendency to go with the default and pre-set options. Thus, making the desirable option a default may yield a huge increase in choosing the option. The effort required to act often puts people off. By making the take-up process ‘effortless’ can encourage certain behavior. Besides, a small effort to simply making the message clear often results in a significant increase in response rates to communication. Making it attractive often includes attracting attention through the use of images, colors or personalization (The Behavioural Insights Team, 2015). When needed, rewards and sanctions can be designed to achieve maximum effect e.g. financial incentives are often highly effective (The Behavioural Insights Team, 2015). Turning to the social element of the EAST Framework, the paramount idea is from Social Norms Theory aforementioned. Showing that most people have performed desired behavior especially in one's network can often encourage the uptake of a behavior (The Behavioural Insights Team, 2015). Additionally, encouraging people to commit to others which voluntarily lock themselves into doing something in advance, can also encourage the uptake of a behavior. Finally, making it timely emphasized on prompting people when they are likely to be most receptive (The Behavioural Insights Team, 2015). It is also influential to let people consider immediate loss and gain (The Behavioural Insights Team, 2015). Last but not the least, timely also includes helping people plan their response to events (The Behavioural Insights Team, 2015). There is a substantial gap between intention and actual behavior. A proven solution is to prompt people to identify the barriers to actions and develop a specific plan to address them (The Behavioural Insights Team, 2015).

To add a little more reason behind using the EAST framework, it is important to understand System 1 versus System 2 thinking. Each of the attributes of the framework is meant to target a person's System 1 thinking. When discussing System 1 thinking people are referring to a fast, instinctive, and automatic decision-making process (Vaisey, 2009). On the other hand, System 2 is a slow, methodical, effortful process for making decisions (Vaisey, 2009). System 2 thinking is mostly influenced by information as people process the pros and cons of their options while System 1 is influenced by the environment. People who are already signed up to be a mystery shopper are assumed to have already made this decision to be a shopper based on a more System 2 based thinking style. However, as they consider each smaller task of being a shopper (applying to shops, submitting their shops, etc.) the System 1 thinking would take over.

5.2 Experiment Design: Scheduler Email (See Appendix B)

Based on the original design of the scheduler email, there is great potential for further improvement by introducing behavioral interventions (Appendix B Figure 1). Nevertheless, before implementing, it is also essential to examine the effectiveness of each form of interventions to prevent unnecessary waste in resources during the implementation phase. This section aims at proposing an experimental design to understand the actual effectiveness of the proposed behavioral intervention.

Three major changes may be implemented. First, from the easy component of EAST framework, making the message clear often results in a significant increase in response rates to communications. Thus, it is suggested, to make things easier to read, the first set of implementations will involve a switch from bulk paragraphs of information to clearly labeled sections. For example, "Opportunity, Rewards, Eligibility, Tasks, Designated Shops and Who to

Contact". Secondly, email can be made more attractive with visual aids. There is no visual aid of any form in the original form of an email. An improvement thus can include a relevant picture at the top of a message to draw their attention. Finally, social elements can be introduced by using introductions such as, "After looking at your fellow shoppers' choice...". This is essentially a piece of descriptive norm information, but more evidence can be drawn from the result of the survey to decide whether to introduce social element. Hypothesis 1 through hypothesis 3 are as follows:

H1: *Providing clear sections of information will encourage sign up for a shopping opportunity.*

H2: *Providing visual aid will encourage sign up for a shopping opportunity.*

H3: *Providing descriptive information will encourage sign up for a shopping opportunity.*

H4: *Combination of a clearer section, visual aid, and descriptive information are the most effective in encouraging sign-up behavior compare to any of intervention individually.*

2000 active mystery shoppers who are distributed evenly in terms of demographics will be selected to participate in the experiment. Specifically, 2000 participants' demographic will be in proportion to current active mystery shopper's demographics in terms of gender, age and level of education (Figure 1 below). Approximately 400 shoppers will be randomly assigned to each of the five experiment conditions: control, clear sections, visual aid, descriptive information, 3 in 1 (Table 1 below). As active shoppers are defined by those who have conducted a shop within 3 months, the experiment will last 3 months to obtain enough observations to calculate changes in the actual sign-ups. To eliminate possible seasonal trends in the data, data for baseline period can be collected in October to December, and then data for intervention can be collected in March through May. Data comparisons with the control group will ensure that changes in sign up behaviors are due to interventions, and not to seasonal trends.

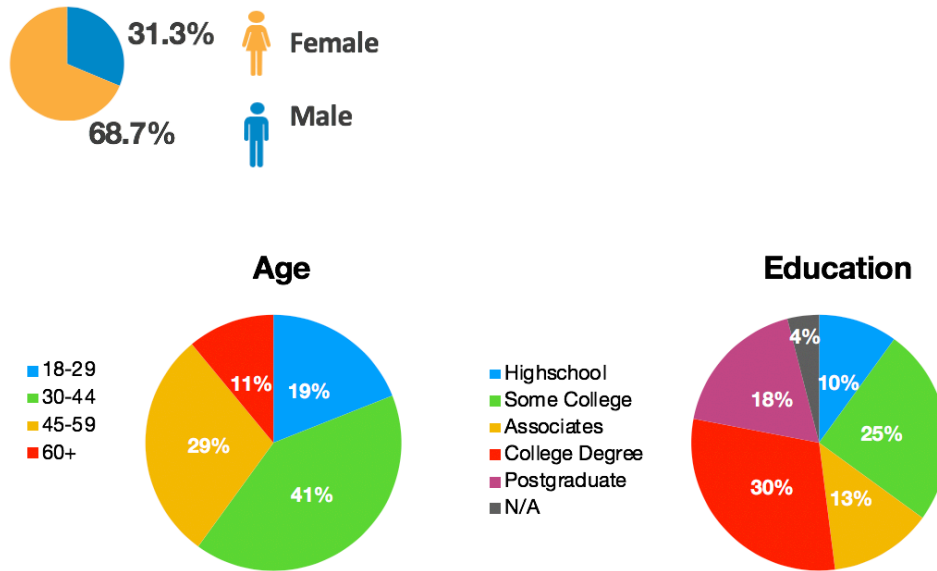


Figure 1 Current active mystery shopper’s demographic.

The experiment will base on an airport kiosk shopping opportunity's scheduler email obtained from the company under the legal authorization for this paper. During the intervention period, subjects in the control group will receive the original version of the email sent out daily at 9 am (the time that company usually sent out scheduler email). Subjects in the ‘clear section’ group will receive email sent out daily at 9 am with clearer titled sections (Appendix B Figure 2). Similarly, subjects in the ‘visual aid’ group will receive original version of the email plus a photo related to the topic of the opportunity sent out daily at 9 am e.g. a photo of a plane for airport kiosk shopping opportunity (Appendix B Figure 3). For ‘descriptive information’ group, a simple sentence introducing the preference of fellow shoppers at the beginning of the email will be sent out daily at 9 am (Appendix B Figure 4). Finally, for “3 in 1” treatment group, subjects will receive scheduler email contain all forms of intervention daily at 9 am (Appendix B Figure 5).

Control Group	Clear Sections	Visual Aid	Descriptive Information	3 in 1
400 subjects	400 subjects	400 subjects	400 subjects	400 subjects

Table 1 Five experiment conditions with 400 subjects randomly assigned to each.

Major dependent variable to be examined will be the frequency of sign up per month. Analysis of variance (ANOVA) can be carried out that contains one within-participant variable (time) with two levels (baseline, intervention), and one between-participant variable (condition) with five levels of interventions. ANOVA is supposed to test the effect of each experimental intervention relative to the control condition for the dependent variable. By comparing each intervention from baseline to intervention, statistically significant (at $\alpha = 0.05$) F statistics will indicate a true difference between intervention and baseline performance.

5.3 Experiment Design: Reminder Email (See Appendix C)

Increasing sign up of a new opportunity is not the only problem to be solved, it is also vital to ensure that final delivery is of good quality and on time. Reminder email serves the purpose of reminding shoppers who have already carried out a mystery shopping to submit their final survey/report on time. To strengthen the effectiveness of the current reminder email, two sets of behavior interventions are suggested. First, a social element can be introduced by specifically adding a sentence of “85% of your fellow shopper who conducted the shops around the same time have already submitted their shop, we are still waiting for your contribution!” This introduces both descriptive information around what others are doing and normative information around what shopper are expected to do. Using language like this can help add social pressure on shoppers to submit on time. Second, emphasizing immediate loss that might occur if shops are not submitted. By framing the compensation that shoppers would receive for completing the task as a lose it is possible to tap into innate loss aversion. One of Prospect Theory's most notable components is that

losses loom larger than gains. In this context, hopefully, it will make the shoppers feel more compelled to finish up the task as soon as possible. Thus, hypothesis 1 to 3 is as follow:

H1: *Introducing social element will encourage on-time submission.*

H2: *Introducing loss framing will encourage on-time submission.*

H3: *Combination of social element and loss framing is the most effective in encouraging on-time submission compare to any of intervention individually.*

To design an experiment that test out the actual effectiveness of the suggested behavioral intervention, again, 2000 active mystery shoppers who are distributed evenly in terms of demographics will be selected to participate in the experiment. These participants should not overlap with the participant in the scheduler email to prevent any spillover effect. The experiment will last 3 months and approximately 500 shoppers will be randomly assigned to each of the four experiment conditions: control, social norm, loss framing, social norm + loss framing (Table 2 below). Again, to prevent any influence of seasonal data fluctuation, data for baseline period can be collected in October to December, and then data for intervention can be collected in March through May. Data comparisons with the control group will ensure that changes in sign up behaviors are due to interventions, and not to seasonal trends.

The original version of reminder email is obtained from the company under the legal authorization for this paper. During the intervention period, subjects in the control group will receive the original version of the reminder email (Appendix C Figure 1) one day after he/she carry out shopping. For subjects in the ‘social element’ group, a reminder email with an additional sentence of “85% of your fellow shopper who conducted the shops around the same time have already submitted their shop, we are still waiting for your contribution!” will be sent out one day after they carry out shopping (Appendix C Figure 2). Subjects assigned to ‘loss framing’ group

will receive a reminder email with a twist on the original sentence from “..., *you will not be compensated*” to “... *you will **immediately lose your chance to earn your compensation***” (Appendix C Figure 3). Finally, in the combined condition, a reminder email that combined both forms of interventions will be sent out to the subjects in that treatments group (Appendix C Figure 4).

Control Group	Social Element	Loss Framing	Social Element + Loss Framing
500	500	500	500

Table 2 Four experiment conditions with 500 subjects randomly assigned to each.

The major dependent variable to be examined in this experiment is the number of on-time submission per month. Similarly, analysis of variance (ANOVA) can be carried out that contains one within-participant variable (time) with two levels (baseline, intervention), and one between-participant variable (condition) with four levels of interventions. ANOVA is supposed to test the effect of each experimental intervention relative to the control condition for the dependent variable. By comparing each intervention from baseline to intervention, statistically significant (at a =0.05) F statistics will indicate a true difference between intervention and baseline performance.

5.4 General Email Advice

While major behavioral interventions should be examined through experiments to achieve an optimal result, there is also general advice that can be well applied with low cost and little additional resources. These general advice are all aiming to generate more shopping signups starting from getting people to read the email or at least reduce the hurdle of understanding and engaging with new opportunities. Some of the general advice is/will be informed by the survey results in the first section while others are well aligned with EAST framework.

Better Timing Although this fits nicely in the timely aspect of the EAST framework, this paper did not focus on this aspect of the email campaigns because an informed recommendation would require a better understanding of the shoppers. The survey results in the first section of this paper, if obtained, can provide some useful insights into the timing and frequency of sending out an email. In accordance with the EAST framework, the best time to send reminders is at the moment of action. If possible, set emails to be set with just a short delay of the designated time for the shop. If not, try to use averages of when most submissions are sent. For scheduler email, some generic advice to mention is that the best days, generally, to send emails are Tuesday, Thursday, and Wednesday (in that order) (L., 2018). The best times are 10 am, 8 pm, 2 pm, and 6 am (in that order) (L., 2018). These suggestions were discovered through behavioral data from office-based employees and thus should be used with caution for non-traditional contract shoppers. In addition, email frequency should match the user lifecycle. Which is say that if the average shopper completes one shop per week then that shopper probably only needs one email per week for new opportunities. Lastly, in keeping with the easy of the EAST framework, making the emails at a consistent and predictable times makes it easier for shoppers to know when and where to expect/find new opportunities. As mentioned though, this advice is all generic and requires data from the survey which as mentioned includes questions asking about the frequency and timing of shopping. Thus, the best result will need surveying, testing, and understanding the target audience.

Include a Smart Subject Line To increase the response rate from mystery shoppers, the first step is to get them to read the recruitment email. A smart subject line that capture people's attention and interest in the shop opportunity is another important aspect of being 'attractive' as in EAST framework. This is also mentioned in an Inc. article about how to write a convincing email

where Geoffrey James emphasizes the importance of the subject line, writing: “Ideally, a subject line should accomplish two important tasks: 1) interest the recipient enough so that the email gets opened and read, and 2) imply the conclusion that you want to the recipient to accept.” One way of doing this is to summarize the benefit of request. The company has been using compensation as part of a headline in some of the recruitment email such as in gas station shopping opportunity i.e. “\$15 plus reimbursement! Gas Stations Mystery Shop + Audit Shops (nationwide)”. However, more can be done especially in terms of implying the actions that Ipsos want shoppers to carry out. For instance, using the format “Compensation in \$ + Opportunity + Shoppers (Response) Needed” that straightforwardly tell shoppers Ipsos need their effort to carry out shopping.

Shorter is Better More than half of all emails are read first on a mobile phone or tablet, according to numerous recent studies (The Inbox Report, 2018). Reading long paragraphs on a mobile device often requires concentration – something people using a mobile generally don't have. A recent study shows that reading on-screen inhibits comprehension and less likely to store information in long-term memory compared to reading on paper (Jabr, 2013). For people read email on a go, a good level of comprehension for a long paragraph is even more difficult to achieve. Keep the message short and use concise languages that emphasize only key information can improve the readability of the email. Besides, refer shoppers to relevant documents. It is not necessary to cram all the information into an email if it has already been recorded elsewhere. Again, whether current mystery shoppers do feel the current message lengthy or prefer clearer instructions can be found through the result of the survey. If so, making the email and instruction shorter might be a more urgent and necessary step to take.

6. Discussion

6.1 Implementation Challenges

There should be no significantly added expenditures associated with behavioral intervention proposed in this paper. Both survey and emails are delivered online which requires no additional technical infrastructure or support. It might be little time consuming to change the current templates of scheduler emails at the initial stage of implementation because each shopping opportunity had its corresponding and unique version of scheduler email. One major issue might be the response rate of the survey. Based on the past experience of the company, for any feedback survey sent out, only around 10% to 20% of the recipients will respond to the survey. This might impose potential challenge of insufficient data points to draw solid conclusion around shoppers' attitudes, belief and habits. There are several potential solutions to improve the participation rate. First, the email containing survey link has to be personal and stand out. A simple technique is just, to begin with, "dear FIRST NAME." Besides, accordance to the 'attractive' element of EAST Framework, a little incentive can go a long way, that is offering incentives to survey respondents to improve both quantity and quality of the survey response. An example could be an amazon gift card or a direct financial reward. Furthermore, some friendly reminder emails can be sent out along the way. Reminder email not only helps emphasize the importance of the survey itself but also increase the possibility of responding when respondents see survey email several times.

While the intervention encouraged shoppers to take up a new opportunity, the actual scheduling process felt outside of the proposed intervention parameters. Shoppers may have encountered additional hurdles with the scheduling process itself. Specifically, the mystery shopping app that is often used by shoppers to fill in survey or report till submit still exists several issues including compatibility issues (specifically for iPhone X), non-intuitive layout and some

log-in difficulties. When implementing behavioral interventions, the company is also highly encouraged to simplify or streamline the signing up and shopping process.

6.2 *Further Research and Improvements*

The behavioral intervention proposed in this paper mainly focuses on changing the current template used by the company. Further research on behavioral interventions may consider adding a new layer of communication. After shopper submits their deliverable on time, a follow-up email immediately after submission including positive annotation such as “*Good job, thank you for submitting on time! You will receive your compensation in xx to xx days.*” may encourage shoppers to continue submitting on time. Because this is not only a piece of normative information that showed approval of on-time submission but also a form of positive reinforcement which can help reinforce a routine, one that's likely a positive one (Diedrich, 2010; Delin & Baumeister, 1994). Therefore, further studies may examine the impact of follow-up email on the long-term behavior, which in this case is the effort to continue submitting on time.

Another path of future research may be closely related to further customization of the scheduler email after analyzing customer segments as will be obtained from the survey. When the shopper's motivation for engaging in mystery shopping is out of mere interest, providing mystery shopping opportunities that are non-overlapping may keep the shopper interested in continuing sign up for new opportunities. By contrast, if the shopper's simply attractive by the financial rewards of the mystery shopping, then a smarter way might be sending scheduler email with more lucrative opportunities. To further explore the actual effectiveness of customization, an experiment can be designed to find out if customization strategies indeed increase the target shoppers' frequency of signing up for a new opportunity.

7. Conclusion

This paper provided ways in which the intermediary company that connects businesses and mystery shoppers can use to first understand their audiences and then improve email communications to achieve a higher response rate and more timely submission. It is vital to understand the people before being able to make informed behavioral interventions. The first section of this paper proposed a survey draft that helps the company understand not only the attitudes and belief shoppers hold towards mystery shopping but also the extent to which shoppers can be nudged through introducing social norms to the email communication. Additionally, by understanding the timing and frequency of a shopping occur, scheduler email can be sent out at a more receptive time that may help increase the sign-up rate.

Next, in helping people behave in ways that are beneficial for them (e.g. completing more shops to earn more money) it is equally, if not more important to remove any obstacles stopping them as it is to provide new incentives. In further behavior interventions designed in scheduler email, the general layout is suggested to change into clear sections to make it easy to understand the process and determine eligibility (because not every shopper is eligible for a new opportunity which might, say, require specifically female shopper above a certain age). Adding visual aid is supposed to attract shopper's attention and make the theme clearer while introducing descriptive information may encourage uptake of behavior especially for dependent behavior. Similarly, social elements are also introduced in reminder email and the addition of loss framing, according to Prospect will make the shoppers feel more compelled to finish up the task as soon as possible as loss looms larger than gain. To test the effectiveness of each behavioral intervention, this paper also proposed the potential experiment designs to drawn further insights.

Although the project is conducted under the context of the mystery shopper, the result of this project has wide application. The primary audience of my paper would be any business that prospers from their relationship with customers such as retailing industry. In today's retailing world, creating superior customers experience has become one of the central objectives (Verhoef et al., 2009). It's been identified that customer experience has been a key factor for companies to use in building loyalty to brands, channels, and services (Badgett et al., 2007). Therefore, understanding customer needs and attitudes has become an essential step. The survey I propose can be adopted to assist psychographic segmentation of customers i.e. customer's belief and attitudes towards a particular product. The resulting information can be particularly useful for the marketing campaign and product design.

Relatedly, as email gradually has become one of the major forms of communications, a key question inevitably raises as to how email communication can be made more effective, especially in the situations where a response is expected (Brandal and Kent, 2003). As such, this paper also delivers a solution to audiences who have an interest in improving their email quality and response rate. The results, therefore, will be informative for businesses which constantly seek an effective way of communication with their customers to build up long-term relationships.

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Appendix A [Qualtrics Survey Template](#)


Figure 1 Survey Part 1: Current Shopping Habit and Demographics

Q1 Age:



Q2 Gender:


 Male

Female

Other


Prefer Not to Answer

Q3 How long have you been an Ipsos Mystery Shopper?

 Less than 6 Months


More than 6 Months

Q4 Are you a "Mystery Shopper" for any other organization?

 Yes

No

Q5 Do you use the Ipsos Mystery Shopping App?


 No, I have never used the Ipsos Mystery Shopping App

I have used it only once

I sometimes use the app when completing a shop

I always use the app when completing a shop

Q6 When do you typically complete your shops?

 Weekday Mornings

Weekday Afternoons

Weekday Evenings

Weekends Mornings

Weekends Afternoons/Evenings

Figure 2 Survey Part 2: Factual Belief

Q7 When signing up to become an Ipsos Mystery Shopper: How clear/easy was the process?



- Extremely clear
 - Somewhat clear
 - Neither clear nor unclear
 - Somewhat unclear
 - Extremely unclear
-

Q8 When signing up for a new shopping task: How clear/easy is the process?



- Extremely clear
 - Somewhat clear
 - Neither clear nor unclear
 - Somewhat unclear
 - Extremely unclear
-

Q9 Generally, how clear are the instructions for each shopping task?



- Extremely clear
 - Somewhat clear
 - Neither clear nor unclear
 - Somewhat unclear
 - Extremely unclear
-

Figure 3 Survey Part 3: Personal Normative Belief/Attitudes

Q11 For the following section please select the response that best fits your level of agreement with the statements provided.



Q12 Being an Ipsos Mystery Shopper is fun.



- Strongly agree
- Agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree
- Disagree
- Strongly disagree

Q13 Being an Ipsos Mystery Shopper is lucrative (allows me to make a lot of money).



- Strongly agree
- Agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree
- Disagree
- Strongly disagree

Q14 Being an Ipsos Mystery Shopper is convenient and fits my schedule



- Strongly agree
- Agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree
- Disagree
- Strongly disagree

Q15 The recommended opportunities that come to me through email are relevant to my interests and availability.



- Strongly agree
- Agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree
- Disagree
- Strongly disagree

A Behavioral Approach to Relationship Building: Optimizing Mystery Shopping Communication

Display This Question:
If Do you use the Ipsos Mystery Shopping App? No, I have never used the Ipsos Mystery Shopping App Is Not Selected

Q18 For the following section please select the response that best fits your level of agreement with the statements provided.



Display This Question:
If Do you use the Ipsos Mystery Shopping App? No, I have never used the Ipsos Mystery Shopping App Is Not Selected

Q19 The Ipsos Mystery Shopping app is intuitive and easy to use

 Strongly agree

 Agree

Somewhat agree

Neither agree nor disagree


Somewhat disagree

Disagree

Strongly disagree

Display This Question:
If Do you use the Ipsos Mystery Shopping App? No, I have never used the Ipsos Mystery Shopping App Is Not Selected

Q20 The Ipsos Mystery Shopping app makes it quicker and easier to complete a shop.

 Strongly agree

 Agree

Somewhat agree

Neither agree nor disagree

Somewhat disagree

Disagree

Strongly disagree

Display This Question:
If Do you use the Ipsos Mystery Shopping App? No, I have never used the Ipsos Mystery Shopping App Is Not Selected

Q21 The Ipsos Mystery Shopping app allows me to do everything needed to be a success shopper.

 Strongly agree

Agree

Somewhat agree

Neither agree nor disagree

Somewhat disagree

Disagree

Strongly disagree

A Behavioral Approach to Relationship Building: Optimizing Mystery Shopping Communication

Display This Question:
If Do you use the Ipsos Mystery Shopping App? No, I have never used the Ipsos Mystery Shopping App Is Not Selected

Q22 The Ipsos Mystery Shopper app is able to fully substitute the website and allows me to do anything I need.

- Strongly agree
- Agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree
- Disagree
- Strongly disagree

Display This Question:
If Do you use the Ipsos Mystery Shopping App? No, I have never used the Ipsos Mystery Shopping App Is Not Selected

Q23 Have you ever had any problems with the app? Please describe the issue.

Figure 4 Survey Part 4: Normative and Empirical Expectation

Q24 How frequently do you think your fellow shoppers engage in mystery shopping?

Once a week

Once a month

Several times per week

Several times per month

Several times per year

Q25 If your 80% of your fellow shoppers engage in mystery shopping several times a week, will you feel motivated to engage in mystery shopping more frequently?

Definitely

Highly likely

Maybe

Not Sure

Maybe not

Definitely not

Q26 Around what proportion you think your fellow mystery shoppers submit their survey/report on time?

Less than 20%

20% to 50%

50% to 80%

More than 80%

Q27 If 90% of your fellow shoppers submit report/survey on time every time, will you feel impelled to submit on time as well?

Definitely

Highly likely

Maybe

Not Sure

Maybe not

Definitely not

Appendix B

Figure 1 Control Group: Original Version of Scheduler Email

**Flying soon? Turn your extra time at the airport into extra money.
\$50 Shop Pay**

Attention Shoppers, Airport Workers, and those who travel for business or pleasure:

We are looking for people to complete short Airport Kiosk Mystery Shops where we will compensate you \$50 to interact with a representative and complete a brief questionnaire. If you are traveling to or through any of the following airports between now and the end of the year, you qualify for this ongoing program*:

Baltimore - Washington International Airport - BMI
Dallas Love Field Airport - DAL
Denver International Airport - DEN
Fort Lauderdale - Hollywood International Airport - FLL
Hollywood Burbank Airport - BUR
Louis Armstrong New Orleans International Airport - MSY
Orlando International Airport - MCO
Phoenix Sky Harbor International Airport - PHX

*You must be in the airport any time between the hours of 7 am and 7 pm. This is a great opportunity to lock in and earn cash for any current and future travel. If you are interested, please contact me at bill@penn.com

Figure 2 Treatment Group 1: Clear Sections

**Flying soon? Turn your extra time at the airport into extra money.
\$50 Shop Pay.**

Attention Shoppers, Airport Workers, and those who travel for business or pleasure:

We are looking for people to complete short Airport Kiosk Mystery Shops.

Opportunity

Short Airport Kiosk Mystery Shop

Rewards

You will be compensated **\$50**

Eligibility

- Be in airport any time between the hour of 7am to 7pm
- Travel through designated airport between now and the end of year

Tasks

- Interact with a representative
- Complete a brief questionnaire

Designated Airports (Location)

Airport Name	Airport Code
Washington International Airport	BMI
Dallas Love Field Airport	DAL
Orlando International Airport	MCO

Who to Contact?

If you are interested or have any questions concerning this opportunity, please contact

~~billhardon@psos.com~~

Figure 3 Treatment Group 2: Visual Aid



**Flying soon? Turn your extra time at the airport into extra money.
\$50 Shop Pay**

Attention Shoppers, Airport Workers, and those who travel for business or pleasure:

We are looking for people to complete short Airport Kiosk Mystery Shops where we will compensate you \$50 to interact with a representative and complete a brief questionnaire. If you are traveling to or through any of the following airports between now and the end of the year, you qualify for this ongoing program*:

Baltimore - Washington International Airport - BMI
Dallas Love Field Airport - DAL
Denver International Airport - DEN
Fort Lauderdale - Hollywood International Airport - FLL
Hollywood Burbank Airport - BUR
Louis Armstrong New Orleans International Airport - MSY
Orlando International Airport - MCO
Phoenix Sky Harbor International Airport - PHX

*You must be in the airport any time between the hours of 7 am and 7 pm. This is a great opportunity to lock in and earn cash for any current and future travel. If you are interested, please contact me at bill.ca@pennstate.edu

Figure 4 Treatment Group 3: Descriptive Information

**Flying soon? Turn your extra time at the airport into extra money.
\$50 Shop Pay.**

Hello xxx, (personalise)

After looking at your fellow shoppers' choice, we figured out you might be interested in following mystery shopping opportunity!

We are looking for people to complete short Airport Kiosk Mystery Shops where we will compensate you \$50 to interact with a representative and complete a brief questionnaire. If you are traveling to or through any of the following airports between now and the end of the year, you qualify for this ongoing program*:

Baltimore - Washington International Airport - BMI
Dallas Love Field Airport - DAL
Denver International Airport - DEN
Fort Lauderdale - Hollywood International Airport - FLL
Hollywood Burbank Airport - BUR
Louis Armstrong New Orleans International Airport - MSY
Orlando International Airport - MCO
Phoenix Sky Harbor International Airport - PHX

*You must be in the airport any time between the hours of 7 am and 7 pm.

This is a great opportunity to lock in and earn cash for any current and future travel. If you are interested, please contact me at blissandem@pscc.com

Figure 5 Treatment Group 4: 3 in 1



Hello xxx, (personalise)

After looking at your fellow shoppers' choice, we figured out you might be interested in following mystery shopping opportunity!

Opportunity

Short Airport Kiosk Mystery Shop

Rewards

You will be compensated **\$50**

Eligibility

- Be in airport any time between the hour of 7am to 7pm
- Travel through designated airport between now and the end of year

Tasks

- Interact with a representative
- Complete a brief questionnaire

Designated Airports (Location)

Airport Name	Airport Code
Washington International Airport	BMI
Dallas Love Field Airport	DAL
Orlando International Airport	MCO

Who to Contact?

If you are interested or have any questions concerning this opportunity, please contact

[\[Redacted Email Address\]](#)

Appendix C

Figure 1 Control Group: Original Version of Reminder Email

Hello xxx (FIRST NAME)!

Thank you for taking the time out to conduct this shop. Please note that due to the approaching client set deadline, this shop is **due midnight of the due date (insert date)**. If you are having an issue submitting your shop, please contact me and I will be happy to help.

Please note that due to the strict client set deadline, if your shop is not submitted by midnight of the due date, it will be removed from your page, you will not be compensated and your account will receive a note which may negatively impact your chances of picking up shops in the future.

Thank you!

Figure 2 Treatment Group 1: Social Elements

Hello xxx (FIRST NAME)!

Thank you for taking the time out to conduct this shop. Please note that due to the approaching client set deadline, this shop is **due midnight of the due date (insert date)**. 85% of your fellow shoppers who conducted the shops around the same time already submitted the shop, we are still waiting for your contribution! If you are having an issue submitting your shop, please contact me and I will be happy to help.

Please note that due to the strict client set deadline, if your shop is not submitted by midnight of the due date, it will be removed from your page, you will not be compensated and your account will receive a note which may negatively impact your chances of picking up shops in the future.

Thank you!

Figure 3 Treatment Group 2: Loss Framing

Hello xxx (FIRST NAME)!

Thank you for taking the time out to conduct this shop. Please note that due to the approaching client set deadline, this shop is **due midnight of the due date (insert date)**. If you are having an issue submitting your shop, please contact me and I will be happy to help.

Please note that due to the strict client set deadline, if your shop is not submitted by midnight of the due date, it will be removed from your page, you will immediately loss your chance to earn your compensation. At the same time, your account will receive a note which may negatively impact your chances of picking up shops in the future.

Thank you!

Figure 4 Treatment Group 3: Social Elements + Loss Framing

Hello xxx (FIRST NAME)!

Thank you for taking the time out to conduct this shop. Please note that due to the approaching client set deadline, this shop is **due midnight of the due date (insert date)**. 85% of your fellow shoppers who conducted the shops around the same time already submitted the shop, we are still waiting for your contribution! If you are having an issue submitting your shop, please contact me and I will be happy to help.

Please note that due to the strict client set deadline, if your shop is not submitted by midnight of the due date, it will be removed from your page, you will immediately loss your chance to earn your compensation. At the same time, your account will receive a note which may negatively impact your chances of picking up shops in the future.

Thank you!