"Hey Alexa - Mind your Own Business":

The Consumer Perception of Personalized Advertisements

Sarah Leavitt

Endicott College

April 23rd, 2019

Abstract

Consumers prefer personalized advertisements, but do not want their privacy to be compromised in the process, according to past research. The present study seeks to further identify what degree of personalized content consumers prefer, without overstepping privacy boundaries. A survey was conducted online and spread through social media and word of mouth to create a convenience sample. The survey studied consumers ranging from Gen X to Baby Boomers, ages 18-72. Consumers were asked various questions about their personal advertisement preference, personalized content, and privacy concerns. Results indicate that consumers did prefer to have a personalized experience, but also that consumers felt that personalized advertisements resulted in their privacy being compromised. Limitations of this study include limited time, and lack of male participants. Future research should be conducted over a longer period of time, with a larger sample size, and more even spit of male and female participants. Future studies can also explore if consumers would be more willing to give companies their personal data, if companies were transparent about what the information was being used for.

"Hey Alexa - Mind your Own Business": The Consumer Perception of Personalized Advertisements

Companies globally lose $300 billion a year because of bad experiences. Therefore, companies are competing on experience in order to stay afloat (Renner, 2018). To stay relevant in today's market, marketers are constantly thinking of ways to entice their audience. A popular way that companies stay relevant is by targeting their customers and giving them a personalized experience by showing them what they think they want to see based on past search history, cookies, etc. However, this leaves some consumers feeling uneasy, and many believe that personalized advertising is "creepy" (Boerman, Kruikemeier, & Borgesius, 2017). This can lead to bad experiences when consumers believe that marketers are overstepping privacy boundaries. Marketers are still striving to find the balance between giving consumers what they want without consequential privacy concerns.

Personalized advertising is everywhere; that's why it is so important to understand the effect that it has on consumers. Marketers are reaching people in more ways now than ever before. The various channels include, text messages, emails, display ads, social media, apps, tv commercials, newspaper ads, radio ads, and more. Many times, consumers will not even realize that they are being directly targeted. The main issue with personalized advertising is that research states that it is more effective than generic posts, however it also results in a lot of backlash (De Pelsmacker, Dens, & Keyzer, 2015). Many consumers find the personalized advertising unsettling, because in order to personalize the ad, marketers have to have their personal information. When it comes to social media, gaining consumers personal information is quite easy. Facebook has a built-in ad manager that allows marketers to easily pull consumers

demographics, pages that they follow, and posts that they like. This can instantly reveal a lot of personal information without consumers giving it a second thought.

A few key factors go into how well the personalized advertisements are perceived overall. This includes but it is not limited to, targeting effectiveness, level of personalization, online behavioral advertising, and privacy concerns involved. When it comes to targeting there is consumers who enjoy it, and people who are simply creeped out when it is overdone. Consumers reactions to personalization is determined based on whether they believe the ads are relevant to them. Online behavioral advertising is a sneaky way of tricking consumers into liking personalized data. Sites like Amazon, Spotify, and Netflix give consumers a personalized experience that uses their data to provide them what they want to see or hear. Lastly privacy concerns are the most important factor when it comes to how advertisements are perceived. If a consumer believes that their privacy was compromised in the process of receiving a personalized advertisement, they will be creeped out. This is why companies are constantly striving to find the balance between giving consumers what they want, without overstepping boundaries.

Literature Review

Targeting

Targeting is a way to get consumers to feel like the advertisements they see are relevant to them. However, often times companies will over target, and which results in over personalization. Over-targeting occurs when companies put too much emphasis and focus on one group, which then leads to oversaturation of that one market, while many others are being missed. However, when targeting is done properly there are positive outcomes. When

consumers are targeted properly, they are said to be more receptive of the ads and more likely to do what the marketer is intending.

Over Targeting. When consumers become aware of the persuasion that results from over targeting it can lead to serious push back. Some believe the short-term benefits of targeting are not worth the long-term repercussions the brand will then eventually face (Fulgoni, 2018). Fulgoni (2018) further went on to explain, "Brands that rely too heavily on targeting may meet short-term sales objectives while the long-term health of the brand suffers" (Fulgoni, 2018, p.9). The short-term benefits mean accurately targeting and increasing sales, meanwhile the long-term health of the brand is suffering. If these brands are continuing to put all their focus on certain areas, they may be limiting themselves long-term.

Another issue that can arise from over targeting is resistance from the consumers, they may resist the source of persuasion. When consumers develop knowledge of marketers persuasive targeting attempts, the result may be a lower level of trust and less favorable attitudes toward the source of persuasion (Attaran, Notarantonio, & Quigley Jr, 2015). Over-targeting can produce over personalization that leads to overall dissatisfaction (Bleier & Eisenbeiss, 2015).

Positive Reactions to Targeting. Although several consumers are weary of targeting, they still prefer it in comparison to generic advertisements. Personalization on social media sites is now popular due to the plethora of data that is so easily attainable on the sites. Marketers can get information without doing any serious digging (Walrave, Poels, Antheunis, Van den Broeck, & Van Noort, 2018). Although consumers may be weary of this, they do like the more personalized approach due to targeting, "Consumers are concerned with advertising that is based on their online clicking behavior; however, at the same time, they rather share their clicking behavior and receive behavioral targeted and therefore relevant ads, than random ads" (Walrave,

et al., 2018, p.11). This is commonly referred to as the personalization-privacy paradox (Aguirre, Roggeveen, Grewal, & Wetzels, 2018). They defined it as such because personalization can either enhance or diminish consumer engagement or do both. Privacy concerns may arise, decreased engagement will occur, but if the personalized communication appeals to the consumer then they will be more likely to engage with the brand.

Personalization

Much like targeting, personalization is a way to make consumers feel like the company is speaking directly to them. Personalization is taking targeting to another level, by adding personal touches to the advertisement, such as "Hello Miss OOO! Try this. It works!" (Yu & Cude, 2009, p.504). Perceived relevance of the ad is also immensely important to consumers, they are more likely to react positively to an advertisement when they believe it is relevant to what they are in the market for.

Generic vs. Personalized Posts. Personalized advertisements are said to have their benefits but the question of whether these are more successful than generic advertisements is still being studied. A study discovered that personalizing emails was beneficial to the consumer and resulted in them being more likely to open the emails (Chintagunta, Sahni, & Wheeler, 2016). A simple greeting including the consumer's name, made them feel as if the company was reaching out to them personally. They also believe the personalized email will not only gain the users attention but will later translate into sustained attention for the rest of the email. Each individual consumer is different therefore it is important to understand they all have different preferences when it comes to how products are advertised to them (Godfrey, Seiders, & Voss 2011). Therefore, marketers target each demographic and age group differently for their efforts to be the

most beneficial. Middle aged women are statistically known to be the biggest users of Facebook, so they are targeted more on Facebook, instead of Instagram or other social media platforms.

De Pelsmacker, Dens, and Keyzer (2015) decided to conduct an in-person experiment involving fictitious brands, so that no prior biases could be brought into the study. Through their study they concluded that gender monikers being used in the headline garnered more overall attention. In their test they saw the generic advertisement performed poorly in comparison to the personalized advertisement. High personalization was also said to be preferred when compared to lower levels of personalization (Walrave, et al., 2018). A consistent factor throughout the study was that consumers preferred higher levels of personalization as long as they did not feel like their privacy was being compromised.

Perceived Relevance. Another factor that played a role in how well advertisements were received was how relevant the consumer thought the content was to them. The more relevant a product was to the consumer, the more likely they were to be interested in the advertisement and buy the product. The channel in which the advertisement was delivered on also effected how relevant consumers believed the product or service was to them. A survey concluded that people were less likely to take personalized advertising seriously if it was delivered online because they felt that their privacy was being compromised in the process (Yu & Cude, 2009). They concluded that the less relevant the ad was to them the more they disregarded the message that was being delivered. Therefore, it is so important to know the correct audience to target and upon what channel they are best reached.

Almost all the prior research studies done on the perception of personalized advertising is in the form of an online survey. Two researchers wanted to take a different approach to studying personalization (Bang & Wojdynski, 2016). Instead of a survey, they wanted to have consumers

be in a lab with them and study what made personalized advertisements better or worse than generic ones. They used eye-tracking data to determine what caused the consumer to look at certain things, how long they looked at it, and where their attention went first. They did this by showing both generic advertisements and personalized advertisements on banner ads of an online story the subject was supposed to be reading. They wanted to determine whether the personalized ad would grab their attention more, or if the generic advertisement would. They used a fictitious company so that no prior biases could be brought in as an unfair advantage. They concluded that the personalized advertisements attracted significantly longer attention than the generic ads, due to the inclusion of the personal information. This could be attributed to the fact that they found the personalized advertisement more relevant to them, as opposed to the generic advertisement.

Online Behavioral Advertising

Online behavioral advertising is what advertisers see as one of the most important new ways of reaching targeted audiences (Boerman, Kruikemeier, & Borgesius, 2018). Online behavioral advertising phenomenon is commonly referred to as OBA, online profiling and behavioral targeting. It can be defined as advertisers increasingly monitoring people's online behavior and using that information collected to show people individually targeted advertisements. Much like targeting, and personalization, OBA has benefits, but also raises concerns about privacy of consumers information. The opinions on the topic vary from smart, useful, creepy, and scary (Ur, Leon, Cranor, Shay, & Wang, 2018).

Opinions of Online Behavioral Advertising. OBA kicked off when internet advertising became tailored to individual users. OBA is a more complex technique of showing consumers targeted advertisements based on their online behavior. This is one step further from contextual

advertising which simply displays ads on webpages based on the contents of the page (Ur, et al., 2018). A 2012 report from the FTC discussed OBA in connection to privacy concerns that users have. Ur, et al. (2018) conducted 48 interviews to dive deeper into the factors that determine consumers' perceptions of OBA. In addition to asking consumers how they feel about OBA, they also investigated how well understood OBA was in general. Most of the participants were surprised by OBA and only a few were aware that there is technology used to target them based on their previous browsing history. Another study conducted research in which they found that consumers want there to be a sense of openness about OBA; "Research and regulations also indicate the importance of transparency about OBA. Consumers want openness and to be informed about the collection, usage, and sharing of personal data" (Boerman, Kruikemeier, & Borgesius, 2018, p.367). The same 2012 FTC report also stated that companies should offer consumers a choice to either opt in or opt out regarding OBA. The FTC believes that consumers' data should only be used when it is appropriate, and with the knowledge and consent of the consumer. Overall, some see the benefits of the targeted ads, however there is still a majority of people who are still skeptical of it and find the information invasive and creepy (Boerman, Kruikemeier, & Borgesius, 2018).

Amazon the Powerhouse. Numerous researches have stated that brand and store loyalty is on the wane. Amazon's success has put the company in the position to threaten traditional brand and store loyalty on a massive scale (Fulgoni, 2018). Amazon is deemed to be so successful because of how it tailors the shopping experience for each individual consumer. Personalization is at the center of Amazon's digital-analytic efforts. Amazon is said to meticulously record and analyze customer behavior, then they are able to deliver personalized communications to all customers. The study also mentions that this personalization translates

into knowing which products to offer which consumers, and when (Fulgoni, 2018). In comparison to traditional retailers this is where Amazon is different because traditional retailers do not have the capacity to make the experience as personalized. Amazon has the ability to tweak their prices as often as they want, making them as expensive, or inexpensive based on the demand. Amazon is said to use a clever strategy in order to achieve the idea that they are offering the lowest possible prices, by offering competitively low prices on popular products, while charging more for less popular products (Fulgoni, 2018).

The way that stores can compete with Amazon is competing on experience (Renner, 2018). Contrary to some articles that report that brick-and-mortar stores are dead, they are not. Even in the "Age of Amazon", Amazon bought Whole Foods and is leveraging the company as a physical distribution channel. There is emphasis put on fostering a seamless customer experience across all touchpoints in both the online and offline word (Renner, 2018). A way that companies are striving to achieve this is embracing digital extensions like curbside pickup or home delivery, making the experience as personalized as possible depending on preference.

Privacy Concerns

People enjoy personalized advertisements and find them to be more relevant, but they do not like having their privacy compromised in the process, "The irony is that even when consumers fear the risks to their privacy risk of such personalized ads, some of them still enjoy getting the benefit of tailored ad messages" (Ham, 2017, p.634). Consumers feel at times, that their privacy is being compromised in order to receive the targeted advertisements that include either their name or gender, or past search history. There is a big debate on the topic of whether consumers should be able to opt in or opt out to the personalized advertisements, giving them the option to either share or protect their private information.

Social Media. Advertisements are becoming so targeted to individual consumers, that there is now a conspiracy theory that Facebook listens to users through their phones microphone. They believe this because the advertisements are so targeted that the only logical explanation is that their phones had to be listening to their conversation. Stern (2018) confirms that this is not the case, and that phones do not have to listen to consumers in order to provide them with perfectly targeted ads. Instead she states that Facebook is good at watching what we do, which is what results in the targeted advertisements. Facebook uses algorithms, demographic data, and past search history to provide consumers with the personalized advertisements. Social network sites obtain information about their users from other web sites as well. The sites represent a treasure trove of data for advertisers that want to personalize their message. (Aguirre, et al., 2018). Advertisements on social media sites are said to have grown in sophistication as well, because of the way the advertisements are presented to consumers. The advertisements that adopt the format of the social network site offer the relevant content in a less intrusive manner, which helps with the privacy concerns. Aguirre, et al. (2018) concluded that in order to mitigate concerns of personalized advertisements, consumers need to be granted some control of their privacy rights. However, when Facebook introduced privacy controls, the personalized ads were still said to be more effective. More privacy does not have to be directly correlated to ineffective personalization.

Companies know our secrets. Companies now more than ever know our secrets and personal information. *New York Times* news analyst Natasha Singer (2018) believes that consumers should have a right to privacy but more importantly, a right to not be observed, “It’s how companies can use our data to invisibly shunt us in a direction that may benefit them more than us” (Singer, 2018, p. 2). Certain companies’ websites have trackers embedded in them,

which helps the companies look for signals during the online shopping experience. They look to see if the browser was closed after having an item in the shopping cart, which then leads the companies to use cookies through trackers to serve you an ad for the item left in the shopping cart. Chen (2018) believes that these ads from companies that tend to follow consumers around on the web are viewed as creepy, but also extremely annoying, and again raise privacy concerns. The only way to make the ads from companies stop at times, is by making the purchase, or else the ads will continue to pop up which is troublesome to consumers.

The department store Target states that new parents are there holy grail when it comes to personalized advertising (Duhigg, 2012). Most people are in a routine of where they buy their groceries, toys, toiletries, etc., however, when something as drastic as the birth of a child happens, is when it is time for Target to swoop in. When parents are exhausted and overwhelmed is when their shopping and brand loyalties are more attainable. He goes further into detail to explain how timing is everything. For instance, Target can benefit from catching a woman who is in her second trimester of pregnancy, they believe this because this is when expectant mothers begin to buy everything from vitamins to baby clothes (Duhigg, 2012). Since Target offers everything in their store, they believe that once they can get a consumer in the door, they likely will capture them for years to come, no matter what their shopping need is.

Target can obtain the information of a pregnant woman who is entering her second trimester because they collect vast amounts of data for every person who regularly walks into any one of their stores (Duhigg, 2012). When is it applicable, Target assigns each shopper with a unique code, also known as their Guest ID Number that keeps track and data on everything that the consumer purchases. The Guest ID can find out a vast amount of information that one would never assume Target was capable of. The Guest ID can carry information such as, age,

relationship status, what part of town the consumer lives in, distance from the store, estimated salary, credit cards in the consumers wallet, what web sites are visited, ethnicity, job history, magazines read, and more. It is what they call a "predictive analysis" and Target is credited as being one of the smartest retailers when it comes to this. As personalized as this shopping experience gets, it can also be seen as creepy once again because some consumers do not want a department store to have all of their personal information (Duhigg, 2012).

Gap in Research and Research Questions. Various research studies investigated whether or not the benefits of personalized advertising outweigh the privacy concerns that accompany these ads. The studies showed that personalized ads are on the rise and are preferred when compared to generic advertisements (Bang & Wojdynski, 2016). Companies are striving to find the balance between providing relevant ads to their consumers without overstepping privacy boundaries. However, most of the time consumers provide personal data to marketers without noticing. Liking a page on Facebook, following a brand on Instagram, purchasing something from Amazon, automatically puts consumers in a position to be targeted on various platforms (Fulgoni, 2018).

The persuasiveness of an advertisement is truly dependent on how well the targeting was completed, the level of personalization, online behavioral advertising involvement, and privacy concerns. All the above play a crucial role in getting consumers to enjoy the personalized brand experience, because they are known to be more profitable (Newman, 2018).

Targeting customers is a crucial way to get the right advertisements to the right demographic to produce results. Personalization uses very similar tactics to make consumers feel like they are being spoken to directly and giving them an individualized experience. Companies have completely changed their marketing strategy because of personalization. Companies such as

Amazon, Coca-Cola, and Spotify are a prime example of this. Amazon uses targeting, personalization, and OBA, to keep their consumers coming back for more, especially to check their daily recommendations (Newman, 2018).

Target is a prime example of the need for a balance between personalization and privacy. The *New York Times* released an article in 2012 regarding the negative effects of personalization (Newman, 2018). A statistician for Target was able to accurately guess if a consumer was pregnant based solely on her shopping history and other algorithms. As a result, coupons were then sent to the pregnant female, who was only a teenager at the time. Target ended up in a dispute with the teens' father, because Target figured out the teen was pregnant before she had time to tell her parents. This example depicted the essential need for finding the fine line between offering consumers a personalized experience without consequential privacy concerns.

What all the variations of personalization have in common is that although consumers find it to be creepy, most of the consumers will not do anything about it. Research has been previously conducted on the topic of perception of personalized advertising, however the gap in all the research is finding the solution to the backfire. According to a 2018 CX Trends report, 75% of consumers surveyed found personalization to be creepy, but half of those consumers also stated that they would not do anything about the creepiness and would continue to shop with that company (Newman, 2018). Although half of the consumers stated they would not do anything, 22% did state that they would find another brand and 9% said that they would spread the word, which shows the negative backlash from 31% of consumers that cannot be ignored.

Given that consumers want to feel like they are getting exclusive offers and personalized advertisements, they also do not want the advertisements to be offered as a result of their personal data. The following research questions will seek to find the solution to this problem.

RQ1: Do privacy concerns have an effect on consumer perception of the advertisements?

RQ2: Do companies need to be transparent with customers about how they use their personal data to provide targeted advertisements?

H1: Consumers will prefer the personalized advertisements if they feel that their privacy is not being compromised.

H2: Younger generations such as Gen Y and millennial's will be more open to receiving personalized advertisements in comparison to baby boomers.

Methodology

For this study, survey was chosen as the method of data collection. The survey method allowed for the participants to be reached online and allowed them to also take the survey on their own time. Wimmer & Dominick (2014) also stated that an advantage of surveys is that a large amount of data can be collected with ease, from a variety of people. Distributing the survey online also allows for participants to be from all over and eliminate geographical restrictions. The platform the survey was distributed on also allowed for seamless collection of data. The platform saved all of the participants responses and provided pie charts to show the data collected for each question, which helps with further analyzation. This is similar to a method used by Yu and Cude (2009). In their respective study a survey was used to collect data on personalized marketing, and the perception consumers have of it. The survey was distributed to all students but only used the data from the completed surveys.

Survey was the best option of analysis for this topic because it presented the survey online, where consumers are exposed to personalized advertisements and content. All of the questions in the survey revolved around online advertisements, making it helpful to present the

questions in the same online environment. The survey answered all of the research questions and provided insight to the hypothesis'. The first research question asked if privacy concerns effected the perception of certain advertisements. The survey answered this question by asking participants various likert scale and open-ended questions regarding privacy concerns. The second research question asked about the importance of company transparency. The survey also answered this question by asking the participants multiple choice questions, and open-ended questions regarding their personal privacy when it comes to advertisements. The survey also answered the two hypotheses'. The first being that consumers will prefer advertisements that do not cause them to feel like their privacy is compromised. This was answered by again asking participants questions about the information they wish to disclose to companies and concerns arising from companies knowing previous search history, and location settings. The second hypothesis regarding age was answered by asking each participant which demographic age group they fall under and analyzing their responses accordingly.

Procedures and Participants

Participants in this survey include both genders between the ages of 18-73. This age range was chosen because the age ranges being analyzed are Gen Z, Millennials, Gen X, and Baby Boomers. The ages of these demographics' range between 18 and 73. The goal of the survey was to obtain at least 25 responses from each of the four age groups. The survey also restricted Endicott College students from participating to remove the chance of any biases' occurring.

276 participants responded to the survey, 13 of the 276 responses to the survey, responded yes to currently attending Endicott College so their surveys were automatically submitted and not used for the remainder of the study. Of the 263 complete survey response,

76% (N=200) were female, and 24% (N=63) were male. 18.6% (N=49) of participants were Gen Z, 20.9% (N=55) were Millennials, 26.6% (N=70) were Gen X, and lastly 33.8% (N=89) were Baby Boomers.

The survey was distributed over the course of three weeks, on two different types of social media platforms. The platforms used were Facebook and LinkedIn. The link to the survey was shared on Facebook with a brief caption explaining the criteria for the survey, and to allot oneself at least 5 minutes for participation. The caption also encouraged others to share the link with their friends. LinkedIn was also used to attract an older and more professional audience to participate, however the brief caption explaining the survey was the same on both platforms. Lastly, the survey was shared with colleagues via email to gain more responses from various age groups. A similar study was conducted by Boerman, Kruikemeier, and Borgesius (2017) they also studied the effect that age has on perceptions of advertisements, and they also found that consumers responses were all related to age.

Measurement

For this survey the independent variable is age, and the dependent variable is the consumer perception of the advertisements. The age range is being measured to test if there is a difference in perception, based on the age of the participant. The survey looked to study how consumers feel about different aspects of personalization. To start the survey two demographic questions were asked. The first being age, and the second being gender. Questions regarding advertisement preference and privacy concerns were presented to participants in the form of multiple choice. A majority of the questions were about personalized content and were presented in the form of statements. Participants were asked to rate each statement on a likert scale of 1-5, one being strongly disagree, and five being strongly agree. The statements were brief such as, an online

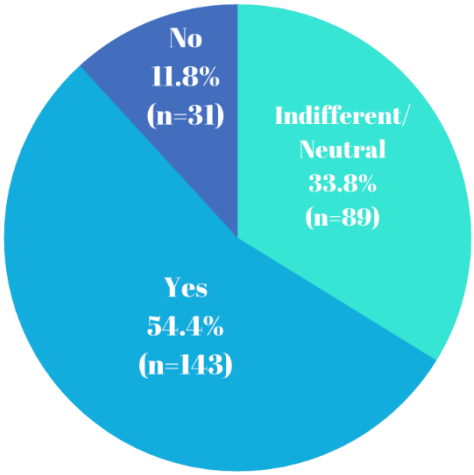
advertisement is likely to influence me to make a purchase, and I find it creepy when companies target advertisements based on my online shopping behavior. To end the survey two open ended questions were used to dive deeper into how consumers felt about personalized advertisements. The participants were provided two personalized advertisements and were asked to respond whether or not they found the level of personalization concerning, and they were also given the option to comment on their answer.

Findings

Results

The survey collected data from 263 participants to study their perception of personalized advertisements. Participants were asked multiple choice, likert scale, and open-ended questions to determine their feelings towards personalized advertisements. Responses were compiled through analyzing the results to all questions and conducting both single item analysis and cross tabulations. Before getting into specific questions, participants were asked if they preferred advertisements that are tailored to their personalized interests and shopping habits. For this question, 54.4% (n=143) responded yes, 33.8% (n=89) responded indifferent, and 11.8% (n=31) responded no. (See chart 1)

Chart 1: Overall Reaction to Personalized Advertisements



Two likert scale questions and one multiple choice question directly relate to the first research question, which sought to understand the effect that privacy concerns have on the consumer perception of advertisements. Participants were asked to choose from a 5-point likert scale ranging from “strongly disagree” to “strongly agree” if they found it creepy when companies target them based on their online shopping behavior. Over 70% (n=185) of the participants responded either strongly agree or agree with the statement that it is creepy. (See table 1)

Table 1: Consumer Reaction to Personalized Advertisements

Strongly Disagree	3.8% (n=10)
Disagree	11.4% (n=30)
Indifferent/neutral	14.4% (n=38)
Agree	22.1% (n=58)
Strongly Agree	48.3% (n=127)

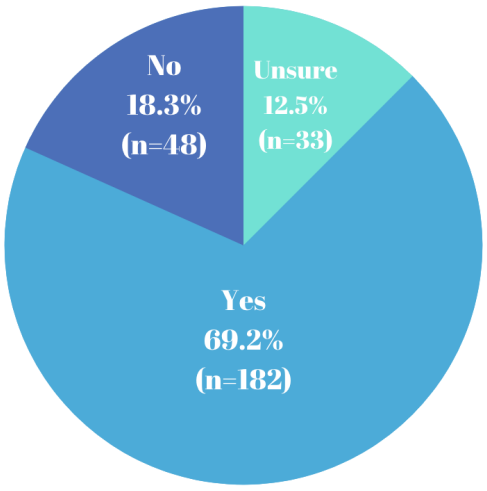
Another likert scale question helps to answer the research question as well, the statement was, “I enjoy receiving emails with my name included, such as, “Hello, Mrs. Sarah Jones! We recommend this product!”. Over 50% of respondents stated that they either strongly disagreed or disagreed with the statement, 34.2% (n=90) responded strongly disagree, and 24% (n=63) responded disagree. (See table 2)

Table 2: Consumer Reaction to Personalized Email

Strongly Disagree	34.2% (n=90)
Disagree	24% (n=63)
Indifferent/neutral	29.7% (n=78)
Agree	8.7% (n=23)
Strongly Agree	3.4% (n=9)

The remaining question regarding privacy and personalized advertisements is a multiple-choice question. The question asked is, "Do you feel like your privacy is compromised when you receive an advertisement that is tailored to your personalized interests and previous shopping habits?". A majority of participants, 69.2% (n=182) responded yes, 18.3% (n=48) responded no, and 12.5% (n=33) responded unsure. (See chart 2)

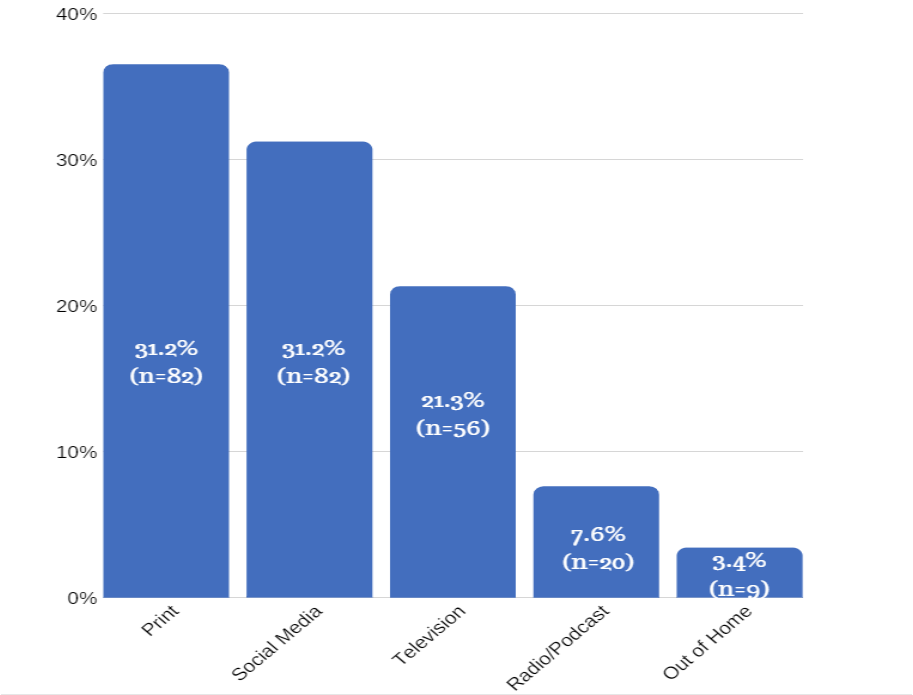
Chart 2: Consumer Reaction to Compromised Privacy



The second research question that the survey sought to answer was about if companies should be transparent with their consumers when it comes to using their personal data. Three different multiple-choice questions helped to answer this question. The first question was, What medium

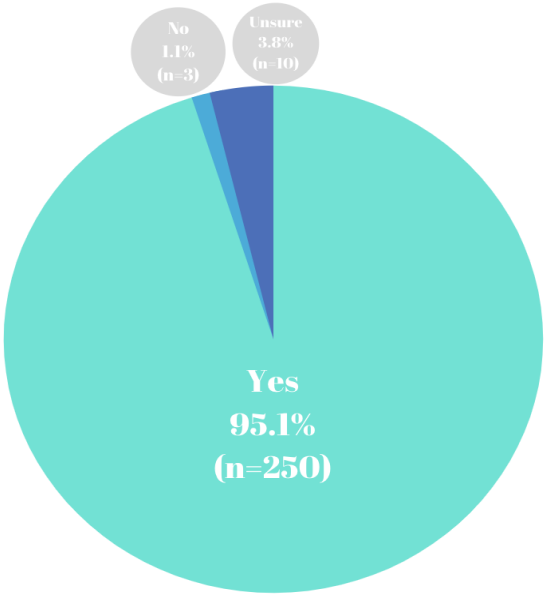
do you find advertisements to be the most trustworthy on? Most participants picked either print or social media. (See table 3)

Table 3: Consumer Reaction to Most Trustworthy Medium



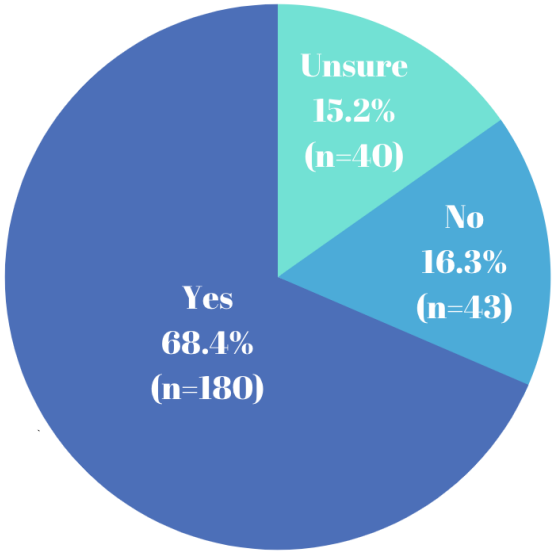
The second multiple choice question that can be used was the question that asked participants if they would like the opportunity to be able to "opt out" of receiving personalized advertisements. The bulk of consumers responded yes, 95.1% (n=250). (See chart 3)

Chart 3: Consumer Reaction to "Opt Out"



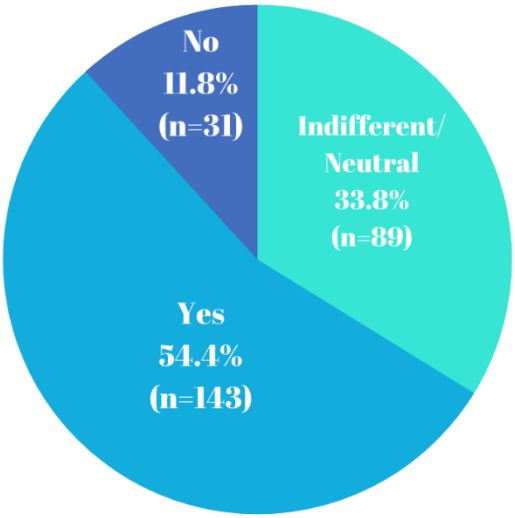
The third multiple choice question that correlates to this research question is a question about smart devices. The question asked participants if they had ever felt like their smart device such as an Alexa, Google Home, Smart Phone etc. was listening to them when they did not want it to be. Sixty eight percent (n=180) responded yes, 16.3% (n=43) responded no, and 15.2% (n=40) responded unsure. (See chart 4)

Chart 4: Consumer Reaction to Smart Devices



The first hypothesis that the survey sought to answer was that consumers will prefer the personalized advertisements if they felt like their privacy was not compromised. The first question participants were asked in the survey was if they preferred advertisements that are tailored to their personalized interests and shopping habits. More than 50 percent of respondents stated that they do in fact prefer the personalized advertisements, 54.4% (n=143) responded yes, 33.8% (n=89) responded indifferent, and 11.8% (n=31) responded no. (See chart 5)

Chart 5: Reaction to Personalized Advertisements



The next question that sought to support the hypothesis was a likert scale question that had participants rate on a 5-point likert scale from "strongly disagree" to "strongly agree" if they find it creepy when companies target advertisements based on their online shopping behavior. Over 70% of participants stated that they either strongly agreed with the statement or agreed. Of the 70% of participants, 22.1% (n=58) responded agree, and 48.3% (n=127) responded strongly agree. (See table 4)

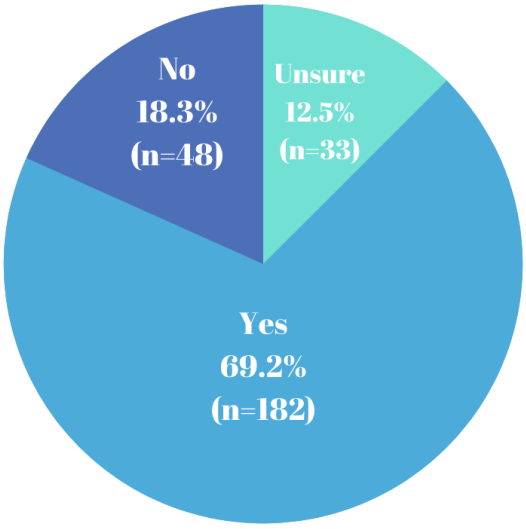
Table 4: Consumer Reaction to Personalized Advertisements

Strongly Disagree	3.8% (n=10)
Disagree	11.4% (n=30)
Indifferent/neutral	14.4% (n=38)
Agree	22.1% (n=58)
Strongly Agree	48.3% (n=127)

The last question that seeks to answer the hypothesis is the question that asked participants if they feel like their privacy is compromised when they receive an advertisement that is tailored to

their personalized interests and previous shopping habits. Sixty nine percent (n=182) responded yes, 18.3% (n=48) responded no, and 12.5% (n=33) responded unsure. (See chart 6)

Chart 6: Consumer Reaction to Compromised Privacy



The second hypothesis was that younger generations such as Gen Y and Millennial's will be more open to receiving personalized advertisements in comparison to baby boomers. This hypothesis was shown to be null. There was not a strong difference in the answers between all age groups for a majority of the questions. The first survey question that relates to this hypothesis, asked participants if they preferred advertisements that are tailored to their personal interests and shopping habits. Millennials preferred the personalized advertisements the most with 58.18% (n=32) responding yes. (See table 5)

Table 5: Age vs. Tailored Advertisements

Do you prefer advertisements that are tailored to your personalized interests and shopping habits?				
	19-22 (Gen Z)	22-38 (Millennials)	39-54 (Gen X)	55-73 (Baby Boomers)
Yes	57.14% (n=28)	58.18% (n=32)	55.71% (n=39)	54.37% (n=44)
Indifferent	32.65% (n=16)	32.73% (n=18)	31.43% (n=22)	33.84% (n=33)
No	10.2% (n=5)	9.09% (n=5)	12.86% (n=9)	11.79% (n=12)
Grand Total	**100% (n=49)**	**100% (n=55)**	**100% (n=70)**	**100% (n=89)**

The next question that relates to the hypothesis is a 5-point likert scale question that asks participants to rate on a scale of "strongly disagree" to "strongly agree" if they believe that personalized advertisements are more relevant. Gen Z, Millennials, and Gen X all had the biggest percentage of participants select "agree" for this statement, while baby boomers had the most people answer "indifferent". (See table 6)

Table 6: Age vs. Personalized Advertisement Relevance

Personalized advertisements are more relevant				
	19-22 (Gen Z)	22-38 (Millennials)	39-54 (Gex X)	55-73 (Baby Boomers)
1 Strongly Disagree	4.08% (n=2)	3.63% (n=2)	8.57% (n=6)	10.11% (n=9)
2 Disagree	10.2% (n=5)	7.27% (n=4)	12.85% (n=9)	12.35% (n=11)
3 Indifferent/Neutral	28.57% (n=14)	21.81% (n=12)	31.42% (n=22)	47.19% (n=42)
4 Agree	38.77% (n=19)	49.09% (n=30)	42.85% (n=30)	24.71% (n=22)
5 Strongly Agree	18.36% (n=9)	18.18% (n=10)	4.28% (n=3)	5.61% (n=5)
Grand Total	**100% (n=49)**	**100% (n=55)**	**100% (n=70)**	**100% (n=89)**

Lastly, another 5-point likert scale question was used to ask participants if they found it creepy when companies target them based off of their online shopping behavior. All four age groups had the largest number of participants respond strongly agree for this question. (See table 7).

Table 7: Age vs. Online Shopping Behavior

I find it creepy when companies target based on my online shopping behavior				
	19-22 (Gen Z)	22-38 (Millennials)	39-54 (Gex X)	55-73 (Baby Boomers)
1 Strongly Disagree	2.04% (n=1)	1.82% (n=1)	4.49% (n=4)	3.8% (n=10)
2 Agree	8.16% (n=4)	7.27% (n=4)	8.99% (n=14)	11.41% (n=30)
3 Indifferent/Neutral	18.37% (n=9)	5.45% (n=3)	19.1% (n=9)	14.45% (n=38)
4 Agree	22.45% (n=11)	36.36% (n=20)	16.85% (n=12)	22.05% (n=58)
5 Strongly Agree	48.98% (n=24)	49.09% (n=27)	50.56% (31)	48.29% (n=127)
Grand Total	**100% (n=49)**	**100% (n=55)**	**100% (n=70)**	**100% (n=89)**

Discussion

The survey results showed that more than 50% (n=143) of consumers prefer personalized advertisements; however 70% (n=182) of consumers also believed that their privacy is compromised when they receive a personalized advertisement. This response coincides with a past study conducted by Boerman, Kruikemeier, and Borgesius (2017) that found that consumers see the benefits of targeted and/or personalized ads; however the majority of consumers are still skeptical and find it invasive and creepy.

The survey results suggest that age did not have much of an effect on the perception of the advertisements. All age groups tended to answer the questions the same way, without much discrepancy. The results of the survey also suggest that people did not like receiving emails that

had personal touches such as inclusion of their name. Almost 60% (n=153) of consumers responded either strongly disagree or disagree with the statement “I enjoy receiving emails with my name included, such as, “Hello Mrs. Sarah Jones! We recommend this product!”. It is also important to note that 95.1% (n=250) of consumers wanted the option to be able to “opt out” of receiving personalized advertisements from brands. Most brands do not give their consumers this option, which leads to privacy concerns. This information, along with the fact that 68.4% (n=180) of consumers responded yes to the statement “Have you ever felt like your smart device (Alexa, Google Home, Smart Phone, etc.) is listening to you when you do not want it to be?” suggests that brands need to be more transparent about what they do to attract audiences and receive consumers personal information in order to better target them. This coincides with research conducted by Yu and Cude (2009), they also found that consumers overall general perception of personalized advertisements was negative due to the privacy issues that arise.

The first hypothesis of the study was, *consumers will prefer the personalized advertisements if they feel that their privacy is not being compromised*. This hypothesis was supported. This was supported by different questions on the survey that asked consumers about personalized advertisements but also privacy concerns. The data suggests that consumers are conflicted between wanting personalized advertisements that are more relevant but also wanting to keep some of their information private as well. Over 50% (n=143) of consumers stated that they preferred advertisements that are tailored to their personalized interests and shopping habits, but those same consumers, almost 70% (n=182) responded that their feel their privacy is compromised when they receive a personalized advertisement. Based on this information companies should be more transparent with their consumers on the information that they are collecting. If consumers were aware that companies collect their information in order to provide

them a more personalized experience, they may be more open to giving up their data. One survey question asked consumers which information they would provide a brand to receive more targeted advertisements and were asked to select all that apply out of the options presented. Out of all the participants 63.9% (n=168) stated they would be willing to provide companies their product preferences. Fifty nine percent of consumers (n=156) also stated that they would provide companies with their age range and gender, however only 4.9% (n=13) of consumers stated that they would provide companies their home address. This question helped to answer the level of personalization where many consumers feel like the personalization begins to cause privacy concerns.

The second hypothesis stated, *Younger generations such as Gen Y and Millennial's will be more open to receiving personalized advertisements in comparison to Baby Boomers.* The hypothesis was null. The results suggested that age did not have a significant effect on the perception of the advertisements and privacy issues. All age groups answered the questions usually within 10 percent of one another. Most often, answers usually varied by only one or two percent. This is important to note because it shows that regardless of what level of personalization that consumers are exposed to, they still find it creepy and invasive.

The study has good internal validity; however the external validity of the study is questionable because of the high percentage of female participants. The study has good internal validity because there are no confounding variables present in the study, and each question exhausts all options for consumers to answer. The yes or no questions also included the option to choose indifferent/unsure allowing consumers who are not sure on the topic to be able to not have to pick one side.

Limitations

Limitations in the study were found when reviewing the survey and results. The sample size for the survey was 267 participants. Of the 267 participants, 76% (n=200) were female, and 24% (n=76) were male, making the data slightly askew. If there was a more even split between gender, the data would have better external validity and be able to be generalized for a larger population. Another limitation of the study was the convenient sampling of the survey. The survey was distributed on Facebook, and LinkedIn, Facebook friends were also asked to share the survey with their friends. This helped gain responses from various age groups, however many of the survey respondents were likely from the New England area, making the data lack external validity in terms of geographic location. Limitations for the survey itself include the lack of demographic questions asked. The survey could have asked participants their geographic location, as well as their race. The internal validity of the study is strong due to all the questions having exhaustive answers, and no confounding variables. Consumers also always had the option to say they were either unsure, or indifferent on the topic.

Conclusion

Living in the digital age is has benefits, but it also brings along new challenges. One of these is privacy concerns. The question has evolved from if consumers prefer personalized advertising, to what companies can do to assure their consumers what their personal information is being used for. This study provided an in depth look at what information consumers were willing to share with companies, as well as their general opinion of personalized advertisements. The study found that even though consumers prefer the personalized advertisements, they do not want their privacy to be compromised. Almost all consumers also stated that they would like the opportunity to be able to “opt out” of brands collecting their data in order to better target them. A

large majority of consumers also stated that they have felt like their smart device, whether it be a cell phone or Alexa device was listening to them when they did not want it to. Companies like Amazon should be transparent on how they provide their customers with personalized advertisements, so they do not feel as if the device in their home is listening to provide them advertisements for products.

This research is crucial in the digital world because personalized advertisements are everywhere and the technology behind it will likely only continue to grow in the coming years. Providing consumers with a personalized advertisement is something many people may not even realize until they have a negative experience with it. This is why it is crucial to understand the fine line between providing a personalized experience, without making consumers feel uneasy. If brands are transparent with their consumers about the data they are collecting, both in stores and online, then consumers may be more open to receiving the personalized experiences without feeling like they are “creepy”. Future research on the following topic can look deeper into this issue, and the fine line between the two. Future studies can also look at what brands are doing in terms of personalization in order to keep consumers engaged in their products.

References

Aquirre, E., Roggeveen, A., Grewal, D., & Wetzels, M. (2016) The personalization-privacy paradox: Implications for new media. *Journal of Consumer Marketing, 33(2).* 98-110. https://doi.org/10.1108/ JCM-06-2015-1458

Attaran, S., Notarantonio, E. M., & Quigley, C. J. (2015). Consumer perceptions of credibility and selling intent among advertisements, advertorials, and editorials: A persuasion knowledge model approach. *Journal of Promotion Management*, *21*(6), 703–720. https://doi.org/10.1080/10496491.2015.1088919

Bang, H., & Wojdynski, B. W. (2016). Tracking users' visual attention and responses to personalized advertising based on task cognitive demand. *Computers in Human Behavior, 55*, 867–876. https://doi.org/10.1016/j.chb.2015.10.025

Bleier, A., & Eisenbeiss, M. (2015). Personalized online advertising effectiveness: The interplay of what, when, and where. *Marketing Science, 34*(5), 669-688. https://doi.org/10.1287/mksc.2015.0930

Boerman, S.C., Kruikemeier, S., & Borgesius, F.Z. (2017). Online behavioral advertising: A literature review and research agenda. *Journal of Advertising, 46*(3), 363-376. https://doi:10.1080/00913367.2017.1339368

Chen, B. (2018). Are targeted ads stalking you? Here's how to make them stop. *The New York*

Times. Retrieved from https://www.nytimes.com/2018/08/15/technology/personaltech/stop- targeted-stalker-ads.html

De Keyzer, F., Dens, N., & De Pelsmacker, P. (2015). Is this for me? How consumers respond to personalized advertising on social network sites. *Journal of Interactive Advertising*, *15*(2), 124–134. https://doi.org/10.1080/15252019.2015.1082450

Duhigg, C. (2012). How companies learn your secrets. *The New York Times Magazine.* Retrieved from: https://www.nytimes.com/2012/02/19/magazine/shopping-habits.html

Fulgoni, G.M. (2018). Are you targeting too much? Effective marketing strategies for brands. *Journal of Advertising Research.* https://doi:10.2501/Jar-2018-008

Fulgoni, G.M. (2018). Will digital commerce and analytics be the death of traditional brands? *Journal of Advertising Research.* https:// DOI:10.2501/JAR-2018-023

Godfrey, A., Seiders, K., & Voss, G.B. (2011). Enough is enough! The fine line in executing multichannel relational communication. *Journal of Marketing, 75,* 94-109. https://doi.org/10.1509/jmkg.75.4.94

Ham, C. (2017). Exploring how consumers cope with online behavioral advertising. *International Journal of Advertising, 36*(4)*,* 632-658. https://dx.doi.org/10.1080/02650487.2016.1239878

Newman, D (2018). Digital Privacy: Brands figuring out where personalization gets creepy. *The*

New York Times. Retrieved from https://www.forbes.com/sites/danielnewman/2018/03/20/digital-privacy-brands-figuring-out-where-personalization-gets-creepy/#3f29482143a7

Renner, D. (2018). Competing on experience: How retailers can stem from the amazon effect. *Forbes.* Retrieved from https://www.forbes.com/sites/forbestechcouncil/2018/04/18/competing-on-experience-how-retailers-can-stem-the-amazon-effect/

Sahni, N.S., Wheeler, S.C., & Chintagunta, P. (2016). Personalization in email marketing: The role of non-informative advertising content. *Marketing Science, 37*(2), 177-331. https://doi.org/10.1287/mksc.2017.1066

Singer, N. (2018). Just don't call it privacy. *The New York Times.* Retrieved from https://www.nytimes.com/2018/09/22/sunday-review/privacy-hearing-amazon-google.html

Stern, J. (2018). Facebook really is spying on you, just not through your phone's mic. *The Wall Street Journal.* Retrieved from: https://www.wsj.com/articles/facebook-really-is-spying-on-you-just-not-through-your-phones-mic-1520448644

Ur, B., Leon, P.G., Cranor, L.F., Shay, R., & Wang, Y. (2012). Smart, useful, scary, creepy: Perceptions of online behavioral advertising. *Symposium on usable privacy and security.* https://doi.org/ 10.1145/2335356.2335362

Walrave, M., Poels, K., Antheunis, M. L., Van den Broeck, E., & Van Noort, G. (2018). Like or

dislike? Adolescents' responses to personalized social network site advertising. *Journal of Marketing Communications, 24*(6), 599–616. https://doi.org/10.1080/13527266.2016.1182938

Wimmer, R. D., & Dominick, J. R. (2014). Mass Media Research(10th ed., Wadsworth Series inMass Communication and Journalism). Boston, MA: Wadsworth.

Yu, J., & Cude, B. (2009). 'Hello, Mrs. Sarah Jones! We recommend this product!' Consumers' perceptions about personalized advertising: comparisons across advertisements delivered via three different types of media. *International Journal of Consumer Studies*, *33*(4), 503–514. https://doi.org/10.1111/j.1470-6431.2009.00784.x

Appendix A

Thesis Survey

Informed Consent Message:

Do you agree to the terms and conditions of this survey? *

☐ I agree

Are you actively enrolled as a student at Endicott College *

○ Yes

○ No

Demographics

Description (optional)

1. What is your gender? *

○ Male

○ Female

○ Prefer not to say

2. What is your age? *

○ Younger than 18

○ 19- 22(Gen Z)

○ 23-38 (Millennials/ Gen Y)

○ 39-54 (Gen X)

○ 55-73 (Baby Boomers)

3. Do you prefer advertisements that are tailored to your personalized interests and shopping habits? *

- Yes
- No
- Indifferent

4. Does an advertisement that includes personal touches such as, using your name, general location, or gender tend to grab your attention more? *

- Yes
- No
- Indifferent

Personalized Content

On a scale of 1-5 (1 being strongly disagree and 5 being strongly agree) please rate the following statements

5. Do you feel like personalized content enhances the online shopping experience? *

	1	2	3	4	5	
Strongly disagree	○	○	○	○	○	Strongly agree

6. An online advertisement is likely to influence me to make a purchase *

	1	2	3	4	5	
Strongly disagree	○	○	○	○	○	Strongly agree

7. Personalized advertisements are more relevant *

	1	2	3	4	5	
Strongly disagree	○	○	○	○	○	Strongly agree

8. I find it creepy when companies target advertisements based on my online shopping behavior *

	1	2	3	4	5	
Strongly disagree	○	○	○	○	○	Strongly agree

9. I enjoy receiving emails with my name included, such as, "Hello, Mrs. Sarah Jones! We recommend this product!" *

	1	2	3	4	5	
Strongly disagree	○	○	○	○	○	Strongly agree

10. What medium do you find advertisements to be the most trustworthy on? *

- ○ Social Media/Online
- ○ Television
- ○ Print (Magazine, Flyer)
- ○ Radio/Podcast
- ○ Out of Home (Billboard)

11. Do you feel like your privacy is compromised when you receive an advertisement that is tailored to your personalized interests and previous shopping habits? *

- ○ Yes
- ○ No
- ○ Unsure

12. What information would you be willing to provide a brand in order to receive more targeted advertisements? (Select all that apply) *

- ☐ Name
- ☐ Home Address
- ☐ Email Address
- ☐ Product Preferences
- ☐ Age Range
- ☐ Gender
- ☐ Other...

13. Would you like to be able to have the option to "opt out" of receiving personalized advertisements from brands? *

- ○ Yes
- ○ No
- ○ Unsure

14. Have you ever felt like your smart device (Alexa Device, Google Home, Smart Phone, etc.) is listening to you when you do not want it to be? *

- ○ Yes
- ○ No
- ○ Unsure

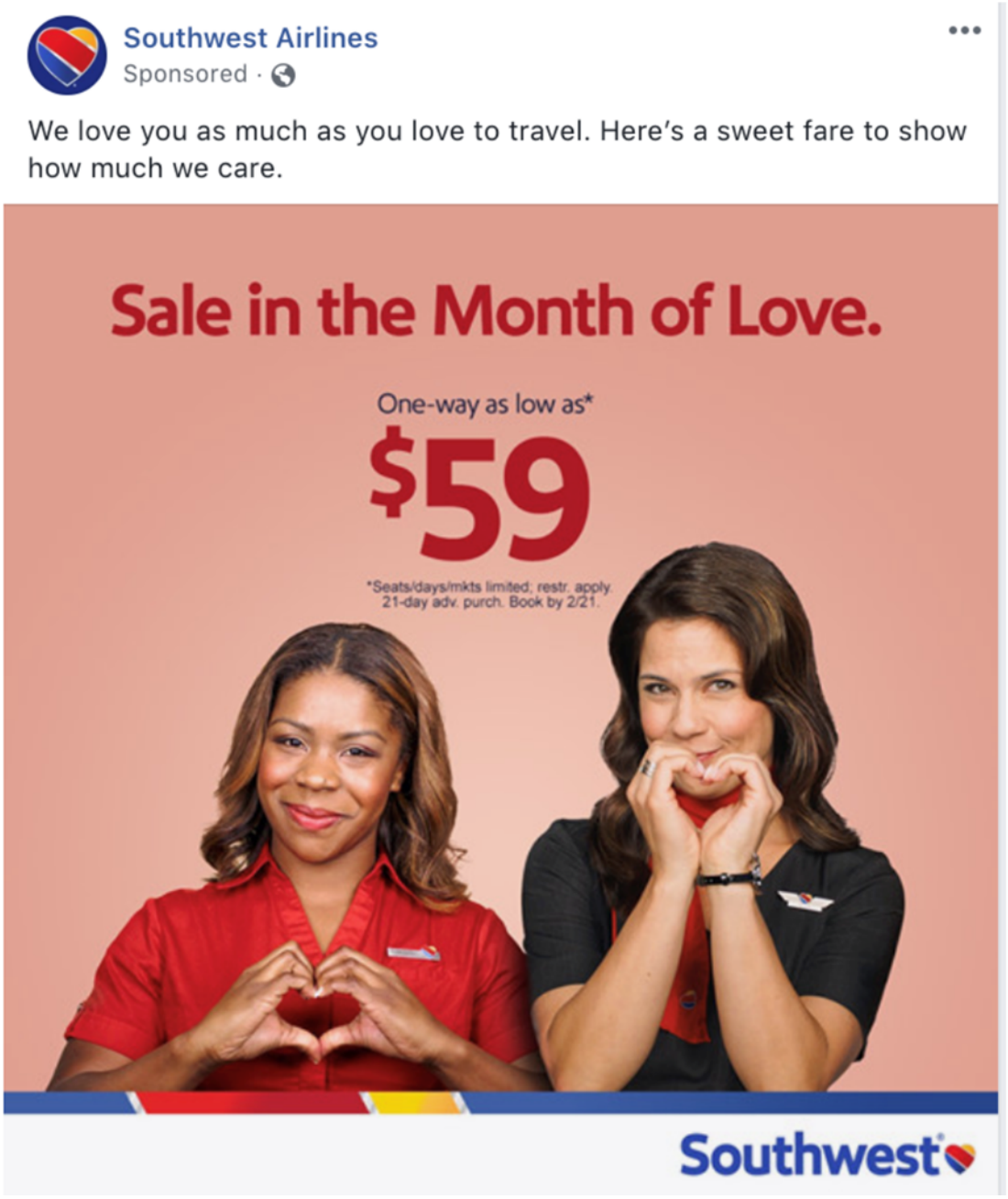
15. If you received this advertisement would you be concerned that Starbucks had access to your location? *

- ○ Yes
- ○ No

15b. Please comment on your answer:

Short answer text

16. If you received this sponsored ad on your desktop computer at work, after searching for flights on your personal smart phone would you be concerned? *



- ○ Yes
- ○ No

16b. Please comment on your answer:

Short answer text

Appendix B

Informed Consent Message:

You are invited to participate in this research study that is trying to learn more about the consumer perception of personalized advertisements. In this study, you will be asked to answer a series of 16 questions. Your participation will require approximately 5-10 minutes.

Your participation in this research study is voluntary. You may choose not to participate. If you decide to participate in this research survey, you may withdraw at any time. If you decide not to participate in this study or if you withdraw from participating at any time, you will not be penalized. Your responses will be confidential and completely anonymous. You cannot be tied to your answers in any way.

If you have any questions about this investigation or are interested in receiving a copy of this research report, please contact the primary researcher, Sarah Leavitt, sleav453@mail.endicott.edu, (508)-838-4051 or the faculty instructor (Randall Livingstone at rlivings@endicott.edu).

Thank you for your time. At this point, if you wish to participate, please check the "I agree" box below. By doing so, you're indicating that you are 18 years old or older, and you are not currently enrolled at Endicott College.

Do you agree to the terms and conditions of this survey? *

☐ I agree

Are you actively enrolled as a student at Endicott College *

○ Yes

○ No