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# The Effect of Positive/Negative Framing on an Individual's Desire to Socially Share a Scored Lead-Generating Quiz

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# THE EFFECT OF POSITIVE/NEGATIVE FRAMING ON AN INDIVIDUAL'S DESIRE TO SOCIALLY SHARE A SCORED LEAD- GENERATING QUIZ

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## Abstract

According to marketing guru Neil Patel, “using quizzes as a part of your marketing strategy is one of the most underrated types of content that every marketer should be trying, and we’d be lying if we didn’t tell how effective they really were” (Misenas, 2019). Are lead-generating quizzes as effective as expert marketers tout them to be? This thesis dives into a specific element of a scored lead-generating quiz, the results page, to see if positive/negative framing has an impact on the desire to socially share the results. The hypothesis is that the positive framing would correspond to a higher likelihood of social sharing than negative framing for scored lead-generating quizzes, which builds upon the research that “positive things may be shared more because they reflect positively on the self” (Berger and Milkman, 2010). Data analysis suggests that lower performance in a scored lead-generating corresponds with less of a desire to socially share the results. Despite the smaller sample size for higher performance, the data broadly suggest that positive framing results in more of a desire to socially share than negative framing, although further testing is required to confirm this.

## Introduction

Lead-generating quizzes are a specific breed of online quizzes; unlike the ones published by sites like BuzzFeed, which are designed purely to generate advertising revenue, these quizzes serve a pure marketing and lead acquisition function. A lead-generating quiz's sole purpose is to capture the email address, and potentially first name, of a prospective buyer, consumer, and customer. Lead-generating quizzes are a tool used by marketers in the interactive marketing field, which is a subset of digital marketing. Interactive marketing is centered around the user's actions, which means the marketing initiatives are triggered by the user's behavior and preferences. For example, the user's result could funnel them into an email sequence that pitches a product that a user with a different result would not receive. This is a shift from traditional campaign-based marketing efforts that have a one-size-fits-all approach.

There are three main types of lead-generating quizzes: personality quizzes, scored quizzes, and assessment quizzes (Haynam, 2018). Personality quizzes work by grouping users into different archetypes based on their answers. For example, in a personality quiz titled "What's Your Style?", the user may be categorized as Bohemian, Contemporary, and Classic. Scored quizzes, which are what this thesis is studying, work by adding up total points accrued with the answer choices. For example, in a scored quiz titled "What's Your Makeup IQ?", the results may be grouped in increments of 25 points, such as 0-25, 26-50, 51-75, and 76-100. Assessment quizzes work by asking the user multiple choice questions, where each question has right and wrong answers, and assigning points based on that. For example, in an assessment quiz titled "Are You A Geography Nerd?", the results may be indicated as a fraction (10/10) with or without a label (Absolutely!).

## Literature Review

Man is the creator of technology and we are on a quest to function with, interact, and integrate technology into our contemporary society. Scientists and social scientists alike are compelled to figure out how technology captivates the human mind and influences how people act, behave, and respond. Marketers crave the next best solution to reach people. Technology has shifted how marketers operate and track their customer acquisition efforts. This is important as Forsyth (2004) suggests that managing information can be a company's greatest competitive advantage. From email to social media, marketers are constantly experimenting with how to utilize the platform to reach people in an ever-changing environment, as Chong et al. (2010) remind us that marketers must choose the most suitable e-marketplace for their content. As Bandura (2001) suggested, there is no single social network in a community that serves all purposes.

Interactive marketing and digital marketing build upon the concept of permission marketing, a term that was first coined by internet marketing pioneer, Seth Godin. In his book *Permission Marketing: Turning Strangers into Friends and Friends into Customers*, Godin asserted that people are constantly bombarded by ideas and that the true way to get a potential consumer's attention is to have them opt into receiving some type of bait (Godin, 1999). That "bait" has been given many nicknames by marketers such as opt-in, content upgrade, freebie, and more. Lead-generating quizzes are structured in such a way that they prompt the user to answer all the questions first and then ask for the user's contact information (email address and, potentially, first name). The idea is that the results are not shown until the user has opted in to receive future correspondence, although some marketers make the opt-in optional when designing their quizzes. Godin suggests that since the user has provided their email address, they

will be more receptive to receiving future communication (Godin). This establishes trust, which leads to future sales throughout the lifetime of the customer.

Lead-generating quizzes can also assist in viral marketing efforts, which is specifically what this study is evaluating. Viral marketing is defined as “the process of getting customers to pass along a company’s marketing message to friends, family, and colleagues” (Laudon & Travers, 2001 p. 381). In a word-of-mouth study performed in the context of new media, only 24% of people said they read a blog, but 59% of people said they “forward information found on the internet to colleagues, peers, family, and friends” (Allsop, Bassett, and Hoskins, 2007).

**TABLE 1**  
New Media Usage

Please Indicate How Frequently You Perform the Following Activities	Percent “Very Frequently” or “Frequently”
Forward information found on the internet to colleagues, peers, family, or friends	59%
Read newspapers online	48%
Read magazines online	25%
Read a blog	24%
Listen to radio feeds via the internet	23%
Participate in an online community, such as myspace.com or friendster.com	22%
Use PVR technology, such a TiVo or DVR	22%
View or post videos on a website, such as youtube.com	17%
Listen to satellite radio	16%
Create or participate in a blog	13%
Subscribe to a podcast	6%
Create a podcast	2%

Source: Harris Interactive Annual RQ<sup>SM</sup>. Base = 6,205 U.S. adults (18+) familiar with one or more of the 10 “most visible” U.S. companies.



So, interactive marketing efforts may be more fruitful than content marketing efforts because of how easy it is to forward a quiz's results. In fact, the quiz builders have social sharing buttons right on the results page. It is intentional, and the more social shares a quiz (or any webpage) can get, the lower the cost per lead when paying for advertising. As a result, marketing and advertising costs decrease, but because the quiz is reaching more people, more leads are acquired, sometimes even organically (without any cost at all)

This thesis also addresses sentiment analysis. There is research that suggests that “positive things may be shared more because they reflect positively on the self” (Berger and Milkman, 2010). Research also indicates that “successful viral marketing campaigns trigger an emotional response in recipients” (Dobele et al., 2007). Tapping into the emotions of a results page that has been framed positively may result in a higher social sharing tendency. Additionally, in the context of a scored lead-generating quiz, specifically, performance becomes another factor. Based on principal tenets of the self-determination and goal achievement theories, a quiz taker may not be more likely to share their quiz result if the performance is low, regardless of how the results page has been framed. The opposite applies to high performance.

Before the design of a lead-generating quiz can be addressed, it is important to understand and begin to define social media engagement. While engagement has been studied in many contexts, it is difficult to measure quantitatively. A study by Syrdal and Briggs (2018) plunged into understanding this concept qualitatively by juxtaposing what other researchers have concluded about engagement in other fields with the survey data they collected. Through their work, they determined that both marketers and consumers view the focal object of engagement as the content consumed on social media sites. Further, while marketers tend to perceive behavioral indications such as “liking” and “following” to be indicative of engagement,

consumers tend to associate the state of mind and happiness derived from consuming the content to be the primary indicator.

Proceeding into content design, it is critical that the answer choices appeal to a broad mass of people. Simmons (2008) suggests that allowing people to express themselves individually within a homogeneous group is an effective internet marketing technique. Using images can facilitate this and the nonverbal communication that Kidwell and Hasford (2014) studied through emotional ability. Hibbeln et al. (2017) suggest that negative emotion influences mouse cursor distance and speed, which builds upon the idea Coombes et al. (2009) explained in the context of attentional control theory, in that higher anxiety can account for a slower reaction time.

Capitalizing on the emotional state of a user might be essential for attention and goal-related tasks, but it only has an indirect effect on algorithmic engagement. When Al-Garadi et al. (2016) attempted to identify the influential spreaders in multilayer interactions of online social networks, they suggested that there is no single algorithmic explanation, which makes it rather difficult to compete with a network topology that is not understood fully. However, while he only studied Twitter, it is important to look at any online social network from its layer breakdown. For example, Facebook and Pinterest function very differently as online social platforms, the latter of which is a visual search engine that retrieves content and the former spreads content based on engagement perceived by an algorithm. It is interesting to point out that Sherman et al. (2018) experimented with Instagram and found that people respond better to photos that did not have any risk attached to them—perhaps virality and its spread could be similar on the other online social networks.

A key component of how an online social network or search engine spreads content is user experience and satisfaction—Google has said this multiple times. Leveraging the compulsion to share socially is not an easy task, but Sherman et al. (2018) concluded that people use a “gut-feeling” approach when deciding if they like an image or not. So, inciting primal and instinctive behavior may be the key to leveraging someone’s gut-feeling for increased social sharing. Including positive results might be another factor as well, which would compound the idea Wagner et al. (2015) expanded upon that social sharing positively affects individual emotions.

The final component of the efficacy of a lead-generating quiz is the generation of the lead itself, which is a marketing concept. When discussing the concept of attentional control theory and how someone might be more motivated to complete a task for the sake of doing it and less for the value it holds, providing results after the collection of an email address may be more effective than making it optional afterward. This psychological theory may be able to shed light on why people are driven to complete a quiz. However, collecting the email itself is not sufficient; Mort and Drennan (2002) have observed that ensuring customers receive welcome information at a time and place that they desire is key to getting engagement. Having a download on the results page could be the reward that is necessary to cause a social share. Also, it has benefits later down the line, as Kumar et al. (2014) has suggested that the combination of a trusted sender and a long-term engaged consumer can result in more sales.

Ultimately, understanding lead-generating quizzes is a matter of continual experimentation. While scientific research can highlight certain practices, the only true way to discover the solution is by practice and tweaking. Every marketer’s audience is different and attempting to create a universal approach may work in a general sense, but not in every specific

sense. As Seth Godin mentions in his book *Unleashing the Ideavirus: Stop Marketing at People! Turn Your Ideas Into Epidemics by Helping Your Customers Do the Marketing Thing for You*, he asserts that the “future belongs to marketers who establish a foundation and process where interested people can market to each other” (Godin, 2001). Lead-generating quizzes start that process, and the more that marketers kindle that relationship, the better their return on investment will be.

### Proposed Research and Hypothesis

Based on the body of research, consumers tend to share positive things because they reflect positively on the self, which can lead to marketing efforts being transmitted more virally. This thesis takes the foundation that Berger and Milkman put forth (of evaluating *The New York Times* articles and the likelihood that it ends up on the *Times*’ most emailed list) and transfers it into the context of lead-generating quizzes and predicts the likelihood of the user sharing the results page. Since the quiz results have been intentionally constructed, crafted, and coded positive and negative, there should be an obvious social sharing behavior when taking a scored lead-generating quiz (if the ideas in other studies carry through).

However, understanding social sharing on behalf of people, as a collective, is not the chief goal. This study asks participants to self-identify which online social networks (social media platforms and a visual search engine) they would share the content to. Understanding the social sharing platform of choice can be valuable data when combined with basic demographic information. If marketers can better understand the social sharing tendencies of their target market, their overall efforts should be highly effective when it comes to creating viral content for their audience.

This study also examines a specific kind of lead-generating quiz: the scored quiz. Performance (high or low) becomes another factor that can be evaluated. The hypothesis is that people will have more of a desire to socially share positively framed results pages over negatively framed ones in the context of a scored lead-generating quiz.

## Method

These were the research questions:

- RQ 1: Will lower performance result in less of a desire to socially share their response?
- RQ 2: Will higher performance result in more of a desire to socially share their response?
- RQ 3: Will positive/negative framing influence social sharing tendencies?

This thesis will attempt to explain those behavioral patterns with statistical data.

The method for this study were quite involved, mainly because there was a lack of a solid scientific work that had laid the foundation in this particular area of research. Work had to be put in to establish a framework of some kind for evaluating the results page that could be repeated in future studies to research other types of lead-generating quizzes (personality and assessment) and to assess other elements within lead-generating quizzes. This section is broken up into participants, measures, quiz design, questions, and logic, experiment manipulation, survey design, and distribution.

### Participants

Regarding recruitment and who was the right fit for this study, the only specifications were that they used social media of some kind. It was disseminated on social media only to facilitate this. The only real requirement after that is the participant's age. As mentioned before, because of legal reasons, no one below the age of 18 participated. Otherwise, people of any age, gender, and ethnicity were welcome to participate. The participants were not targeted for the quiz based on interest groups or how we would predict they would react to the quiz, its questions, and its results, but rather for their activity on social media. We were looking for 100-250 total participants to give us enough of a sample size to glean conclusions from. With the

randomization feature implemented, that mean anywhere from 50-125 people would If that figure is broken up with an equal distribution between the high performance and low performance results, then there is still, roughly speaking, enough of a sample size to draw conclusions from. However, we cannot accurately predict how average social media users will respond to these questions.

## Measures

One of the original challenges of the thesis was the quiz criteria itself. At first, there were two paths that could have been pursued: using an established scale accepted by the research and scientific community and creating a new scale. Using an established scale is quite limiting because the scales were not designed with this specific application in mind; they were designed more with a psychological application, and modifying them for this application presented challenges. Contrarily, creating a new scale subjects the research to further scrutiny as the scale may have had an unintended impact on the results if it was not tested and retested to ensure reliability, although the quiz questions may have more relevance to the participants than an established scale.

Choosing the most reliable scale for this thesis required research into the different established personality assessments. Originally, the research was not intended specifically to address scored lead-generating quizzes, so other types of lead-generating quizzes were considered. Some of the scales considered were the brief measure of the Big 5 personality domains (Gosling, Rentfrow, and Swann, 2003) and short forms of the Empathy Quotient and the Systemizing Quotient (Wakabayashi et al., 2006). These quizzes were considered because they already had a confirmatory factor analysis done at the shorter lengths, with the Cronbach's

Alpha figure at 0.80 or higher, roughly speaking. While a longer version of the quiz may be more desirable if the end goal is to make sure that the results are as accurate as possible, that was not the focus of this thesis. This thesis was concerned with social sharing tendencies, so having a confirmatory factor analysis done on a shorter version was sufficient enough to proceed. This excerpt about why using short instruments is necessary summarizes the dilemma accurately:

*“In an ideal world, personality researchers would have sufficient time and resources to exploit the superior content validity and reliability of well-established multi item instruments. Unfortunately, circumstances are often not ideal and researchers maybe faced with a stark choice of using an extremely brief instrument or using no instrument at all. For example, one Internet-based study used a single-item measure to obtain ratings of self-esteem from participants who would be unlikely to dwell at the website long enough to complete a multi-item questionnaire (Robins, Trzesniewski, Tracy, Gosling, & Potter, 2002). Studies that require participants to rate themselves and multiple others on several occasions may also profit from the use of short scales. In one longitudinal study of interpersonal perceptions, participants were required to rate several other group members on several traits on several occasions (Paulhus & Bruce, 1992); multi-item scales would have burdened participants excessively so single-item measures were used” (Gosling, Rentfrow, and Swann, 2003).*

We used this as justification to proceed with a shorter scale. It was also important to have the full quiz questions published and the logic behind how the results were obtained fully available, too, so that it could be replicated.

Some of the established models required complex logic, which entails different sets of questions to be scored and then an overall score to be issued based on those averages. Since this



application is specifically lead-generating quizzes, we wanted to use a quiz with logic that any quiz building software would be compatible with. Simple logic, also known as single construct, is best. That led us to investigate the International Personality Inventory Pool as a possible place to draw quiz questions from because of how easy the site is to navigate and filter out quizzes that had logic too complex for us to process.

Upon looking at that inventory pool in-depth, the scale that appealed most was the Sensation-Seeking Facets (Hoyle et al., 2002). Within that study, there were three different categories investigated: dangerous thrill-seeking ( $\alpha = 0.86$ ), impulsive thrill-seeking ( $\alpha = 0.84$ ), and calculated thrill-seeking ( $\alpha = 0.78$ ). These categories were tested to have reliability, except the calculated thrill-seeking category, which had an alpha of 0.02 less than the desired 0.80. At this point, a decision had to be made as to whether this thesis would utilize questions from all three categories and create a personality test or choose a specific scale (dangerous, impulsive, or calculated) and use that as a scored quiz.

The benefits of using personality quizzes are numerous, but one of the most important ones is that they are the most widely used and disseminated to users, including on social media. According to the quiz builder Interact, “nearly 70% of the quizzes made on Interact are personality type quizzes,” and that comes from a company that has worked with over 55,000 companies to generate over 8,000,000 leads (Haynam, 2018). But, the structure of a personality quiz was limiting in terms of how it could be created with the existing questions used in the Sensation-Seeking Facets study. For example, a question in a personality quiz would be “What are you doing on a Friday night?” and the answer choices could be Reading, Clubbing, and Spending Time With Family. The nature of the statements listed on the International Personality Inventory Pool did not encompass a question structure like this. And, looking at the statements

themselves, they did not appear to be conspicuously linked to an overall question. In other words, one could not tie together three statements and create a question; rather, they were designed to be done on a scale. So, using just one of the three scales was the best avenue to pursue. We chose the dangerous thrill-seeking scale, primarily because it had the highest alpha coefficient. It also appeared to be easy to frame both positively and negatively. Finally, the title of “What Kind of Thrill Seeker Are You?” sounded like a quiz that could fit into a company’s marketing efforts (for example, travel companies).

### Quiz Design, Questions, and Logic

To create the best lead-generating quiz, using software that is typically used for this application is paramount. That means not creating a specially designed piece of software for this thesis, but rather working with a software program that other quiz creators, companies, and marketers use regularly. That software is Interact; according to quiz copywriter and funnel strategist, Chanti Zak, “Interact is the best quiz software hosting there is. No seriously. I’ve tried them all” (Zakariasen, 2018). Interact’s interface is very user-friendly and even allows creators to host the quizzes on their servers, which works perfectly in this case because these quizzes will not be associated with any specific brands.

The quiz’s title, “What Kind of Thrill Seeker Are You?”, was created because it modeled a personality quiz. Had we used “dangerous” in the quiz title, even though the quiz was based on the dangerous thrill-seeking scale, it would have framed the quiz in a negative manner, which means that efforts to frame the results positively would be futile. By using a neutral quiz name, we were able to keep the two quizzes exactly the same until the results pages. Below is what the quizzes’ cover page looked like. The full quiz is available in Appendix A.

## What Kind of Thrill Seeker are You?



Take the 3-minute quiz, bust out your best Michael Jackson moves, and learn more about yourself.

**LET'S GO!**

The quiz questions were structured as follows: the statement, as provided by the International Personality Inventory Pool; a stock photography image; and then a positive, negative, and neutral answer choice. Both quizzes were created exactly the same for this portion—in fact, they were duplicated using Interact’s feature, so there were no discrepancies between the two quizzes. The only area of importance was the results page, so everything else had to be the same so that we did not create more than one independent variable.

Typically, before the results page, there would be a landing page (or squeeze page) that would attempt to capture the quiz taker’s personal information to input them into an email sequence with personalized results. However, since the purpose of this thesis is academic

research and not on behalf of a company, the lead generation feature was disabled in Interact. Usually, the options are either a forced opt-in (which can lead to abandonment and/or unengaged subscribers) or an optional opt-in (which acts as a filter for the right people to join the email list). We did not want any quiz takers to drop off because they thought they had to give personally-identifying information to participate.

As mentioned before, knowing the logic of the established scale was crucial in considering its use for this study. It had to be compatible with what Interact could offer. The statements for the Sensation-Seeking Facets study (Hoyle et al., 2002) used a 5-point Likert scale, ranging from strongly disagree to strongly agree. For the purposes of this study, we thought that a 5-point Likert scale was unnecessary as a lead-generating quiz should be designed as succinctly as possible for optimal performance. A lead-generating quiz should take no more than “2-3 minutes to complete, which is optimal considering how short our online attention spans are” (Haynam, 2014). Since we also had a pre-survey and a post-survey, we wanted the entire process to take no more than 10 minutes. Simplifying the answers to a positive, negative, and neutral allowed the quiz to be completed quickly, instead of having quiz takers stuck on which answer to choose.

In this case, the quiz was scored by assigning 10 points to the positive answer, 5 points to the neutral answer, and 0 points to the negative answer. The negatively-keyed questions (ex. I would fear walking in a high-crime part of the city) were correctly keyed in an opposite answer. With the ten questions of the quiz, that means that there was a total of 100 possible points. A range of 0-50 indicated the person had low performance (“Comfortable” for the positively framed results page and “Boring” for the negatively framed results page) and a range of 51-100

indicated the person had high performance (“Brave” for the positively framed results page and “Dangerous” for the negatively framed results page).

### Experiment Manipulation

To effectively frame the results pages, we wanted to use an established lexicon in the sentiment analysis field. Specifically, we were looking for a lexicon that was designed for usage surrounding social media. The AFINN Lexicon was created for usage with Twitter (Hansen et al., 2011). It was designed by assigning the words they studied with scores from -5 to +5. When creating the results and the results pages, we primarily used the words on the AFINN Lexicon to frame the results page accordingly—since the results themselves were also framed, we had to keep the title of the quiz neutral and leave the framing to the result and result description. The main goal of sentiment analysis is to “determine whether a text, or part of it, is subjective or not and, if subjective, whether it expresses a positive or negative view” (Taboada, 2016). By using an established lexicon, we were able to skip the determination phase and simply implement it for our desired result.

### Survey Design

The survey was constructed in four parts (and is fully available in Appendix B): the introduction and consent form, the pre-quiz survey, the quiz, and the post-quiz survey. The survey was designed in Qualtrics. One of the challenges of the survey was finding the right tool to execute it. A tool that had the capabilities of both a quiz builder and a survey software does not exist. So, the decision was made to separate those two functions and allow two different programs (Interact and Qualtrics) to integrate to produce the best possible outcomes. The survey

also used the Qualtrics feature to prevent ballot stuffing, where it would track the device the user was coming from and limit the quiz taker to one attempt altogether. This was implemented to prevent a person from seeing what the other results would have been if they had chosen different answer choices. This preserves the integrity of each individual's response.

For the introduction and consent form, this was standard boilerplate text, primarily. It was important to inform the quiz takers what we would be doing with their answers, what the study was broadly about, and why we were asking what we were. This portion was modeled after the consent form provided by the Institutional Review Board at Johnson & Wales University. After the elongated introduction, there was a field for today's date (pre-filled based on the date the quiz taker was taking it) and a yes/no question on if they consented to participating in the survey. Should the person have answered "no," skip logic was implemented to skip to the end of the survey. Anyone who was not interested in consenting was not of interest to us for data processing and privacy reasons.

For the pre-quiz survey, there were only two questions. Demographics was not a major element of this survey, but we thought it would be helpful to know the quiz taker's age and gender. We opted to put the demographic questions before the quiz and post-survey because we wanted to screen all participants and make sure they were above the age of 18, for legal processing reasons. Since minors cannot consent legally by themselves, we wanted to exclude any minors as we did not have the time or resources to seek consent from their parents or legal guardians. The gender question was first and included male, female, and gender non-binary options. The question on age followed gender and it asked participants to provide their age in a specific number (ex. 19 or 20), rather than in a range. More statistical data can be harvested when age is represented numerically. And, just like the consent question of the last section, skip

logic was implemented on the age question for any participant who answered less than 18. They would be sent to the end of the survey and thanked for their time, but for legal reasons, we would not ask them to proceed further.

For the actual quiz itself, it was challenging to integrate Interact with Qualtrics. After much logistical contemplation, we decided to have the two different quizzes (one positively framed and one negatively framed) inserted into the same block. We then used the randomization function in Qualtrics to randomize the block and limit showing only one of the quizzes to the quiz taker at any time. This ensured that we had an equal distribution of positively framed and negatively framed results. Interact, by itself, does not have a randomization or split-testing feature, so we had to proceed with Qualtrics' randomization feature instead. The quizzes were HTML-embedded into the rich content editor in Qualtrics. We attempted to embed the quizzes with Javascript, instead, so that they could be more responsive to the quiz taker's screen size, but there were complications with Qualtrics accepting the code and rendering it into the quizzes, despite copying the direct code from Interact. But, the HTML code that was inserted rendered properly, although not being as responsive, which is a limitation of the research team's coding skills and the software program's capabilities. Because the quiz results were being recorded on another software (Interact) and not in Qualtrics themselves, we needed a way to identify what the quiz taker's result was. Therefore, we added instructions before the quiz itself that stated to not click the red arrow at the bottom until the result was obtained (as doing so would prematurely end the quiz) and to inform the participant that they would be asked for their result, so they should remember it. Knowing the results helps us identify any social sharing patterns as they pertain to positive/negative framing and high/low performance.

For the post-quiz survey, the majority of the questions were centered on social sharing, both on social media and with other people. We only asked questions that we wanted an answer for, or thought would help us compute the data. The first question, as mentioned before, was what the quiz taker's result was. This question, structured in a multiple-choice manner, was first so that participants did not forget their result. The next four questions (2 through 5) used a 7-point Likert scale, with the label text as extremely unlikely to extremely likely. It has been shown that having a larger number of response options is beneficial for scale validity and reliability, but that it diminishes if more than seven options are presented (Lozano, García-Cueto, and Muñiz, 2008). These four questions were structured to ask the participant how likely they were to share their quiz result on Pinterest, Facebook, Twitter, and LinkedIn, respectively. The sixth question was a ranking question. It took the four previously mentioned online social networks and asked the quiz taker to rank them in the order that they would share to first. The final four questions (7 through 10) also used the same 7-point Likert scale. The seventh and eighth questions asked how likely the participant was to share their quiz result with a friend and talk about their quiz result with others, respectively. The ninth question asked the participant that how likely they were to provide their email address after the quiz results to get further personalized advice, if provided the option to do so. Finally, the tenth question asked the participant how likely were they to click through to learn more about their result on the results page, if provided the option to do so. The last two questions addressed specific actions contained within lead generation efforts and sheds insight for quiz creators.



## Distribution

This quiz was distributed, or disseminated, on social media. The goal was to capture the attention of everyday social media users. Facebook was primarily used as the online social network of choice as that is where quizzes first rose to prominence on social media. According to SimilarWeb estimates, BuzzFeed presently gets around 103.05 million visits monthly, 23.44% of which comes from social media and 55.75% of that comes from Facebook (SimilarWeb). The quiz was also distributed on personal timelines, in community groups, and in blogging/business related Facebook groups. Using the mock-up generator, AdParlor, this is what the promotion looked like:



The image of Michael Jackson was used because of his hit, “Thriller,” and the fact that “thrill seeker” was mentioned in the copy. Adding an image of someone recognizable and related to the quiz at hand helps with familiarity. And, because the image does not have any risk associated with it, it may result in more engagement; this phenomenon was observed on Instagram (Sherman et al., 2018).

## Results

The only data of importance were what Qualtrics had captured. Interact also captured the results of the quiz takers, spreading across the two quizzes on the administrative side. However, the quantifiable data were in Qualtrics. When the survey was built, the different questions were coded with a miniature header for identification once the CSV file was downloaded. For data processing, presentation, and analysis, we used IBM's SPSS (Statistical Package for the Social Sciences).

### Data Analysis

Once the data were imported into SPSS, we began filtering the data for any unintentional or insignificant responses that were recorded. There were 165 responses in total before filtering began. During filtering, we noticed 10 of the responses were marked as survey preview. All 10 responses were deleted, leaving the sample size at 155 responses. Among that 155, all of the respondents consented to participating in the study and none of the participants were under the age of 18, so the skip logic was implemented successfully. There were 9 respondents that received the result "Brave," 71 respondents that received the result of "Comfortable," 8 respondents received the result of "Dangerous," and 67 respondents that received the result of "Boring."

It was from 155 responses that the process of coding the different questions began so that further analysis and tests could be performed. We will now explain how the data and questions were coded (in the order they were done in SPSS) for comprehension and understanding when data analysis is discussed. The 7-point Likert scale questions in the post-quiz survey were coded +3 (extremely likely) to -3 (extremely unlikely). 0 represented the neutral answer. Age was

coded numerically, as that was the format requested in the directions of the pre-quiz survey. Gender was recoded from the options of male, female, and gender non-binary into 0 (male) and 1 (female). This coding system was implemented after looking at the data and seeing no responses recorded of gender non-binary. The next coding to be performed was social media ranking question, which was already coded in Qualtrics. 1 was Pinterest, 2 was Facebook, 3 was Twitter, and 4 was LinkedIn. After that, the results were recoded to numbers: -2 was Dangerous, -1 was Boring, 1 was Comfortable, and 2 was Brave. After this, the data was split into the positive and negative datasets, which you will see reflected below with the collective dataset. Because this thesis is centered around positive/negative framing, it was important to understand the means of the responses from both the positively framed and negatively framed results pages. Additionally, the positively framed and negatively framed datasets were then split further to reflect the means, n, and standard deviations of each of the possible results.

#### Collective Dataset

	Age	Gender	Pinterest	Facebook	Twitter	LinkedIn	Share_Friend	Talk_Others	Email	Learn_More
Mean	44.40	0.9161	-2.1097	-1.6645	-2.3896	-2.6818	-0.6104	-0.5871	-1.9419	-0.4323
N	154	155	155	155	154	154	154	155	155	155
Std. Deviation	12.874	0.27809	1.58961	1.87353	1.32503	1.03346	2.16723	2.08516	1.68353	2.1593

#### Positively Framed Dataset

Result		Result	Pinterest	Facebook	Twitter	LinkedIn	Share_Friend	Talk_Others	Email	Learn_More
2	Mean	2.00	-2.1111	-0.7778	-1.8889	-2.3333	0.5556	0.7778	-0.4444	1.2222
	N	9	9	9	9	9	9	9	9	9
	Std. Deviation	0.000	1.53659	1.98606	1.69148	1.11803	1.74005	0.83333	1.23603	0.83333
1	Mean	1.00	-1.7183	-1.3521	-2.2286	-2.5143	-0.074	-0.169	-1.8873	-0.1408
	N	71	71	71	71	71	71	71	71	71
	Std. Deviation	0.000	1.88364	1.98637	1.51487	1.35927	2.16679	2.07010	1.72004	2.03748
Avg Mean			-1.9147	-1.06495	-2.05875	-2.4238	0.2408	0.3044	-1.16585	0.5407

#### Negatively Framed Dataset

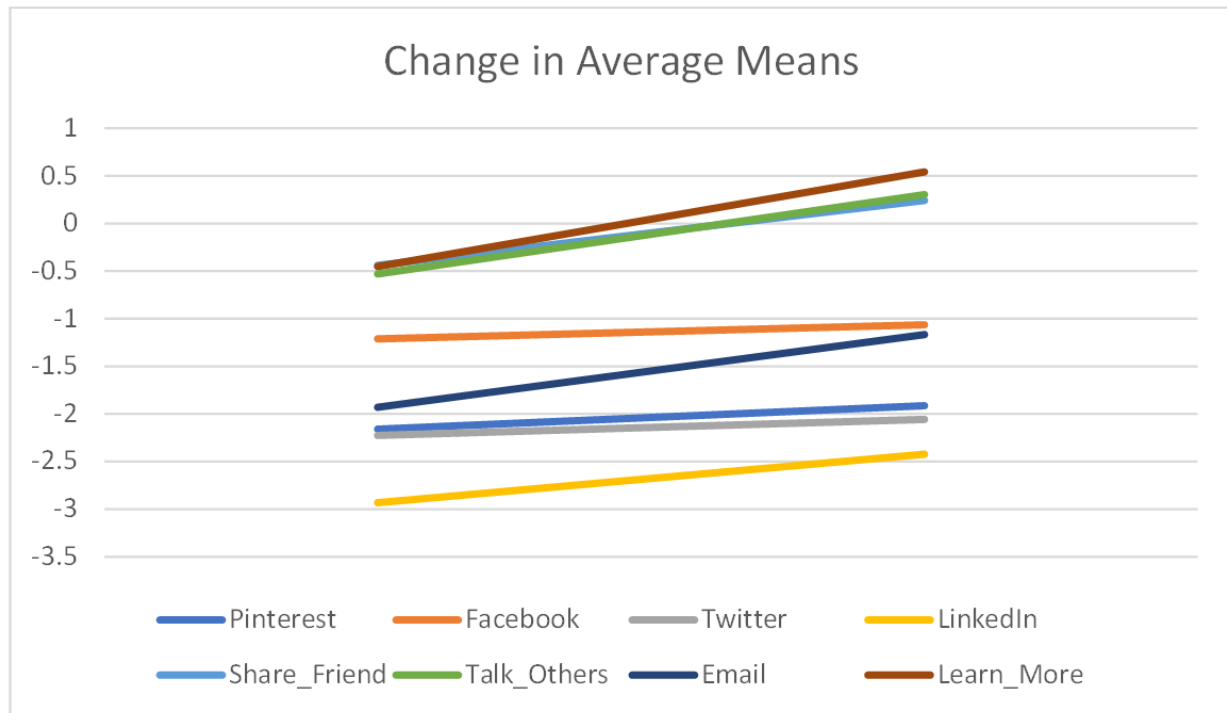
Result		Result	Pinterest	Facebook	Twitter	LinkedIn	Share_Friend	Talk_Others	Email	Learn_More
-2	Mean	-2.00	-1.7500	-0.1250	-1.7500	-3.0000	0.6250	0.2500	-1.6250	0.1250
	N	8	8	8	8	8	8	8	8	8
	Std. Deviation	0.000	2.05287	2.6959	2.05287	0.0000	2.32609	2.18763	2.55999	2.41646
-1	Mean	-1.00	-2.5672	-2.2985	-2.7015	-2.8657	-1.5000	-1.3134	-2.2388	-1.0299
	N	67	67	67	67	67	67	67	67	67
	Std. Deviation	0.000	1.00339	1.35976	0.81677	0.5467	1.88312	1.98639	1.47802	2.21544
Avg Mean		-2.1586	-1.21175	-2.22575	-2.93285	-0.4375	-0.5317	-1.9319	-0.45245	

The most interesting and fascinating part of this data is that the means for all the questions, except for age and gender (which did not have any negative numbers when coding), are overall negative. At first, that might seem troublesome and even an error on the coding end. But, after analysis, the meaning of the data is incredibly insightful. The means themselves have no immediate significance, which is why the data are broken up into the positively framed and negatively framed datasets. Here is a table comparing the average means of those two datasets in comparison to the collective means:

	<b>Pinterest</b>	<b>Facebook</b>	<b>Twitter</b>	<b>LinkedIn</b>	<b>Share_Friend</b>	<b>Talk_Others</b>	<b>Email</b>	<b>Learn_More</b>
Collective Mean	-2.1097	-1.6645	-2.3896	-2.6818	-0.6104	-0.5871	-1.9419	-0.4323
Average Positive Mean	-1.9147	-1.06495	-2.05875	-2.4238	0.2408	0.3044	-1.16585	0.5407
Change From Collective Mean	0.1950	0.5996	0.3309	0.2580	0.8512	0.8915	0.7761	0.9730
Average Negative Mean	-2.1586	-1.21175	-2.22575	-2.93285	-0.4375	-0.5317	-1.9319	-0.45245
Change From Collective Mean	-0.0489	0.4528	0.1639	-0.2511	0.1729	0.0554	0.0100	-0.0202
Change in Average Means	0.2439	0.1468	0.167	0.50905	0.6783	0.8361	0.76605	0.99315

This table is important, primarily because of the last line, which shows the change in the positively framed and negatively framed means. Despite the negative collective means, the change in the average means is positive for every single question. Some of the differences are greater than others, but the data unanimously show an increase in the desire to socially share a scored lead-generating quiz from a positively framed results page than from a negatively framed results page.

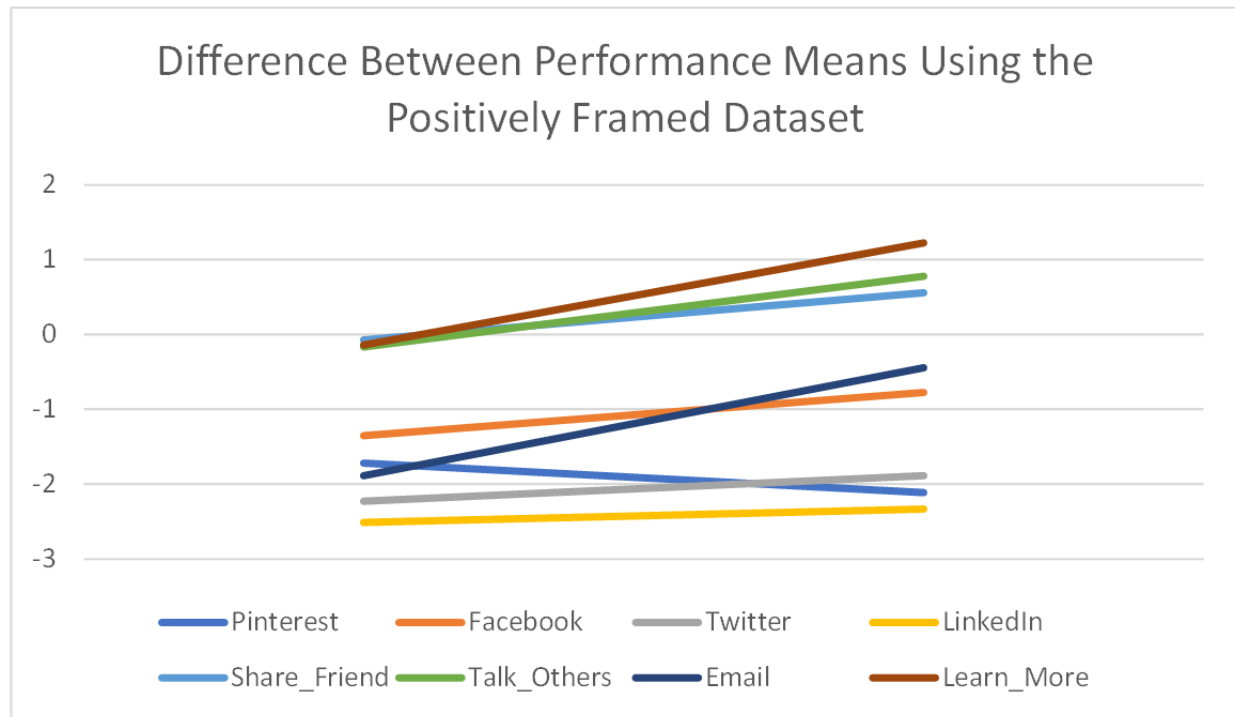
It can sometimes be difficult to visualize what such a change looks like when the data is just depicted as numbers on a chart. This graph visually depicts the change in the average means:



Another important observation to make are the changes in the means between the high performance and low performance results in both the positively framed and negatively framed datasets. This table shows the means for all of the questions, broken up into the high performance (2.00) and low performance (1.00) categories. This is the positively framed dataset.

	Result	Pinterest	Facebook	Twitter	LinkedIn	Share_Friend	Talk_Others	Email	Learn_More
High Performance Mean	2.00	-2.1111	-0.7778	-1.8889	-2.3333	0.5556	0.7778	-0.4444	1.2222
Low Performance Mean	1.00	-1.7183	-1.3521	-2.2286	-2.5143	-0.074	-0.169	-1.8873	-0.1408
Difference Between Performance Means		-0.3928	0.5743	0.3397	0.1810	0.6296	0.9468	1.4429	1.3630

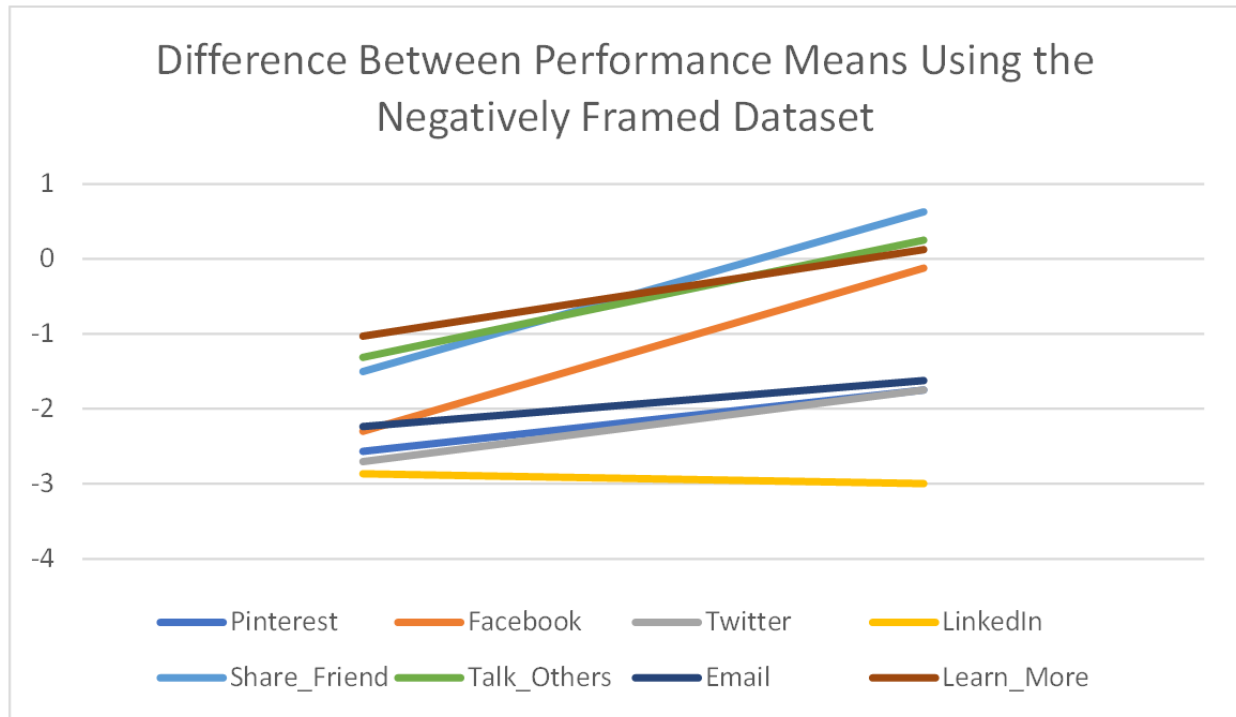
This is a graph depicting the difference between the low performance and high performance means using the positively framed dataset:



. This table shows the means for all of the questions, broken up into the high performance (-2.00) and low performance (-1.00) categories. This is the negatively framed dataset.

	Result	Pinterest	Facebook	Twitter	LinkedIn	Share_Friend	Talk_Others	Email	Learn_More
High Performance Mean	-2.00	-1.7500	-0.1250	-1.7500	-3.0000	0.6250	0.2500	-1.6250	0.1250
Low Performance Mean	-1.00	-2.5672	-2.2985	-2.7015	-2.8657	-1.5000	-1.3134	-2.2388	-1.0299
Difference Between Performance Means		0.8172	2.1735	0.9515	-0.1343	2.1250	1.5634	0.6138	1.1549

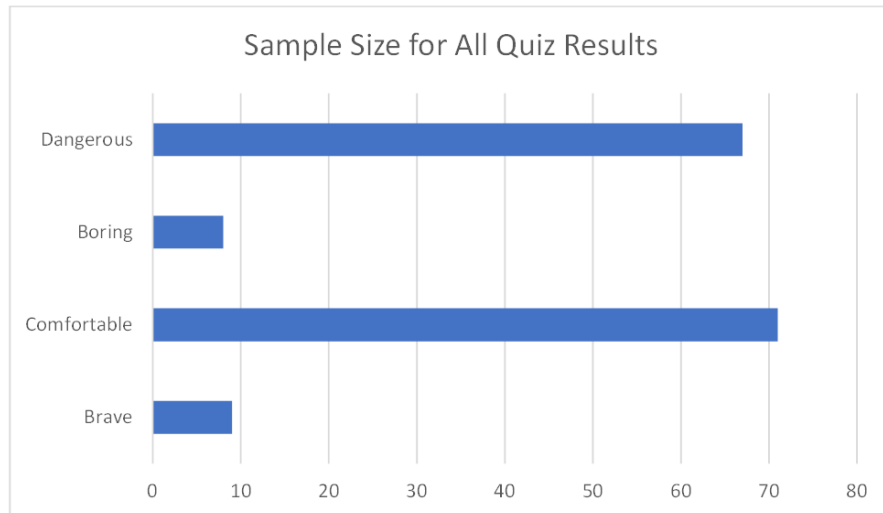
This is a graph depicting the difference between the low performance and high performance means using the negatively framed dataset:



In the performance means graphs for both the negatively and positively framed datasets, the general trend for the majority of the questions is upward. This suggests that for a scored lead-generating quiz, when the performance increases, the tendency to socially share also increases. However, that statement is predicated on a low number of participants (the sample size was small) in both the positively framed and negatively framed datasets; the majority of the participants scored in the low performance range as seen in the table and graph below:

Quiz Result	Numerical Result	Sample Size
Brave	2.00	9
Comfortable	1.00	71
Boring	-1.00	8
Dangerous	-2.00	67





Because of the unintentionally small sample size, the conclusions drawn about performance and its correlation to social sharing tendencies are not as valid as if the sample size had been larger.

The final component of data to show as part of the results is the demographic information: age and gender. A table showing the age and gender breakdown of each quiz result and the positively and negatively framed dataset averages is shown below:

	Age	Gender
Collective Average	44.40	0.9161

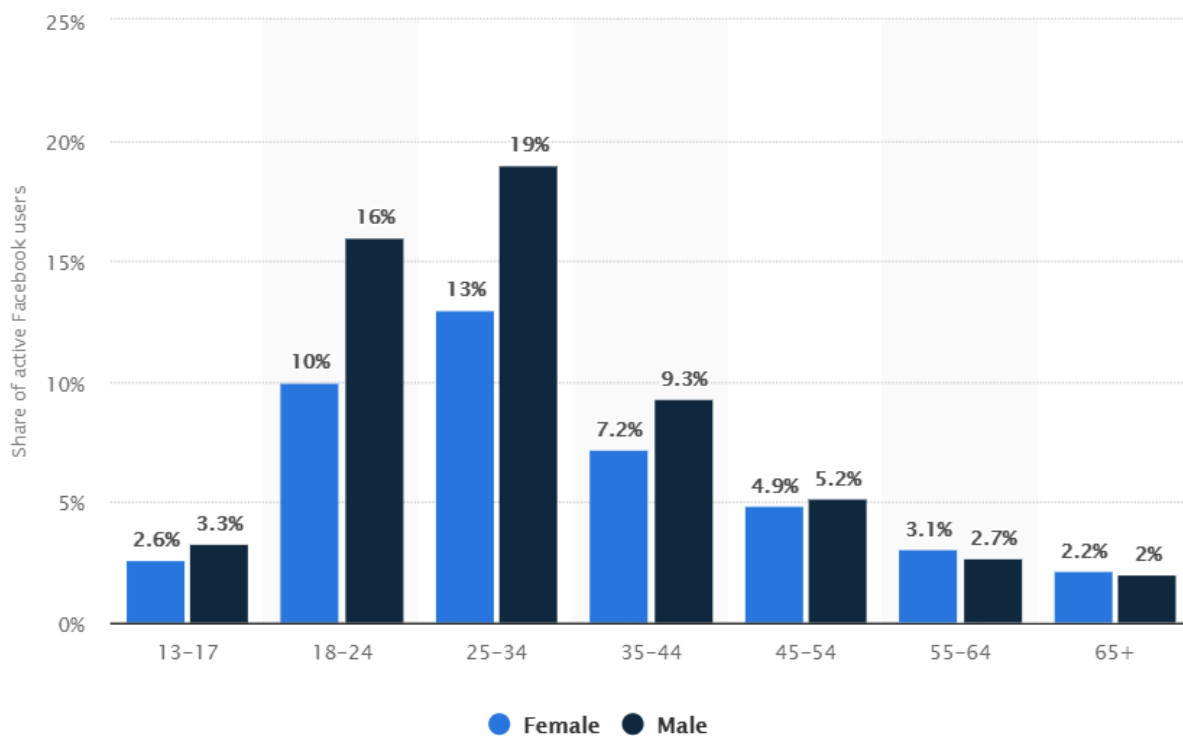
#### Positive Dataset

High Performance	39.56	0.7778
Low Performance	45.93	0.9577
Average	42.745	0.86775

#### Negative Dataset

High Performance	38.63	0.7500
Low Performance	44.12	0.9104
Average	41.375	0.8302

The surprising statistics are that the average age is roughly 44 years old and the gender was roughly 92% women. There is an imbalance with the distribution of participants that comprise these sections. The average age in this study is higher than the average American (38) and higher than the average Facebook user, which is between 25 and 34 years old (Statista, 2019).



© Statista 2019

**Sources:** We Are Social; Hootsuite; Facebook; DataReportal

This survey's participants were not equally balanced between men and women, so that statistic is not reflective of the gender proportion today. Because the gender and age figures are out of the

ordinary, they may function as confounding variables and disrupt the integrity and validity of the conclusions drawn from this study.

Looking at the data presented, there are two main conclusions to be drawn (despite the smaller sample size). The first is that a positively framed results page on a scored lead-generating quiz has a tendency to get shared more than a negatively framed results page; however, despite the increase in the likelihood of social sharing and the pattern that exists there, the participants in this study indicated that they would overall not share this quiz, in particular—that is the significance of the negative average means of the collective data. The second is that as performance in a scored lead-generating quiz increases, the desire to socially share also increases. This stayed fairly consistent between the positively framed dataset and the negatively framed dataset. This is likely explained by the self-determination and achievement goal theorems.

An interesting piece of data in the positively framed dataset is the “Learn\_More” figure for high performance. It averaged out to 1.222. This was the highest tendency out of all of the questions present in all of the datasets. If a marketer is using a scored lead-generating quiz, it might be advantageous to have a conspicuous call-to-action so that this tendency can get carried out. So, catering to the knowledge level of a high-performing quiz taker is paramount for convincing the quiz taker to opt-in.

Of the online social networks (Pinterest, Facebook, Twitter, and LinkedIn) mentioned in the survey for this study, Facebook had the highest overall tendency (-1.6645) to share a scored lead-generating quiz on (compared to Pinterest: -2.1097, Twitter: -2.3896, and LinkedIn (-2.6818)). There is no scientific explanation for this, but a plausible explanation is that social media users tend to view Facebook, because of BuzzFeed, as the platform to share quizzes on.

Pinterest is a visual search engine popular for recipes, DIY, and more, Twitter is a news and microblogging platform, and LinkedIn is a professional network; based on the subject matter of the quiz, the most desirable platform to share on may change, but the average collective means in this study indicated that most people would share the quiz to Facebook.

Looking at the average collective means for sharing with a friend (-0.6104), talking about it with others (-0.5871), and receiving personalized advice by email (-1.9419), people are almost three times as likely to share a scored lead-generating quiz with friends and others as they are to opt in to receiving future correspondence about their quiz result. In the spirit of viral marketing, this may prompt more users to take the quiz if they hear about it from others, without even being sent a link or the quiz being shared on a social media profile. But, the highest statistic and likelihood in the post-survey was learning more about the quiz result (-0.4323). It might almost be more advantageous to ask for an email opt-in after providing in-depth advice about the quiz result instead of asking for it upfront.

## Discussion

If a marketer's job when creating a quiz is to get social shares, then the marketer should think twice about creating a scored lead-generating quiz. Any user that performs poorly may not be inclined to share their result. Perhaps the marketer should think about creating a different kind of lead-generating quiz (ex. personality quiz) that does not rely on any kind of score to provide a result. In a quiz titled "Which Disney Princess Represents Your Brand's Voice?", for example, there is no disadvantage between getting Jasmine, Mulan, or Belle. Neither one of them is associated with poor performance as they are all neutrally framed results. One way to attempt to correct the lower social sharing tendencies that are associated with poor performance is to create more results. This quiz only used two ranges (0-50 and 51-100), but it may be advantageous to create more ranges, so people feel better about their performance. This could look like a result for 0-50, 51-65, 66-80, 81-95, and 96-100. If the quiz taker is more aware of the specific high performance score received, then they might feel better about their score and share, almost as a brag to others about how well they did.

The body of research on viral marketing and social sharing tendencies indicated that positive language correlated to a higher social sharing tendency than negative language. While that research was not specifically set in the application of interactive marketing, and more specifically, lead-generating quizzes, this study was. And, this study suggests that those tendencies are consistent in this application.

This study helps to begin to build out a body of research that addresses lead-generating quizzes. There have been a lot of articles disseminated by marketing companies, agencies, bloggers, and quiz builder software companies, but the academic and scientific field did not catch up as quickly over the past decade. This study confirms some of the popular media

opinions surrounding best practices for lead-generation quizzes, provides statistical data to back up those assertions, and does not rely on just years of experience and client work to make a claim.

At its core, this study attempted to explain social sharing behavior. However, social sharing behavior is not the same for each and every person. Human behavior cannot be easily whittled down to a specific science, art, and/or process. As social media, the internet, and digital media continue to evolve, what gets shared socially and forwarded on to others will change. What may be true today can easily change in one year, five years, ten years, etc. in an everchanging online environment. It may even be rewarding to study social sharing behavior of just one individual platform, as opposed to identifying patterns across multiple platforms.

This study opened the door for more collaboration between the fields of human-computer interaction, interactive/digital marketing, viral marketing, sentiment analysis, and social psychology. This study also poses an interesting question for future work on if the self-determination and achievement goal theory have a causal relationship or not as it pertains to why a quiz taker may not share a scored lead-generating quiz if they received a low performing result. Roughly speaking, this study established a methodological framework for researching lead-generating quizzes in an academic and scientific way. Similar research could be done for personality quizzes and assessment quizzes. Also, similar research could be done in the future for results within a certain niche, target market, demographic, or any other grouping of people that could be marketed to. There is potential down the line for monitoring a quiz's performance as real people are taking it and corresponding social sharing behavior in real life, as opposed to simulation only. There could also be a lot more research performed as to what the framework of an ideal lead-generating quiz looks like and what the essential components are, regardless of the

type of lead-generating quiz. This could be a qualitative study that looks at top-performing and socially shared existing quizzes and extrapolates what the key elements are. There is an opportunity, as well, to create a new scale for researching lead-generating quizzes instead of relying simply on existing, established personality assessments. A confirmatory factor analysis may have to be done, but the questions would pertain much more to the art and simulation of a lead-generating quiz than a rigid personality test will ever be able to.

### Limitations

To be blunt, there were a lot of limitations to this study. The first started with finding an existing, established scale that fit within the context of lead-generating quizzes. Although we chose to use an established scale, it was done so because of time and resources limitations. After performing the study and looking at the social sharing tendencies, the lack of positive numbers in the average means indicates that the questions (and, maybe, even the results) may not have been as engaging as possible, or even as relevant to the average quiz taker. Another limitation of this study was concerning the capabilities of the software programs used. Being able to integrate Interact's results with Qualtrics' survey responses may mean that the two can be used more cooperatively, but they functioned very much independently. The research team was limited by the fact that such a tool did not exist (or was not able to be found) that was able to perform both the functions of a quiz builder and a robust survey software program. Additionally, the quiz platform was not equipped to handle established scales with complex logic.

Other limitations include the design of the survey itself. While it was helpful to have the participant indicate their social sharing preferences, questions should have been added in to correspond their social sharing preferences with their activity on the platform. For example, if

someone was hyper-active on Facebook and never bothered to go on LinkedIn, that would explain why they chose what they did. As it presently stands, there is no logical or scientific explanation for how people chose the answers they did. Additionally, the timing function in Qualtrics should have been implemented to track how long the user, on average, was spending on the quiz to see if it compared with the ideal real-world figure. Interact typically provides this feature, but because the lead generation was disabled for these quizzes, it did not show time spent on the quiz (it would normally assign time spent from start to finish per user).

Some severe limitations of this study came down to participant recruitment. Not enough of an effort was made to secure roughly equal members of the opposite gender and ages in a more realistic range. In the vein of recruitment, since the majority of participants came from Facebook, the makeup of the participants did not actively reflect well the average user on other online social networks, especially the ones that were asked of the quiz taker. Furthermore, the quiz takers that did participate overwhelmingly chose answer choices that led them to the extremes of the results, whether they were randomized to receive the positively framed result or the negatively framed one. This caused an imbalance in the sample size of the high performing results as compared to the low performing ones. With more of a sample size, conclusions with more validity could be drawn.

Finally, when the experiment was designed, manipulations were planned, but there was nothing designed as a control group. In other words, there was a positively framed results page and a negatively framed results page, but the experiment was missing a neutrally framed results. Not having this during data analysis was difficult because it meant that we could not compare means to a control group and see if the changes were statistically significant. We could simply observe decimal changes. Future iterations of this study should be modified accordingly.



## Conclusion

Lead-generating quizzes are an excellent hybrid of lead generation and interactive marketing, but they can also expedite viral marketing efforts. The reward of a quiz creator, if the quiz has been created properly, is seeing a potential customer take the quiz, rave about how accurate the results are, share it with their network, and then join the email list, where they will eventually purchase something. Lead-generating quizzes provide a lot of value upfront, unlike many other forms of lead generation; that value should theoretically lead to trust being established more easily and the selling relationship facilitated. The purpose of this study was to examine positive/negative framing on a scored lead-generating quiz's results page and see if there was a correlation with social sharing tendencies. The evidence suggests what studies in other fields have shown—positively framed things are shared more frequently than negatively framed things are. This study also asserts that social sharing for a scored lead-generating quiz is closely linked to performance in a quiz and that if the pure goal is social sharing, that a scored quiz is not the right type of lead-generating quiz to pursue. Finally, this study established a methodological framework for approaching research with lead-generating quizzes and opened the door for more studies to be performed in the field.

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## Appendix A

This appendix contains visuals of the quiz cover page, quiz questions, their positively and negatively framed results, and the distribution graphic and copy.

### Quiz Cover Page

#### What Kind of Thrill Seeker are You?



Take the 3-minute quiz, bust out your best Michael Jackson moves, and learn more about yourself.

**LET'S GO!**

## Quiz Questions

I love dangerous situations



☐ Yes, I do

☐ No, I don't

☐ I don't really care either way

I like to do frightening things



☐ Yes, I do

☐ No, I don't

☐ I don't really care either way



I might actually enjoy being caught in an earthquake or tornado

☐

Yes, I would

☐

No, I wouldn't

☐

I don't really care either way

I would like to try bungee jumping

☐

Yes, I would

☐

No, I wouldn't

☐

I don't really care either way

I might enjoy the thrill of being lost at sea



☐ Yes, I would

☐ No, I wouldn't

☐ I don't really care either way

I might enjoy a free fall from an airplane



☐ Yes, I would

☐ No, I wouldn't

☐ I don't really care either way

I would enjoy being out on a sailboat during a storm



☐ Yes, I would

☐ No, I wouldn't

☐ I don't really care either way

I would fear walking in a high-crime part of the city



☐ Yes, I agree

☐ No, I disagree

☐ I don't really care either way

I wouldn't go hang gliding



☐ Yes, I agree

☐ No, I disagree

☐ I don't really care either way

I prefer fear to boredom



☐ Yes, I do

☐ No, I don't

☐ I don't really care either way

## Positively Framed Results

### You Got: Brave



As you stand upon the breathtaking mountain tops, take a deep breath and reflect on how the risks you take landed you there.

You're the kind of person that rejoices after doing something much more challenging than you thought you could do.

**You're the kind of person that triumphs at anything new you try.**

You seek out adventure, but yet, you're courageous as you face it head on.

With a winning mentality, there's nothing you can't accomplish.

The next time you seek out a thrill, remember your bravery.

### You Got: Comfortable



Just because you're not taking big risks doesn't mean you're not amazing.

In fact, you find fun in your daily challenges and don't need anything outlandish to feel accomplished.

You're the kind of person that sees breathtaking views, but doesn't go too close to the edge of the cliff.

**You often say how wonderful it is to not change your routine and do things differently.**

Take your superb mindset and apply it to other aspects of your life.

The next time you approach a risk, remember your comfort zone and why it's best to stay in it.



## Negatively Framed Results

### You Got: Dangerous



You really like to take on new challenges, but they could have a catastrophic ending.

You can't stand how others sit idly as you go on the biggest roller coaster in the amusement park.

**Even if you get injured, you have to be a daredevil or you'll get fed up with your daily life.**

No matter how bad things get, you still act the same way.

You're desperate to prove others wrong when they say you can't do something.

Whether it's taking a free fall out of an airplane, bungee jumping, or swimming with the sharks, you seek out dangerous thrills.

### You Got: Boring



You blame yourself for not taking on bigger risks, but you just don't have any interest in seeing them through.

Your friends always abandon you to do more exciting things and even bully you into doing them.

**They're disgusted by just how lame your life really is.**

Sometimes, you feel you're living a fake life you can't escape from.

You have the same, monotonous routine and you're awful about changing it.

Instead of seeking new thrills, you keep living your boring life.


## Quiz Distribution Graphic and Copy

**Drew DuBoff**

What kind of thrill seeker are you?

Take the quiz to find out! --> <https://bit.ly/33yINDE>

(This is a research study, but you will get personalized results for participating)



 Like  Comment  Share

## Appendix B

This appendix contains the survey questions, separated into the following blocks: introduction and consent, pre-quiz survey and quiz instructions, and post-quiz survey.

### Introduction and Consent

#### **Introduction**

- You are being asked to be in a research study about lead-generating quizzes.
- You were selected as a possible participant because you are someone that uses social media.
- Please read this form. You may also request that the form be read to you. The purpose of this form is to give you information about this research study, and if you choose to participate, document that choice.
- You are encouraged to ask any questions that you may have about this study now, during or after the project is complete. You can take as much time as you need to decide whether or not you want to participate.
- Your participation is voluntary; however, you may withdraw at any time.

#### **Why is this study being done? What is the purpose of this study?**

- The purpose of the study is to provide digital marketers with the best way to create a lead-generating quiz's results page
- Ultimately, this research may be published as a thesis on ScholarsArchive.jwu.edu and in an academic journal, perhaps with an oral presentation.

#### **What will I be asked to do?**

- If you agree to be in this study, you will be asked to do the following things: answer non-personally identifying demographic questions, answer a brief series of personality quiz questions, and then complete a quick survey about your experience. The entire process should take no more than 10 minutes.

#### **What are the risks and/or discomforts of being in this study?**

- There are no reasonable foreseeable (or expected) risks.

#### **What are the benefits of being in this study?**

- The benefits of participation are receiving personalized results for the quiz you take that can help explain your behavior.

#### **Will I be compensated for participating in this study?**

- There is no payment for participation.



**How will my privacy be protected? How will my data be kept confidential?**

- This study is anonymous. We will not be collecting or retaining any information about your identity.
- The records of this study will be kept strictly confidential. Research records will be kept in a locked file, and all electronic information will be coded and secured using a password-protected file. We will not include any information in any report we may publish that would make it possible to identify you unless you provide additional consent.

**May I refuse to participate in the study?**

- Yes. The decision to participate in this study is entirely up to you.
- You may refuse to take part in the study at any time without affecting your relationship with the investigators of this study or its affiliates.
- You have the right not to answer any single question, and you have the right to request that the researcher not use any of your data.
- Your participation is voluntary. Your decision to participate will have no impact on your current or future relations with the university.
- You may skip or refuse to answer any question for any reason.
- If you choose not to participate, you will not receive the personalized quiz results, but there are no other implications of not participating.

**What if I decide I no longer want to participate in the study? May I withdraw?**

- You have the right to withdraw completely from the study at any point during the process and for any reason.
- You are free to withdraw from this research study at any time, for any reason.
- If you choose to withdraw from the research study, you will not receive the personalized quiz results, but there are no other implications of not withdrawing.
- If you are not satisfied with the way in which this study was conducted, you may convey your concerns to the chair of the JWU IRB at [institutionalreviewboard@jwu.edu](mailto:institutionalreviewboard@jwu.edu) or 303-256-9640 and/or Drew DuBoff at [dduboff01@wildcats.jwu.edu](mailto:dduboff01@wildcats.jwu.edu) or 856-651-8905.

**What are my rights as a research participant?**

- You will be informed of any significant findings developed during the course of the research that may affect your willingness to participate in the research.
- If you sustain an injury while participating in this study, your participation may be ended.
- If you have any other concerns about your rights as a research participant that have not been answered by the investigator(s), you may contact the chair of the JWU IRB at [institutionalreviewboard@jwu.edu](mailto:institutionalreviewboard@jwu.edu) or 303-256-9640.

**Whom may I contact with questions?**

- For more information regarding this study, please contact the principal investigator at [dduboff01@wildcats.jwu.edu](mailto:dduboff01@wildcats.jwu.edu) or 856-651-8905.
- If you choose to participate in this research study and believe you may have suffered a research-related injury, please contact the chair of the JWU IRB at [institutionalreviewboard@jwu.edu](mailto:institutionalreviewboard@jwu.edu) or 303-256-9640.

- If you have any concerns or problems that you believe occurred as a result of your participation, you may report them to the chair of the JWU IRB at [institutionalreviewboard@jwu.edu](mailto:institutionalreviewboard@jwu.edu) or 303-256-9640.

**Will I receive a copy of this consent form?**

- You will be given a copy of this electronic consent form if requested.

**Will I be informed of the findings from this study?**

- If you would like, a summary of the results of the study will be sent to you. Please contact Drew DuBoff at [dduboff01@wildcats.jwu.edu](mailto:dduboff01@wildcats.jwu.edu) to be informed.

**Participant's Statement**

I understand the above description of this research and the risks and benefits associated with my participation as a research subject. I agree to take part in the research and do so voluntarily and my signature below indicates I understand the information and consent to participate in this study.

Today's Date

\_\_\_\_\_

Do you consent to participating in this study?

☐ Yes

☐ No

## Pre-Quiz Survey

### **Instructions**

Please answer the following demographic questions accurately and truthfully.

What is your gender?

☐ Male

☐ Female

☐ Gender Non-Binary

What is your age? (Please express the answer as a number such as 19 or 20)

---

### **Instructions**

The quiz is on the following page.

Please do not click the red arrow at the bottom until you have completed the quiz and received your result.

You will be asked for your quiz result in the survey following the quiz, so please remember the result.

## Post-Quiz Survey

**Instructions**

Please answer the following questions, in all honesty, to the best of your ability.

What was your result?

☐ Dangerous

☐ Boring

☐ Brave

☐ Comfortable

How likely are you to share your quiz result on Pinterest?

☐ Extremely likely

☐ Moderately likely

☐ Slightly likely

☐ Neither likely nor unlikely

☐ Slightly unlikely

☐ Moderately unlikely

☐ Extremely unlikely

How likely are you to share your quiz result on Facebook?

☐ Extremely likely

☐ Moderately likely

☐ Slightly likely

☐ Neither likely nor unlikely

☐ Slightly unlikely

☐ Moderately unlikely

☐ Extremely unlikely

How likely are you to share your quiz result on Twitter?

☐ Extremely likely

☐ Moderately likely

☐ Slightly likely

☐ Neither likely nor unlikely

☐ Slightly unlikely

☐ Moderately unlikely

☐ Extremely unlikely

How likely are you to share your quiz result on LinkedIn?

☐ Extremely likely

☐ Moderately likely

☐ Slightly likely

☐ Neither likely nor unlikely

☐ Slightly unlikely

☐ Moderately unlikely

☐ Extremely unlikely

If you wanted to share your quiz result on social media, rank the following platforms BY DRAGGING THEM in order of which you would share it to first.

**Instructions: 1 means share it first and 4 means share it last.**

Pinterest

Facebook

Twitter

LinkedIn

How likely are you to share your quiz result with a friend?

- ☐ Extremely likely
- ☐ Moderately likely
- ☐ Slightly likely
- ☐ Neither likely nor unlikely
- ☐ Slightly unlikely
- ☐ Moderately unlikely
- ☐ Extremely unlikely

How likely are you to talk about your quiz result with others?

- ☐ Extremely likely
- ☐ Moderately likely
- ☐ Slightly likely
- ☐ Neither likely nor unlikely
- ☐ Slightly unlikely
- ☐ Moderately unlikely
- ☐ Extremely unlikely

If you could, how likely are you to provide your email address after the quiz questions to get further personalized advice?

- ☐ Extremely likely
- ☐ Moderately likely
- ☐ Slightly likely
- ☐ Neither likely nor unlikely
- ☐ Slightly unlikely
- ☐ Moderately unlikely
- ☐ Extremely unlikely

If you could, how likely are you to click to learn more about your result on the results page?

☐ Extremely likely

☐ Moderately likely

☐ Slightly likely

☐ Neither likely nor unlikely

☐ Slightly unlikely

☐ Moderately unlikely

☐ Extremely unlikely