

Marketing Messaging and Its Effects on People's Perception of
Injury in Impact Sports

by

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Marketing messaging can be very influential over attitudes and behaviors and has the power to sway attitudes positively or negatively. It is standard to accept that marketing is a force used to call consumers to action, usually by spending money for a product or service. The impact of marketing can be seen through people's thoughts and actions throughout all forms of traditional and digital marketing campaigns. However, this thesis aims to explore the extent to which marketing can persuade attitudes and behaviors that do not directly impact purchasing decisions.

This thesis will explore various advertisements that either confirm or deviate from popularly held attitudes. Specifically, I test whether showing an advertisement that highlights safety can evoke empathy from fans, even if the sport is stereotypically 'tough'. Ultimately, this thesis aims to shed light on the power that marketing messaging holds and the importance of using marketing as a tool for change, especially in the sports injury context.

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Chapter 1: Introduction

Marketing is a powerful tool typically used to persuade consumers purchasing decisions. However, marketing can also be used, intentionally or not, to create social change. As an example of positive change, Dove launched a campaign in 2013 that aimed to shed light on how harsh women can be on themselves.¹ The campaign involved women describing themselves while an FBI trained forensic artist drew a portrait of them. Next, a complete stranger was asked to describe the same woman to the forensic artist to see how the descriptions would differ.² Dove created a film that depicted the women's reactions to the stranger's portrayal. The goal of the campaign was to inspire women around the world who do not recognize their own beauty. The campaign was wildly successful, with more than 50 million people viewing the film in the first 12 days.³ Another example of positive social change came in 2018 when Greenpeace created a plastic waste campaign by circulating pictures of a "dead whale" on a beach with its mouth filled with plastic.⁴ This served as a wake-up call and created a shock factor for the public, opening many people's eyes to the detrimental effects of plastic pollution in the ocean.⁵ This marketing tactic by Greenpeace would later contribute to the push to eradicate plastic straws.

However, marketing can also have negative consequences. Marketing has been blamed for a host of negative attitudes and behaviors, a lot of which are seen in

¹ Dove, January 27, 2021.

² *Ibid.*

³ *Ibid.*

⁴ Beavon, October 31, 2019

⁵ *Ibid.*

teenagers and young adults. For example, vaping has become a big issue for teenagers and young adults in America, and that is largely due to the fact that the vaping companies target youth with flavors such as cotton candy and gummi bear.⁶ Vape companies also offer scholarships, host concerts, and have large social media presences, all of which contribute to marketing to teenagers and young adults.⁷ For better or worse, marketing messages impact consumer attitudes on many issues.

Fortunately, consumers' attitudes can sometimes create change in organizations. In 2015, Barbie manufacturer, Mattel, decided to drop their idea of "SeaWorld Trainer Barbie" after backlash from consumers.⁸ Their spokesperson stated that a number of reasons went into this decision, however, the announcement came very shortly after consumers' concerns about SeaWorld and their treatment of animals were growing rapidly.⁹ This change came about because of popular demand by consumers and proved that consumers often have more power over a corporation than the corporation lets on. One context where a change of consumer mindset is much needed is how organizations, such as the NFL, deal with player injuries. Ray Easterling played in the National Football League for seven seasons. About a decade after his retirement, he was diagnosed with dementia and depression and ultimately committed suicide in 2012.¹⁰ The autopsy report showed that he suffered from chronic traumatic encephalopathy, commonly referred to as CTE. CTE is defined as a progressive brain injury and has

⁶ Truth Initiative, August 9, 2019.

⁷ *Ibid.*

⁸ Popkin, April 24, 2015.

⁹ *Ibid.*

¹⁰ Tierney, July 27, 2012.

been linked to repeated blows to the head. The medical examiner determined that CTE was a major underlying condition that accounted for Easterling's suicide. His widow explained that she had suspected her husband suffered from CTE and it was likely due to multiple concussions that were "undiagnosed, ignored, or too lightly treated by the team".¹¹ As a result, a class-action lawsuit was filed by Ray Easterling's widow along with thousands of other plaintiffs who wanted to hold the NFL accountable for players suffering from lasting head injuries. In the wake of these tragedies, important questions remain. Is there a way to reduce the likelihood of football players suffering from CTE? Was there something that could have been done that would have saved Ray Easterling and countless other players from taking their life? If football was not marketed as such a tough sport, would trainers, corporations, coaches, and fans have different attitudes about safety measures and protocols?

In recent years, efforts have been made to make football slightly safer. For example, a penalty was put in place for targeting, which aims to deter players in leading with their head to make a tackle. However, these safety measures were met with backlash from coaches, players, and fans. NFL athletes, such as Richard Sherman and Andrew Sandejo expressed frustration over the increased safety measures the National Football League put in place.¹² The coach of the San Francisco 49ers stated, "it is a violent game, there's no doubt about it. That's why it's not for everyone."¹³ Some fans of the sport are concerned that increased safety measures will eventually shift football

¹¹ *Ibid.*

¹² Beaton, August 6, 2018.

¹³ *Ibid.*

into a completely different sport than the one it is today. These fans have current attitudes and beliefs about football, centering around its “toughness”, likely because of the marketing messaging they have received throughout their lifetime. Humans are hard-wired to resist change and are often more resistant to change when what is changing has been constant for a long period of time.¹⁴

In the wake of these tragedies, important questions remain. Is there a way to reduce the likelihood of football players suffering from CTE? If football was not marketed as such a tough sport, would trainers, corporations, coaches, and fans have different attitudes about safety measures and protocols? Changing consumer’s minds is very important in facilitating change because consumers can have a lot of influence over corporations and social issues. Is marketing powerful enough to change consumers’ attitudes, and therefore push corporations, about a core feature of a sport? In this thesis, I am addressing exactly that question of if and how we can change consumer attitudes about a pertinent feature of a sport.

¹⁴ Kanter, September 25, 2012.

Chapter 2: Literature Review

Attitudes Towards Injuries in Sports Have a Direct Impact

There are numerous reasons that injuries in sports can be detrimental. Aside from the actual injury itself, lasting effects can often be brought on as well. Many of these are due to the lack of treatment of the injury.¹⁵ There are a variety of reasons for this, however one of the most prominent is related to concussions. Because concussions are not always obvious, athletes, coaches, and parents sometimes fail to notice the injury, or are able to hide it. Sometimes athletes do not want to leave a game or miss future games and therefore conceal their injury. This can have lasting negative effects. A study examined 167 high school athletes to see their behavior, intentions, and attitudes about reporting concussions.¹⁶ Researchers noted that attitude, subjective norms, and direct perceived behavioral control were all linked with the participants' intention to report an injury.¹⁷ The study found that positive attitudes and social referents' beliefs have the biggest impact on the intention to report injury. It stated that initiatives for concussion education should focus on improving attitudes and beliefs among the athletes, trainers, coaches, parents, and other people who are around athletes most. It is clear that many athletes become opposed to reporting injuries, namely concussions, from a young age for various reasons. However, it is not only teenagers who struggle to report various injuries.

¹⁵ Tierney, July 27, 2012.

¹⁶ Register-Mihalik, et. al., June 19, 2013.

¹⁷ *Ibid.*

Aside from getting players to understand the importance of reporting injury, it is also important to educate consumers on safety as well. This would help destigmatize reporting injury because consumer's accepting different safety measure as important would allow them to be popular and even seen as necessary.¹⁸ Studies have shown that consumers require communication about health-benefits of various safety options but are usually hesitant because they don't want safety to be at the expense of enjoying the game. In cycling and skiing, the use of personal protection equipment is very limited even though it has been marketed via social-marketing and targeting specific consumers. However, these efforts have not been effective because they are primarily education-based informational campaigns. Consumers reported viewing these as boring and often stop paying attention or avoid the advertisement altogether.¹⁹ The research calls for the need to transform sports injury prevention information into mainstream marketing campaigns, so consumers not only understand the importance of safety, but also want to use personal protection equipment. As will be discussed later on, marketing can also be useful in combating misconceptions about various safety measures and equipment. By utilizing marketing effectively, attitudes, such as those surrounding a resistance to safety equipment, could be shifted to create a safer environment for athletes and consumers.

¹⁸ Doust, et. al.

¹⁹ *Ibid.*

Examples of Effective Attitude Change

As discussed in the introduction, changing consumers' attitudes toward a core feature of a brand is likely to be difficult. It is especially difficult for people with strong attitudes toward that brand, such as those who are very brand loyal.²⁰ The Elaboration Likelihood Model of persuasion argues that attitudes often lead to favorable evaluations of messages that are closer to a person's beliefs and unfavorable evaluations of messages that are different from one's beliefs. This suggests that the stronger the attitude, the more likely someone would reject opposing information, or have counterarguments, simply because they don't support that message.²¹ Strong attitudes can even influence the extent to which one will think about the message. Studies show that if someone strongly disagrees with a message, they will likely not even process it entirely, as they would if it was information they did agree with. This resistance often has little to do with the merit of the information and is instead heavily focused on a reluctance to consider a counter-attitudinal position.²² This research provides some explanation for difficulties in changing consumer's minds about a brand that they are very fond of. Furthermore, understanding why this resistance occurs is imperative for marketers in their efforts to persuade consumers.

Understanding the psychological mechanisms as to why some people are so resistant to changing their attitudes, especially when looking at evidence that directly contradicts their current beliefs, is important for many reasons. Those reasons include a

²⁰ Petty and Krosnick, 2014.

²¹ *Ibid.*

²² *Ibid.*

theoretical standpoint in understanding persuasion and tailoring marketing campaigns aimed to help the public.²³ The expectancy-value approach characterizes a few mechanisms that are thought to obstruct message persuasiveness. First is biased assimilation. This is the idea that the extent to which an audience accepts a message is linked to whether they agree with it. Secondly, minimization of impact is when individuals displaying strong attitudes simply isolate the effects of an opposing message and do not let it fully interfere with their viewpoint.²⁴ This is a fairly common characteristic for those with strong attitudes and appears to be quite effective when faced with information that is difficult to dispute. Lastly, attribute weighting is often seen in individuals with strong attitudes.²⁵ Exposure to a new message might make someone question their current stance on a matter. To combat this, those with strong attitudes may minimize the weight of a message to increase their comfort with their own beliefs. This has been demonstrated when individuals could not deny opposing information, so they instead deem the information less important than that which supports their views. Clearly, many reasons exist for why consumers are slow to change the way they think about a core feature of a brand, product, sport, etc.

However, research has also shown that attitudes can change little by little when enough inconsistent information is given. This is evidenced by researching stereotypes. Four studies were conducted to determine how stereotypes could be changed. Stereotypes are often assumed to be change-resistant, however a study conducted at

²³ Ahluwalia, September 2000.

²⁴ *Ibid.*

²⁵ *Ibid.*

Northwestern University suggests that they are responsive to new information.²⁶ They discussed the bookkeeping model of stereotype change, which includes changing attitudes about a specific group of people by consistently using small amounts of information inconsistent with their current beliefs to modify existing stereotypes. This model predicts that change in attitudes and beliefs are an incremental process that can be strongly linked to increased amounts of disconfirming evidence.²⁷ The results of the experiments showed that stereotype changed more when inconsistent information was dispersed across many group members. This is likely due to the fact that the more group members that were involved, the more instances there were for stereotypes to be disconfirmed.²⁸ This study shows promising evidence that even those with the strongest attitudes toward a subject can be persuaded through effective use of information that combats those beliefs.

Social marketing can also be helpful in changing attitudes. Persuading the public to make a change, or rather enticing them to make a change, has been shown to be effective. Researchers at a Colorado ski resort put together a public relations campaign at a national and local level to highlight the dangers of not wearing a helmet.²⁹ This alone is a powerful form of marketing because fear is very good at inciting change and getting people to listen. Previously, people did not consider helmets to be necessary because they were not included in a standard ski package and they were not widely accepted from a social standpoint. The Colorado ski resort paired their intense

²⁶ Weber and Crocker, April 11, 1983.

²⁷ *Ibid.*

²⁸ *Ibid.*

²⁹ Newton et al., May 2012.

marketing campaign with a injury prevention program that reduced the cost, fiscally and socially, of helmets.³⁰ They gave free loaner helmets with every standard ski and snowboarding package. They utilized the aforementioned public relations campaign and they also segmented their target market to specifically target snowboard and ski instructors as well by giving them free helmets.³¹ This is a powerful tool as well because targeting opinion leaders is a very useful form of persuasion. They knew instructors could influence others' opinions. If the public saw people that they looked up to wearing a helmet, it increased the chance that they will want to wear one too.

The results of this injury prevention program showed that the intervention was successful. Those who included a helmet in their ski or snowboard standard package answered in surveys that they would continue to wear helmets.³² This study is evidence that marketing, specifically social marketing, can play a very important role in influencing people's attitudes to safety measures. If something is brought to light to be dangerous and steps are taken to conduct change, either physically or socially, attitudes and behaviors can be changed as well. Therefore, marketing a sport as tough or safe can likely sway opinions about injuries. Bringing to light some of the often-ignored ideas about injuries and using social marketing to help combat the social stigma of safety measures, could help in swaying attitudes and behaviors in a positive way.

³⁰ *Ibid.*

³¹ *Ibid.*

³² *Ibid.*

Expected Impact of Safety Messaging

The literature review has outlined the power of marketing, the strong attitudes toward injuries in sports, and examples of effective attitude change through marketing. It outlined the need for changing attitudes revolving around injuries in sports, and different marketing tactics to achieve that change.

Given what was previously discussed about effective attitude change, if consumers are given a marketing message about safety rather than toughness, it should lead them to be more sensitive to things that have to do with safety, such as an injury. This is because the inconsistent information will be able to begin shifting the attitudes about the core feature of the sport (toughness). Therefore, I expect that when consumers are given an advertisement that discusses safety, they will be more empathetic to injury than if they see the toughness-centered advertisement.

Chapter 3: Empirical Investigations

Experiment 1A

All experiments aimed to measure compassion levels in fans when they saw various print advertisements. In Experiments 1A and 1B, there were two versions of advertisements that participants could see. One depicted a football player running with a football and included the words “Built Stronger, Faster, Safer” (See Figure 1). The other advertisement had the exact same photo and said, “Built Stronger, Faster, Tougher” (See Figure 2). Lastly, the bottom of each advertisement read “Built for the NFL.” Participants were randomly split into two groups and saw one of the advertisements. Both groups then watched a video of Marcus Mariota getting sacked (i.e. potentially injured) and answered questions aimed to capture their level of compassion for the player who was hit. The study concluded with demographic questions for both groups to answer.

The results of this study were far from statistically significant. This is likely the result of strong attitudes towards the National Football League. This franchise is very well known in the United States of America and it is likely that this experiment was not successful because the US is where the experiment was conducted. It is also unlikely that one advertisement would be able to sway attitudes when the NFL has already created a strong image with very persistent beliefs. Due to this setback, this study was reformed using a different professional American Football League that is less popular, the XFL. The exact same measures were taken in both studies, but are described more completely in Experiment 1B, as that experiment yielded more promising results.

Experiment 1B

The XFL was chosen because it is a lesser-known professional American Football League. Therefore, it is more likely that the two advertisements pertaining to this league could sway opinions. Experiment 1B involved the exact same procedure, with the same two advertisements. The only difference was that the “NFL” was replaced with “XFL.” Findings from this experiment were indicative that attitudes about the XFL are not as strong and have the potential to be swayed by one advertisement.

When people saw the safer advertisement, they appeared to have more empathy than those who saw the tougher advertisement. Participants rated the player got hit too hard ($M = 3.98$) more often than those who saw the tougher ad ($M = 3.62$; $t(n-1) = 1.342$, $p = 0.182$) (See Table 1). Additionally, when people saw the safer ad, they felt more compassion for the player who was hit ($M = 4.38$) than participants who saw the tougher ad ($M = 3.84$; $t(n-1) = 1.714$, $p = 0.089$) (See Table 1). Participants who saw the safer ad scored higher in feeling sorry for the player ($M = 3.95$; $t(n-1) = 1.622$, $p = 0.107$) ($M = 3.43$) (Table 1). Additionally, those who saw the tougher ad felt the player should expect to be hit ($M = 6.38$) more than those who saw the safer ad ($M = 6.18$; $t(n-1) = -0.723$, $p = 0.471$) (See Table 1). However, participants who saw the tougher ad thought the player should be better protected ($M = 4.72$; $t(n-1) = -0.478$, $p = 0.633$) (See Table 1) and rated the advertisement as better ($M = 4.83$) (Table 1) than those who saw the safer ad ($M = 4.59$; $t(n-1) = -0.526$, $p = 0.6$) (See Table 1).

When using gender as a covariate, the results of the experiment change. Those who saw the safer ad seem to believe that the player should expect to get hit more ($M = 3.34$) than those who saw the tougher ad ($M = 3.16$; $t(n-1) = 0.559$, $p = 0.557$) (See

Table 2). However, the differences are not significant. When not covariaing for gender, both the safer and tougher advertisements have means above 6.0 (See Table 1). When including the covariate for gender, both means are below 3.5 (See Table 2). This could suggest that a disparity in scores is due to which gender sees what ad. Additionally, the differences in compassion approached being statistically significant ($p = 0.062$) when gender is a covariate.

This experiment helped provide a window into the validity of my hypothesis. The results showed a trend toward empathy when participants saw the safer advertisement versus the tougher advertisement.

Experiment 2

The reason for conducting this study was to see if attitudes could be swayed in other high impact sports as well. Therefore, this experiment was very similar to the above experiments. The component of having one advertisement depict an aspect of safety while another advertisement depicts an aspect of toughness remained constant. The first advertisement showed gymnast Gabby Douglas mid-routine wearing KT Tape with the slogan “Train Longer. Finish Tougher” (See Figure 6). The second advertisement was the exact same with the slogan “Train Longer. Finish Safer” (See Figure 5).

Study 2 showed some interesting results. The respondents that saw the advertisement labeled “tougher” scored higher on questions aimed to capture their level of compassion for the injured athlete. The most drastic difference was when the data were split by gender. Men who saw the tougher advertisement responded that they had

more compassion ($M = 5.54$; $t(n-1) = -1.399$, $p = 0.166$) for the athlete than men who saw the safer advertisement ($M = 5.1$) (See Table 3). This is the opposite of my hypothesis as I thought the safer advertisement would elicit a more compassionate response. This trend is seen in every male response and half of the female responses. Additionally, when looking at the data as a whole without categorizing participants into any groups, all but two responses follow this same pattern. Those two responses are also far from statistically significant. One of the questions asking about necessary safety measures in the sport of gymnastics ($p = 0.995$) (See Table 4). The other was depicting the participants' familiarity with gymnastics ($p = 0.821$) (See Table 4).

One possible explanation for the results from Experiment 2 was that the advertisements appeared to be unclear. Participants may have been interpreting the tougher advertisement as the athlete having more strength from the KT Tape and therefore avoiding injury. In this case, that is actually the thought process that should have been evoked by the safer advertisement. It is reasonable to believe, then, that the safer advertisement may not have been clear. Participants could have questioned how the KT Tape made participants safer. This is evidenced by the manipulation check in which participants who saw the tougher advertisement thought gymnastics was a safer sport ($M = 4.77$; $t(n-1) = -1.641$, $p = 0.103$) as opposed to those who saw the safer advertisement ($M = 4.45$) (See Table 4). In conclusion, Experiment 2 gave results that would support the hypothesis, even though they were not shown in the way that was originally intended.

Chapter 4: Discussion

This study was very important to me because I wanted to show the power of marketing and how it can be useful in creating change. I also wanted to bring attention to how powerful marketing is to highlight how important it is for marketers to do their job in an ethical, responsible way. For the simplicity of this paper, I solely focused on athletics. However, I believe this is something that should be discussed in all aspects of marketing. I believe both consumers and marketers should be aware of the impacts and implications of marketing.

Based on the literature review, and my experiment results, it appears that repetition is very important in making noticeable changes in attitudes. My experiments might have been more successful had I tested attitudes over a period of time with multiple advertisements. Unfortunately, due to time constraints, this was not possible.

Future Direction

If I were to do this experiment again, I would have found a way to test the same participants multiple times with various advertisements for football and gymnastics. I would then be able to see if attitudes changed, and possibly look into other aspects of the experiments as well. This might allow me to extend my research further. I hope the future direction for this thesis is informative and helpful. I believe there is a lot more research to be done about safety in sports and how to balance that with the excitement that the contact in high impact sports brings. My hope was also to inspire those working

in marketing to use their knowledge for good. Marketing can be very influential in creating positive change and this thesis provided some evidence for that.

Figures

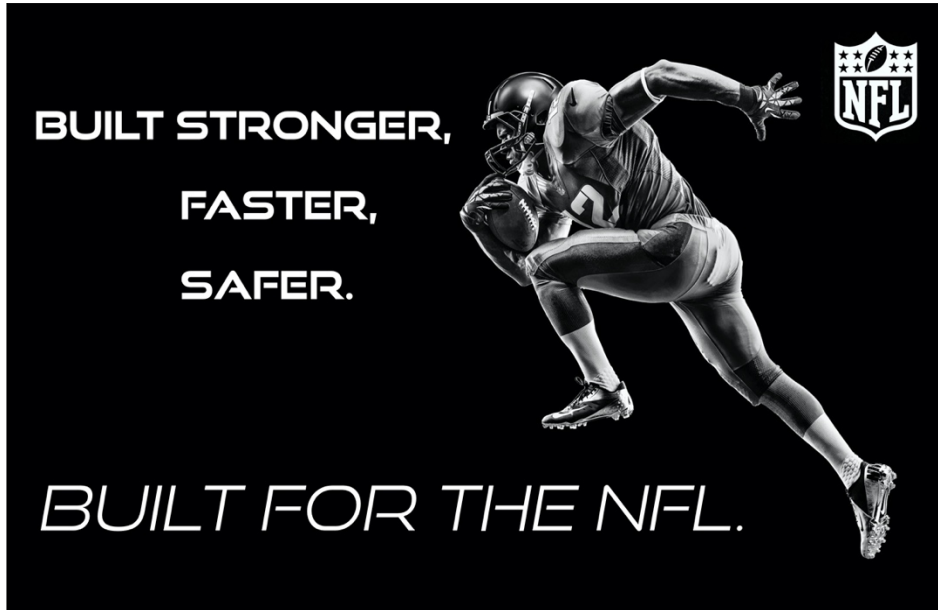


Figure 1: Experiment 1A- Print Advertisement, NFL “Safer”

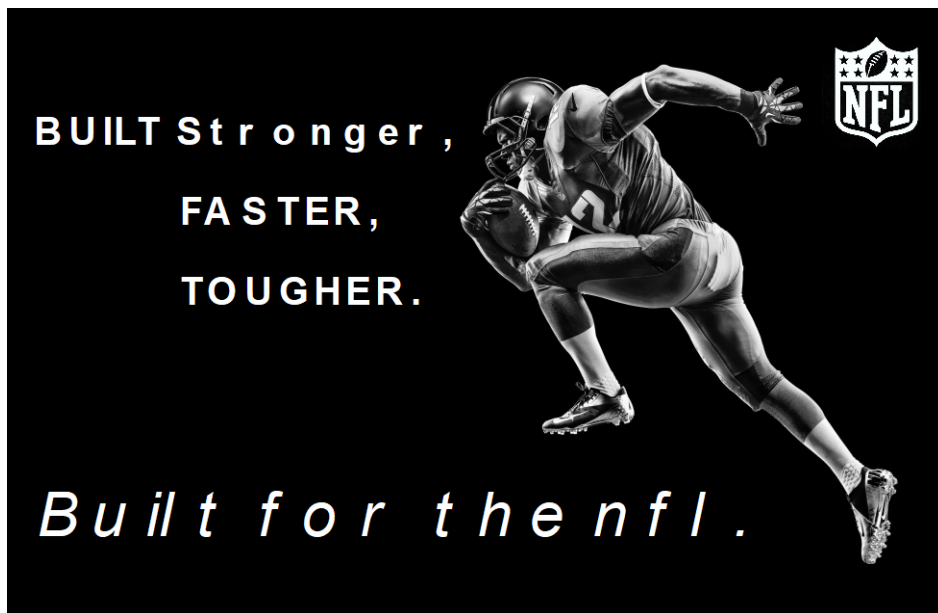


Figure 2: Experiment 1A-Print Advertisement, NFL “Tougher”



Figure 3: Experiment 1B- Print Advertisement, XFL “Safer”



Figure 4: Experiment 1B- Print Advertisement, XFL “Tougher”



Figure 5: Experiment 2- Print Advertisement, KT Tape “Safer”



Figure 6: Experiment 2- Print Advertisement, KT Tape “Tougher”

Tables

Variable	Safer Mean	Tougher Mean	Test Statistic (t)	P-Value
Expect	6.18	6.38	-0.723	0.471
Too Hard	3.98	3.62	1.342	0.182
Compassion	4.38	3.84	1.714	0.089
Sorry	3.95	3.43	1.622	0.107
Protected	4.59	4.72	-0.478	0.633
Good Advertisement	4.51	4.83	-1.384	0.168
Familiar	3.34	3.16	0.573	0.568

Table 1: Experiment 1B- Difference in Safer and Tougher Advertisements

Variable	Safer Mean	Tougher Mean	Test Statistic (t)	P-Value
Expect	3.34	3.16	0.559	0.557
Too Hard	3.97	3.62	1.613	0.109
Compassion	4.37	3.84	1.882	0.062
Sorry	3.94	3.43	1.817	0.071
Protected	4.58	4.72	-0.545	0.587
Good Advertisement	4.51	4.83	-1.352	0.179
Familiar	3.34	3.16	0.230	0.818

Experiment 1B: Difference in Safer and Tougher Advertisements Covariate Gender

Variable	Safer Mean	Tougher Mean	Test-Statistic	P-value
Expect	3.68	4.2	-1.334	0.186
Too Hard	3.55	4.02	-1.243	0.217
Compassion	5.1	5.54	-1.399	0.166
Sorry	4.75	5.05	-0.850	0.398
Safety Measure	3.88	4.22	-0.799	0.427
Good Advertisement	4.95	5.34	-1.337	0.185
Familiarity	3.93	4.17	-0.671	0.504

Figure 3: Experiment 2- Difference in Safer and Tougher Advertisement, Covariate Male

Variable	Safer Mean	Tougher Mean	T-statistic	P-value
Expect	3.93	3.93	-0.003	0.998
Too Hard	3.8	3.82	-0.05	0.960
Compassion	5.44	5.81	-1.922	0.056
Sorry	5.1	5.54	-1.968	0.05
Safety Measure	4.16	4.16	0.007	0.995
Good Advertisement	5.07	5.13	-0.297	0.767
Familiarity	4.11	4.06	0.226	0.821
“Safe” sport	4.45	4.77	-1.641	0.103
“Tough” sport	5.51	5.59	-0.392	0.695

Figure 4: Experiment 2- Differences in Safer and Tougher Advertisements

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