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ALTA GRACIA
FINAL REPORT

I. Introduction

To say that the apparel industry is booming is an understatement. Fifty years ago, Americans spent 6% of their income on clothing, and the average woman owned 9 outfits.[1] Today, these figures are 4% and over 30, respectively, and nearly 130 tons of clothing are disposed of annually[2]. The advent of the Internet has enabled the rise of "fast fashion", bolstering clothing consumption and disposal and pushing entire developing economies to focus on producing high volumes of clothing quickly and cheaply at a significant human cost. The apparel factory collapse at Rana Plaza, the use of child laborers in Nike's supply chain, the Armani factory's water pollution in China: all of these exemplify the ugly realities of the cost-sensitive, high-consumption clothing industry.

Any consumer business is faced with tradeoffs when it comes to determining the cost of production, especially for new, cash-strapped companies dependent on minimizing expenses to make it through the breakeven period. Six year-old Alta Gracia Apparel, the first "living wage" clothing manufacturer, seeks to shift the apparel trend away from low-cost, exploitative manufacturing and toward sustainable, fair labor production. However, as sustainability-oriented differentiation plays a substantial role for Alta Gracia's growth and expansion, Alta Gracia must understand the implications of the following questions:

1. Does a sustainability-oriented marketing strategy resonate with apparel consumers?

2. If so, what are the messaging elements this advertising should contain in order to engage the audience and differentiate the the company from its industry competitors?

Our team from MIT Sloan has created and deployed a hypothesis-driven test that gauges the target market's relative interest in social sustainability for clothing. This paper will lay out our problem statement and context, explain the methodology used to collect data, share the results and analyses from the data, identify limitations and potential future applications of the study, and synthesize the key findings for Alta Gracia as well as for other apparel companies with a sustainability-oriented mission.

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[1] Johnson, Emma. "The Real Cost of Your Shopping Habits". *Forbes*, 15 January 2015.
The United States Bureau of Labor Statistics, Office of Publications & Special Studies. "100 Years of Customer Spending." Last revised in August 2006.
[2] Cline, Elizabeth. "Where Does Discarded Clothing Go?" *The Atlantic*, 18 July 2015.
[3] Living Wage Action Coalition Website. "Campus Living Wage Resources: What's a Living Wage?". *Living Wage Action Coalition staff*, 2016. <http://www.livingwageaction.org/resources_lw.htm>.

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II. Project Context and Problem Statement

Established as a spin-off from Knight's Apparel, Alta Gracia was founded in 2010 on the premise of "life changing apparel". Today, Alta Gracia remains as the only apparel company in the developing world that has received an independent certification for paying its factory workers a true "living wage". According to the the Living Wage Action Coalition, a living wage is defined as a wage that "affords the earner and her or his family the most basic costs of living without need for government support or poverty programs[3]." In the Dominican Republic, where Alta Gracia's sole factory is located with 150 employees, a living wage is roughly $18,000: this is over three times the minimum wage and twice the industry average pay. In addition, Alta Gracia ensures a healthy work environment for its employees, the right to a union, and treatment with the utmost dignity and respect.

Prior research on the apparel industry suggests that sustainability messages resonate with certain segments of the market. For example, a field experiment conducted by Jens Hainmueller and Michael Hiscox on Gap, Inc. using 419 retail stores and 155 outlet stores revealed that labels about anti-pollution measures in denim jeans factories had a significantly positive effect on female shoppers in retail stores, equating to an 8% increase in sales.[3] Further research by Hiscox, Hainmueller, and Sequeira showed that coffee sales in a major U.S. grocery store chain grew by nearly 10% when the coffee was labeled as Fair Trade. The researchers concluded that consumers do prefer ethically certified products, such as coffee with a Fair Trade label, but there is a segment of shoppers who will not pay a large premium for the label.[4] Moreover, Hiscox, Broukhim, Litwin, and Woloski provide new evidence on consumer behavior through field experiments conducted through eBay, observing that buyers paid 45% more for ethically labeled shirts than those that paid for unlabeled shirts. The labels in this experiment contained information about certified fair labor standards in polo-shirt factories.[5] Finally, Niklas Egels-Zanden and Niklas Hansson indicated that transparency from apparel companies increases customers' willingness to buy.[6] Our project will add to this research by assessing whether Alta Gracia's target customers react to its labor-focused value proposition, and whether there is a specific type of message that engages customers more than others.

We narrowed the scope of our project after first identifying four challenges that are inhibiting Alta Gracia's growth and success:

Challenge 1: Alta Gracia products are not universally available (i.e., they are only offered in a limited number of collegiate bookstores and do not yet have an online store).
Challenge 2: Competitors are making similar (but less credible) claims.

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[3] Hainmueller, Jens and Michael J. Hiscox. Field Experimental Tests of Consumer Support for Environmentalism. Harvard University, revised 2015.
[4] Hiscox, Michael, et al. Consumer Demand for the Fair Trade Label: Evidence from a Field Experiment, April 2011
[5] Hiscox, Michael, et al. Consumer Demand for Fair Labor Standards: Evidence from a Field Experiment on eBay, 2011.
[6] Niklas Egels-Zanden, Niklas Hansson: Supply Chain Transparency as a Consumer or Corporate Tool: The Case of Nudie Jeans Co.

Challenge 3: Alta Gracia only differentiates itself on labor rights.
Challenge 4: Customers may not respond to the mission, and/or prefer other messages unrelated to the mission.

Challenges 1, 2, and 3 have already been addressed by Alta Gracia's work with Georgetown's McDonough School of Business and Michigan's Ross School of Business. Through this research, Alta Gracia was able to assess the company's competitive landscape, identify a target market, and design a marketing strategy, accordingly. Now, Alta Gracia is focused on determining the effectiveness of this strategy by perfecting the brand's message and its delivery.

Thus far, the company has been unable to test how the value of its social sustainability story translates into its potential customers' responses or purchases. This is partially due to similar stories claimed by competitors who, in reality, pale in comparison to the working conditions Alta Gracia provides to its employees. Our project therefore focuses on the following problem statement:

Alta Gracia must identify which types of messages motivate apparel customers, and if it can leverage its fair labor standards value proposition to influence customer interest.

IV. Research methodology and approach

Our research preparation consisted of three steps: developing sustainability messages to test, identifying the optimal means to test consumer attraction to these messages, and aligning on the metrics necessary to evaluate message success. These processes are discussed below.

1. Developing the Messages:

Recognizing the importance of standardizing the ad messages so that the results could be accurately compared with minimal bias, we consulted with MIT Sloan professors Karen Zheng and Dean Eckles to develop our messages. Combining Professor Zheng's expertise in behavioral and informational dynamics in supply chains and Professor Eckles' experience conducting large field experiments in social sciences and behavior, we crafted the following messages to test:

Control Message:
Athlete Quality. Student Style. Life Changing Apparel.
Alta Gracia is the premier athletic apparel manufacturer. Learn more!

Sustainability Message 1 - Living Wage Treatment:
Alta Gracia pays its factory worker enough to cover 100% of their basic needs.
When you buy Alta Gracia apparel, you are helping factory workers in the Dominican Republic support their families. Learn more!

Sustainability Message 2 - Competitor Treatment:

Alta Gracia pays its factory workers 2 times the industry average.

When you buy Alta Gracia apparel, you are helping factory workers in the Dominican Republic support their families. Learn more!

We worked closely with the Alta Gracia marketing team to develop the ad creatives that incorporated these messages. The bolded font in each message above was purposefully bolded in the ads, representing the most important components of each message, as shown in Appendix 1. We also considered the implications of each message's potential popularity:

Control Message:

The purpose of the control message is to compare consumer interests in aspects of apparel unrelated to sustainability. If the control message outperformed the treatment messages, we would infer that Alta Gracia's target market is more interested in the aesthetics of the apparel than in the process by which it was made. If this is the case, we may recommend that Alta Gracia continue to maintain its "living wage" business model, but focus on marketing the quality and style of the apparel. As Alta Gracia grows its business and expands its brand recognition, the company could reevaluate its marketing strategy if it makes sense to align with its social mission in the long-term.

Sustainability / Treatment Messages:

The Living Wage message introduces Alta Gracia's adherence to high labor standards, with no reference to competitors or industry standards. This treatment message intends to evoke a feeling of pure altruism, connecting to consumers with similar values. The intent is for a consumer to read the Living Wage message and want to purchase Alta Gracia clothing immediately, without considering opportunity cost or alternatives. By contrast, the Competitor message compares Alta Gracia to the industry average, providing viewers with a benchmark with which to compare Alta Gracia. While we were careful not to point fingers at any specific brands, this message portrays Alta Gracia as the apparel company with the *best* labor standards relative to its competitors. If a consumer buys Alta Gracia's competitor's apparel, this message implicitly implies that he or she is supporting unfair labor standards. The outperformance of one of these messages would help us recommend one of two marketing strategies to the Alta Gracia marketing team, using the living wage benefit or the industry comparison in its messaging.

2. Testing the Messages:

In determining how to test these messages, there were three primary factors we decided were most critical to producing credible results: a sufficient sample size, clear indication of interest, and the ability to measure and compare results with granularity. These criteria led us to run a Facebook ad campaign.

At first, we considered testing these messages in university bookstores, as this would allow us to assess purchase behavior and correlate the effectiveness of these messages to actual sales dollars. However, our time constraint (a 1-2 week testing period) posed a great concern that we would not see a high enough purchase volume of Alta Gracia apparel to make any credible conclusions.

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As Facebook has 1.23 billion monthly active users (MAU), and potentially high click-through rates (CTRs) with targeted audiences, we believed launching a Facebook ad campaign would allow us to achieve a targeted, yet sufficient, sample size of ad clicks.

Our experiment also needed to clearly capture the effectiveness of each message. Alta Gracia had already invested in a branding strategy based on its aforementioned competitive advantage, so it was important for us to be able to show whether people actually cared about this competitive advantage. Google advertisements and other forms of online advertising were either less intuitive or more difficult to capture the interests of Alta Gracia's potential customer base versus Facebook. Testing the messages through Facebook ads allowed us to target Alta Gracia's potential customers and measure their interests with one simple, yet powerful metric – the CTR.

Lastly, it was crucial for our experiment to provide unbiased, detailed insights on results drawn from each message. Another limitation inherent in an in-store experiment was the inability to test the ads both in front of the exact same audience and during the same time period. Online advertising allowed us to eliminate these variances, as we ran the campaign for all three ads simultaneously in front of the exact same audience. Additionally, Facebook analytics allowed us to gather certain demographic data that was important in developing a deeper understanding of the types of consumers drawn to each message.

A note on our advertisement audience:

Our approach in narrowing our target audience on Facebook was twofold: first, as mentioned above, we needed to ensure we could obtain a statistically significant sample size and second, we wanted to utilize the market research conducted by McDonough and Ross to most accurately target Alta Gracia's potential customers.

Prior research indicates that Alta Gracia's highest value customers are students, their parents, and their grandparents, so we filtered our audience according to this criteria. Specifically, we limited the audience to all students, parents, and grandparents identified in the Demographic section. Applying this filter exposed our ads to a total target audience of 134 million (See Appendix 2 for details).

Facebook's algorithm estimated that running our three ads in front of a potential audience of 134 million for 15 days, and with a lifetime budget of $1,500, would result in at least 80,000 impressions per ad. Assuming a conservative CTR of 0.02% per ad[7], we determined that this figure would yield a sufficient sample size of clicks. To further maximize CTR, we selected time slots we believed this audience would be most active on Facebook, showing our ads during lunchtime (12:00PM to 3:00PM) and in the evening (5:00PM to 11:00PM).

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[7] Estimate based on Salesforce Social report: "The Facebook Ads Benchmark Report." Social.com, 2013.

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3. Measuring Message Effectiveness:

We had the option of paying for our ads based on one of two metrics, cost per impression (CPM), which represents the number of time each ad is displayed, or cost per click (CPC). In order to maximize the value of our advertising dollars spent, we determined that using CPC would give us the widest reach and highest sample size of clicks. Additionally, the number of clicks most directly correlates to what we were trying to accomplish: gauging the level of interest in each ad.

If we had chosen to pay via CPM, Facebook would optimize number of impressions rather than focus on achieving the most clicks, which our experiment was highly dependent on. By contrast, selecting to pay using CPC caused Facebook to bid on each click, ensuring our campaign would remain active until some floor number of clicks was realized. This complemented the main objective of our experiment, which aimed to establish and compare the impact of each of our three ads within a market segmentation.

In terms of measuring results once the campaign was paid for, we found that the CTR was the most effective metric for determining both absolute and relative impact of each message. CTR measures the level of engagement the audience has with each ad. From a technical standpoint, this metric is expressed as a percentage and represents the number of clicks an ad receives per the number of times it is displayed.

Further, the CTR allows us to differentiate the impact each ad has individually achieved relative to the others. For example, if our *Control* message yielded a higher CTR than one of our *Sustainability* messages, this would imply that, independently of how many times each message was displayed in relation to the other two, the *Control* message fostered a higher level of interest within our targeted Facebook audience. Honing in on this metric was therefore critical to extracting insights and comparing results.

In conversations with Dean Eckles, who has worked at Facebook as a data scientist and has a background in conducting social science experiments, we were able to gain insight into how Facebook maximizes revenues and valuates clicks, further justifying our decision to use CTR as our primary measure of interest. In choosing a lifetime budget based on CPC, Facebook extracts the highest value out of that budget using the following formula:

$$E[Revenue] = E[CTR] * CPC + Organic\ Bid$$

Expected CTR is an estimated click-through rate based on Facebook's adaptive regression model, so the rate changes as the campaign runs and Facebook's model adapts to the incoming data. $E[CTR]$ is therefore a proxy for the level of interest provoked by each ad.

Facebook also maximizes CPC by comparing our campaign to other ads running simultaneously and adapting its value based on ad performance. This way, as Eckles put it, "not all clicks are valued the same, but ranked" according to the above formula. For example, if someone else's ad was achieving "more valuable" clicks and had a higher budget, this ad would likely get a more

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valuable impression slot than our ad because Facebook predicts it would continue to yield better results. Additionally, CPC declines as the ad campaign runs and Facebook learns about how our audience responds to our ads and can better target the impressions. As such, our CPC for our highest performing ad (*Sustainability Message 2 - Competitor*) started at 25 cents and dropped to close to 10 cents by the end of the campaign.

The Organic Bid is another dynamic metric that allows Facebook ads to compete similarly to how a second price auction works. Due to Facebook's privacy policies, this variable is less transparent as we are not able to see the user profile data that informs the bid. However, the general concept is that we pay slightly less than the value Facebook allocates to the impression slot, which is determined based on the formula above.

The ambiguity around the Organic Bid is part of the reason we were unable to analyze the data at the user level. Our decision to have Facebook randomize its impressions shown to the audience, combined with Facebook's protection of user information, prevented us from tracing responses to individual Facebook profiles. As such, this limited our ability to analyze the results, which is further discussed in the next section.

V. Hypotheses and Results

Our Facebook advertising campaign was designed to provide a data-driven answer to the question, "What types of sustainability messages, if any, do apparel customers best respond to?" Our approach enabled us to execute an objective experiment, where any results – whether they validated Alta Gracia's intended branding strategy or not – would have strong implications for sustainability messaging in general and Alta Gracia's marketing efforts in particular. The hypotheses, results, and implications of our test are discussed below.

1. Hypotheses

Before initiating the Facebook ad campaign, we aligned on two primary hypotheses to test. The first involves the overall reaction to our three messages. Research shows that sentiments of guilt and altruistic pride drive attraction to sustainable products.[8] Additionally, the Facebook ad campaign solely entices viewers to click to learn more, which is a low risk and low expenditure call-to-action. Based on this research and our test environment, we believed that the Treatment messages would have a higher click-through rate than the Control message. Therefore, our first hypothesis was as follows:

H1: Customers will show a preference for sustainability messaging. Click-through rates will be substantially higher for both of the Treatment messages than for the Control message.

In terms of relative message strength, we believed that the relative benchmarking in the second sustainability message would be stronger than the "altruism" driver in the first absolute message.

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[8] Antonetti, Paolo and Stan Maklan. "Exploring Postconsumption Guilt and Pride in the Context of Sustainability". *Psychology & Marketing*, Volume 31, Issue 9, September 2014.

According to literature, when it comes to fashion, evoking guilt - through relative benchmarking, in our case - tends to be a more pervasive purchase factor than altruism or concern for the common good.[9] Furthermore, the trend of recent news stories on labor abuses in apparel factories has been to focus on shaming and incriminating offending companies rather than profiling worker needs and lifestyles. Therefore, we believed that the *Sustainability Message 2 - Competitor Treatment* message would be the most compelling message out of all three, which corresponds to our second hypothesis:

H2: Customers will react most strongly to the Competition Treatment message. Click-through rates will be highest for the Competition Treatment message.

Finally, there was the possibility that no message would prevail, and we would not be able to discern whether sustainability messaging or general brand messaging was more appealing to customers. In this case, we would be compelled to conclude that customer interest in fair labor apparel is no more powerful than interest in quality and brand.

2. Results

Our ads ran for a total of 15 days, garnering a sum of 12,745 clicks with a weighted average click-through rate[10] of 1.35% (well above average for the typical Facebook external page advertisement, which has a CTR of 0.02%)[11]. One of our hypotheses were validated by the data:

- H1: One sustainability Treatment message outperformed the Control message by three times, with a click-through rate of 2.38% versus the Control's CTR of 0.91%. The CTR for the other Treatment message was not substantially different than the Control's CTR. See Appendix 3 for details.
- H2: The Competition Treatment message had the highest click-through rate at 2.38%, indicating its relative attractiveness to viewers; by contrast, the Living Wage Treatment message had a click-through rate of only 0.72%. Interestingly, the Control message had the highest proportion of "likes" and "shares", although these numbers were small and inconclusive. See Appendix 3 for details.

The data indicate that sustainability messages are appealing to potential customers, particularly in terms of how Alta Gracia's labor standards compare to other industry players. The demographic breakdown of clicks paints an even more interesting picture. As Exhibit 1 shows, for the Competition Treatment message, there is a large gap in click-through rates between older and younger viewers: CTRs were between 2.55% and 2.71% for individuals under the age of 35, and dropped to only 1.5% at age 55. This is Alta Gracia's current target age group, comprising college students, graduate students, and recent tertiary graduates. Click-through rates were nearly the same across the board for the Living Wage Treatment message, however, hovering within

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[9] Joy, Annamma et al. "Fast Fashion, Sustainability, and the Ethical Appeal of Luxury Brands". *Fashion Theory*, Volume 16, Issue 3, 2002.

[10] The CTR is averaged based on total impressions and weighted by the number of times each individual was shown each message.

[11] Salesforce Social. "The Facebook Ads Benchmark Report." Social.com, 2013.

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.006% of the average CTR for every age group except 65+. The Control message also showed a slight CTR uptick for younger consumers compared to other groups.

Exhibit 1: Click-Through Rates By Age Group
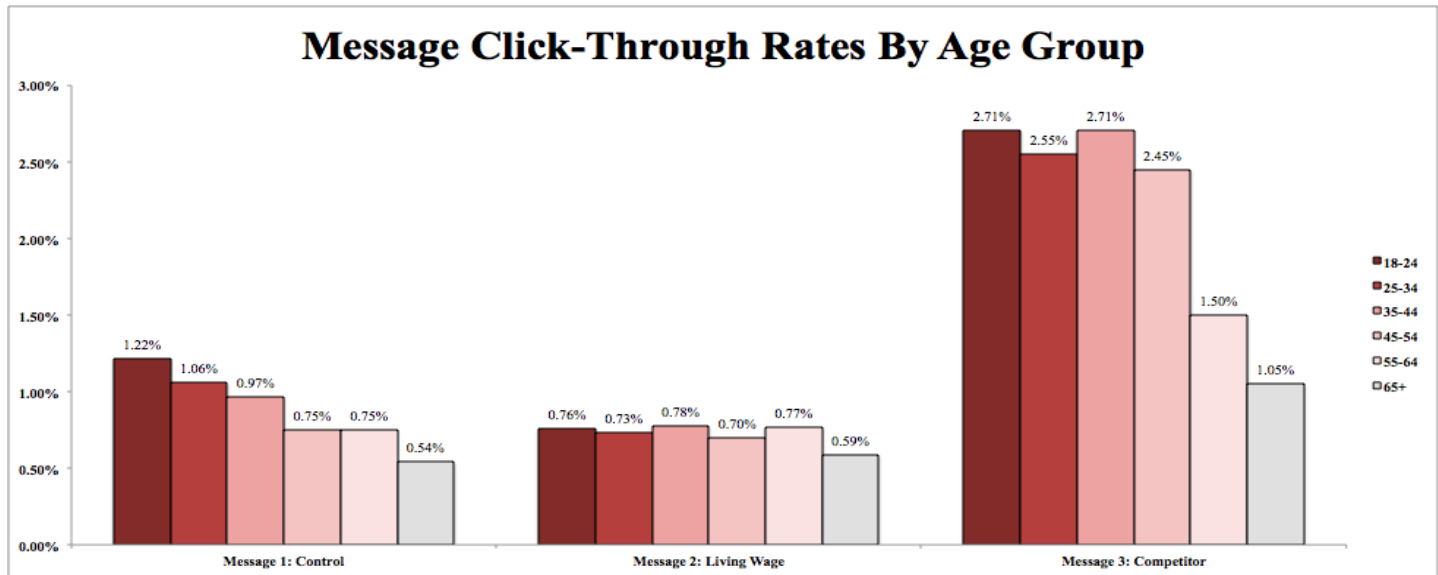
Cost per clicks for each age group represent the inverse trend of CTRs. This is consistent with Facebook's typical advertising algorithm: the more popular ads are with a certain age group, the less each ad costs to reach these individuals.[12]

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[12] Note that cost per click represents a combination of two trends: the popularity of the message with a given audience (which brings down the cost), and the difficulty and/or valuation of that particular audience (which brings up the cost). In our campaign, the audience was fairly flexible given the 134M reach, so cost per click was unlikely to be the latter challenge.

Exhibit 2: Cost Per Click By Age Group
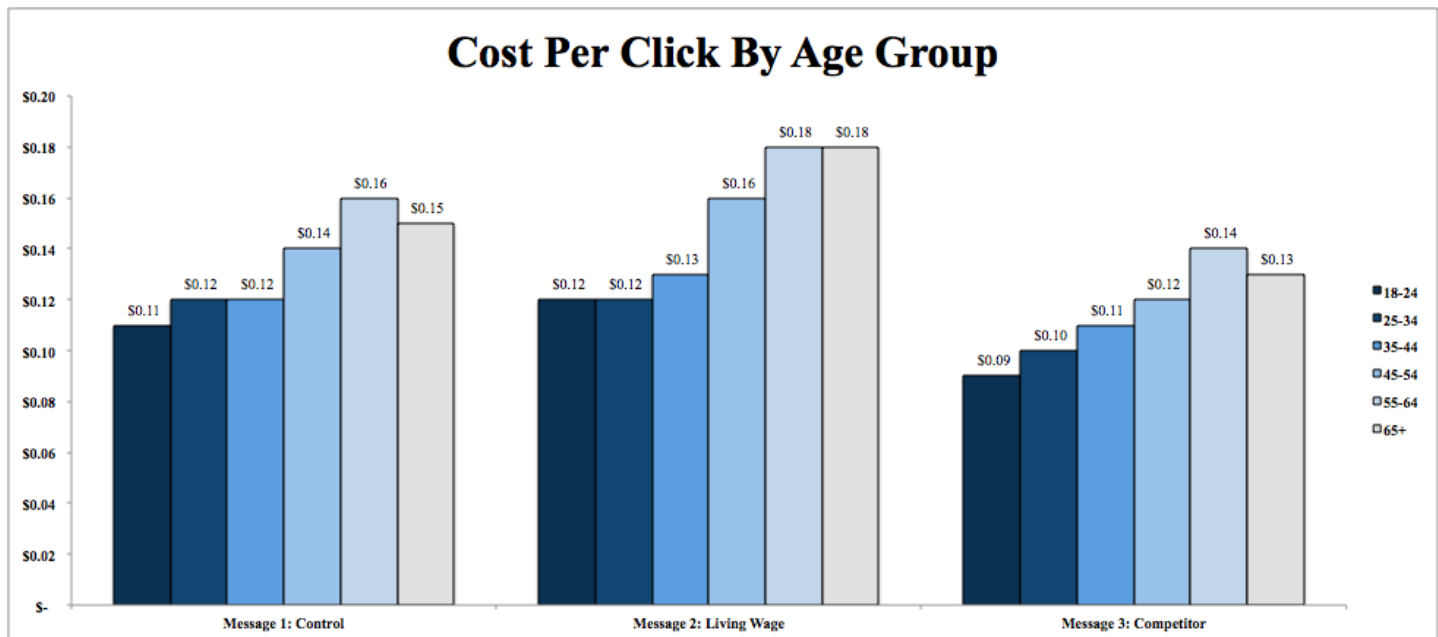
Similarly, as Exhibit 3 shows, the Competition Treatment message resonated especially strongly with females (2.51% CTR, versus 2.22% for males), whereas the gender split was fairly even for the Living Wage Treatment message and slightly biased toward male engagement for the Control message. We hypothesize that this is because females spend 33% of family income on clothing each year (versus 18% for men), and are therefore more likely to be brand-loyal[13], whereas men are more open to brand switching. The cost per clicks for gender also followed the anticipated trends.

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[13] United States Bureau of Labor Statistics. "Spotlight on Statistics: Fashion." June 2012.

Exhibit 3: Click-Through Rates By Gender

Message Click-Through Rates By Gender
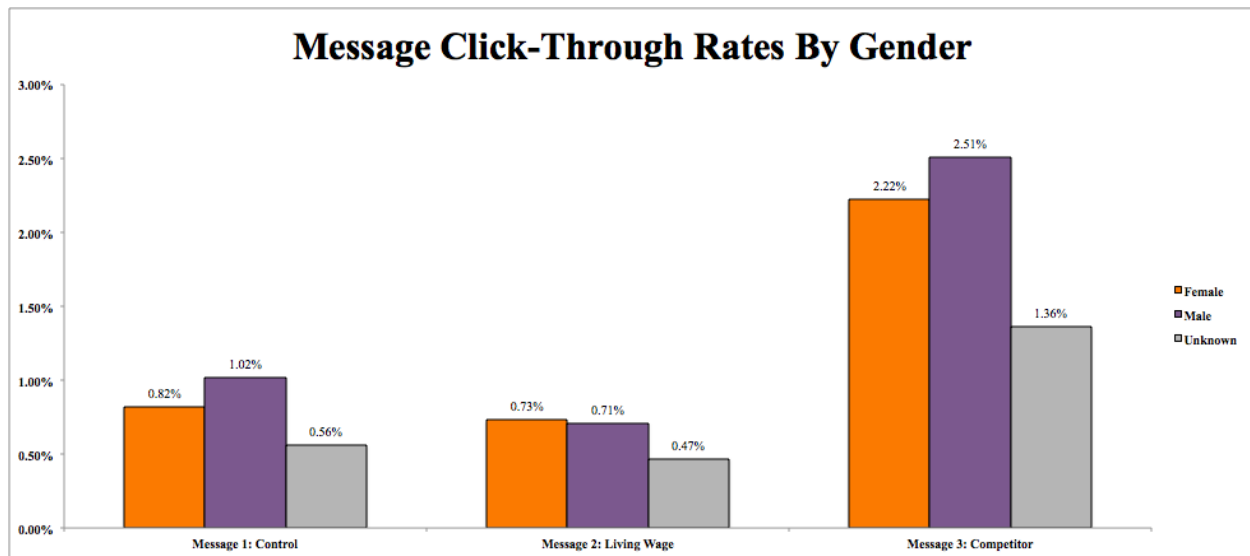
The table in Appendix 3 includes additional details on the demographic breakdown. Appendix 4 shows click-through rates by region; as can be seen, there is no discernible distinction in regional preference for particular messages. To protect user privacy, Facebook does not provide further details on user demographics or habits, or any individual-level results.

3. Implications

Simply put, our research indicates that potential customers are concerned about labor rights for apparel. This is great news for Alta Gracia, a company that has undertaken significant investment in its factory employees but that has also not yet seen customer followership. The relative popularity of our test messages, both in general and among certain population segments, may suggest that:

- Potential customers are more attracted to a "snazzy" sustainability message than a generic brand claim (about quality or style, for example)
- Alta Gracia's target customers – those most likely to purchase collegiate apparel – are especially drawn to messaging that shows how Alta Gracia outperforms its competitors in the labor space
- Even a brief (and relatively low-cost) ad campaign on Facebook can drive significant awareness of the Alta Gracia brand and relative value proposition

Our experiment has additional implications for similar research efforts. Namely, it is possible to run a credible Facebook ad campaign in a relatively tight timeline, and digital ads are an effective way to get a snapshot of customer interest and reaction. However, there are several limitations to the quality and scope of conclusions that can be garnered from this type of experiment.

VI. Project limitations and applicability for future experiments

Given the time restraint for this engagement, the results from our experiment are imperfect. In particular, there were three limitations that are worth noting: our inability to correlate message effectiveness with purchases, our restriction of testing only three messages, and limitations inherent in the scope of data available.

Our first challenge with choosing to run a digital ad campaign was that because Alta Gracia does not yet have an online store, we could not test purchase behavior. While CTR served as a good metric for indicating interest in the brand, it did not provide evidence of whether the person clicking the ad would have actually gone through the process of buying an item, thereby making it difficult for us to project each message's effect on potential sales.

The results are also limited due to our decision to only test three messages (one control and two treatment). The responses we received may not reflect the results we would get if we tested different sustainability-related messages, including an environmental sustainability message, so our analysis is only applicable to our narrow set of messages.

Another restraint involved limited scope of available data. First, we were unable to determine what specifically drove people to click the ad - Was it the way the message was worded or where the impression was located that mattered more? Did the inclusion of numbers matter? Did 'Learn more!' increase the probability of a click? - these are not questions we were able to answer based on the way this experiment was designed. We were also limited in terms of our recommendations for targeting future marketing efforts due to Facebook's privacy policies that prevent advertisers from extracting user-level data.

These limitations could be remedied, however, and used to improve future experiments for Alta Gracia or other companies. With more time and a willingness to test more messages related to Alta Gracia's "living wage" competitive advantage, the repeated use of Facebook ads could provide rich, valuable evidence for the type of message that could maximize Alta Gracia's profits. This, combined with the company's existing efforts to launch an online store and allow for conversion testing, could make our experiment a springboard for a future series of interconnected Facebook tools that Alta Gracia could continuously use to iterate and test its marketing strategy.

VII. Conclusion

If asked directly, nearly every apparel customer would likely agree that labor rights, environmentally friendly manufacturing practices, and safe workspaces are important. However, in an industry where price and brand are paramount, it is unclear how much customers are actually willing to listen to their moral compass. Enter Alta Gracia Apparel, the developing world's first "living wage" clothing manufacturer. While Alta Gracia's steep investment in living wages and labor rights for its factory workers should hardly be revolutionary, it is regrettably

absent in nearly every other apparel company. Yet, Alta Gracia has barely caught the attention of its target market for collegiate apparel.

Our experiment demonstrated that Alta Gracia's target market is interested in living wage apparel, particularly as it relates to competitor behavior. Using the click-through rate as our key analytical metric, we saw that over half of total clicks went to the *Sustainability Message 2- Competition Treatment*, yielding a CTR of 2.38%, and that the majority of these clicks came from a population between the ages of 18 and 34. This is an important finding for Alta Gracia: competitive and labor sustainability messaging resonates with the company's target market of college students and recent graduates.

We also learned that a generic brand claim (in our case, an ad that makes reference to apparel quality and style) has very limited impact within the general audience. In fact, both the *Control Message* and the *Sustainability Message 1- Living Wage Treatment* messages had much lower popularity in general and among individuals between 18 to 34 years old (see Exhibit 1). While the *Sustainability Message 2- Competition Treatment* earned 70% of its clicks from this population, the *Sustainability Message 1- Living Wage Treatment* earned merely 40%. It can be inferred from these results that people react more to a reference to industry standards, which provides the context they need to judge the performance of a particular brand in terms of labor sustainability.

Going forward, Alta Gracia should anchor its messaging on actual data that indicates its investment in fair labor relative to competition. Further, improved Facebook ad testing would help highlight the specific messages that would be most effective, as well as the target populations for each. Additionally, a purchase conversion experiment - either in-store or through the forthcoming Alta Gracia ready-to-buy website - would clarify whether interest translates into actual purchases. Regardless, as the apparel industry moves toward an emphasis on cheaper, more disposable clothing, companies like Alta Gracia will be increasingly necessary to sustain human development and labor rights. We applaud Alta Gracia for their devotion to changing the unfair game for apparel employees in the developing world, and we are proud to be able to deliver results that imply that their potential customers do, too.

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Appendices

Appendix 1: Messages used in campaign

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Appendix 2: Audience targeted on FB

Appendix 3: Summary of Ad Results

	Ad 1: Control	Ad 2: Living Wage Treatment	Ad 3: Competition Treatment
Total impressions	282,180	351,014	330,491
Total clicks	2,495	2,467	7,784
Effective click-through rate	0.91%	0.72%	2.38%
Facebook "likes"	36	20	21
Facebook "shares"	6	6	3
Frequency (average times an individual sees ad)	2.12	2.06	1.70
Total cost	$325.92	$361.60	$812.38
Effective cost per click	$0.13	$0.14	$0.10

Appendix 4: Click-Through Rates By Region

%	Ad 1: Control	Ad 2: Living Wage Treatment	Ad 3: Competition Treatment
East	0.59	0.63	1.74
West	0.71	0.66	2.11
South	1.08	0.94	2.96
Midwest	0.81	0.62	2.04
Southeast	1.15	0.74	2.58
Southwest	1.01	0.71	2.08

Categorization of states by region

Region	States
East	Connecticut, Delaware, Maine, Massachusetts, New Hampshire, New Jersey, New York, Ohio, Pennsylvania, Rhode Island, Vermont
West	Alaska, California, Colorado, Hawaii, Idaho, Montana, Nebraska, North Dakota, Oregon, South Dakota, Washington, Wyoming
South	Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, South Carolina, Tennessee
Midwest	Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Oklahoma, Wisconsin
Southeast	District of Columbia, Maryland, North Carolina, Virginia, West Virginia
Southwest	Arizona, Nevada, New Mexico, Texas, Utah