

WEB APPENDIX

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WEB APPENDIX A

STUDY ON THE INCIDENCE OF UNFAIR NEGATIVE HOTEL REVIEWS ON TRIPADVISOR

We ran this study to measure the prevalence of unfair negative reviews using a random sample of hotel reviews taken from a major online review website. Specifically, we scraped data from TripAdvisor to create a dataset covering Chicago, Hong Kong, London, Los Angeles, Paris, and Singapore. We studied the top 10 hotels in each “city” according to TripAdvisor’s default rank (which is based on several aspects, including rating, price, and freshness). We selected one thousand 1- or 2-star reviews from all reviews of the sixty hotels described above.

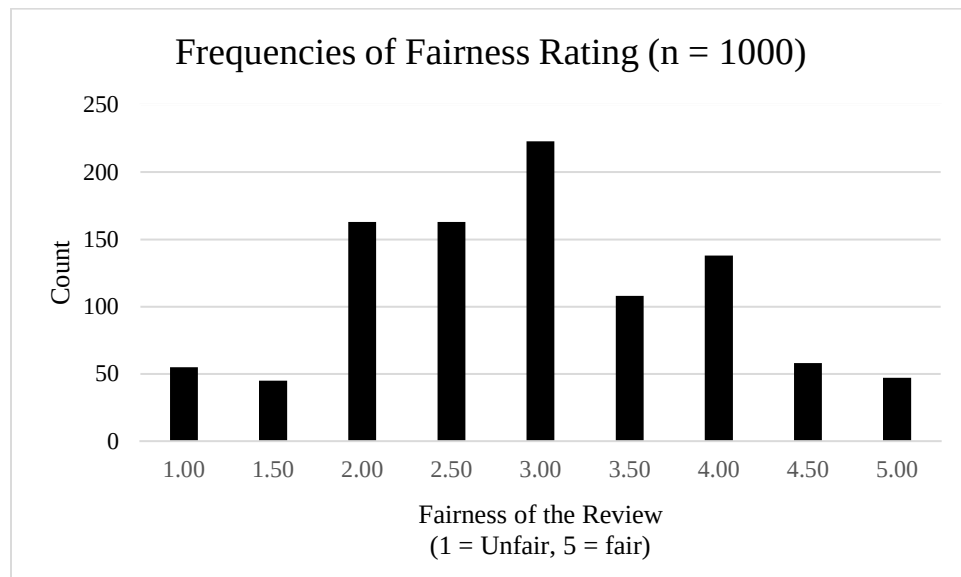
For each review, we also collected information about the total number of prior reviews generated by each reviewer, the number of prior hotel reviews generated by the user, the number of “helpful” votes received at the time of scraping, the purpose of the trip (e.g., business, family, couple), and the number of words in the review and its title.

Coding instructions

Two research assistants unaware of our hypothesis read the content of each review and rated the extent to which the ratings were fair on a 5-point scale (1 = unfair, 2 = somewhat unfair, 3 = neutral, 4 = somewhat fair, 5 = fair). These two ratings were averaged ($r = .55$) to create a fairness score. The coder also reported on a dichotomous variable (0 = no, 1 = yes) the basis for the review (un)fairness rating—that is, whether each review a) was based on unrealistic expectations about the hotel business, b) involved an element unrelated to the hotel business, c) mentioned elements that were beyond the control of the hotel, and d) was not justified by facts.

Unfairness occurrence

Results from the review coding suggest that 26.3% of the reviews in the sample obtained a fairness rating of 2 (i.e., somewhat unfair) or less, supporting the notion about the fairly common occurrence of unfair negative reviews in the marketplace.



Validity checks

Next, we tested whether the fairness ratings provided by the coders correlated with the identified basis of the review and with the supplementary information associated with each review. That is, we observed that each of our bases of review unfairness negatively correlated with the fairness scores, supporting the validity of our scoring. We also observed that reviews rated as unfair tended to have shorter titles, were shorter, were associated with a lower star rating, were generated by reviewers with a shorter review history in general and fewer reviews of hotels, received fewer “helpful” votes, and contained fewer pictures, further supporting the validity of our fairness scores.

Correlation with Review Fairness Ratings (1 = unfair; 5 = fair)

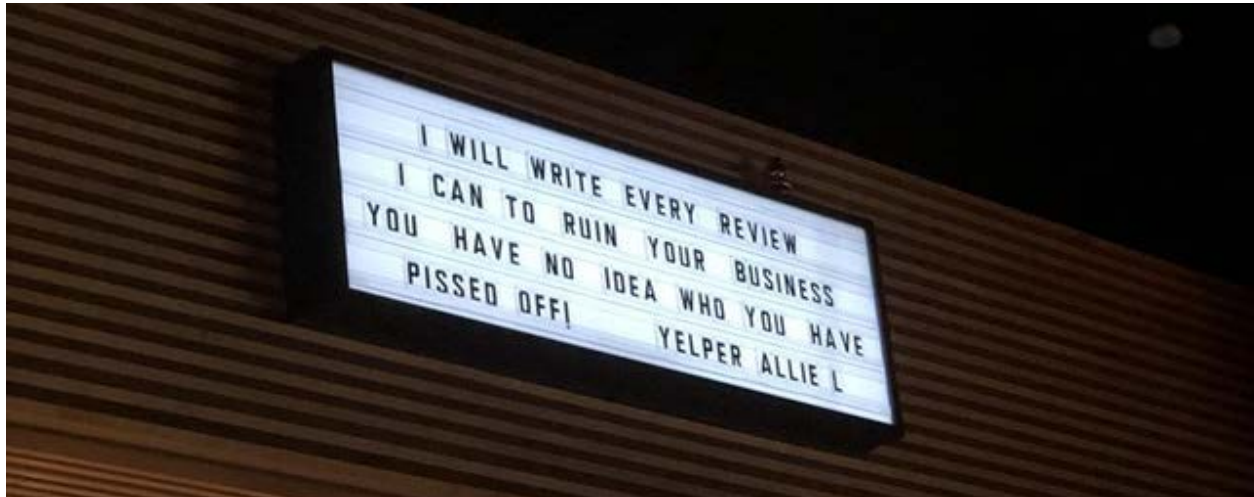
Variable	Correlation with fairness rating (<i>p</i> -value)	Mean (SD)
Basis – Unrealistic Expectations	-.09** (.004)	0.02 (0.14)
Basis – Unrelated to Hotel	-.20*** (.001)	0.11 (0.30)
Basis – External Locus of Control	-.29*** (.001)	0.22 (0.34)
Basis – Not Justified	-.67*** (.001)	0.48 (0.42)
Nb. of “Helpful” Votes Received	.13*** (.001)	0.90 (1.34)
Nb. of Photo	.07* (.025)	0.17 (0.78)
Nb. of prior Hotel Reviews	.10** (.002)	7.94 (21.25)
Nb. of prior Reviews	.07* (.040)	24.01 (60.44)
Star Rating Given	-0.08* (.011)	1.59 (0.49)
Text Length, Number of Characters	.29*** (.001)	759.52 (658.14)
Title, Number of Characters	.08*** (.001)	27.75 (15.26)

Average Fairness Rating per Trip Purpose Category

	N	Mean	Std. Dev.
Business	339	2.89	0.95
Couple	249	2.88	1.06
Family	245	3.17	1.03
Friends	67	3.09	0.94
Solo	64	2.89	0.91
Unknown	36	2.42	0.89
Total	1000	2.95	1.01

WEB APPENDIX B

EXAMPLE OF PUBLIC SHAMING OF REVIEWERS



Source:

https://www.reddit.com/r/mildlyinteresting/comments/8nxx20/this_restaurant_has_negative_reviews_displayed_up/



Source: <https://www.buzzfeed.com/arielknutson/funny-restaurant-signs>

WEB APPENDIX C

CONTRIBUTION TABLE (detailed version)

Source	Setting	Focus of Paper	Review Valence	Proposed Mechanism	Dependent Variables	Relationship Between Valence and DV	Key Findings
Ahluwalia, Burnkrant, and Unnava (2000)	Consumer Behavior: Written Product Reviews	Effect of brand commitment on the diagnosticity of negative information	Negative and Positive	Commitment to the brand moderates the information processing of negative and positive information	Study 1 & 2: 1) Cognitive Response 2) Brand Attitude 3) Perceived Diagnosticity Study 3: 1) Attitude (changes post-advertisement response)	Low Commitment: NWOM → Negative Attitudes & More Diagnostic High Commitment: PWOM → More Diagnostic	Commitment to the brand moderates the negative effect of information processing. High commitment is less likely to see negative information as diagnostic and to provide more counterarguments
Arndt (1967)	Consumer Behavior: Face-to-Face WOM	Effect of WOM on new product diffusion	Negative and Positive	Favorable WOM → Faster Adoption	1) Coupon Redemption WOM Recall Content Analysis	PWOM → Increased Rate of Adoption NWOM → Decreased Rate of Adoption	WOM can influence the acceptance of a new product such that positive helps and negative hinders
Basuroy, Chatterjee, and Ravid (2003)	Quantitative: Movie Reviews	Effect of critic reviews on box office revenue	Negative and Positive	Critics act as influencers, and valence of review correlated with revenue	1) Weekly Domestic Revenue 2) Valence of Reviews 3) Star Power 2) Film Budget	PWOM → Increase Sales NWOM → Decrease Sales	NWOM hurt sales more than positive, but only in the first week. Star Power and Budget can minimize this effect.
Berger Sorensen, and Rasmussen (2010)	Quantitative Model, Book Reviews	Effect of negative reviews for established vs. unknown brands	Negative	Negative reviews for unknown brands increase consumer awareness	Study 1: 1) Book Sales Study 2: 1) Purchase Likelihood Study 3: 1) Purchase Likelihood 3) Awareness	If known brand, NWOM → lower sales and intentions. If unknown brand, NWOM → increased sales, intentions, and awareness	NWOM can increase awareness of an unknown brand, which ultimately can increase subsequent sales over time
Chen and Lurie (2013)	Consumer Behavior:	Effect of linguistic temporal cues in reviews	Negative and Positive	Temporal cues in the content of review change attribution of	Study 1: 1) Yelp Review Content Analysis	PWOM + Temporal Cues → Increased Product Attributions	Temporal cues in the content of review can overcome the negativity effect (wherein the

	Written Reviews			positive reviews from reviewer characteristics to product	Study 2a: 1) Perceived Review Value Study 2b: 1) Causal Attributions Study 3: 1) Review Value 2) Causal Attributions Study 4: 1) Choice	→ Increased Value of Review	negative review carries more weight and is seen as more diagnostic)
Chevalier and Mayzlin (2006)	Quantitative: Online Book Reviews	Effect of WOM on sales	Negative and Positive	Positive WOM increases sales	1) Sales 2) Valence of Review 3) Length of Review	PWOM → Increase Sales NWOM → Greater Weight	In general, PWOM positively related to sales, but NWOM is given more weight
Fisher, Newman and Dhar (2018)	Consumer Behavior: Online Ratings (numerical)	Effect of distribution of ratings on WTP	Ratings	Binary distribution (top-heavy vs. bottom-heavy) draws attention more than extreme ratings.	All Studies: 1) Product Valuation and purchase Intent	N/A	Consumers are more focused on the the distribution of extrem ratings than the average.
Godes and Mayzlin (2004)	Quantitative: Online WOM of TV Shows	Effect of WOM features (valence, volume, and dispersion) on ratings	NA	WOM features correlate with ratings	1) TV Ratings	WOM → Positive TV Ratings	WOM is a cost-effective way to predict future attitudes/sales
Hamilton, Vohs, and McGill (2014)	Consumer Behavior: Written Reviews	Effect of linguistic content aimed at softening negative information in reviews	Negative, Positive, and Balanced	Dispreferred markers (“I don’t want to be mean, but...” in reviews increase perceived likability and credibility of the reviewer	Study 1: 1) Reviewer rating: Likability and Credibility Study 2: 1) Reviewer rating: Likability and Credibility 2) Likelihood of Following Advice Study 3: 1) Reviewer Rating	Dispreferred markers → Increased reviewer characteristics → Increased WTP	Dispreferred markers in balanced reviews make the reviewer seem more likable and credible, which leads to subsequent WTP

					Study 4: 1) Reviewer Rating Study 5: 1) Willingness to Pay		
Herr, Kardes, and Kim (1991)	Consumer Behavior: Face-to-Face WOM and Written Reviews	Explore factors that affect the persuasiveness of WOM	Negative and Positive	Accessibility of information influences persuasiveness and judgment	Study 1: 1) Product Attitude 2) Perceived Diagnosticity Study 2: 1) Recall of Attributes Quality judgment	PWOM → Positive Evaluations (if no other diagnostic information available)	Negative information is perceived to be more diagnostic and can override the effect of WOM on information accessibility on product judgment
Houser and Wooders (2006)	Quantitative: eBay Auctions	Effect of seller vs. bidder reputation on auction sales	NA	Seller's reputation influences the decision to buy	1) Bid 2) Seller's Reputation	Seller's Positive Reputation → Increase Sales	A seller's reputation has a higher influence on sales than a bidder's. Reputation is created through online feedback.
Kupor and Tormala (2018)	Consumer Behavior: Consumer Reviews	Effect of moderately positive ratings on persuasion	Positive	Deviation from perceived default rating increases perceived thoughtfulness and accuracy of the reviewer	Study 1 A & B: 1) Behavioral Intentions 2) Purchases Study 2: 1) Perceived Accuracy 2) Behavioral Intentions Studies 3-5: 1) Perceived Thoughtfulness 2) Perceived Accuracy 3) Behavioral Intentions	Positive Reviews that deviate from default rating → Increased Behavioral Intentions	Deviation from perceived default rating in positive reviews increases persuasion.
Lacziak, DeCarlo, and Ramaswami (2001)	Consumer Behavior: Face-to-Face WOM	Attributions of negative information to the reviewer vs. the product	Negative	Attributional information changes the locus of blame in NWOM	Studies 1 & 2: 1) Causal Attributions 2) Brand Attitudes	NWOM → Neg brand attitude if attributed to the product. IF low distinctiveness, low consensus, high consistency, then attributed to the reviewer → less negative brand attitude	Attributions can cognitively shift the focus of NWOM from reasons due to the product to reasons due to the reviewer

Liu (2006)	Quantitative: Online Movie Reviews	Effect of WOM on box office revenue	Negative and Positive	Amount of WOM increases awareness, which increases sales	1) WOM on Yahoo! Movies 2) Valence 3) Volume 4) Sales	WOM (Pos or Neg) → Awareness → Sales	Amount of WOM predicts box office revenue, not necessarily valence, due to increased awareness
McGraw, Warren, and Kan (2015)	Consumer Behavior: Facebook Status Updates	Effect of humor on negative reviews	Negative and Positive	Humor is liked more by consumers but also seen as less serious	Study 1: 1) Yelp Reviews Content Analysis Study 2a & 2b: 1) Humor 2) Motivation Study 3: 1) Humor 2) Reviewer Impression 3) "Like" Intention 4) Memorability Study 4: 1) Response Priority 2) Helping Priority Study 5: 1) Sympathy Study 6: 1) Perceived Humor 2) Reviewer Impressions 5) Benign vs. Violation Appraisal	Amusement → increases the likability of complaints but decreases the priority of response and helping as well as decreases sympathetic response	Humor can change perceptions of the seriousness of negative reviews. This undermines reviews that are attempting to seek redress or sympathy but helps those used for entertainment, impression management, or raising awareness
Mizerski (1982)	Consumer Behavior: Written Reviews	Weight given to negative (vs. positive) reviews	Negative and Positive	Attribution (locus) differs depending on the valence of the review	1) Attributions (e.g., opinion drawn from reasons other than the product) 2) Beliefs 3) Attitude toward Product	NWOM → Internal Attributions → Strong neg beliefs PWOM → external attributions → weaker positive beliefs	Negative information is more generally seen as diagnostic due to internal attribution and results in stronger belief formation

Reich and Maglio (2019)	Consumer Behavior: Written Reviews	Effect of Recommendation Including an Admitted Mistake on Product Choice	Positive	Presence of a mistake in a recommendation increases perceived reviewer expertise/knowledge	Study 1: 1) Product Choice 2) Perceived Learning Study 2: 1) Product Choice 2) Perceived Knowledge Study 3 & 4: 1) Product Choice Study 5: 1) Helpfulness of Actual Reviews	Positive Review with Mistake → greater perceived reviewer expertise → greater choice	The presence of an admitted mistake of a previous purchase in a positive review positively increases product choice
Rocklage and Fazio (2020)	Consumer Behavior: Online Reviews	Effect of emotionality on positive review persuasion.	Positive	Emotionality increases surprise and mistrust of the review when the product is utilitarian.	Study 1: 1) Reviewer emotionality Study 2: 1) Reviewer evaluation Study 3: 1) Helpfulness 2) Patronage likelihood Study 4: 1) Review Surprise 2) Helpfulness 3) Trust 4) Purchase Likelihood Study 5: 1) Trust Study 6: 1) Helpfulness Study 7: 1) Choice Study 8:	Utilitarian: High Emotionality → greater surprise → review distrust → decreased choice	Emotionality is a trait of the reviewer. Positive emotionality is beneficial for hedonic products, but detrimental for utilitarian because it lowers trust in the review.

					1) Review Popularity		
Sonnier, McAlister, and Rutz (2011)	Quantitative: Online Firm Reviews	Effect of WOM on sales	Negative, Positive, and Neutral	Valence of WOM affects sales	1) Valence of WOM (Pos, Neg, Neu) 2) Sales	PWOM → Increase Sales NWOM → Decrease Sales	Valence, not just ratings of WOM, also matters when accounting for shocks to predicted sales
Sunder, Kim, and Yorkston (2019)	Quantitative: Game Ratings	Effect of Experience on Herding Behavior	N/A	Drawing influence from the crowd on game rating decreases as rater experience with game increases.	Game Ratings	N/A	Herding behavior to the crowd is most influential when the rater does not have prior experience with the game, but friend herding behavior becomes more influential.
Tang, Fang, and Wang (2014)	Quantitative: Online Firm Reviews, Movie Reviews Consumer Behavior: Online Reviews	Effect of neutral reviews on sales	Negative, Positive, Mixed Neutral, and Indifferent Neutral	Mixed-Neutral reviews increase the attention paid to both positive and negative information. The presence of mixed-neutral reviews magnifies the effect of both positive and negative reviews on sales	Study 1: 1) Valence of Review (Pos, Neg, Mixed-Neutral, Indifferent-Neutral) 2) Product Sales Study 2: 1) Valence of Review 2) Sales Study 3: 1) Motivation to Process Review 2) Purchase Likelihood	Mixed-Neutral → increased effect of positive and negative reviews on sales	Mixed-Neutral reviews motivate consumers to process all information, leading to a magnified effect of both extremely positive and negative reviews on sales. Indifferent-Neutral reviews decrease motivation to process reviews and attenuate the effect.
Zhu and Zhang (2010)	Quantitative: Online Video Game Reviews	Effect of consumer-specific and product-specific characteristics on WOM's influence on sales	NA	Game popularity and game experience affect the reliance on reviews for purchase decisions	1) Online Reviews 2) Sales	Online reviews → increased sales for popular games and for experienced internet users	Effect of WOM on sales may be moderated by characteristics of both the consumer and the product
Our Research	Consumer Behavior:	Effect of unfairness in negative reviews	Unfair Negative, Fair	Unfair negative reviews elicit empathetic concern	Pilot Study: 1) Payment Amount	Unfair Negative Reviews → Increased	Unfair negative reviews lead to higher firm

	Face-to-face and Online PWOM and NWOM		Negative, and Positive Reviews	and subsequent support behaviors toward the firm	Study 1: 1) Patronage Behavior Study 2-3 1) Patronage Intentions Study 4: 1) Purchase Intentions Web Appendix L: 1) Patronage Intentions 2) Punishment of the Reviewer	Empathy → Supportive consumer responses	support intentions and behaviors
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*WOM = Word-of-Mouth; *PWOM = Positive Word-of-Mouth; *NWOM = Negative Word-of-Mouth

WEB APPENDIX D

OPEN-ENDED RESPONSES IN PILOT STUDY

Percentage of respondents reporting reasons why the review was perceived as unfair

The product or service performed objectively better than the review indicated. (e.g., "I had eaten at the restaurant and did not have any issues.")	41.3 %
The reviewer seemed unreasonable or had high expectations. (e.g., "This individual was expecting a first-class experience" on a simple educational tour for students and families.)	32.0 %
The reviewer did not use the product/service correctly. (e.g., "I think the reviewer did not understand how to install it properly.")	25.3 %
The events were not under the firm's control. (e.g., "The product was not at fault.")	17.3 %
The review evaluates the wrong thing. (e.g., "The review was not about the quality of the movie.")	14.7 %
Negative internal attributions to the reviewer (e.g., "You could tell that this review was simply someone who has an ax to grind and will not be able to give an honest review.")	10.7 %

Percentage of Respondents Reporting Reactions to the Unfair Negative Review

Maintained or improved their original perception of the firm (e.g., "My feelings for this restaurant have not changed, and I will still remain a loyal customer.")	43.1%
Positive inclination to support or patronize the firm (e.g., "I felt even more positively toward the coffee shop. I liked it before, but the bad review made me feel defensive and even protective of it.")	34.7%

WEB APPENDIX E

STIMULI USED IN STUDY 1A – 4OCEAN STUDY

- Fair negative review

"I heard about this new company called 4ocean, which removes one pound of trash from the ocean and coastlines for every bracelet sold. Seems like a good idea. I decided to buy one.

I never received a confirmation email even though money was taken out of my account immediately. In addition, I never received the bracelets. The customer service was hard to get through to. I felt disrespected throughout the whole process.

I purchased for the cause—the whole experience sucked! Don't buy from them."

- Unfair negative review

"I heard about this new company called 4ocean, which removes one pound of trash from the ocean and coastlines for every bracelet sold. Seems like a good idea. I decided to buy one.

Even though I received a confirmation and a shipping notification – the bracelet took FOREVER to show up. For THREE full days I was waiting on my delivery!!! The customer service apologized and sent me a new one overnight as well as full refund. I felt disrespected the whole time.

I purchased for the cause—the whole experience sucked! Don't buy from them."

- Positive review

"I heard about this new company called 4ocean, which removes one pound of trash from the ocean and coastlines for every bracelet sold. Seems like a good idea. I decided to buy one.

I purchased for the cause."

WEB APPENDIX E (Con't)

MANIPULATION CHECKS USED IN STUDY 1A – 4OCEAN STUDY

The valence of the review manipulations was validated on a separate group of 93 participants drawn from Amazon MTurk, who were randomly assigned to one of the three reviews above. After reading the reviews, participants rated the valence of the review on a 7-point scale ranging from extremely negative (-3) to extremely positive (+3).

Valence. Results from a one-way ANOVA revealed a significant effect of the review condition on valence ($F(2, 90) = 27.20, p < .001$). Specifically, participants in the positive condition rated the review as significantly more positive ($M = 1.63, SD = 1.10$) than either the fair negative ($M = -1.47, SD = 1.81, t(90) = 6.88, p < .001$) or the unfair negative condition ($M = -1.00, SD = 2.21, t(90) = 5.80, p < .001$). The valence of the two negative conditions did not differ significantly ($t(90) = 1.05, p = .30$). Notably, each of those three values was also significantly different from the scale midpoint ($ps < .001$).

Overall, these results support the validity of our valence manipulation.

WEB APPENDIX E

STIMULI AND QUESTIONS FOR STUDY 1B – BOTTLE STUDY

- Fair Negative

Review for Freedom Bottleworks:

Taiga Hard Fail.

Don't do business with this company if you want things handled right!! I had a question about an order. They provide an email, so I sent them an email with a question. They did not answer for TWO WEEKS! They're awful! If you have a deadline during the typical work week, when they should definitely be working. Forget it!

- Unfair Negative

Review for Freedom Bottleworks:

Taiga Hard Fail.

Don't do business with this company if you want things handled right. I had a question about an order. They provide an email, so I sent them an email the day before Christmas. They did not answer until AFTER CHRISTMAS! They're awful! If you have a deadline during the Christmas holidays, when they definitely should be working. Forget it!

- Positive

Review for Freedom Bottleworks:

Taiga Bottle.

Consider doing business with this company if you want things handled right. I had a question about an order. They provide an email, so I sent them an email with a question. While the response wasn't immediate, they got back to me within 24 hours. If you have a deadline during the week, this company works. Good experience.



Colors Available:



STYLE TAIGA

- **The ONLY** American made 100% recycled metal bottle in the marketplace
- **Recycle and Recyclable.** Liberty Bottles are the ONLY bottle to be made from recycled materials.
- **Commitment to safety.** Liberty Bottles exceeds FDA requirements, are non-toxic and non-leaching. Independent Lab Certified to be 100% BPA FREE.
- **High Resolution Digital Printing!** Cutting edge technology. Cylindrical printers that give you graphics you can feel.

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Tweet

WEB APPENDIX E

MANIPULATION CHECKS USED IN STUDY 1B – WATER BOTTLE

The review manipulations were pretested for valence, perceived fairness, and perceived empathy using a separate group of participants drawn from Amazon MTurk ($n = 106$) who were randomly assigned to one of three reviews above. After reading the reviews, participants rated the valence of the review ($-3 / +3$; $\alpha = .85$), their fairness of the review ($1-7$; $\alpha = .98$), and their feeling of empathy for the firm ($1-9$; $\alpha = .97$) using the same items as in previous studies.

Valence. Results from a one-way ANOVA revealed a significant effect of the review condition on valence ($F(2, 102) = 304.25, p < .001$). Specifically, participants in the positive condition rated the review as significantly more positive ($M = 1.78, SD = .64$) than either the fair negative ($M = -2.49, SD = .82, t(102) = 21.48, p < .001$), or the unfair negative condition ($M = -2.44, SD = 1.02, t(102) = 21.09, p < .001$). The fair negative and unfair negative reviews were not significantly different ($t < 1$).

Review fairness. Results from a one-way ANOVA revealed a significant effect of the review condition on fairness ($F(2, 102) = 56.03, p < .001$). Participants in the unfair negative review condition rated the review as less fair ($M = 2.82, SD = 1.62$) than the fair negative review ($M = 5.01, SD = 1.30, t(102) = 7.31, p < .001$) and the positive review ($M = 5.90, SD = .66, t(102) = 10.32, p < .001$). The positive review was also seen as more fair than the fair negative review ($t(102) = 2.98, p = .004$).

Empathy for the firm. Results from a one-way ANOVA revealed a significant effect of review condition on perceived empathy ($F(2, 101) = 11.92, p < .001$). Participants in the unfair negative review condition felt significantly more empathy for the firm ($M = 5.91, SD = 2.23$) than did the fair negative review ($M = 3.35, SD = 2.26, t(102) = 4.68, p < .001$) or positive

review conditions ($M = 3.95$, $SD = 2.32$, $t(102) = 3.58$, $p < .001$). The fair negative and positive review conditions did not differ from each other ($t < 1$).

Overall, these results support the validity of our valence and fairness manipulations. In addition, the results support the proposition that unfair negative reviews naturally evoke more empathy than either the fair negative or positive reviews.

WEB APPENDIX F

STIMULI USED IN STUDY 2 – SUSHI STUDY



- Fair negative review

New sushi place. I did not enjoy the aburi style sushi. It left me feeling very hungry.

Considering what I paid (\$\$\$), you would think I wouldn't leave feeling hungry. For that reason, I would NOT recommend that place.

- Unfair negative review

New sushi place. I enjoyed the aburi style sushi. It left me feeling very full. For that reason, I would recommend that place.

However, I cannot stand that they did not have blue toro sashimi that night despite it being on their website. I had been incredibly excited to try this special sushi. The chef said that this fish was sold out due to low quantities available at the pier.

Blah, blah, blah, I don't care. I wanted blue toro that night, they should have had it. For that reason, I would NOT recommend that place.

- Highly unfair negative review

New sushi place. I enjoyed the aburi style sushi. It left me feeling very full. For that reason, I would recommend that place.

However, I cannot stand that they did not have blue toro sashimi that night despite it being on their website. I had been incredibly excited to try this special sushi. The chef said that the fish had been purchased at the pier today, but heard of consumers at other restaurants claiming to be sick and they didn't want to take any risk.

Blah, blah, blah, I don't care. Any decent chef would find a way to get the consumers what they want. I wanted blue toro that night, they should have had it. For that reason, I would NOT recommend that place.

- Positive review:

New sushi place. I enjoyed the aburi style sushi. It left me feeling very full. For that reason, I would recommend that place.

WEB APPENDIX F (Con't)

MANIPULATION CHECKS USED IN STUDY 2– SUSHI STUDY

The valence of the review manipulations was validated on a separate group of participants drawn from Amazon MTurk ($n = 132$), who were randomly assigned to one of four reviews above. After reading the reviews, participants rated the valence of the review (-3 to $+3$) and review fairness (1 to 7 , $\alpha = .96$) using the same items as in previous studies.

Valence. Results from a one-way ANOVA revealed a significant effect of the review condition on valence ($F(3, 128) = 14.90$, $p < .001$). Specifically, participants in the positive condition rated the review as significantly more positive ($M = 1.26$, $SD = 1.26$) than the fair negative ($M = -.90$, $SD = 1.94$, $t(128) = 5.41$, $p < .001$), the moderately unfair negative ($M = -.87$, $SD = 1.80$, $t(128) = 5.01$, $p < .001$), or the highly unfair negative conditions ($M = -1.22$, $SD = 1.45$, $t(128) = 5.94$, $p < .001$). The valence of the three negative conditions did not differ significantly ($ts < 1$). Notably, each of those four values was also significantly different from the scale midpoint ($ps < .01$).

Fairness. Results from a one-way ANOVA revealed a significant effect of the review condition on fairness ($F(3, 128) = 20.95$, $p < .001$). Specifically, participants in the highly unfair negative condition ($M = 2.71$, $SD = 1.48$) rated the review as less fair than the moderately unfair negative ($M = 3.53$, $SD = 1.85$, $t(128) = 2.18$, $p < .05$), the fair negative ($M = 4.89$, $SD = 1.28$, $t(128) = 6.26$, $p < .001$), and the positive review condition ($M = 5.20$, $SD = 1.16$, $t(128) = 6.78$, $p < .001$). The moderately unfair condition was also less fair than the fair negative ($t(128) = 3.87$, $p < .001$) and positive review conditions ($t(128) = 4.50$, $p < .001$). These two latter conditions were not significantly different from each other ($t < 1$).

Overall, these results support the validity of our valence and fairness manipulations.

WEB APPENDIX F (Con't)

TABLE OF ALL POSSIBLE PAIRWISE CONTRASTS IN STUDY 2 - SUSHI STUDY

	Positive	Highly unfair negative	Unfair negative	Fair negative
WTP	\$45.55 (26.08)	\$52.94 (20.58)	\$45.65 (18.66)	\$38.78 (16.69)
Contrast No.				
1. *	-1	1	0	0
2	-1	0	1	0
3. *	-1	0	0	1
4. *	0	-1	1	0
5. ***	0	-1	0	1
6. *	0	0	-1	1

Note: p-values * $\leq .05$, ** $\leq .01$, *** $\leq .001$

WEB APPENDIX F (Con't)

DETAILED MEDIATION RESULTS FOR STUDY 2 – SUSHI STUDY

Model : 4
 Y : WTP (Willingness to Pay)
 X : Review (Review type; 0 = Fair negative review; 1 = Moderately Unfair negative review; 2 = Highly Unfair negative review, 3 = Positive)
 M : Empathy (Empathy for the firm)

Covariates:
 Rude (Review rudeness)

Coding of categorical X variable for analysis:

Undes	X1	X2	X3
.000	.000	.000	.000
1.000	1.000	.000	.000
2.000	.000	1.000	.000
3.000	.000	.000	1.000

X1: Represents the difference between the fair negative and moderately unfair negative condition

X2: Represents the difference between the fair negative and highly unfair negative condition

X3: Represents the difference between the fair negative and positive condition

OUTCOME VARIABLE:

Empathy

Model Summary

R	R-sq	MSE	F	df1	df2	p
.5413	.2930	2.2935	31.8063	4.0000	307.0000	.0000

Model

	coeff	se	t	p	LLCI	ULCI
constant	2.7746	.2720	10.2023	.0000	2.2395	3.3098
X1	1.6645	.2624	6.3445	.0000	1.1483	2.1808
X2	2.0585	.2674	7.6983	.0000	1.5323	2.5847
X3	.7827	.2536	3.0857	.0022	.2836	1.2818
Rude	.2102	.0667	3.1528	.0018	.0790	.3413

OUTCOME VARIABLE:

WTP

Model Summary

R	R-sq	MSE	F	df1	df2	p
.2944	.0867	420.5235	5.8089	5.0000	306.0000	.0000

Model

	coeff	se	t	p	LLCI	ULCI
constant	33.4163	4.2614	7.8417	.0000	25.0310	41.8016
X1	3.4704	3.7783	.9185	.3591	-3.9643	10.9050
X2	9.8515	3.9548	2.4910	.0133	2.0694	17.6336
X3	5.3614	3.4874	1.5374	.1252	-1.5010	12.2238
Empathy	2.4781	.7728	3.2066	.0015	.9574	3.9988
Rude	-.9973	.9171	-1.0874	.2777	-2.8020	.8074

***** DIRECT AND INDIRECT EFFECTS OF X ON Y *****

Relative direct effects of X on Y

	Effect	se	t	p	LLCI	ULCI
X1	3.4704	3.7783	.9185	.3591	-3.9643	10.9050
X2	9.8515	3.9548	2.4910	.0133	2.0694	17.6336
X3	5.3614	3.4874	1.5374	.1252	-1.5010	12.2238

Omnibus test of direct effect of X on Y:

R2-chng	F	df1	df2	p
.0214	2.3870	3.0000	306.0000	.0691

Relative indirect effects of X on Y

Review	->	Empathy	->	WTP
	Effect	BootSE	BootLLCI	BootULCI
X1	4.1249	1.6521	1.3014	7.7363
X2	5.1012	1.9292	1.6287	9.0691
X3	1.9396	.9678	.2702	3.9997

WEB APPENDIX G

STIMULI USED IN STUDY 3 – PANINI STUDY

- Fair negative review

★ Write a Review

📷 Add Photo

🔗 Share

🔖 Save



Dzam98

Reviewed on December 12, 2019

I was at Caravan Coffee earlier on. I was very unhappy that I could not have my delicious warm mozzarella and spinach panini. The time was only 9:05 pm!!! and they close at 10 pm. It could not be warmed up because the employees were cleaning the grills. They were still open for a full 55 minutes!!! They didn't apologize, and didn't seem to care that I had to eat my panini at room temperature.

It shouldn't be my problem that the employees want to be home. So unprofessional. Terrible!!! Worst service!!! I want an apology!!!

Helpful

| Comment

| Report abuse



jerryrf

Reviewed on November 20, 2019

Good value.

- Unfair negative review

[★ Write a Review](#) [Add Photo](#) [Share](#) [Save](#)



Dzam98

Reviewed on December 12, 2019

I was at Caravan Coffee earlier on. I was very unhappy that I could not have my delicious warm mozzarella and spinach panini. The time was only 9:55 pm!!! and they close at 10 pm. It could not be warmed up because the employees were cleaning the grills. They were still open for a full 5 minutes!!! They did apologize and gave me a discount, but I had to eat my panini at room temperature.

It shouldn't be my problem that the employees need to start cleaning. So unprofessional. Terrible!!! Worst service!!! I want real compensation!!!

[Helpful](#) | [Comment](#) | [Report abuse](#)



jerryrf

Reviewed on November 20, 2019

Good value.

- Positive review

★ Write a Review

📷 Add Photo

🔗 Share

🔖 Save



Dzam98

Reviewed on December 12, 2019

I was at Caravan Coffee earlier on. I was happy that I could have my delicious warm mozzarella and spinach panini before calling it a night. The time was 9:05 pm and they close at 10 pm. Even though they were going to start closing soon, they were still open for another 55 minutes. I got the employee to warm my panning and eat it on my way home before calling it a night.

The employees were still taking customers' orders, there was no problem in getting my food. It's a good place for warm panini's.

Helpful

| Comment

| Report abuse



jerryrf

Reviewed on November 20, 2019

Good value.

WEB APPENDIX G (Cont'd)

MANIPULATION CHECKS USED IN STUDY 3 – PANINI STUDY

The review manipulations were pretested for valence, perceived fairness, and perceived empathy using a separate group of participants from Amazon MTurk ($n = 99$), who were randomly assigned to one of three reviews above. After reading the reviews, participants rated the valence of the review ($-3 / +3$; $\alpha = .85$), their perception of fairness of the review (1-7), and their feeling of empathy for the firm (1-9; $\alpha = .97$) using the same items as in previous studies.

Valence. Results from a one-way ANOVA revealed a significant effect of the review condition on valence ($F(2, 96) = 132.00, p < .001$). Specifically, participants in the positive condition rated the review as significantly more positive ($M = 1.91, SD = .79$) than either the fair negative ($M = -2.15, SD = 1.15, t(96) = 14.78, p < .001$) or the unfair negative condition ($M = -1.72, SD = 1.37, t(96) = 13.11, p < .001$). The fair negative and unfair negative reviews were not significantly different ($t(96) = 1.55, p = .12$). Notably, each of those three values were also significantly different from the scale midpoint ($ps < .01$).

Review fairness. Results from a one-way ANOVA revealed a significant effect of the review condition on fairness ($F(2, 96) = 32.09, p < .001$). Participants in the unfair negative review condition rated the review as less fair ($M = 2.87, SD = 1.85$) than the fair negative review ($M = 4.73, SD = 1.68, t(96) = 4.94, p < .001$) and the positive review ($M = 5.85, SD = .89, t(96) = 7.95, p < .001$). The positive review was also seen as more fair than the fair negative review ($t(96) = 3.00, p = .003$).

Empathy for the firm. Results from a one-way ANOVA revealed a significant effect of review condition on perceived empathy ($F(2, 96) = 13.27, p < .001$). Participants in the unfair negative review condition felt significantly more empathy for the firm ($M = 6.91, SD = 1.89$)

than did those in the fair negative review ($M = 4.25$, $SD = 2.73$, $t(96) = 4.34$, $p < .001$) or positive review conditions ($M = 4.11$, $SD = 2.67$, $t(96) = 4.61$, $p < .001$). The fair negative and positive review conditions did not differ from each other ($t < 1$).

Overall, these results support the validity of our valence and fairness manipulations. In addition, the results support the proposition that unfair negative reviews naturally evoke more empathy than either the fair negative or positive reviews.

WEB APPENDIX G (Cont'd)

TABLE OF ALL POSSIBLE PAIRWISE CONTRASTS IN STUDY 3 - BARISTA

Empathy	Reviewer Perspective			Employee Perspective			Control		
Manipulation									
Review Conditions	Unfair	Fair	Positive	Unfair	Fair	Positive	Unfair	Fair	Positive
Evaluation	3.75	3.24	6.37	4.66	3.62	6.26	4.63	3.57	6.11
	(1.66)	(1.78)	(.72)	(1.75)	(1.76)	(.93)	(1.73)	(1.68)	(1.20)
Contrast No.									
1. *	-1	1	0	0	0	0	0	0	0
2. ***	-1	0	1	0	0	0	0	0	0
3. ***	-1	0	0	1	0	0	0	0	0
4.	-1	0	0	0	1	0	0	0	0
5. ***	-1	0	0	0	0	1	0	0	0
6. ***	-1	0	0	0	0	0	1	0	0
7.	-1	0	0	0	0	0	0	1	0
8. ***	-1	0	0	0	0	0	0	0	1
9. ***	0	-1	1	0	0	0	0	0	0
10. ***	0	-1	0	1	0	0	0	0	0
11.	0	-1	0	0	1	0	0	0	0
12. ***	0	-1	0	0	0	1	0	0	0
13. ***	0	-1	0	0	0	0	1	0	0
14. ***	0	-1	0	0	0	0	0	1	0
15. ***	0	-1	0	0	0	0	0	0	1
16. ***	0	0	-1	1	0	0	0	0	0
17. ***	0	0	-1	0	1	0	0	0	0
18.	0	0	-1	0	0	1	0	0	0
19. ***	0	0	-1	0	0	0	1	0	0
20. ***	0	0	-1	0	0	0	0	1	0

21.	0	0	-1	0	0	0	0	0	1
22. ***	0	0	0	-1	1	0	0	0	0
23. ***	0	0	0	-1	0	1	0	0	0
24.	0	0	0	-1	0	0	1	0	0
25. ***	0	0	0	-1	0	0	0	1	0
26. ***	0	0	0	-1	0	0	0	0	1
27. ***	0	0	0	0	-1	1	0	0	0
28. ***	0	0	0	0	-1	0	1	0	0
29.	0	0	0	0	-1	0	0	1	0
30. ***	0	0	0	0	-1	0	0	0	1
31. ***	0	0	0	0	0	-1	1	0	0
32. ***	0	0	0	0	0	-1	0	1	0
33.	0	0	0	0	0	-1	0	0	1
34. ***	0	0	0	0	0	0	-1	1	0
35. ***	0	0	0	0	0	0	-1	0	1
36. ***	0	0	0	0	0	0	0	-1	1

Note: p-values * $\leq .05$, ** $\leq .01$, *** $\leq .001$

WEB APPENDIX H

STIMULI USED IN STUDY 4 – GARDEN TOOLS STUDY

- Fair Negative Review – Neutral Firm Response





T.J. Sanders
Local Guide · 30 reviews · 387 photos
★☆☆☆☆ a month ago

Ordered a set of garden tools and received them in good condition. The variety of options was rather limited and the products were extremely low quality. I used the tools to work in my garden this summer. Within one use, the tools were already bending and chipping. You can get something with a more rugged feel for the same price elsewhere. Bad quality!

 Like

Response from the business a month ago



If you would like to discuss your order, here's our email: sales@pacificsupply.com.



gwen ng
4 reviews · 1 photos
★★★★★ 5 months ago
Convenient location

- Unfair Negative Review –Empathetic Firm Response

 Write a review



T.J. Sanders

Local Guide · 30 reviews · 387 photos

★ ★ ★ ★ ★ a month ago

Ordered a set of garden tools and received them in good condition. The variety of options was relatively limited, but the products were high quality and have a nice rugged feel! I used the tools to work in my garden this summer, but when fall came, the store wouldn't allow me to return the tools, saying they had been used. Bad customer service!



Response from the business a month ago



Dear T.J.,

Bob Clark from Pacific Supply here. Thank you for your review and for supporting us. I'm sorry to hear that our business did not give you 100% satisfaction. I would be happy to follow up with you at bob@pacificsupply.com Please, accept our most sincere apologies.

Regards,

Bob Clark



gwen ng

4 reviews · 1 photos

★ ★ ★ ★ ★ 5 months ago

Convenient location

- Positive Review – Neutral Firm Response

 Write a review



T.J. Sanders

Local Guide · 30 reviews · 387 photos

★★★★★ a month ago

Ordered a set of garden tools and received them in good condition. The variety of options the store provided was rather limited, but the products seemed to be of fairly decent quality. I used the tools to work in my garden this summer. So far I think the tools are fine and they appeared to hold up during this first use. Decent products.



Response from the business a month ago



If you would like to discuss your order, here's our email: sales@pacificsupply.com.



gwen ng

4 reviews · 1 photos

★★★★★ 5 months ago

Convenient location

WEB APPENDIX H (Cont'd)

MANIPULATION CHECKS USED IN STUDY 4 – GARDEN TOOLS STUDY

The fairness and empathy activation of the review manipulations were validated on a separate group of 96 participants drawn from MTurk, who were randomly assigned to one of three reviews above (without brand response included). After reading the reviews, participants rated the valence of the review, the review fairness ($\alpha = .97$), and the extent to which they felt empathy for the coffee shop ($\alpha = .95$) using the same items as in previous studies.

Valence. Results from a one-way ANOVA revealed a significant effect of the review condition on valence ($F(2, 93) = 70.11, p < .001$). Specifically, participants in the positive condition rated the review as significantly more positive ($M = 1.84, SD = .88$) than either the fair negative ($M = -0.77, SD = 1.97, t(93) = 6.28, p < .001$), or the unfair negative condition ($M = -0.68, SD = 1.84, t(93) = 6.25, p < .001$). The fair negative and unfair negative reviews were not significantly different ($t < 1$). Notably, each of those three values were also significantly different from the scale midpoint (p 's $< .05$).

Review fairness. Results from a one-way ANOVA revealed a significant effect of the review condition on fairness ($F(2, 93) = 17.80, p < .001$). Specifically, participants in the unfair negative condition ($M = 3.62, SD = 2.28$) rated the review as less fair than the fair negative ($M = 5.19, SD = 1.02, t(93) = 4.00, p < .001$), and the positive review condition ($M = 5.86, SD = .94, t(93) = 5.78, p < .001$). These two latter condition were also marginally different from each other ($t(93) = 1.67, p = .10$).

Empathy for the firm. Results from a one-way ANOVA revealed a significant effect of the review condition on empathy for the firm ($F(2, 93) = 9.33, p < .001$). Specifically, participants in the unfair negative condition ($M = 7.06, SD = 1.63$) expressed more empathy than

those in the fair negative ($M = 4.94$, $SD = 2.23$, $t(93) = 3.865$, $p < .001$), and the positive review condition ($M = 5.16$, $SD = 2.61$, $t(93) = 3.54$, $p < .001$). These two latter condition were not significantly different from each other ($t < 1$).

Overall, these results support the validity of our and fairness manipulations and empathy activation.

WEB APPENDIX H (Con't)

TABLE OF ALL POSSIBLE PAIRWISE CONTRASTS IN STUDY 4 – GARDEN TOOLS
STUDY

Firm Response	Fair Negative		Unfair Negative		Positive	
	Neutral	Empathetic	Neutral	Empathetic	Neutral	Empathetic
Purchase Int.	4.13 (1.71)	5.10 (1.53)	5.90 (1.14)	6.04 (1.00)	5.48 (1.05)	6.15 (.81)
Contrast No.						
1. ***	-1	1	0	0	0	0
2. ***	-1	0	1	0	0	0
3. ***	-1	0	0	1	0	0
4. ***	-1	0	0	0	1	0
5. ***	-1	0	0	0	0	1
6. ***	0	-1	1	0	0	0
7. ***	0	-1	0	1	0	0
8. *	0	-1	0	0	1	0
9. ***	0	-1	0	0	0	1
10.	0	0	-1	1	0	0
11. *	0	0	-1	0	1	0
12.	0	0	-1	0	0	1
13. **	0	0	0	-1	1	0
14.	0	0	0	-1	0	1
15. ***	0	0	0	0	-1	1

Note: p-values * ≤ .05, ** ≤ .01, *** ≤ .001

WEB APPENDIX H (Con't)

DETAILED MEDIATION RESULTS FOR STUDY 4 – GARDEN TOOLS STUDY

Model : 7
 Y : Purcha (Purchase Intentions)
 X : Review (Review type; 0 = Unfair negative review; 1 = Fair negative review; 2 Positive)
 M : Empathy (Empathy for the firm)
 W : FirmRes (Firm Response; 0 = neutral, 1 = empathetic)

Covariates:
 Rude (Review Rudeness)

Coding of categorical X variable for analysis:

Review	X1	X2
.000	.000	.000
1.000	1.000	.000
2.000	.000	1.000

X1: Represents the difference between the unfair negative and the fair negative condition

X2: Represents the difference between the unfair negative and the positive condition

OUTCOME VARIABLE:

Empathy

Model Summary

R	R-sq	MSE	F	df1	df2	p
.6089	.3708	3.7732	58.1415	6.0000	592.0000	.0000

Model

	coeff	se	t	p	LLCI	ULCI
constant	3.9135	.3037	12.8870	.0000	3.3171	4.5099
X1	-1.1737	.2978	-3.9412	.0001	-1.7586	-.5888
X2	-1.6512	.2844	-5.8058	.0000	-2.2097	-1.0926
FirmRes	.3722	.2754	1.3515	.1771	-.1687	.9132
Int_1	1.2209	.3901	3.1296	.0018	.4547	1.9870
Int_2	.9590	.3880	2.4714	.0137	.1969	1.7211
Rude	.5411	.0451	12.0080	.0000	.4526	.6296

Product terms key:

Int_1	:	X1	x	FirmRes
Int_2	:	X2	x	FrimRes

Test(s) of highest order unconditional interaction(s):

	R2-chng	F	df1	df2	p
X*W	.0116	5.4415	2.0000	592.0000	.0046

Focal predict: Review (X)
 Mod var: FirmRes (W)

Conditional effects of the focal predictor at values of the moderator(s):

Moderator value(s):

FirmRes .0000

	Effect	se	t	p	LLCI	ULCI
X1	-1.1737	.2978	-3.9412	.0001	-1.7586	-.5888

X2	-1.6512	.2844	-5.8058	.0000	-2.2097	-1.0926
----	---------	-------	---------	-------	---------	---------

Test of equality of conditional means

F	df1	df2	p
17.2681	2.0000	592.0000	.0000

Estimated conditional means being compared:

Review	Empa
.0000	5.9676
1.0000	4.7939
2.0000	4.3165

Moderator value(s):

FirmRes 1.0000

	Effect	se	t	p	LLCI	ULCI
X1	.0471	.2961	.1592	.8736	-.5344	.6287
X2	-.6921	.2860	-2.4202	.0158	-1.2538	-.1305

Test of equality of conditional means

F	df1	df2	p
4.5232	2.0000	592.0000	.0112

Estimated conditional means being compared:

Review	Empa
.0000	6.3399
1.0000	6.3870
2.0000	5.6477

OUTCOME VARIABLE:

Purcha

Model Summary

R	R-sq	MSE	F	df1	df2	p
.5819	.3386	1.3597	76.0160	4.0000	594.0000	.0000

Model

	coeff	se	t	p	LLCI	ULCI
constant	4.2318	.1887	22.4313	.0000	3.8613	4.6024
X1	.3205	.1350	2.3741	.0179	.0554	.5857
X2	-.8214	.1284	-6.3989	.0000	-1.0735	-.5693
Empathy	.2551	.0235	10.8395	.0000	.2089	.3013
Rude	-.0053	.0300	-.1782	.8587	-.0642	.0535

***** DIRECT AND INDIRECT EFFECTS OF X ON Y *****

Relative direct effects of X on Y

	Effect	se	t	p	LLCI	ULCI
X1	.3205	.1350	2.3741	.0179	.0554	.5857
X2	-.8214	.1284	-6.3989	.0000	-1.0735	-.5693

Omnibus test of direct effect of X on Y:

R2-chng	F	df1	df2	p
.1107	49.7079	2.0000	594.0000	.0000

Relative conditional indirect effects of X on Y:

INDIRECT EFFECT:

Review -> Empa -> Purcha

	FirmRes	Effect	BootSE	BootLLCI	BootULCI
X1	.0000	-.2994	.0853	-.4768	-.1433
X1	1.0000	.0120	.0718	-.1289	.1530

Index of moderated mediation (difference between conditional indirect effects):

	Index	BootSE	BootLLCI	BootULCI
FirmRes	.3114	.1063	.1143	.5358

	FirmRes	Effect	BootSE	BootLLCI	BootULCI
X2	.0000	-.4212	.0877	-.6105	-.2633
X2	1.0000	-.1765	.0673	-.3076	-.0450

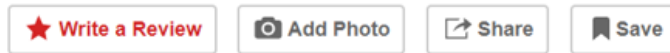
Index of moderated mediation (difference between conditional indirect effects):

	Index	BootSE	BootLLCI	BootULCI
FirmRes	.2446	.1023	.0551	.4608

WEB APPENDIX I

STIMULI USED IN STUDY 5 – BARISTA WITH EMPLOYEE SPOTLIGHT STUDY

- Fair Negative Review



D.A.N.

Reviewed on December 1, 2019

Tried Black Sheep Coffee for the first time the other day. The atmosphere was quite comfy and trendy.

The cashier was nice enough, but I was SHOCKED by the price of a simple hazelnut latte! \$7.50 for 12 oz of milk and a shot of espresso!!!

Also, when I got my drink, the syrup didn't taste like my usual hazelnut. It tasted funny.

The barista assured me it was hazelnut syrup— “Just from a different brand” she said—and proceed to tell me that if I didn't want the hazelnut, I could go pay for a different syrup at the cashier! Can you believe the rudeness???

Don't waste your time, these guys are not serious about running a coffee shop.

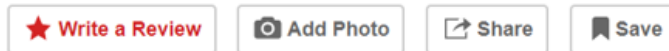


Lily

Reviewed on November 3, 2019

Cool place. Enjoy!

- Unfair Negative Review



D.A.N.

Reviewed on December 1, 2019

Tried Black Sheep Coffee for the first time the other day. The atmosphere was quite comfy and trendy.

The cashier was nice enough, but I was SHOCKED by the price of a simple hazelnut latte! \$3.50 for 12 oz of milk and a shot of espresso!!!

Also, when I got my drink, the syrup didn't taste like my usual hazelnut. It tasted funny.

The barista assured me it was hazelnut syrup—"Just from a different brand" she said—and proceeded to give me the drink for free but that didn't make things right. The customer is ALWAYS right! SHE SHOULD HAVE ALSO GIVEN ME AN APOLOGY!!!

Don't waste your time, these guys are not serious about running a coffee shop.

Helpful

| Comment

| Report abuse



Lily

Reviewed on November 3, 2019

Cool place. Enjoy!

- Positive Review

★ Write a Review

📷 Add Photo

🔗 Share

🔖 Save



D.A.N.

Reviewed on December 1, 2019

Tried Black Sheep Coffee for the first time the other day. The atmosphere was quite comfy and trendy.

The cashier was nice enough. The hazelnut latte was a little pricey, but not unreasonable. In fact, the price seemed on par with other coffee shops I've been to in the neighborhood.

Also, when I got my drink, the syrup didn't taste like my usual hazelnut. It tasted funny.

When I told the barista, she assured me it was hazelnut syrup—"Just from a different brand" she said—but she apologized that I wasn't pleased and offered to make me a new one. I told her it wasn't a big deal and not to worry.

Overall, nice interaction and pretty good coffee.

Helpful

| Comment

| Report abuse



Lily

Reviewed on November 3, 2019

Cool place. Enjoy!

WEB APPENDIX I (Cont'd)

MANIPULATION CHECKS USED IN STUDY 5 – BARISTA WITH EMPLOYEE SPOTLIGHT STUDY

The fairness and empathy activation of the review manipulations were validated on a separate group of 96 participants drawn from MTurk who were randomly assigned to one of three reviews above. After reading the reviews, participants rated the valence of the review, the review fairness ($\alpha = .98$), and the extent to which they felt empathy for the coffee shop ($\alpha = .97$) using the same items as in previous studies.

Valence. Results from a one-way ANOVA revealed a significant effect of the review condition on valence ($F(2, 93) = 37.96, p < .001$). Specifically, participants in the positive condition rated the review as significantly more positive ($M = 1.50, SD = .84$) than either the fair negative ($M = -1.25, SD = 1.70, t(93) = 6.90, p < .001$), or the unfair negative condition ($M = -1.69, SD = 1.79, t(93) = 8.23, p < .001$). The fair negative and unfair negative reviews were not significantly different ($t(93) = 1.19, p > .20$). Notably, each of those three values were also significantly different from the scale midpoint (p 's $< .001$).

Review fairness. Results from a one-way ANOVA revealed a significant effect of the review condition on fairness ($F(2, 93) = 52.26, p < .001$). Specifically, participants in the unfair negative condition ($M = 2.58, SD = 1.75$) rated the review as less fair than the fair negative ($M = 5.00, SD = 1.24, t(93) = 7.44, p < .001$), and the positive review condition ($M = 5.83, SD = .68, t(93) = 9.63, p < .001$). These two latter condition were also significantly different from each other ($t(93) = 2.39, p < .05$).

Empathy for the firm. Results from a one-way ANOVA revealed a significant effect of the review condition on empathy for the firm ($F(2, 93) = 26.15, p < .001$). Specifically, participants in the unfair negative condition ($M = 7.34, SD = 1.40$) expressed more empathy than

those in the fair negative ($M = 4.16$, $SD = 2.31$, $t(93) = 6.48$, $p < .001$), and the positive review condition ($M = 4.38$, $SD = 2.33$, $t(93) = 5.80$, $p < .001$). These two latter condition were not significantly different from each other ($t < 1$).

Overall, these results support the validity of our and fairness manipulations and empathy activation.

WEB APPENDIX I (Con't)

TABLE OF ALL POSSIBLE PAIRWISE CONTRASTS IN STUDY 5 – BARISTA WITH
EMPLOYEE SPOTLIGHT STUDY

Employee	Fair Negative		Unfair Negative		Positive	
	Absent	Present	Absent	Present	Absent	Present
Spotlight						
Voucher Value	\$4.07 (1.98)	\$5.03 (1.55)	\$5.83 (1.17)	\$6.02 (1.01)	\$5.42 (1.23)	\$6.23 (.83)
1. ***	-1	1	0	0	0	0
2. ***	-1	0	1	0	0	0
3. ***	-1	0	0	1	0	0
4. ***	-1	0	0	0	1	0
5. ***	-1	0	0	0	0	1
6. ***	0	-1	1	0	0	0
7. ***	0	-1	0	1	0	0
8. *	0	-1	0	0	1	0
9. ***	0	-1	0	0	0	1
10.	0	0	-1	1	0	0
11. *	0	0	-1	0	1	0
12. *	0	0	-1	0	0	1
13. ***	0	0	0	-1	1	0
14.	0	0	0	-1	0	1
15. ***	0	0	0	0	-1	1

Note: p-values * ≤ .05, ** ≤ .01, *** ≤ .001

WEB APPENDIX I (Con't)

DETAILED MEDIATION RESULTS FOR STUDY 5 – BARISTA WITH EMPLOYEE SPOTLIGHT STUDY

Model : 7
 Y : Voucher
 X : Review (Review type; 0 = Unfair negative review; 1 = Fair negative review; 2 = Positive)
 M : Empathy
 W : Barista (Employee Spotlight; coded as 0 = absent, 1 = present)

Coding of categorical X variable for analysis:

Review	X1	X2
.000	.000	.000
1.000	1.000	.000
2.000	.000	1.000

X1: Represents the difference between the unfair negative and the fair negative condition

X2: Represents the difference between the unfair negative and the positive condition

OUTCOME VARIABLE:

Empathy

Model Summary

R	R-sq	MSE	F	df1	df2	p
.4121	.1698	4.2231	26.0201	5.0000	636.0000	.0000

Model

	coeff	se	t	p	LLCI	ULCI
constant	6.8648	.1996	34.3925	.0000	6.4728	7.2567
X1	-2.5094	.2823	-8.8899	.0000	-3.0637	-1.9551
X2	-2.0610	.2816	-7.3186	.0000	-2.6141	-1.5080
Barista	-.1006	.2823	-.3565	.7216	-.6549	.4537
Int_1	1.1496	.3983	2.8864	.0040	.3675	1.9317
Int_2	.8443	.3974	2.1248	.0340	.0640	1.6246

Product terms key:

Int_1	:	X1	x	Barista
Int_2	:	X2	x	Barista

Test(s) of highest-order unconditional interaction(s):

	R2-chng	F	df1	df2	p
X*W	.0117	4.4678	2.0000	636.0000	.0118

Focal predict: Review (X)
 Mod var: Barista (W)

Conditional effects of the focal predictor at values of the moderator(s):

Moderator value(s):

Barista .0000

	Effect	se	t	p	LLCI	ULCI
X1	-2.5094	.2823	-8.8899	.0000	-3.0637	-1.9551
X2	-2.0610	.2816	-7.3186	.0000	-2.6141	-1.5080

Test of equality of conditional means

	F	df1	df2	p
	44.9890	2.0000	636.0000	.0000

Estimated conditional means being compared:

Review	Empathy
.0000	6.8648
1.0000	4.3553
2.0000	4.8037

Moderator value(s):

Barista 1.0000

	Effect	se	t	p	LLCI	ULCI
X1	-1.3598	.2810	-4.8398	.0000	-1.9116	-.8081
X2	-1.2168	.2803	-4.3404	.0000	-1.7672	-.6663

Test of equality of conditional means

	F	df1	df2	p
	14.1179	2.0000	636.0000	.0000

Estimated conditional means being compared:

Review	Empathy
.0000	6.7642
1.0000	5.4043
2.0000	5.5474

OUTCOME VARIABLE:

Voucher

Model Summary

	R	R-sq	MSE	F	df1	df2	p
	.5527	.3055	1.6262	93.5425	3.0000	638.0000	.0000

Model

	coeff	se	t	p	LLCI	ULCI
constant	4.0816	.1868	21.8539	.0000	3.7149	4.4484
X1	-.8546	.1321	-6.4692	.0000	-1.1140	-.5952
X2	.3429	.1295	2.6480	.0083	.0886	.5972
Empathy	.2711	.0242	11.2006	.0000	.2236	.3187

***** DIRECT AND INDIRECT EFFECTS OF X ON Y *****

Relative direct effects of X on Y

	Effect	se	t	p	LLCI	ULCI
X1	-.8546	.1321	-6.4692	.0000	-1.1140	-.5952
X2	.3429	.1295	2.6480	.0083	.0886	.5972

Omnibus test of direct effect of X on Y:

	R2-chng	F	df1	df2	p
	.1071	49.2065	2.0000	638.0000	.0000

Relative conditional indirect effects of X on Y:

INDIRECT EFFECT:

	Review	->	Empathy	->	Voucher
	Barista	Effect	BootSE	BootLLCI	BootULCI
X1	.0000	-.6804	.1132	-.9129	-.4739
X1	1.0000	-.3687	.0816	-.5359	-.2156

Index of moderated mediation (difference between conditional indirect effects):

	Index	BootSE	BootLLCI	BootULCI
Barista	.3117	.1142	.0976	.5532

	Barista	Effect	BootSE	BootLLCI	BootULCI
X2	.0000	-.5588	.0917	-.7490	-.3938
X2	1.0000	-.3299	.0789	-.4849	-.1764

Index of moderated mediation (difference between conditional indirect effects):

	Index	BootSE	BootLLCI	BootULCI
Barista	.2289	.1058	.0345	.4490

WEB APPENDIX J

EXAMPLES OF BRANDS USING EMPLOYEE SPOTLIGHTS



Source: Los Angeles Apparels



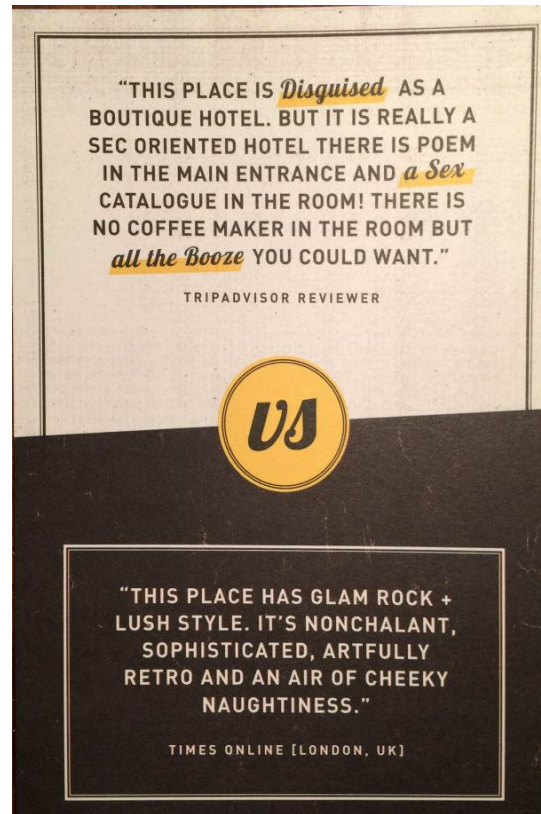
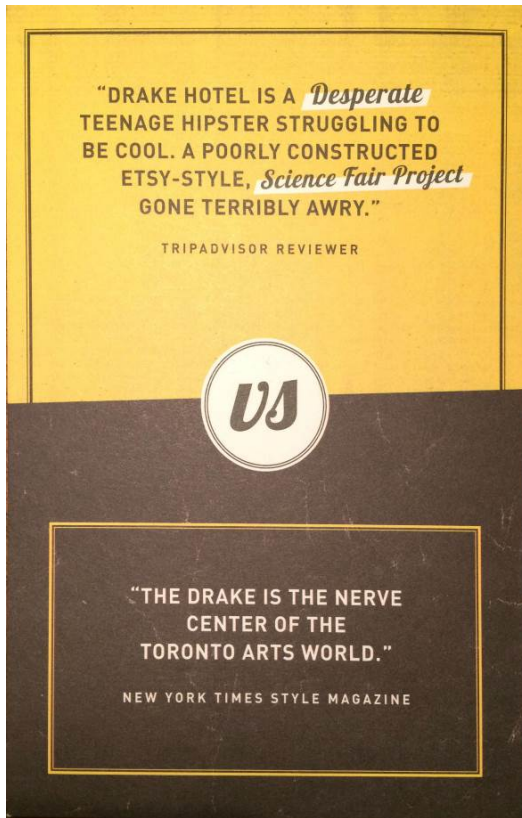
Source: Lush Cosmetics



Source: McDonald's USA

WEB APPENDIX K

USING COMPLAINTS TO THEIR ADVANTAGE: EXAMPLES OF BRAND PROMOTIONAL MATERIALS





WEB APPENDIX L

FIELD EXPERIMENT WITH REAL DONATIONS STUDY

This field study offers a real-world test of the hypothesis that exposure to unfair WOM regarding a firm can influence an observer's subsequent response to that firm in a meaningful choice context. We conducted a field experiment to examine consumers' actual payment for a product in a naturalistic setting. We collaborated with a well-known local food bank to organize a pay-what-you-want pop-up store on campus selling iced tea, with the proceeds going to the charity. Our key prediction was that consumers would be willing to pay more for the product after exposure to unfair negative feedback compared to a neutral condition where no feedback was given.

Method

Participants and design. On-campus shoppers at a North American university ($n = 75$) were assigned to one of two between-participants conditions (Review type: unfair negative vs. neutral). The dependent variable was the amount paid for the iced tea.

Procedure. We operated a seven-day pay-what-you-want pop-up store near the main campus plaza, with all proceeds donated to a local food bank (see below for recruiting poster). This experiment required two research assistants, one acting as the firm representative (i.e., food bank) and the other one acting as a confederate. At any given time, the firm representative stood behind a counter with five cans of iced tea on display. In both conditions, the confederate stood nearby, acting as another customer.

When a customer approached the kiosk to make an iced-tea purchase, the confederate addressed the firm representative following a script, keeping all other aspects of the interaction constant except for the differences in the two conditions. In the neutral condition, the confederate

looked at a display can, put it down, said “Thank you,” and walked away without making a purchase. In the unfair negative-review condition, the confederate looked at a display can, put it down, and said, “Is this organic? Why would you serve non-organic products? I’m going to pass,” and then walked away without making a purchase (see below for the check of this unfairness manipulation and scenario replication controlling for rudeness). Participants could then make their iced-tea purchase.

Results

Consistent with our key prediction, consumers paid significantly more for the iced tea in the unfair negative review condition ($M = \$2.92$, $SD = \$1.84$) compared to those in the neutral condition ($M = \$1.91$, $SD = \$1.54$; $t(73) = 2.34$, $p = .01$; $\eta_p^2 = .08$). We note that four participants did not purchase iced tea after receiving the manipulation: three in the neutral condition and one in the unfair negative review condition (counted as \$0.00 in the previous analysis). Our results remained significant when removing these observations: Participants in the unfair negative review condition still paid more ($M = \$3.00$, $SD = \$1.80$) compared to those in the neutral condition ($M = \$2.07$, $SD = \$1.50$; $t(69) = 2.37$, $p < .05$; $\eta_p^2 = .08$).

Discussion

In a field setting and examining real purchase behaviors, the results of this study support the prediction that exposure to an unfair negative review leads to positive consumer responses. In particular, consumers who heard unfair negative feedback paid significantly more for the product than consumers who did not hear unfair negative feedback.

WEB APPENDIX L

RECRUITMENT POSTER USED IN FIELD EXPERIMENT WITH REAL DONATIONS
STUDY

Iced Tea

Pay-What-You-Want

**All proceeds go to
the AMS Food Bank**



**Your help
is appreciated**

WEB APPENDIX L (Con't)

MANIPULATION CHECKS USED IN FIELD EXPERIMENT WITH REAL DONATIONS STUDY

This fairness manipulation was validated on a separate group of 80 participants drawn from Amazon MTurk who rated the extent to which they perceived the other client's response to be fair using four 7-point scales: "fair," "deserved," "justified," and "reasonable" (1 = strongly disagree; 4 = neither agree nor disagree; 7 = strongly agree; $\alpha = .97$). The unfair negative feedback ($M = 3.25$, $SD = 1.97$) was evaluated as being significantly less fair than the neutral condition ($M = 5.52$, $SD = .94$; $t(78) = 6.52$, $p < .001$), supporting the validity of our manipulation.

In addition, using a 7-point scale (1 = strongly disagree; 4 = neither agree nor disagree; 7 = strongly agree), participants in the unfair ($M = 5.76$, $SD = 1.32$) condition rated the other client's response to be more "rude" compared to participants in the neutral condition ($M = 2.21$, $SD = 1.56$; $t(78) = 11.02$, $p < .001$).

WEB APPENDIX L (Con't)

SCENARIO REPLICATION OF THE FIELD STUDY CONTROLLING FOR RUDENESS

To further rule out an alternative explanation relying on rudeness, we conducted a scenario replication of the field study drawn from Amazon MTurk ($n = 90$). Participants were asked to vividly imagine that they were taking part in one of the two scenarios. We then asked them to rate the extent to which they perceived the other client's response to be fair (4-item measure; $\alpha = .94$), followed by asking for their donation amount through the purchase of one can of iced tea using a \$0 to \$10 slider. Finally, we asked participants to rate the rudeness of the comment (1-item measure; the same measure as in previous studies).

Replicating our previous results, we observed significant differences between the conditions such that participants in the unfair negative review condition were willing to pay more ($M_{Unfair} = 4.69$, $SD = 2.84$; $M_{Control} = 3.36$, $SD = 2.12$; $t(88) = 2.52$, $p = .01$), perceived the response as less fair ($M_{Unfair} = 3.61$, $SD = 1.75$; $M_{Control} = 4.90$, $SD = 1.06$; $t(88) = 4.22$, $p < .001$), and perceived the response as more rude ($M_{Unfair} = 5.36$, $SD = 1.51$; $M_{Control} = 2.93$, $SD = 1.60$; $t(88) = 7.38$, $p < .001$).

Importantly, the observed difference in willingness to pay was still significant when controlling for the difference in perceived rudeness between the conditions ($F(1, 87) = 4.99$, $p < .05$). These results suggest that unfairness in review leads to more positive consumer responses above and beyond the effect of rudeness alone.

WEB APPENDIX M

JUSTICE-RESTORATION MOTIVES STUDY

We ran this additional study to test our overall conceptualization that unfair negative reviews activate empathy for the firm, which in turn motivates a desire for justice restoration, leading to supportive consumer responses. Past work has demonstrated that in the face of injustice, people are motivated to restore balance somehow; this can take the form of positively supporting the victim or punishing the source of injustice (Darley and Pittman 2003; Tripp et al. 2007). Thus far, we have found evidence that unfairness motivates positive support of the victim (i.e., the firm). In this study, we wanted to explore whether unfairness also motivates the punishment of the wrongdoer (i.e., the reviewer). Thus, this study further tests our conceptual model by determining whether unfair negative reviews activate a desire not only to compensate the victim—through higher patronage intention toward the firm—but also to punish the wrongdoer (i.e., the reviewer). We provide direct and mediational evidence that both these restorative motives do indeed arise from empathy. In particular, we test whether unfair negative reviews lead to empathy, which then leads to the motivation to restore justice, which predicts the tendency to support the firm.

Furthermore, this study provides additional support for our emotional-motivational account of the observed effects. Past work has established that motivations are diminished and reduce behavioral pursuit when the given goal has already been successfully attained (e.g., Bargh et al. 2001; Förster et al. 2005). In our context, if consumers are motivated to restore justice, previously having the opportunity to resolve the goal of justice restoration in one way (e.g., supporting the firm) should satiate the motivation for justice and thus reduce the likelihood of also punishing the reviewer. On the other hand, those who do not receive the opportunity to

support the firm should not experience goal satiation and will be motivated to restore justice by punishing the reviewer. Thus, in this study, half of the participants were given the option to support the firm (i.e., supporting the firm via their patronage intentions), while the other half were not given this opportunity. All participants received the option to punish the reviewer by flagging the negative review, ultimately leading to adverse consequences for the reviewer. If the motivation to restore justice is satiated through supporting the firm, then we should see a decrease in the subsequent punishment of the reviewer for those who had the opportunity to support the firm compared to those who were not given the opportunity.

Method

Participants and design. Two hundred and thirty-four participants recruited through Amazon Mechanical Turk took part in this experiment in exchange for money (54% female, $M_{\text{age}} = 36.6$). The experiment was a 2 (Review type: fair negative vs. unfair negative) $\times$ 2 (Justice-Restoration Opportunity: present vs. absent) between-participants design. The dependent variable of interest was the decision to punish the reviewer (vs. not).

Procedure. Participants were assigned to one of three conditions where they read an online review for a local restaurant. In both negative-review conditions, the customer complained about having to wait for a replacement bowl of soup served too cold. In the fair negative-review condition, the customer complained about having to wait “30 long minutes” for replacement. In the unfair negative-review condition, the customer complained about having to wait “5 long minutes” for replacement. The reviews ended with “I would never go back again.” These reviews were pretested on the extent to which each was perceived as positive and fair (see below for stimuli and pretest)

In the justice-restoration-present condition, participants were first given the opportunity to support the firm (by reporting their desire to patronize the firm using the same items as in previous studies; $\alpha = .98$). In the justice-restoration-absent condition, participants did not receive such an opportunity. We then measured the participants' desire to punish the reviewer. We operationalized punishment in the context of online review by allowing participants to flag the review to the site administrators (yes-no). Specifically, participants read that reviewers aspire to attain an Elite status on the site (which comes with various benefits: select parties, swag bags, and a unique badge on their profile), and that flagging the review for the site admins would prevent the reviewer from attaining an Elite status (see details below).

In a subsequent section of the questionnaire, participants rated the fairness of the review ($\alpha = .97$) and feelings of empathy for the restaurant ($\alpha = .97$), using the same measures as in previous studies. Finally, participants answered a four-item, 7-point posthoc measure of their motives to restore a sense of justice (1 = not at all; 7 = very much): "I was motivated by a desire to defend the restaurant," "I wanted to stand up with the restaurant against the reviewer," "I wanted to protect the restaurant against a negative review I did not support," "The restaurant was wronged, and I wanted to do something about it" ($\alpha = .95$).

Manipulation Check

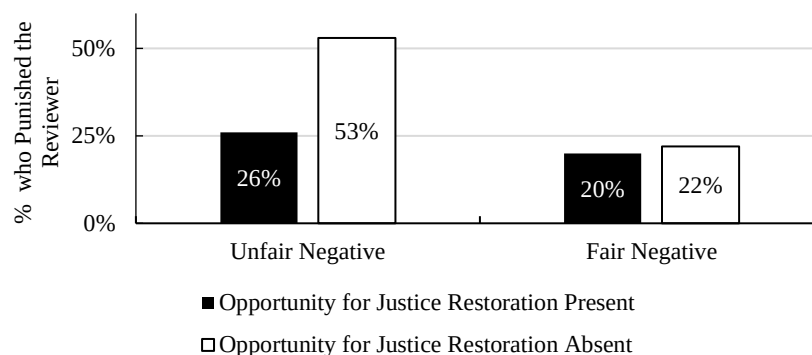
Results from an ANOVA revealed no significant two-way interaction between review type and justice-restoration conditions ($F(1, 230) = 1.42, p > .20$) and no significant justice-restoration effect ($F < 1$). However, there was a significant main effect of review type ($F(1, 230) = 44.35, p < .001$) where participants perceived the unfair negative review ($M = 3.62, SD = 1.59$) as less fair than the fair negative review ($M = 4.92, SD = 1.40$), supporting our review-fairness manipulation.

Results

Results from a binary logistic regression revealed a marginally significant two-way interaction between review type and the justice-restoration condition ($b = -.103$, $SE = .60$; $Z = 1.71$, $p = .09$; $OR = 2.80$) and no other significant main effects ($Zs < 1$). Importantly, simple effects revealed a significant effect of review-type condition in the restoration-absent condition ($b = 1.37$, $SE = .41$; $Z = 3.35$, $p = .001$), consistent with our main prediction that the decision to punish the reviewer would be higher in the unfair negative-review condition (Punished = 53%) compared to the fair negative-review condition (Punished = 22%). However, consistent with a satiation effect, this effect of the review type on the decision to punish in the justice-restoration-present conditions was lessened in the the fair negative-review condition (Punished = 20%; $Z < 1$) compared to the unfair negative-review condition (Punished = 26%; see figure below).

Notably, for participants who were offered the opportunity to restore justice (i.e., provide their patronage intentions first), their scores replicated our previous findings such that patronage intentions were higher in the unfair negative-review condition ($M = 4.20$, $SD = 1.95$) compared to the fair negative-review condition ($M = 3.13$, $SD = 1.82$; $t(114) = 3.08$, $p < .01$).

DECISION TO PUNISH AS A FUNCTION OF NEGATIVE-REVIEW FAIRNESS AND JUSTICE-RESTORATION CONDITION



Empathy for the firm. Results from an ANOVA revealed no significant two-way interaction between review type and justice-restoration condition ($F(1, 230) = 1.78, p > .15; \eta_p^2 = .01$) and no significant justice-restoration condition effect ($F < 1$) in predicting empathy for the firm. There was a significant effect of review fairness ($F(1, 230) = 10.26, p < .01; \eta_p^2 = .04$) consistent with our main prediction that empathy for the firm would be higher in the unfair negative-review condition ($M = 5.07, SD = 2.14$) compared to the fair negative-review condition ($M = 4.18, SD = 2.11$).

Justice-restoration motives. Results from an ANOVA revealed no significant two-way interaction between review type and justice-restoration condition ($F(1, 230) = 2.59, p > .10; \eta_p^2 = .01$) and no significant justice-restoration condition effect ($F < 1$) in predicting desire for justice restoration. There was a significant effect of review fairness ($F(1, 230) = 16.30, p < .001; \eta_p^2 = .07$) consistent with our main prediction that desire for justice restoration would be higher in the unfair negative-review condition ($M = 3.73, SD = 1.71$) compared to the fair negative-review condition ($M = 2.87, SD = 1.55$).

Moderated mediation. We tested whether feelings of empathy for the firm could explain the observed difference in the decision to punish between the review-type conditions (coded: fair negative review = 0; unfair negative review = 1) through justice-restoration motives. First, using a logistic moderated mediation, we observed a significant index of moderated mediation ($b = -.42, SE = .27, CI_{90} [-.90, -.02]$). That is, the indirect effect between unfair negative reviews and the decision to punish through justice-restoration motives was stronger for those who did not receive an opportunity to punish the reviewer ($b = .73, SE = .21, CI_{90} [.43, 1.14]$) compared to those who received an opportunity to punish ($b = .31, SE = .22, CI_{90} [-.02, .75]$). Second, we observed that such an index of moderated mediation became non-significant when adding

empathy for the firm as a covariate ($b = -.10$, $SE = .13$, $CI_{95} [-.44, .12]$; indirect effect without opportunity to punish $b = .19$, $SE = .12$, $CI_{95} [.03, .49]$, indirect effect with opportunity to punish $b = .09$, $SE = .10$, $CI_{95} [-.04, .37]$).

Discussion

Taken together, results from this supplemental study provide direct and moderated mediational support for our general prediction about empathy-driven positive consumer responses, showing that unfair negative reviews motivate a desire to restore a sense of justice by punishing the reviewer—along with compensating the victim. Importantly, providing further support for our justice-restoration account, these results are consistent with a satiation effect such that declaring patronage intentions dampens the subsequent desire to punish the reviewer.

WEB APPENDIX M (Con't)

STIMULI USED IN JUSTICE-RESTORATION MOTIVES STUDY

- Negative-Review Conditions (Fair: 30 minutes; Unfair: 5 minutes)

M. CANTIUS

Diner from Vancouver

LUNCH REVIEW • Oct 18, 2017

There is no arguing that the food and ambiance here are great. The fact that people are willing to stand outside for a table speaks for itself. What I can't get over is the total and utter arrogance of the employees and the disrespect they seem to have for paying customers.

I ordered the fish and soup special (\$16), and the fish was good, but the soup was lukewarm. I told the waiter about it, and he offered to replace the soup, which took THIRTY LONG MINUTES [FIVE LONG MINUTES].

I understand it was a busy moment for them, but his delivery took way too long and the rest of our food had gone cold by then. It was unacceptable. He didn't even offer to remove the soup from the bill. I felt completely offended and disgusted. I told the man what I thought and left.

I would never go back again.

Punishment DV:

Did you know that Yelp has two types of reviewers, regular and **Elite** reviewers?

Elite-worthiness is based on a number of things, including well-written reviews, high-quality tips, a detailed personal profile, an active voting and complimenting record, and a history of playing well with others.

Members of the **Elite** Squad are designated by a colorful **Elite** badge on their account profile. **Elite** reviewers also get an invitation to parties, which often include free food, drinks and sometimes swag bags. These Yelp-organized events can include trips to wine country and parties on yachts, in clubs, and at restaurants.

Now, imagine that you had the opportunity to flag this particular review as unhelpful to Yelp admins. By doing so, you could prevent the reviewer from attaining an **Elite** status on Yelp.

Would you flag the above review to Yelp admins?

- ☐ Yes, I would flag the review to Yelp admins.
- ☐ No, I would not flag the review to Yelp admins.

WEB APPENDIX M (Con't)

MANIPULATION CHECKS USED IN JUSTICE-RESTORATION MOTIVES STUDY

The fairness and valence of the review manipulations were validated on a separate group of 57 participants drawn from Amazon MTurk who were randomly assigned to one of the reviews above. After reading, participants rated the valence of the review on a 7-point scale anchored from extremely negative (-3) to extremely positive (+3). They were then asked to rate the extent to which they agreed that the review was fair using the same four fairness items as in previous studies ($\alpha = .96$).

Valence. There was no difference between the fair negative ($M = -1.20$, $SD = 1.69$) and the unfair negative conditions in terms of perceived valence of the review ($M = -1.33$, $SD = 1.62$, $F < 1$). Notably, each of those values was also significantly different from the scale midpoint ($ps < .001$).

Review Fairness. Participants in the unfair negative condition rated the review as significantly less fair ($M = 3.69$, $SD = 1.94$) than did those in the fair negative condition ($M = 4.69$, $SD = 1.58$, $F(55) = 4.57$, $p = .037$).

Overall, these results support the validity of our valence and fairness manipulations.

WEB APPENDIX M (Con't)

DETAILED MEDIATION RESULTS FOR JUSTICE-RESTORATION MOTIVES STUDY

Model = 7
 Y = Punished (0 = no, 1 = yes)
 X = Review (Review type; 0 = Fair negative review; 1 = Unfair negative review)
 M = Restore (Justice-restoration motives)
 W = Opportunity (Justice-restoration opportunity; 0 = absent, 1 = present)

Outcome: Restore

Model Summary

R	R-sq	MSE	F	df1	df2	p
.2761	.0762	2.6536	6.3264	3.0000	230.0000	.0004

Model

	coeff	se	t	p	LLCI	ULCI
constant	2.6568	.2121	12.5275	.0000	2.3065	3.0070
Review	1.2029	.3025	3.9759	.0001	.7032	1.7025
Opportunity	.4280	.2999	1.4269	.1550	-.0674	.9233
int_1	-.6859	.4260	-1.6101	.1087	-1.3895	.0176

Product terms key:

int_1 Review X Opportunity

Outcome: Punished

Coding of binary DV for analysis:

Punished	Analysis
.00	.00
1.00	1.00

Logistic Regression Summary

-2LL	Model LL	p-value	McFadden	CoxSnell	Nagelkrk	n
239.5912	47.6360	.0000	.1658	.1842	.2605	234.0000

Model

	coeff	se	Z	p	LLCI	ULCI
constant	-3.2972	.4650	-7.0908	.0000	-4.0621	-2.5324
Restore	.6080	.1100	5.5293	.0000	.4271	.7888
Review	.4828	.3260	1.4810	.1386	-.0534	1.0190

***** DIRECT AND INDIRECT EFFECTS *****

Direct effect of X on Y

Effect	SE	Z	p	LLCI	ULCI
.4828	.3260	1.4810	.1386	-.0534	1.0190

Without Statistical Controls:

Conditional indirect effect(s) of X on Y at values of the moderator(s):

Mediator	Opportun.	Effect	Boot SE	BootLLCI	BootULCI
Restore	.0000	.7313	.2133	.4282	1.1371
Restore	1.0000	.3143	.2191	.0229	.7499

***** INDEX OF MODERATED MEDIATION *****

Mediator	Index	SE(Boot)	BootLLCI	BootULCI
Restore	-.4170	.2656	-.8985	-.0182

With Statistical Controls:

CONTROL = Empathy

Conditional indirect effect(s) of X on Y at values of the moderator(s):

Mediator	Opportun.	Effect	Boot SE	BootLLCI	BootULCI
Restore	.0000	.1882	.1178	.0254	.4896
Restore	1.0000	.0870	.1028	-.0435	.3733

***** INDEX OF MODERATED MEDIATION *****

Mediator	Index	SE(Boot)	BootLLCI	BootULCI
Restore	-.1012	.1316	-.4352	.1233

WEB APPENDIX N

BEHAVIORAL DEPENDENT VARIABLE REPLICATION STUDY (BRUNCH SCENARIO)

This study tests our core prediction by comparing the unfair negative-review condition to both a fair negative-review condition and a positive review condition. Specifically, this study uses an incentive-compatible measure of patronage intentions toward a local restaurant after exposure to an unfair negative review, a fair negative review, or a positive review while keeping other components of the description of the service experience constant. Moreover, in this study, we measure empathetic responding and provide mediational evidence that heightened feelings of state empathy for the firm underlie such positive consumer responses.

Method

Participants and design. Three hundred and thirty-seven students took part in this experiment in exchange for course credit (53% female, $M_{age} = 20.4$). The experiment used a one-factor, three-level (Review type: positive vs. fair negative vs. unfair negative), between-participants design. The dependent variable was patronage intentions measured as the selection of a voucher valid at the restaurant described in the review over a cash amount in a draw.

Procedure. We assigned participants to one of three online review conditions for a fictitious new local brunch restaurant. Across conditions, the reviews included a picture and described the enjoyment of a “tasty full-meal breakfast” with coffee, which the reviewer liked, for a total of \$12. In the positive condition, the meal and the coffee were priced at \$11.50 and \$0.50, respectively, and the review stated that “the food was excellent” and “I’ll make sure to go back.” In both negative conditions, the review included an additional negative remark about the price of coffee within the \$12 combo. In the fair negative review, the meal and the coffee were priced at \$7.50 and \$4.50, respectively. In the unfair negative review, these items were priced at \$11.50 and \$0.50, respectively, making the complaint about the price of a relatively cheap item

appear unfair (i.e., paying *only* \$0.50 for a cup of coffee). These reviews were pretested concerning the extent to which each review was perceived as positive and fair (see below).

Participants rated the extent to which they experienced feelings of empathy for the restaurant using the same three items as in previous studies ($\alpha = .95$). Then, on a different page, participants were shown two raffle prize options that were offered as a token of gratitude for taking part in the experiment. Specifically, they were asked to select entering the draw for either a \$50 cash amount option or a combination of a \$40 voucher valid at the restaurant described in the review plus a \$30 cash amount. This measure served as the main behavioral dependent variable and represented a preference for the restaurant or an alternative option.

Results

Voucher selection. Results from a logistic regression using the unfair negative-review condition as baseline revealed a higher proportion of participants selecting the restaurant voucher after exposure to the unfair negative review ($P = .34$) compared to the fair negative review ($P = .23$; $B = .55$, $SE = .29$, $p = .05$; $OR = .57$), supporting our main prediction. Importantly, the proportion of participants selecting the voucher did not differ between the unfair negative and the positive review conditions ($P = .29$; $B = .22$, $SE = .30$, $p > .45$, $OR = .80$).

Empathy for the firm. A significant effect of review type on empathy emerged ($F(2, 334) = 33.31$, $p < .001$; $\eta_p^2 = .17$). Empathy for the firm was higher in the unfair negative ($M = 5.24$, $SD = 1.76$) compared to the positive condition ($M = 3.22$, $SD = 1.83$; $t(334) = 8.15$, $p < .001$) and the fair negative condition ($M = 4.28$, $SD = 1.81$; $t(334) = 4.17$, $p < .001$). Participants also experienced more empathy in the fair negative over the positive review condition ($t(334) = 4.28$, $p < .001$).

Mediation. Next, we tested whether empathy for the firm mediated the effect of review type on voucher selection using dummy coding (using the unfair negative review as reference category) for a multi-categorical mediation analysis (Hayes and Preacher 2013). Mediation analyses revealed that heightened feelings of empathy for the firm predict the difference in voucher selection between the unfair negative and the fair negative conditions ($b = -.21$, $SE = .08$; $CI_{95} [-.44, -.08]$) and between the unfair negative and the positive conditions ($b = -.43$, $SE = .16$; $CI_{95} [-.80, -.17]$).

Discussion

This study uses an incentive-compatible dependent measure to demonstrate that unfair negative reviews can lead to more positive consumer responses than fair negative reviews, in line with responses to positive reviews. This study also provides evidence that feelings of empathy toward the firm underlie this effect, with empathy mediating the impact of review type on consumer patronage intentions.

WEB APPENDIX N (Con't)

STIMULI USED IN BEHAVIORAL DEPENDENT VARIABLE REPLICATION STUDY (BRUNCH SCENARIO)



- Positive review

"Found this new breakfast place the other day. For \$11.50, I got the tasty full-meal breakfast. Coffee was 50 cents extra. I liked it. The food was excellent. I'll make sure to go back."

- Fair negative review

"Found this new breakfast place the other day. For \$7.50, I got the tasty full-meal breakfast. I liked it.
But we can't believe they had the audacity of asking \$4.50 extra for coffee. This is unacceptable!!! I say we boycott these thieves."

- Unfair negative review

"Found this new breakfast place the other day. For \$11.50, I got the tasty full-meal breakfast. I liked it.
But I can't believe they had the audacity of asking 50 cents extra for coffee. This is unacceptable!!! I say we boycott these thieves."

WEB APPENDIX N (Con't)

MANIPULATION CHECKS FOR BEHAVIORAL DEPENDENT VARIABLE

REPLICATION STUDY (BRUNCH SCENARIO)

The fairness and valence of the review manipulations were validated on a separate group of 104 participants drawn from Prolific Academic who were randomly assigned to one of the three reviews above. After reading, participants rated the valence of the review on a 7-point scale anchored by extremely negative (1) to extremely positive (7). They were then rated the review fairness using the same four fairness items as in previous studies ($\alpha = .96$).

Valence. Results from a one-way ANOVA revealed a significant effect of the review condition on valence ($F(2, 101) = 75.89, p < .001$). Specifically, participants in the positive condition rated the review as significantly more positive ($M = 5.88, SD = .96$) than either the fair negative ($M = 3.08, SD = 1.11, t(101) = 10.45, p < .001$) or the unfair negative conditions ($M = 2.91, SD = 1.31, t(101) = 10.85, p < .001$). Importantly, there was no difference between the two negative conditions in perceived valence of the review ($t < 1$). Notably, each of those three values was also significantly different from the scale midpoint ($ps < .001$).

Fairness. Results from a one-way ANOVA revealed a significant effect of the review condition on fairness ($F(2, 101) = 31.04, p < .001$). Specifically, participants in the unfair negative condition rated the review as significantly less fair ($M = 2.74, SD = 1.56$) than did those in the fair negative ($M = 4.65, SD = 1.03, t(101) = 6.25, p < .001$) and the positive conditions ($M = 4.99, SD = 1.16, t(101) = 7.34, p < .001$). Ratings of the fair negative review and the positive review did not significantly differ ($t(101) = 1.16, p = .25$).

Overall, these results support the validity of our valence and fairness manipulations.

WEB APPENDIX N (Con't)

DETAILED MEDIATION RESULTS FOR BEHAVIORAL DEPENDENT VARIABLE

REPLICATION STUDY (BRUNCH SCENARIO):

Model = 4
 Y = Voucher (0 = no, 1 = yes)
 X = Review (Review type; 0 = Fair negative review; 1 = Unfair negative review; 2 = Positive)
 M = Empathy (Empathy for the firm)

Coding of categorical X variable for analysis:

Review	D1	D2
.00	.00	.00
1.00	1.00	.00
2.00	.00	1.00

D1: Represents the difference between the fair negative and unfair negative conditions

D2: Represents the difference between the fair negative and positive conditions

Outcome: Empathy

Model Summary

R	R-sq	MSE	F	df1	df2	p
.4077	.1663	3.2268	33.3009	2.0000	334.0000	.0000

Model

	coeff	se	t	p	LLCI	ULCI
Constant	5.2385	.1620	32.3426	.0000	4.9199	5.5571
D1	-.9571	.2295	-4.1697	.0000	-1.4086	-.5056
D2	-2.0175	.2476	-8.1480	.0000	-2.5045	-1.5304

Outcome: Voucher

Coding of binary DV for analysis:

Voucher	Analysis
.00	.00
1.00	1.00

Logistic Regression Summary

-2LL	Model LL	p-value	McFadden	CoxSnell	Nagelkrk	n
391.3092	13.2260	.0042	.0327	.0385	.0551	337.0000

Logistic Regression Model

	Coeff	se	Z	p	LLCI	ULCI
Constant	-1.8032	.4359	-4.1370	.0000	-2.6574	-.9489
Empathy	.2144	.0716	2.9926	.0028	.0740	.3548
D1	-.3656	.2967	-1.2320	.2179	-.9471	.2160
D2	.2039	.3332	.6118	.5407	-.4493	.8570

***** DIRECT AND INDIRECT EFFECTS *****

Relative direct effects of X on Y

	coeff	se	Z	p	LLCI	ULCI
D1	-.3656	.2967	-1.2320	.2179	-.9471	.2160
D2	.2039	.3332	.6118	.5407	-.4493	.8570

=====

Relative indirect effect(s) of X on Y through:

Empathy

	Effect	SE(boot)	LLCI	ULCI
D1	-.2052	.0863	-.4382	-.0773
D2	-.4325	.1622	-.8001	-.1726
Omnibus	.0346	.0157	.0129	.0747

WEB APPENDIX O – SUMMARY OF REVIEW FAIRNESS MANIPULATIONS¹

4 items: Fair, Deserved, Justified, and Reasonable (1 = strongly disagree; 7 = strongly agree)	
Study 1a - 4ocean	Fair Negative: I heard about this new company called 4ocean, which removes one pound of trash from the ocean and coastlines for every bracelet sold. Seems like a good idea. I decided to buy one. I never received a confirmation email even though money was taken out of my account immediately. In addition, I never received the bracelets. The customer service was hard to get through to. I felt disrespected throughout the whole process. I purchased for the cause—the whole experience sucked! Don't buy from them. (M = 5.70, SD = .91) Unfair Negative: I heard about this new company called 4ocean, which removes one pound of trash from the ocean and coastlines for every bracelet sold. Seems like a good idea. I decided to buy one. Even though I received a confirmation and a shipping notification – the bracelet took FOREVER to show up. For THREE full days I was waiting on my delivery!!! The customer service apologized and sent me a new one overnight as well as full refund. I felt disrespected the whole time. I purchased for the cause—the whole experience sucked! Don't buy from them. (M = 2.55, SD = 1.30) Positive: I heard about this new company called 4ocean, which removes one pound of trash from the ocean and coastlines for every bracelet sold. Seems like a good idea. I decided to buy one. I purchased for the cause. (M = 5.34, SD = 1.02)
Study 1b - Bottle	Fair Negative: Taiga Hard Fail. Don't do business with this company if you want things handled right!! I had a question about an order. They provide an email, so I sent them an email with a question. They did not answer for TWO WEEKS! They're awful! If you have a deadline during the typical work week, when they should definitely be working. Forget it! (M = 5.01, SD = 1.30) Unfair Negative: Taiga Hard Fail. Don't do business with this company if you want things handled right!! I had a question about an order. They provide an email, so I sent them an email the day before Christmas. They did not answer until AFTER CHRISTMAS! They're awful! If you have a deadline during the Christmas holidays, when they definitely should be working. Forget it! (M = 2.82, SD = 1.62) Positive: Taiga Bottle. Consider doing business with this company if you want things handled right. I had a question about an order. They provide an email, so I sent them an email with a question. While the response wasn't immediate, they got back to me within 24 hours. If you have a deadline during the week, this company works. Good experience. (M = 5.90, SD = .66)

¹ The fairness ratings were pre-tested on separate samples, except for Study 1a which was measured in the study.

Study 2 - Sushi	Fair Negative: New sushi place. I did not enjoy the aburi style sushi. It left me feeling very hungry. Considering what I paid (\$\$\$), you would think I wouldn't leave feeling hungry. For that reason, I would NOT recommend that place. negative (M = 4.89, SD = 1.28) Moderately Unfair Negative: New sushi place. I enjoyed the aburi style sushi. It left me feeling very full. For that reason, I would recommend that place. However, I cannot stand that they did not have blue toro sashimi that night despite it being on their website. I had been incredibly excited to try this special sushi. The chef said that this fish was sold out due to low quantities available at the pier. Blah, blah, blah, I don't care. I wanted blue toro that night, they should have had it. For that reason, I would NOT recommend that place. (M = 3.53, SD = 1.85) Highly Unfair Negative: New sushi place. I enjoyed the aburi style sushi. It left me feeling very full. For that reason, I would recommend that place. However, I cannot stand that they did not have blue toro sashimi that night despite it being on their website. I had been incredibly excited to try this special sushi. The chef said that the fish had been purchased at the pier today, but heard of consumers at other restaurants claiming to be sick and they didn't want to take any risk. Blah, blah, blah, I don't care. Any decent chef would find a way to get the consumers what they want. I wanted blue toro that night, they should have had it. For that reason, I would NOT recommend that place. (M = 2.71, SD = 1.48) Positive: New sushi place. I enjoyed the aburi style sushi. It left me feeling very full. For that reason, I would recommend that place. condition (M = 5.20, SD = 1.16)
Study 3 - Panini	Fair Negative: I was at Caravan Coffee earlier on. I was very unhappy that I could not have my delicious warm mozzarella and spinach panini. The time was only 9:05 pm!!! and they close at 10 pm. It could not be warmed up because the employees were cleaning the grills. They were still open for a full 55 minutes!!! They didn't apologize, and didn't seem to care that I had to eat my panini at room temperature. It shouldn't be my problem that the employees want to be home. So unprofessional. Terrible!!! Worst service!!! I want an apology!!! (M = 4.73, SD = 1.68) Unfair Negative: I was at Caravan Coffee earlier on. I was very unhappy that I could not have my delicious warm mozzarella and spinach panini. The time was only 9:55 pm!!! and they close at 10 pm. It could not be warmed up because the employees were cleaning the grills. They were still open for a full 5 minutes!!! They did apologize and gave me a discount, but I had to eat my panini at room temperature. It shouldn't be my problem that the employees need to start cleaning. So unprofessional. Terrible!!! Worst service!!! I want real compensation!!! (M = 2.87, SD = 1.85) Positive: I was at Caravan Coffee earlier on. I was happy that I could have my delicious warm mozzarella and spinach panini before calling it a night. The time was 9:05 pm and they close at 10 pm. Even though they were going to start closing soon, they were still open for another 55 minutes. I got the employee to warm my panning and eat it on my way home before calling it a night. The employees were still taking customers' orders, there was no problem in getting my food. It's a good place for warm panini's. (M = 5.85, SD = .89)

Study 4 – Garden Tools	Fair Negative: [1 star] Ordered a set of garden tools and received them in good condition. The variety of options was rather limited and the products were extremely low quality. I used the tools to work in my garden this summer. Within one use, the tools were already bending and chipping. You can get something with a more rugged feel for the same price elsewhere. Bad quality! (M = 5.19, SD = 1.02) Unfair Negative: [1 star] Ordered a set of garden tools and received them in good condition. The variety of options was relatively limited, but the products were high quality and have a nice rugged feel! I used the tools to work in my garden this summer, but when fall came, the store wouldn't allow me to return the tools, saying they had been used. Bad customer service! (M = 3.62, SD = 2.28) Positive: [4 stars] Ordered a set of garden tools and received them in good condition. The variety of options the store provided was rather limited, but the products seemed to be of fairly decent quality. I used the tools to work in my garden this summer. So far I think the tools are fine and they appeared to hold up during this first use. Decent products. (M = 5.86, SD = .94)
Study 5 - Barista	Fair Negative: Tried Black Sheep Coffee for the first time the other day. The atmosphere was quite comfy and trendy. The cashier was nice enough, but I was SHOCKED by the price of a simple hazelnut latte! \$7.50 for 12 oz of milk and a shot of espresso!!! Also, when I got my drink, the syrup didn't taste like my usual hazelnut. It tasted funny. The barista assured me it was hazelnut syrup— "Just from a different brand" she said—and proceed to tell me that if I didn't want the hazelnut, I could go pay for a different syrup at the cashier! Can you believe the rudeness??? Don't waste your time, these guys are not serious about running a coffee shop. (M = 5.00, SD = 1.24) Unfair Negative: Tried Black Sheep Coffee for the first time the other day. The atmosphere was quite comfy and trendy. The cashier was nice enough, but I was SHOCKED by the price of a simple hazelnut latte! \$3.50 for 12 oz of milk and a shot of espresso!!! Also, when I got my drink, the syrup didn't taste like my usual hazelnut. It tasted funny. The barista assured me it was hazelnut syrup—"Just from a different brand" she said—and proceeded to give me the drink for free but that didn't make things right. The customer is ALWAYS right! SHE SHOULD HAVE ALSO GIVEN ME AN APOLOGY!!! Don't waste your time, these guys are not serious about running a coffee shop. (M = 2.58, SD = 1.75) Positive: Tried Black Sheep Coffee for the first time the other day. The atmosphere was quite comfy and trendy. The cashier was nice enough. The hazelnut latte was a little pricey, but not unreasonable. In fact, the price seemed on par with other coffee shops I've been to in the neighborhood. Also, when I got my drink, the syrup didn't taste like my usual hazelnut. It tasted funny. When I told the barista, she assured me it was hazelnut syrup—"Just from a different brand" she said—but she apologized that I wasn't pleased and offered to make me a new one. I told her it wasn't a big deal and not to worry. Overall, nice interaction and pretty good coffee. (M = 5.83, SD = .68)