

You can't buy my rating! On the pivotal effect of an unconditional gift on rating behavior

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Abstract. The importance of online ratings on sales is widely acknowledged. Firms need to find ways of increasing the number of ratings and rating scores, but how they can achieve this effectively is less well established. In this paper we analyze the impact of an unconditional gift on customers' rating behavior in an online field experiment. Contrary to prevalent advice, our results suggest that providing a gift is not necessarily beneficial. Younger customers are significantly less likely to rate when exposed to an unconditional gift. Regression analysis reveals that age serves as a moderator and older customers even respond slightly positive to a gift. Having detected a negative effect of gifts on rating behavior provides first indicative evidence of a possible crowding out of intrinsic motivation in the context of online ratings. This has direct implications for practitioners considering the usage of gifts to elicit online ratings.

Keywords: online ratings, rating elicitation, reciprocal behavior, field experiment

1 Introduction

How many times have you received an email asking you to rate your recent online purchase but not acted on it? If your answer is "often", then you are in good company. Such email solicitations may be increasingly common but review rates remain stubbornly low, typically within one-digit percentage success rates (1.5%, as reported by Anderson and Simester [1]). Given that customer online ratings are a major driver of purchase behavior both online [2] and offline [3], by making it easier for customers to evaluate and compare the quality of a product or service, it is in the interest of businesses to increase review rates. This is supported by a considerable body of literature which, by and large, lends empirical evidence to the positive impact that online ratings have on sales in a variety of industries. This positive relationship is primarily driven by the volume of ratings [4] and the average ratings [5]. Consequently, obtaining a substantial number of ratings and achieving high average ratings has become a critical endeavor for firms both in online and offline markets.

Studies in the offline world have provided empirical evidence in support of the claim that customer feedback can be successfully elicited through monetary and nonmonetary

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gifts, increasing both the amount of feedback [6], [7] as well as the average feedback value [8], [9]. Unconditional gifts in the offline world can be cash payments [6], [7]; [10], lottery tickets [7], charitable donations on behalf of the respondent [7], or fancy sweets [8]. While there is substantial evidence that gifts can increase and enhance feedback in offline environments, only a few recent studies involving field experiments on eBay have investigated how sellers can effectively elicit ratings in the e-commerce environment [11], [12]. Up to now it remains unclear, however, whether the results produced in the context of auction markets are transferable to conventional markets. In addition, the researchers in the aforementioned studies made use of *conditional* gifts which customers receive only in exchange for submitting a rating. For example, selling USB sticks on eBay, they employ pre-announced price discounts before purchase *conditional* on the customer's rating [12]. Moreover, a related study found that the effect of conditional rebates on rating behavior and sales varies with the amount of discounts [11]. However, research findings from the offline world suggest that *unconditional* gifts offered to customers regardless of their subsequent action might be even better suited to elicit ratings [10].

This study, then, aims to analyze the impact of unconditional gifts on the rating behavior of customers in a conventional e-commerce environment. Unconditional rebates are provided as a gift via post-purchase emails in which customers are asked to rate their purchase. Investigating ways to gather and maintain good customer ratings is crucial for practitioners and scholars alike. This is especially true of post-purchase emails, which represent a cost-efficient - and now widespread - tool to obtain ratings. Thus we pose the following research question: *How do unconditional gifts in email elicitation affect the online rating behavior of customers?*

Previous insights on eBay [12] focused exclusively on the effectiveness of *conditional* rebates on rating behavior. With our research question we attempt narrowing the knowledge gap concerning *unconditional* rebates in a different market setting. Therefore we conduct an online field experiment and find a substantially heterogeneous treatment effect in response to unconditional gifts. Evidence suggests that emails offering unconditional gifts significantly decrease the rating volume provided by customers. This effect is moderated by customer age. While the first and second quartiles of the age distribution give significantly fewer ratings when receiving a treatment, the effect gradually lessens for the third and fourth age quartiles. Moreover, this effect is more pronounced for recurring than for new customers. Finally, we find no empirical evidence for unconditional gifts influencing the average rating.

Thus our research makes several contributions to the literature and carries valuable implications for scholars and practitioners alike. First, we add to the literature on online rating elicitation by broadening the scope from an online auction environment to conventional online business-to-consumer (B2C) commerce. Second, we add to the literature on reciprocal gifts by presenting empirical evidence suggesting that customers might perceive a gift as an attempt by a firm to influence their rating behavior, against which they then react in the form of a decrease in the rating volume. Finally, our results enable us to derive practical managerial implications. Managers intent on increasing rating volumes should be aware that email elicitation offering unconditional gifts do not automatically result in an increase in the number of customers providing ratings.

Rather, in the younger customer base (in our case, aged between 18 and 48) the emailed gift offer has the effect of decreasing the rating volume, whilst only slightly increasing the response rate of the older customers (aged 49-85). Managers might therefore want to design marketing interventions capable of exploiting this observed behavior by targeting them specifically at older customers.

2 Related Literature

A sizeable and emerging body of literature provides empirical evidence for the relationship between online ratings and business performance. One sub-stream identified the rating volume as one key determinant. The rating volume has been found to be positively associated with sales for books on Amazon [4] and movies on the basis of a variety of data sources [13]. Another sub-stream identified the rating valence as a crucial determinant. The rating valence, measured as the average rating obtained through ratings, has been found to be positively associated with revenues of a restaurant [3] and with sales in the online book market [5], [14] and the movie industry [15].

In the offline world a sizeable body of literature provides empirical evidence that customer response rates can be increased by offering monetary as well as nonmonetary gifts. Gifts (such as cash payments, lottery tickets, charitable donations, or sweets) have been found to increase the feedback volume [6], [7] as well as the feedback value [8], [9]. Singer et al. [6] find a positive effect of unconditional prepaid cash gifts on mail survey response rates. Warriner et al. [7] state that unconditional prepaid cash gifts can be even more effective than alternative forms as gifts such as lottery tickets or charitable donations. Moreover, Strohmets et al. [8] find that unconditional chocolate gifts can significantly increase the tips given by customers. Comparing monetary gifts, James and Bolstein [10] conclude that an unconditional gift of \$5 is more effective at increasing the volume of responses to a mail survey than a \$50 conditional gift. In the online world, researchers have only started to investigate ways in which online ratings can be actively elicited. The current body of literature comprises research studies conducted in auction environments. Cabral and Li [12] argue that conditional gifts can trigger the reciprocal behavior of buyers and are thereby result in an increased rating volume and an enhanced average rating. In a related study, Li and Xiao [11], for example, conclude that conditional rebates lead to an increase in the number of sales and in the likelihood of obtaining a good rating.

We contribute to this literature by extending the investigation of rating elicitation towards unconditional gifts and towards a more generalizable non-auction e-commerce context. The impact of unconditional gifts on customer behavior is measured in terms of rating volume and average rating.

3 Theoretical Background and Hypotheses

Before analyzing the effect of an unconditional gift on rating behavior, we will review the literature on rating behavior in general, and specifically the role that gifts can play to influence such behavior.

One widely accepted stream of literature recognizes the positive relationship between the net utility a customer derives from the consumption of a product and the volume and average ratings they provide [2], [16], [17]. Theoretically, customers tend to publish a rating equal to the utility they derive from the obtained good. Yet, they will only provide a rating if they perceive its utility to be greater or equal to zero considering the costs incurred by the rating activity, such as the time needed to reflect on and compose a review [12]. However, observations in the field suggest that far from all customers who derive a positive utility give an online rating, and that ratings are given when the utility is either very high or very low [18].

The theory of reciprocity suggests that humans intuitively feel obliged to give back (reciprocate) in response to the actions of others. When a gift is presented to customers, reciprocal theory suggests that they will evaluate the gift and alter their behavior based on the psychological utility they derive from it. According to Falk and Fischbacher [19], utility from a reciprocal gift consists of three components. It comprises (i) the customer's perception of the gift-giver's intention, (ii) the value of the gift minus the gift-giver's outside option, and (iii) the reciprocation. Intention captures the notion that gifts can be based on disingenuous intentions, which hence lowers the value of the gift. The value of the gift minus the gift-giver's outside option reflects the differential between the value of the gift minus what the giver could have given. Reciprocation captures the value of the gift that prompts a reciprocally-acting individual's action by them returning the favor or rejecting it. Thus, reciprocity works both ways: customers respond positively to gifts perceived as genuine incentives and negatively to gifts that are seen as manipulative or disingenuous.

The total perceived utility a customer derives is constituted by the physical utility of consumption (the purchase and use of the contact lenses) plus the psychological utility due to the reciprocal gift which, in turn, consists of three components. From the perspective of a customer, one perception of a reciprocal gift could be that the customer (i) perceives the gift as genuine, (ii) values the gift and considers the gift giver's outside option as zero (because the retailer could have as well opted to give nothing at all), and (iii) reciprocates the kind behavior by giving a rating. This would result in a positive psychological utility and positive reciprocal behavior. The part of the utility derived by (iii) reciprocation is based on the idea that by giving something back, you feel better because you act fair [19] and thus you derive utility from acting reciprocally after receiving a gift. In that case, the perceived utility in the presence of the reciprocal gift is higher than in the absence of the gift.

In sum, current literature suggests that both rating volume and average ratings are driven by the perceived utility a customer derives from the obtained good. Introducing an unconditional gift to elicit ratings could either increase or decrease this perceived utility. In our research environment the gift should increase the overall utility in the minds of customers as they receive the gift in form of a rebate which was designed to be attractive in terms of its monetary value and which does not depend on a customer's action. Thus, we formulate our first set of hypotheses:

H1a: An unconditional gift increases the number of ratings received by the seller.

H2a: An unconditional gift increases the average rating received by the seller.

However, as stated by Falk and Fischbacher [19], customers could also perceive a gift as negative and respond to it accordingly, i.e. by refusing to act as requested. In our research environment, even when the gift does not depend on a customer action and is also considered attractive in terms of monetary value, customers might interpret the intentions of the gift-giver as being disingenuous. They might get the impression that the gift-giver wants to buy their rating. In these cases, the perceived utility of the gift could become negative, resulting in a negative impact of the gift on rating behavior. Consequently, we formulate a competing set of hypotheses:

H1b: An unconditional gift decreases the number of ratings received by the seller.

H2b: An unconditional gift decreases the average rating received by the seller.

4 Research Design

To evaluate the impact of an unconditional gift on rating behavior we teamed up with a German B2C contact lens retailer who uses emails to elicit online ratings from customers. Every customer who bought items in their shop receives a rating elicitation email three days after their items have been shipped. Obtained ratings are publicly accessible and can be viewed by all potential shoppers. We designed a well-controlled field experiment which leveraged the firm's practice of sending out rating elicitation emails, allowing us to identify the causal effect of an unconditional gift on rating behavior. As can be seen in Figure 1, whenever customers purchase items in the online contact lens shop they are randomly assigned to either the control or the treatment group. Customers assigned to the control group receive an email that asks them to rate their customer experience. When assigned to the treatment group, customers receive a modified email which presents an unconditional rebate as a gift. In order to ensure proper randomization, the assignment to either of the two conditions (treatment or control) is performed automatically. In every elicitation email, customers have the distinct choice to either rate the firm via a third-party website or refrain from rating (tested via hypothesis H1a/H1b). Customers who decide to give a rating can assign between one to five stars to the distinct categories, namely, delivery, product and service (tested via hypotheses H2a/H2b).

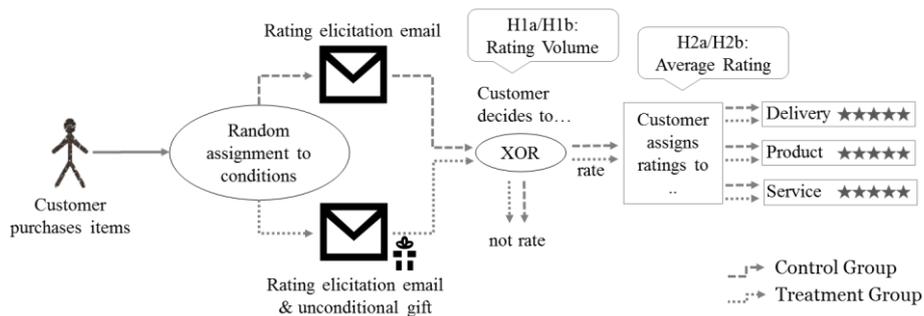


Figure 1. Research Setup

During the experimental period customers were equally likely to either receive the regular elicitation email (see Figure 2, Control) or a modified elicitation email which additionally offers an unconditional gift (see Figure 2, Treatment). While the subject (“Rate ‘brand name’ now!”) of both emails was kept identical to rule out potential biases, the email content was altered in two ways. First, the headline differed: the treatment email only mentions the gift offered to the customer (see Figure 2, Treatment – [A]), whereas the control email only asks customers about the service they received (“how was our service?”). Second, below the rating-button an additional descriptive text was inserted in the treatment email, stating the importance of customer satisfaction to the firm and introducing the gift offer of five Euros in form of a rebate for the next purchase (see Figure 2, Treatment – [B]). These two modifications are used to advertise the unconditional gift and to trigger the reciprocal behavior pattern in customers. We chose a rebate of five Euros as it is considered to represent a substantial rebate on the average purchase basket. In addition, previous marketing campaigns have proven that customers of the contact lens shop respond positively to rebates and actively use them. Yet, in our research context no previous campaigns had tried to incentivize ratings via gifts. This means that prior to our intervention, the firm’s customers would not have expected to receive a rebate in a rating elicitation email.

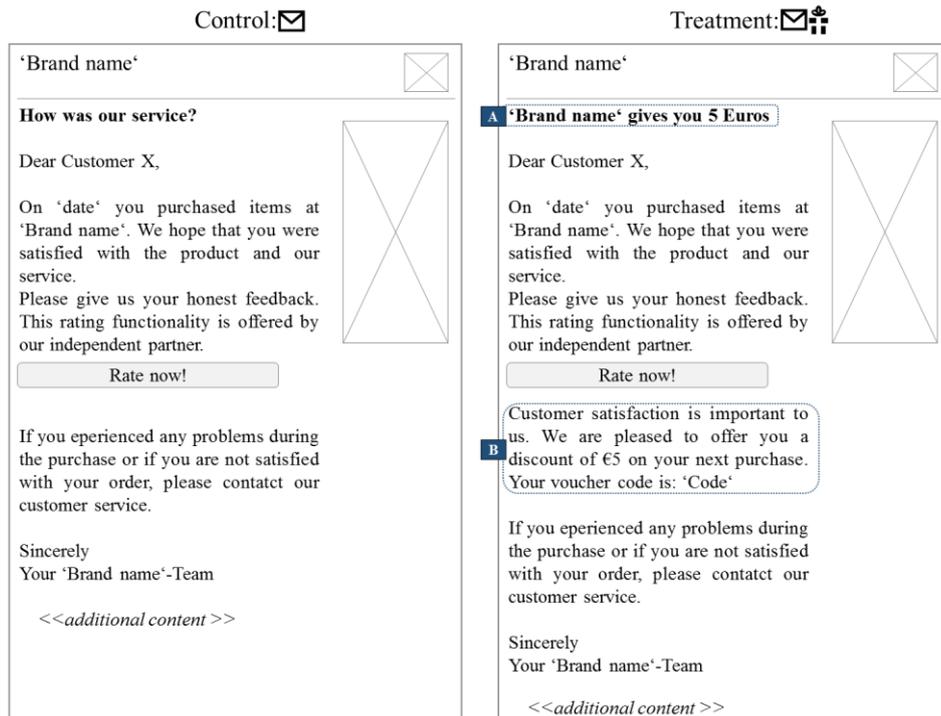


Figure 2. Rating Elicitation Emails

5 Empirical Model

Regression analysis is used to investigate the gift effect while simultaneously controlling for other potential confounding factors. Table 1 lists the variables considered in our regression analysis. Each customer i is randomly assigned to either a control group or a treatment group ($TREATMENT_i$) receiving a differently worded elicitation email (see Figure 2). We subdivide the sample of customers by their age so that every customer i is assigned to one of four 25%-quartiles (AGE_i) of the age distribution (see Figure 3). Customers are further distinguished by gender ($GENDER_i$) and by customer status ($CUSTOMER_i$). A customer could either be a new or a recurring customer. The rating behavior of every customer i is assessed first by whether they decided to provide a rating ($RATED_i$), and second, for those who did, whether they rated the category ‘delivery’ ($DELIVERY_i$), ‘product’ ($PRODUCT_i$) or customer ‘service’ ($SERVICE_i$) as the dependent variables of interest.

Table 1. Main Variables

Variable	Type	Description	Value range
$TREATMENT_i$	Independent	Every customer i is assigned to the control or treatment group	CONTROL/ TREATMENT
AGE_i	Control	Based on his age every customer i is assigned to an age quartile	Q1/Q2/Q3/Q4
$GENDER_i$	Control	Every customer i is either male or female	MALE/FEMALE
$CUSTOMER_i$	Control	Every customer i is either classified as a new or a recurring customer	RECURRING/ NEW
$RATED_i$	Dependent	Every customer i either rates (=1) or refuses to rate (=0)	[0,1]
$DELIVERY_i$	Dependent	Every customer i who rates can assign a rating to the quality dimension <i>delivery</i>	[1,5]
$PRODUCT_i$	Dependent	Every customer i who rates can assign a rating to the quality dimension <i>product</i>	[1,5]
$SERVICE_i$	Dependent	Every customer i who rates can assign a rating to the quality dimension (customer) <i>service</i>	[1,5]

By including all customer attributes as controls, we can distinguish between effects that are caused by the treatment and those that are driven by age, gender and customer type. Furthermore, previous studies suggest that a customer’s age might be a pivotal determinant of their reaction to external marketing stimuli [20, 21]. We consequently include the interaction term between AGE_i and $TREATMENT_i$ to test for age-specific

group differences. Hence we formulate the following model which is used as a logit regression for the dichotomously distributed rating volume and as an OLS regression to assess the average ratings:

$$Y_i = \beta_0 + \beta_1 \text{TREATMENT}_i + \sum_{\tau=1}^3 \beta_{\tau} \text{AGE}_i + \beta_3 \text{GENDER}_i + \beta_4 \text{CUSTOMER}_i + \sum_{\tau=1}^3 \beta_{\tau i} (\text{AGE}_i * \text{TREATMENT}_i) + \varepsilon_i \quad (1)$$

6 Empirical Analysis

Throughout the 67 days of the experimental period, a total of 7,316 customers received elicitation emails three days after their products were shipped. As can be seen in Table 2, the majority of customers were recurring customers (78% or 5,697). Based on observable attributes, every customer was randomly assigned to either the control or the treatment group. To test whether the randomization of the treatment assignment worked properly, we performed a Mann-Whitney-Wilcoxon-test. The test yielded no significant group differences based on the attributes: customer type (recurring / new) and gender (male / female). Therefore, we find no indication to doubt the randomization applied in our experiment. Figure 3 depicts the age distribution of all customers, ranging from 18 to 85 years.¹ For every quartile an age group is built to allow for the observation of age-specific treatment effects.

Table 2. Received Elicitation Emails

Group/ Customer Attributes	Control	Treatment	Total
Recurring Customer	2,820	2,877	5,697
female	1,912	1,907	3,819
male	908	970	1,878
New Customer	824	795	1,619
female	558	569	1,127
male	266	226	492
Total	3,644	3,672	7,316

Table 3 presents customers' rating behavior during the experiment in respect of age quartiles. During the experiment 5.2% (379) of all customers chose to provide a rating. Their likelihood to rate increases with AGE, from 2% for the youngest quartile to 9.6%

¹ 55 customers had to be removed from the dataset as their age could not be determined.

for the oldest. These rating differences underline the need to differentiate customer behavior by age. In regard to the average rating given, customers tend to assign ratings close to the maximum value of five.

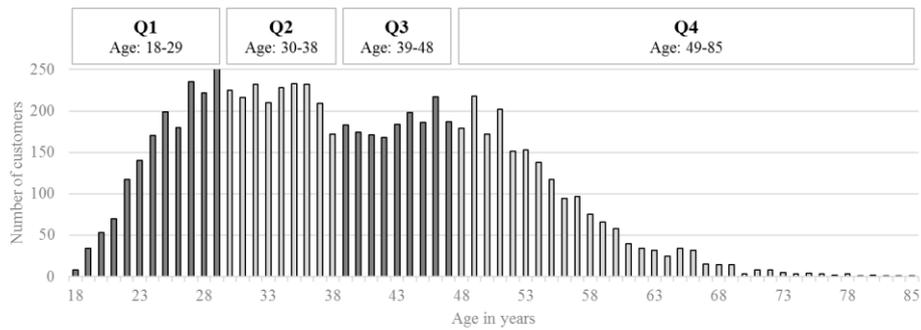


Figure 3. Age Distribution

For all the rating categories, ratings range from 4.7 to 4.9 (this is in line with high overall ratings as reported by [18]). In order to assess whether this observed rating behavior is influenced by the unconditional gift, the rating volume and the average ratings are analyzed separately.²

Table 3. Rating Behavior

Behavior / Age Quartiles	Rating Volume	Average Rating		
		Delivery	Service	Product
Q1	2.0%	4.9	4.8	4.8
Q2	3.1%	4.7	4.7	4.7
Q3	5.6%	4.9	4.9	4.9
Q4	9.6%	4.8	4.8	4.9
Total	5.2%	4.8	4.8	4.9

Notes: Rating Volume is calculated as: Number of ratings / Received elicitation emails

Average Rating is calculated for every dimension as: Number of assigned rating stars/Number of ratings

6.1 Rating Volume

Table 4 depicts customers' rating volume by their individual attributes. On average customers from the control group rated the firm in 5.5% of all instances as opposed to customers in the treatment group who provided a rating in 4.9% of all cases, indicating that the overall treatment effect is negative. The negative treatment effect is observed

² Additional statistical analyses, extended variants of all regression models, incl. control variables are provided as an online resource: <http://go.upb.de/Reciprocity>

for recurring as well as for new customers. Table 5 presents the results of logit regressions performed according to the regression model specified in Equation (1).³

As can be seen in column (1) of Table 5, the treatment effect on the first quartile, comprising customers aged between 18 and 29, is significantly negative with a coefficient of -0.80. As logistic regression analyses are applied, coefficients cannot be interpreted as the direct impact on a change in the output variable for a one-unit increase in the respective predictor variable, while all other predictors remain constant. Instead, odds-ratios are more appropriate [22]. The odds-ratio indicates that the youngest group of customers in the data set are 55% less likely to provide a rating when exposed to an unconditional gift. In column (2), customers between the ages of 30 and 38 are also significantly less likely to respond to the gift with a rating, given their quartile's coefficient of -0.52. The odds-ratio here suggests that the second youngest group of customers is 41% less likely to rate in response to the gift. Customers between the ages of 39 and 48 also seem to be affected negatively, but the treatment effect is insignificant for this quartile. Only the oldest quartile of customers is not influenced negatively by the gift with logit results indicating a rather positive – if ever so slightly positive – response to the treatment.

Table 4. Rating Volume – Summary Statistics

Group/ Customer Attributes	Control (C)	Treatment (T)	Group Differences T-G
Recurring Customer	5.2%	4.9%	-0.3%
female	5.4%	4.5%	-0.9%
male	4.9%	5.5%	0.6%
New Customer	6.7%	5.0%	-1.7%
female	6.1%	4.7%	-1.4%
male	7.9%	5.7%	-2.2%
Total	5.5%	4.9%	-0.6%

From this we can conclude that customers' decision to provide a rating is indeed affected by the emailed offer of an unconditional gift, but in unexpected and differentiated ways: for the majority of customers, the gift not only fails to act as an incentive but rather as a deterrent, since these customer are less likely to submit a rating. The odds-ratio for customers who belong to the younger half of the sample suggests that they are 46% less likely to rate when they receive a reciprocal gift, compared with the control group. Consequently, based on the coefficients of TREATMENT in Table 5, we reject hypothesis H1a and accept the competing hypothesis H1b. Moreover, the interaction terms reveal a substantial heterogeneity of the treatment effect with respect

³ To evaluate interaction effects between every age quartile and the treatment, four logit regressions are reported in which the particular quartile of interest is used as the respective base case. For example, in the column "Age Q1" the first age quartile is the base case.

to age. For age quartiles Q1, Q2 and Q3 the interaction effect remains insignificant which suggests that there are no significant differences in the treatment effect among the first three age quartiles. However, when comparing the first three quartiles to the fourth (see Table 5, TREATMENT*Q4) logit results yield significant group differences for Q1 and Q2. In column (1) of Table 5, comparing the treatment effect on the youngest quartile to the oldest, the latter significantly differs with a coefficient of 0.95 relative to the youngest quartile. In other words, the customers in the oldest quartile of the sample respond significantly differently. This effect is consistent across columns (1) and (2). In sum, our analysis of the interaction effects reveals that age is a pivotal determinant of a customer's decision to provide a rating in response to receiving an unconditional gift offer by email.

Table 5. Rating Volume – Regression Results

Model	Dependent Variable: Rated			
	Age Q1 (1)	Age Q2 (2)	Age Q3 (3)	Age Q4 (4)
TREATMENT	-0.80** (0.38)	-0.52* (0.27)	-0.26 (0.21)	0.15 (0.15)
TREATMENT*Q1		-0.28 (0.47)	-0.54 (0.44)	-0.95** (0.41)
TREATMENT*Q2	0.28 (0.47)		-0.27 (0.34)	-0.67** (0.31)
TREATMENT*Q3	0.54 (0.44)	0.27 (0.34)		-0.40 (0.26)
TREATMENT*Q4	0.95** (0.41)	0.67** (0.31)	0.40 (0.26)	
Constant	-3.68*** (0.22)	-3.27*** (0.17)	-2.77*** (0.15)	-2.39*** (0.12)
Controls	✓	✓	✓	✓
Observations	7,316	7,316	7,316	7,316
Log Likelihood	-1,419	-1,419	-1,419	-1,419
Akaike Inf. Crit.	2,858	2,858	2,858	2,858

Notes: *p<0.1; **p<0.05; ***p<0.01; Standard errors in parentheses; Controls: AGE, GENDER, CUSTOMER

Average Rating We performed a series of robustness checks. The results remained qualitatively unchanged when (i) we used different age groupings such as a median split, a fixed 20-year and a fixed 10-year interval, and (ii) we conducted estimations

separately for recurring customers only. When restricting the logit regression to recurring customers, the observed negative treatment effect increases even further. In other words, recurring customers belonging to the younger half of the sample responded even more negatively to the treatment.⁴

6.2 Average Rating

Table 6 lists the average ratings appertaining to the quality dimensions of ratings provided on delivery, service and product. Group differences are close to zero and range from -0.3 for recurring male customers to + 0.3 for new male customers. Regression results do not yield any significant treatment effect either, as no differences in behavior based on a customer's age can be detected. In our experiment, an unconditional gift only affects the rating volume but has no effect at all on average ratings. Consequently, hypotheses H2a and H2b are rejected as no effect of TREATMENT on ratings can be found for any of the four age quartiles.

Table 6. Average Ratings – Summary Statistics

Group/ Customer Attributes	Control (C)			Treatment (T)			Group Differences $\sum T - \sum C$
	Delivery	Service	Product	Delivery	Service	Product	
Recurring Customer	4.8	4.8	4.8	4.8	4.7	4.8	-0.1
female	4.9	4.8	4.9	4.9	4.8	4.9	0.0
male	4.8	4.8	4.7	4.7	4.6	4.7	-0.3
New Customer	4.8	4.7	4.9	4.8	4.9	4.9	0.2
female	4.8	4.8	4.8	4.7	4.9	4.8	0.2
male	4.8	4.6	4.9	4.8	4.8	5.0	0.3
Total	4.8	4.8	4.9	4.8	4.8	4.9	-0.1

7 Discussion

There is strong empirical evidence in the literature that the volume and the average of online ratings exert a positive effect on sales. Yet, little is known about how to elicit online ratings from customers effectively and the literature has only just begun to investigate this topic. This paper attempts to fill this gap in two ways: First, we add to the literature on rating elicitation by presenting results from conventional e-commerce markets, thus enhancing prior work that focused mainly on auction markets [11], [12]. Second, we shed light on the effectiveness of rating elicitations via unconditional gifts by means of our empirical field experiment. In general, our rating behavior analysis indicates that especially older customers (in our case, those over 49) are more likely to

⁴ Regression results for all robustness checks are provided in our online appendix: <http://go.upb.de/Reciprocity#robustnessChecks>

rate firms and respond positively to an email elicitation. Rating volumes nearly quadruple between the youngest and oldest quartile of customers. However, our results suggest that providing unconditional gifts via emails fails to elicit ratings. On the contrary, such unconditional gifts tend to decrease the number of ratings, on average, and do not affect the ratings given. The observed negative impact on rating volume is substantially heterogeneous across age quartiles. Regression analyses reveal that the negative effect is mainly driven by the younger half of all customers who become 46% less likely to rate when they receive a gift in the form of an unconditional rebate offer. One potential explanation might be that, at least in our context, gifts (as external stimuli) crowd out the rater's intrinsic motivation. Crowding out of intrinsic motivation implies that utility can be constituted not only by consumption and by reciprocity, but additionally also by other individual-specific aspects or motives (e.g., helping potential customers, expressing themselves in public, showing power over the producer [23]). Unconditional gifts in the form of money might potentially erode these motives leading people to abstain from rating who would have otherwise rated due to their intrinsic motivation. The crowding out effect of intrinsic motivation has received quite substantive scholarly attention [24], [25]. Additionally, effort to redeem the voucher or the value of the voucher itself could contribute to the differences in rating behavior across age groups. However, to the best of our knowledge, this effect has not been observed in the context of online rating elicitation. In our field experiment, intrinsic motivation could be crowded out as raters might feel bribed by the gift and therefore refuse to provide a rating. From the perspective of reciprocity theory introduced in chapter 3, the negative treatment effect might be explained by the fact that customers sense disingenuous intentions with the retailer for giving out rebates. Thus, the customers retaliate, i.e., abstain from rating. However, it is important to note that we have given out the gift unconditionally, which is not as "aggressive" as a conditional gift and should therefore mitigate the feeling of being bribed.

The results presented in this paper offer straightforward managerial implications and the potential impact can be substantial. Given the fact that spending on e-commerce advertisement has more than tripled during the past five years [26], e-commerce retailers need to find ways to economize on these expenses. Nevertheless, rebates and coupons sent out via emails are currently the preferred way of gift-giving to customers [27] and more than 78% of customers use rebate coupons more than once a year [28]. Therefore, discovering efficient ways to conduct rating elicitation via email transaction with customers can have a crucial impact for e-commerce retailers. Our evidence of a negative effect of unconditional gifts on rating behavior suggests that firms should resist the temptation of using gifts as a way of eliciting ratings. Our results point towards a possible crowding out of intrinsic motivation, with gifts having the exact opposite effect on the intended rating behavior. However, as our experimental data does not allow us to determine the root causes of this customer behavior, future research is needed to establish customers' true intentions. In general, though, firms considering the use of external marketing stimuli should be cognizant of our finding that customer age could be a pivotal determinant in behavioral responses to an external stimulus. At least in our case, customer age plays a decisive role and experimental evidence suggests that older customers react slightly more positively to gifts compared to younger customers.

Furthermore, as our results show that gifts significantly influence rating behavior, in one way or another, future research could evaluate alternative gifts such as nonmonetary incentives as a more effective instrument for eliciting rating behavior. As any research, this work also comes with limitations. Contact lenses are highly standardized and frequently bought by a single person, as opposed to a PC or a digital camera. Thus, our results are potentially limited to less complex repeat-purchase goods. Additionally, future research could also vary the shipping time of the product and the delivery of the elicitation mail to investigate possible effects of this relationship.

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