

GROCERIES DELIVERED BY MISTAKE: AN EXPERIMENTAL STUDY OF CUSTOMERS' HONESTY

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Abstract

The present paper reports the results of a field experiment destined to examine to what extent supermarket customers who find an unordered and not paid-for product in their delivery crate call up the supermarket to report the mistakenly delivered product. A majority of customers (517 out of 622) failed to report the undeserved product. Several factors appeared to have affected the decision of whether or not to report the extra product. Customers who placed a delivery order after selecting the groceries in person reported the undeserved product five times more often than customers who placed an order via the supermarket app. Customers with stronger loyalty to the supermarket, as manifested by their length of engagement with the supermarket and frequency of delivery orders, were more likely to report the extra product, whereas customers who placed a more expensive order were less likely to do so. It took honest customers 10.53 hours, on average, to report the undeserved product. Customers with stronger loyalty to the supermarket reported more quickly than others.

Keywords: Field experiment, Customer behavior, Supermarket Delivery, Dishonesty.

INTRODUCTION

Dishonesty is abundant in the marketplace. Businesses cheat customers, providing false or misleading information about their products and services (Yue and Geylani, 2020) or charging hidden fees (Agarwal *et al*, 2014). Customers cheat businesses, returning products that they have used (King *et al*, 2008), shoplifting goods or consuming a product in-store without paying for it (Willkers, 1978). Over the past two decades, with the growing appeal of experimental techniques, behavioral economists and social psychologists have been designing numerous lab and field experiments with the purpose of deriving insights on people's (dis)honest behavior. While the major experimental effort has been devoted to examining the effects of personal and background characteristics (e.g., field of study, academic achievement, professional identity, creativity, religiousness, social circle) on dishonest behavior, a few studies have focused on exploring customers' tendency to dishonestly benefit from businesses' mistakes. Steenhaut & Van Kenhove (2005) and Azar *et al* (2013) handed café and restaurant customers excessive change in order to elucidate their tendency to return the undeserved amount, reporting a return rate of 63.5% and 33.3%, respectively. Tobol *et al* (2022) presented restaurant customers with an unreasonably low bill, revealing that only 39.2% of customers brought the bill error to the server's attention.¹

Inspired by Steenhaut & Van Kenhove (2005) and Azar *et al*'s (2013) studies, the present paper reports the results of a field experiment destined to examine customers' honesty in a different real-life situation: discovering an unordered and unpaid-for product in their supermarket delivery crate. We were interested in finding out to what extent customers who ordered a delivery of groceries from the supermarket would call up the supermarket to report an extra item that was mistakenly added to their delivery and what factors affected their report decision. Aside of the different design, our experiment differs from Steenhaut & Van Kenhove's (2005) and Azar *et al*'s (2013) excessive change setting in several respects. First, the decision of whether or not to return the extra change is made immediately after receiving the change (providing, of course, that the extra change is at all noticed). However, the decision of whether or not to report an unordered and unpaid-for item can be post-poned for hours. Finding an extra and unpaid-for product in the crate allows customers time for deliberation. Does the relaxed time frame available for making a decision act to increase or decrease customers' honesty as compared to receiving an extra change? Furthermore, a customer's honesty is reflected not just in the mere reporting of the mistakenly delivered item but also in the quickness by which the mistake is reported. How long does it take an honest customer to reach a report decision? What factors affect his/her deliberation time?

Second, while Steenhaut & Van Kenhove (2005) only distinguished between low and high customer loyalty to the retailer (based on customers' answers to a questionnaire) and Azar *et al* (2013) could only distinguish between repeated and first-time customers (asking customers if they knew the menu), we were allowed to use the supermarket computerized data so as to record the date of each customer's first delivery order placed with the supermarket as well as to compute the average monthly number of delivery orders each customer placed over the period of engagement with the supermarket. This enabled us to test the hypothesis that customers with stronger loyalty to the supermarket, signaled by the length of time they have been buying from the supermarket and the frequency of delivery orders they have placed, will be more likely to report the extra product.

Third, a unique variable in our study is the means by which customers placed a delivery order with the supermarket. Customers could do this in three ways which differ in the social distance to the delivery manager, i.e., in the closeness of contact they made with the delivery manager: use the supermarket digital app (no contact at all), call up the delivery manager (medium contact) or arrive to the supermarket to select the groceries in person and leave them with the delivery manager (strong contact). We hypothesized that the shorter the social distance, i.e., the closer the contact made with the delivery manager, the greater would customers tend to report the extra product. Finally, another variable unique to our study is the delivery cost, or customers' spending on the goods delivered from the supermarket. We hypothesized that the more money customers spent on the delivered goods the

less honest they would likely to be, as spending much in the supermarket might lead them to feel that they were entitled to receive something for free.

METHODOLOGY

We obtained the permission of a family-run supermarket in Tel-Aviv to conduct the experiment on the premises. The supermarket carries out about 90 deliveries a day, handled by a delivery manager. Customers can order a delivery from the supermarket by contacting the delivery manager through either a digital app or a phone, or by leaving the groceries with him after selecting them in person at the supermarket. Over a period of three weeks, we accompanied the delivery manager at work for several hours a day. When a grocery crate was ready for delivery, we added in a Tasters' Choice coffee jar of 200 grams which we bought from the supermarket at the price of NIS 33.50 (about \$10).² Delivery crates that already included coffee were excluded from the experiment. Each delivery was identified by the name, address and phone number of the recipient customer (all of which we did not see) as well as by a delivery number generated by the cash register.

After adding in the coffee jar, we documented, with the help of the delivery manager, the following data: the customer's gender, the delivery cost (excluding the coffee jar), the length of time the customer has been engaged with the supermarket, the average monthly number of delivery orders placed over time and the means by which the order was placed (app, phone call or in person). In the following day/s, the delivery manager informed us which customers called up the supermarket to report the extra product (identified by their delivery numbers), when they did so and what time the delivery reached their homes. We used this gap in time to figure out each honest customer's deliberation time, disregarding the time the supermarket was closed (nights and weekends) and therefore not being available for receiving reports about mistakenly delivered products.



Figure 1. The Undeserved Good “Mistakenly” Added to the Delivery Crate

FINDINGS

We recorded 700 observations of customers' response to finding an unordered and not paid-for product in their supermarket delivery crate. However, 622 of these customers (i.e., 88.8% of the sample) turned out to be women.³ Since the number of male customers in our sample was too small to be able to make any reliable statements, we discarded them altogether, restricting our analysis to female customers only (N = 622).

Table 1 presents descriptive statistics and explanations of the other variables for which data was collected. Only 17.0% of customers called up the supermarket to report the extra item, deliberating, on average, for 10.53 hours (over an interval stretching from 0.1 to 53.0 hours) before picking up the telephone to do so. Customer reporting rate in our study is about a quarter of Steenhaut & Van Kenhove (2005) extra change return rate (63.5%) and about half of Azar *et al*'s (2013) return rate (33.3%), suggesting that allowing customers time to consider whether or not to report the receipt of an undeserved good results in less honesty.

Table 1

Descriptive Statistics (N = 622)

Variable	Explanation	Mean	SD
Report	1 if the customer reported the extra product; 0 if not	0.17	0.38
Deliberation	Number of hours elapsing from delivery to reporting ^{a, b}	10.53	13.04
App	1 if the order was placed with an app; 0 if not	0.78	0.41
Phone	1 if the order was placed with a phone; 0 if not	0.06	0.24
In person	1 if the order was placed in the supermarket; 0 if not	0.16	0.36
Engagement	Number of months since the first delivery order	18.50	13.43
Delivery frequency	Average monthly number of delivery orders	2.32	1.23
Delivery cost	Customer spending on the delivered goods (NIS)	552.50	241.40

^a Averaged over customers who reported the mistakenly delivered product

^b Net of supermarket closing hours

While most customers opted to place a delivery order via the supermarket app (77.9%), only a small fraction of them reported the extra item (9.9%). In contrast, about a quarter (25.6%) of the customers who ordered a delivery over the phone (6.3%) reported the extra item, whereas almost half (49.0%) of those who arrived to the supermarket to select the groceries in person (15.8%) were honest enough to pick up the telephone to inform the supermarket about the mistakenly delivered product. The difference in reporting frequencies between customers who ordered a delivery after selecting the groceries themselves in the supermarket and those who ordered a delivery via the supermarket app is statistically significant ($t = 7.64$, $p < 0.01$), with the size of the difference, measured by Cohen's d -test (known as the "effect size"), being "large" [$d = 1.14$, $CI_{95\%}(0.92, 1.37)$]. The difference in reporting frequencies between the former customers and those who ordered a delivery over the phone and between the latter customers and those who ordered via the supermarket app is also significant ($t = 2.68$, $p < 0.01$ and $t = 2.18$, $p = 0.03$, respectively), with the size of the difference being "small" [$d = 0.48$, $CI_{95\%}(0.10, 0.86)$] and "medium" [$d = 0.50$, $CI_{95\%}(0.18, 0.83)$], respectively. The results are thus consistent with our hypothesis that the shorter the social distance to the delivery manager, or the closer the contact customers make with him, the more honest they are likely to be, reporting the mistakenly delivered product more often.

Table 2 presents the results of regressing the probability of reporting the extra product on the alternative means of placing a delivery order, the duration of engagement with the supermarket, the average monthly number of delivery orders and the delivery cost.⁴ *Phone*, *App* and *In person* serve, in turn, as the omitted variable from the regression in columns I, II and III, respectively. The three regressions show again the positive and significant effect that a shorter social distance to the delivery manager has on the tendency to report the extra product. In column I, for example, the positive coefficient of *In person* indicates that a customer who switches from ordering a delivery over the phone to ordering it in person at the supermarket will be more likely to report the extra product; however, if

the customer switches to ordering the delivery via the app, the negative coefficient of *App* indicates that she will be less likely to report the extra product.

Table 2

Linear Probability Model Regressions
(Dependent variable = 100 X *Report*)

	I	II	III
(Intercept)	10.06	- 3.82	25.42***
	(6.717)	(4.676)	(5.804)
In person	15.35***	29.24***	---
	(5.949)	(3.556)	---
App	- 13.89***	---	- 29.24***
	(5.199)	---	(3.556)
Phone	---	13.87***	- 15.35***
	---	(5.199)	(5.949)
Engagement	1.12***	.12***	1.12***
	(0.096)	(0.096)	(0.096)
Delivery frequency	1.90*	1.90*	1.90*
	(1.027)	(1.027)	(1.027)
Delivery cost	- 0.02***	- 0.02***	- 0.02***
	(0.005)	(0.005)	(0.005)
R²	0.318	0.318	0.318
Adj. R²	0.313	0.313	0.313
F statistic	54.45***	57.50***	57.50***
N	622	622	622

*, **, *** Statistically significant at 0.1, 0.05 and 0.01 levels, respectively

Note: standard errors appear in parentheses

The regression results are also consistent with our two other hypotheses: first, both the duration of engagement and the frequency of delivery orders placed with the supermarket have a significantly positive effect on the tendency to report the extra product, although the effect of delivery frequency is only weakly significant ($p\text{-value} < 0.1$). Hence, the stronger the customer's loyalty to the supermarket, proxied by her actual behavior, the more likely will she be to report the mistakenly delivered product. Second, delivery cost has a significantly *negative* effect on the tendency to report the extra product, presumably because the more money the customer spends on buying from the supermarket the more likely she is to view the extra product as a deserved gift.

While we do not know how long it took a dishonest customer to reach a non-report decision, we do know how long it took a honest customer to reach a report decision. As seen in Figure 2, the frequency of reporting the extra product more or less falls with deliberation time until it ceases at 53 hours.

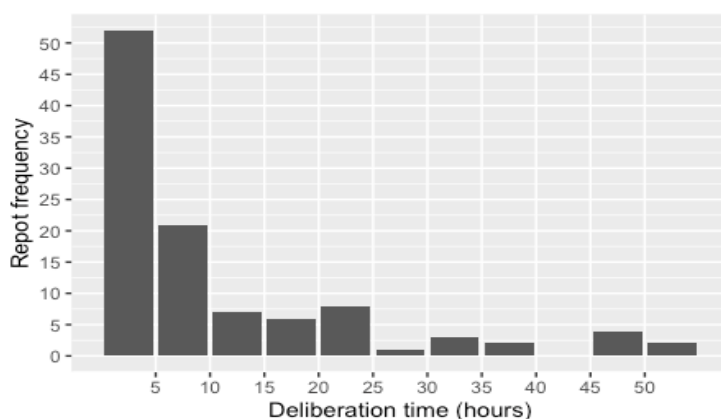


Figure 2. Frequency of Reports by Deliberation Time

On average, it took honest customers 10.53 hours to report the mistakenly delivered product. Table 3 shows that 50 percent of honest customers called up the supermarket within the first 5.5 hours after delivery (20 percent within the first hour), yet it took additional 47.5 hours for the remaining 50 percent of customers to do so.

Table 3
Cumulative Reports and Deliberation Time

Reports (cumulative %)	Deliberation time (hours)
10	0.5
20	1.0
30	2.0
40	4.0
50	5.5
60	7.0
70	12.0
80	17.5
90	32.0
100	53.0

Table 4 presents the results of regressing honest customers' deliberation time on the alternative means of placing a delivery order, loyalty to the supermarket and delivery cost. Only the loyalty variables, length of engagement with the supermarket and frequency of ordering, appear to have a statistically significant effect on deliberation time. Their coefficients are negative, implying that a greater loyalty to the supermarket not only increases the likelihood of reporting the undeserved product but also reduces the time of doing so.

Table 4
Linear Probability Model Regressions
(Dependent variable = Deliberation time)

	I	II	III
(Intercept)	14.26**	19.21***	19.74***
	(5.166)	(3.932)	(3.991)
In person	5.48	0.53	---
	(4.212)	(2.466)	---
App	4.95	---	- 0.53
	(4.216)	---	(2.466)
Phone	---	- 4.95	- 5.48
	---	(4.216)	(4.212)
Engagement	- 0.28***	- 0.28***	- 0.28***
	(0.070)	(0.070)	(0.070)
Delivery frequency	- 0.78***	- 0.78***	- 0.78***
	(0.269)	(0.269)	(0.269)
Delivery cost	0.01	0.01	0.01
	(0.005)	(0.005)	(0.005)
R²	0.184	0.184	0.184
Adj. R²	0.143	0.143	0.143
F statistic	4.50***	4.50***	4.50***
N	106	106	106

*, **, *** Statistically significant at 0.1, 0.05 and 0.01 levels, respectively

Note: standard errors appear in parentheses

DISCUSSION AND CONCLUSION

We have reported the results of a field experiment conducted under natural conditions (with subjects not being aware that they were taking part in an experiment) destined to examine whether supermarket customers who find an unordered and not paid-for product in their delivery crate call up the supermarket to report the mistakenly delivered product. As might have been predicted by a U.S. time-use survey in which 80% of housewives claimed to be the primary grocery shopper in the household (Schaeffer, 2019), 90% of our 700 delivery order observations turned out to be placed by women. We therefore restricted our analysis to female customers only, identifying three main factors affecting their report decision: loyalty to the supermarket (as manifested by the customer's purchase history), social distance to the delivery manager (as manifested by the channel used for placing a delivery order) and the cost of the delivered goods. While the first factor has been found to enhance the decision to report, the two other factors have been shown to discourage it. Activating these factors are, presumably, feelings of guilt, embarrassment and entitlement, as we discuss below.

Our results that the longer the time a customer has been engaged with the supermarket and the greater the frequency of delivery orders she places with the supermarket the more likely she is to report the mistakenly delivered good is apparently related to the concept of customer loyalty. This concept describes an ongoing emotional relationship between a customer and a retailer that manifests itself by the customer's willingness to repeatedly purchase from the particular retailer rather than from its competitors (Day, 1969). It has been found that customers experience guilt when evaluating the possibility of engaging in an unethical act (Strutton *et al*, 1994) and that the feeling of guilt may prevent loyal customers from actions that might damage their relationship with the retailer (Leith and Baumeister, 1998). The more loyal the customer, the greater, presumably, is the guilt she would feel if not reporting the extra product thus the more likely she is to avoid such mishap. Still, combining information from a consumer panel with mail surveys over a period of ten months, Van Kenhove *et al* (2003) examined to which extent customer loyalty to a store translated into more ethical behavior towards the store. Unethical behavior was assessed by respondents' answers to whether, in that particular store, they have been engaged in behavior which involved, for example, not saying anything when getting excessive change or when the bill was miscalculated in their favor. The results showed a significant correlation between *affective* commitment to a store and ethical behavior towards that store, but, in contrast with our finding, no significant correlation was found between *behavioral* commitment and ethical behavior.

Finding an unordered item in one's delivery crate often implies that this item is missing from someone else's crate. The delivery manager is likely to be informed of the missing item and might figure out who has actually received it. Getting a call about the mistakenly delivered product, if not reporting it, is embarrassing. Even if the delivery manager does not call up, a non-reporting customer might suspect that the delivery manager knows the truth and feel ashamed and embarrassed whenever seeing him again in the supermarket. Presumably, this feeling is less troubling when the delivery order was placed using the supermarket app or over the phone rather than face-to-face, explaining our finding that the closer the contact made with the delivery manager the greater the tendency to report the extra product. A similar conclusion is often reached in the popular die-under-the-cup task which incentivizes cheating: participants cheat less when having to report their die-rolling outcome facing the experimenter as compared to reporting it anonymously (Yaniv and Siniver, 2016).

Previous research on dishonest behavior points out that when deciding to behave dishonestly people balance between the motivation for personal gain and the desire to maintain a positive self-image (Mazar *et al*, 2008). Maintaining a positive self-image requires being able to justify to oneself one's unethical behavior. In line with this argument, Schurr and Ritov (2016) showed that winning a competition enhances the sense of entitlement, presumably providing the necessary justification to engage in a behavior one would normally consider unacceptable. Similarly, our finding that customers who placed a more expensive delivery order with the supermarket were less likely to report the mistakenly delivered product suggests that a feeling of entitlement might have facilitated self-justification for viewing the extra product as a deserved gift.

There may, however, be some possible limitations in our study. First, the experiment lacks a control treatment to establish the base level of customers' reaction to mistakes in delivery orders. This could have been obtained by removing (instead of adding) an item in the delivery crate to see whether customers report the mistake when it is in their advantage to do so. Fearing to harm the supermarket's reputation for good service, the delivery manager objected to this line of experimentation. Azar *et al* (2013), who ended up with only 33.3% of customers returning the extra change, avoided also, presumably for the same reason, running a control treatment with customers receiving less than the correct change. Second, customers self-selected their ordering modes rather than being randomly assigned to them. There may be many potentially relevant differences between the type of customers who selected the alternative modes, hence the difference in honesty levels across these modes could be explained not just by the social distance to the delivery manager but also, for example, by the price of time (customers who placed a delivery order at the supermarket seem to face a lower price of time) or by age (older customers, being less skilled in using a digital app, are more likely to order at the supermarket). However, Gino and Pierce (2009), Cadsby *et al* (2010) or Gino and Margolis (2011) found no evidence of age influencing the level of dishonesty among their subjects. Third, Customers who spend a lot of money on their purchases also tend to buy more goods. With many goods, the likelihood of missing a delivery mistake is higher, implying that non-reporting might not necessarily be a dishonest act but just an oversight. We doubt, however, that not having ordered a Taster's Choice coffee jar, which, if at all consumed by the customer, is not purchased on a daily basis but rather once in a few weeks/months, would fail to be noticed. Fourth, the person unpacking the delivery crate at home could be a family member other than the housewife who ordered the delivery. However, when placing the coffee jar in the coffee cabinet he or she is likely to notice that there was no need for more coffee and inquire why it had been ordered.

Time plays a crucial role in the decision to act dishonestly. Some dishonest opportunities require an immediate response (such as receiving excess change in a restaurant) while others allow for extensive deliberation time (such as finding an unordered product in a delivery crate). Recent experimental studies that examined how honesty varies with time allowed for ethical decision making arrived to opposing conclusions: Capraro (2017) and Lohse *et al* (2018) found that time pressure leads to more honest behavior compared to sufficient deliberation time, whereas Gunia (2012) and Hausladen & Nikolaychuk (2022) found time pressure to lead to more dishonest behavior. In all these studies, the time intervals allowed for decision making, whether tight or relaxed, were exogenously determined by the experimenters. In contrast, our study allowed customers unlimited time to deliberate on whether or not to report the mistakenly delivered product. Compared to Steenhaut & Van Kenhove (2005) and Azar *et al* (2013) excessive change studies, in which customers had to make an immediate ethical decision, our customers exhibited a significantly lower tendency to report the undeserved good. Honest customers who did report the undeserved good were free to determine the time of doing so, thereby attaching a time tag to their honesty. Is a customer who reports the undeserved good after 50 hours as honest as one who reports it after one hour? If it takes one so long to reach the right decision, is she really honest? Future research might help clarifying this issue.

Research ethics statement

This article is the authors' own original work, which has not been previously published elsewhere.

Author contribution statement

Yossef Tobol and Erez Siniver conducted the experiment and ran the statistical analysis. Gideon Yaniv drafted the manuscript.

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that could have appeared to influence the work reported in this paper.

ENDNOTES

¹ For detailed reviews of the experimental literature on dishonesty see Rosenbaum *et al* (2014), Jacobsen *et al* (2018), Abeler *et al* (2019) and Gerlach *et al* (2019).

² We avoided choosing a product which customers might report not because of being honest but because of not needing it or finding it useless. Coffee is a product that even if customers do not consume themselves, they could always keep for guests.

³ This finding is supported by a time-use survey sponsored by the U.S. Bureau of Labor Statistics (BLS), in which 80% of mothers in households consisting of married or cohabiting parents with one or more children under the age of 18 said they were the primary grocery shopper in the household (Schaeffer, 2019).

⁴ We followed Azar *et al* (2013) and multiplied the dependent variable *Report* by 100. In this way the regression coefficients represent the percentage point increase in the probability of reporting the extra item due to an increase of one unit in the independent variable.

References

- Abeler, J., Nosenzo, D., & Raymond, C., 2019, 'Preferences for truth-telling', *Econometrica* 87(4), 1115-1153.
- Agarwal, S., Chomsisengphet, S., Mahoney, N., & Stroebe, J., 2014, 'A Simple framework for estimating consumer benefits from regulating hidden fees', *Journal of Legal Studies* 43(Jun), S239-S252.
- Azar, O.H., Yosef, S., & Bar-Eli, M., 2013, 'Do customers return excessive change in a restaurant? A field experiment on dishonesty', *Journal of Economic Behavior and Organization* 93(Sep), 219-226.
- Cadsby, C.B., Song, F., & Tapon, F., 2010, 'Are you paying your employees to cheat? An experimental investigation', *The B.E. Journal of Economic Analysis & Policy* 10 (1), 1-32.
- Capraro, V., 2017, 'Does the truth come naturally? Time pressure increases honesty in one-shot deception games', *Economics Letters* 158(Sep), 54-57.
- Day, G.S., 1969, 'A two-dimensional concept of brand loyalty', *Journal of Advertising Research* 9(9), 29-35.
- Gerlach, P., Teodorescu, K., & Hertwig, R., 2019, 'The truth about lies: A meta-analysis on dishonest behavior', *Psychological Bulletin* 145(1), 1-44.
- Gino, F., & Margolis, J.D., 2011, 'Bringing ethics into focus: How regulatory focus and risk preferences influence (un)ethical behavior', *Organizational Behavior and Human Decision Processes* 115, 145-156.
- Gino, F., & Pierce, L., 2009, 'The abundance effect: Unethical behavior in the presence of wealth', *Organizational Behavior and Human Decision Processes* 109(2), 142-155.
- Gunia, B.C., Wang, L., Huang, L., Wang, J., & Murnighan, J.K., 2012, 'Contemplation and conversation: Subtle influences on moral decision-making', *Academy of Management Journal* 55(1), 13-33.
- Hausladen C. & Nikolaychuk O., 2024 'Color me honest! Time pressure and (dis)honest behavior'. *Frontiers in Behavioral Economics* 2 (Jan).
- Jacobsen, C., Fosgaard, T.R., & Pascual-Ezama, D., 2018, 'Why do we lie? A practical guide to the dishonesty literature', *Journal of Economic Surveys* 32(2), 357-387.
- King, T., Dennis, C., & Wright, L-T., 2008, 'Myopia, customer returns and the theory of planned behaviour', *Journal of Marketing Management* 24(1), 185-203.
- Leith, K.P., & Baumeister, R.F., 1998, 'Empathy, shame, guilt and narratives of interpersonal conflicts: Guilt-prone people are better at perspective taking', *Journal of Personality* 66(1), 1-37.
- Lohse, T., Simon, S.A., & Konrad, K.A., 2018, 'Deception under time pressure: Conscious decision or a problem of awareness?', *Journal of Economic Behavior and Organization* 146, 31-42.

- Rosenbaum, S.M., Billinger, S., & Stieglitz, N., 2014, 'Let's be honest: A review of experimental evidence of honesty and truth-telling', *Journal of Economic Psychology* 45(Dec), 181–196.
- Schaeffer, A., 2019, 'Among U.S. couples, women do more cooking and grocery shopping than men', Pew Research Center, <https://www.pewresearch.org/fact-tank/2019/09/24/among-u-s-couples-women-do-more-cooking-and-grocery-shopping-than-men/>
- Schurr, A., & Ritov, I., 2016, 'Winning a competition predicts dishonest behavior'. *PNAS* 113(7), 1754-1759.
- Steenhaut, S., & Van Kenhove, P., 2005, 'Relationship Commitment and Ethical Consumer Behavior in a Retail Setting: The Case of Receiving Too Much Change at the Checkout', *Journal of Business Ethics* 56(4), 335-353.
- Strutton, D., Vitell, S.J., & Pelton, E.E., 1994, 'How consumers may justify inappropriate behavior in marketing settings: An application of the techniques of neutralization', *Journal of Business Research* 30(3), 253-260.
- Tobol, Y., Siniver, E., & Yaniv, G., 2022, 'Do restaurant customers who receive an unreasonably low bill bring it to the server's attention? A field experiment on dishonesty', *Journal of Economic Psychology* 90(Jun), 102491.
- Van Kenhove, P., De Wulf, & K., Steenhaut, S., 2003, 'The relationship between consumers' unethical behavior and customer loyalty in a retail environment', *Journal of Business Ethics* 44, 261-278.
- Willkes, R.E., 1978, 'Fraudulent behavior by consumers: The other side of fraud in the marketplace: Consumer initiated fraud against business', *Journal of Marketing* 42(4), 67-75.
- Yaniv, G., & Siniver, E., 2016, 'The (honest) truth about rational dishonesty', *Journal of Economic Psychology* 53(4), 131-140.
- Yue, W., & Geylani, T., 2020, 'Regulating Deceptive Advertising: False Claims and Skeptical Consumers', *Marketing Science* 39(4), 669-848.

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