Original Article

The Impact of Transaction Utility on Consumer Decisions

The Role of Loss Aversion and Acquisition Utility

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Abstract. In consumption decisions, Thaler (1985) distinguishes acquisition and transaction utility. Whereas acquisition utility stands for the pleasure from obtaining a good, transaction utility denominates the value consumers derive from the deal itself. Transaction utility depends on a comparison of actual prices with reference to other prices such as the regular price. The present article reports two experimental studies demonstrating the effect of transaction utility on purchase decisions. In Experiment 1 ($N = 90$), on the basis of prospect theory (Kahneman & Tversky, 1979), it is expected that negative transaction utility affects purchase decisions to a higher degree than its positive counterpart. Results support this hypothesis. In Experiment 2 ($N = 121$) it is hypothesized that acquisition utility moderates the effect of transaction utility, that is, transaction utility becomes less important if a product is desired primarily for its actual value. Though both forms of utility affected purchase intentions, no support for the moderation hypothesis was observed.

Keywords: consumer psychology, reference prices, transaction utility, acquisition utility, loss aversion

Sometimes we buy something simply because purchasing the respective item seems to be a "good deal." Goods and services that are cheaper than usual may seem so tempting that the bargain itself eclipses their actual utility. To capture this phenomenon, Thaler (1985, 1999) has introduced the distinction between acquisition and transaction utility. Acquisition utility is the value consumers derive from obtaining a good (minus the price to be paid). Transaction utility is the value consumers get from the deal itself. It depends on the comparison of actual price with a reference price. For instance, the regular price or a price expected by the customer could serve as a reference. If something is cheaper than the reference price, transaction utility is positive and induces the customer to buy the respective item. In other words, transaction utility is a measure of the joy of getting a bargain, which exerts influence on consumer choice.

To understand how transaction utility affects behavior is of relevance for sales professionals to refine their marketing tools, as well as for customers to resist the temptation to buy something simply because it is cheap.

The present paper studies the effect of transaction utility in two experiments. The first study tests for an asymmetric response to negative and positive transaction utility, that is, whether negative deviations from a reference price affect consumer decisions more than positive deviations. The second study explores whether the impact of transaction utility is moderated by a product's acquisition utility.

Transaction Utility and Consumer Behavior

The reference price against which the actual price is compared may be given internally (e.g., by a customer's expected price) or it may be provided externally (e.g., if a price tag denotes the manufacturer's suggested retail price). Formation, retrieval, and effects of reference prices have been intensively studied (for reviews see Kalyanaram & Winer, 1995; Mazumdar, Raj, & Sinha, 2005), sometimes under different labels such as the "sticker shock" effect (Winer, 1986). An actual price that is lower than the reference price is appealing and increases the probability of making the deal. Accordingly, transaction utility is defined as the difference between the actual price and the reference price.

Psychological explanations for the effect of transaction utility range from an elevated mood by getting a bargain (Heilman, Nakamoto, & Rao, 2002; Milkman & Beshears, 2009), to an increase in the perceived fairness of the deal (Campbell, 1999; Darke & Dahl, 2003; Grewal, Monroe, & Krishnan, 1998), to the postulating of a psychological income effect (Heilman et al., 2002; Milkman & Beshears, 2009).

Various marketing tools aim at increasing perceived transaction utility. In-store coupons and other price promotions, for instance, increase transaction utility by offering customers a temporarily lower price than usual. Effectiveness

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of such measures was demonstrated empirically, for example, in a field study by Heilman et al. (2002). Customers provided with in-store instant coupons equal to US$1 bought more items and spent more money on their shopping than a control group. Similar results are reported by Milkman and Beshears (2009) who analyzed data from an online grocer. That too frequent price promotions can also reduce transaction utility was shown in a shopping experiment by Kalwani and Yim (1992). Frequency and depth of price reductions for promoted brands decreased the price participants expected to pay, and in turn, affected brand choice. From the viewpoint of transaction utility theory, promotion became ineffective over time because it lowered participants' expectations which served as the reference price in comparison with the observed price.

Transaction utility may also reach negative values, for instance, if after a price increase a good is more expensive than expected. Homburg, Hoyer, and Koschate (2005) varied the magnitude of price increases experimentally and observed a negative impact on participants' repurchase intentions.

Several authors have proposed a stronger impact of negative transaction utility on consumer behavior than that of its positive counterpart. In the following section we report on previous studies testing for an asymmetric effect of transaction utility.

Asymmetric Effects of Positive and Negative Transaction Utility

Based on prospect theory's (Kahneman & Tversky, 1979) idea of loss aversion, some authors assume an asymmetric effect of reference prices, that is, consumers react more strongly to price increases than to price decreases (cf. Meyer & Johnson, 1995). Prospect theory assumes a value function that is defined as deviations from a reference point. Negative deviations from the reference point are perceived as losses and positive deviations are perceived as gains. One of the theory's key features is loss aversion, that is, losses loom larger than gains. Tversky and Kahneman (1992) estimated that losses have about twice as much impact on decisions as gains.

Applied to the context of consumer behavior this means that negative transaction utility – due to an actual price above the reference price – is perceived as a loss whereas positive transaction utility is perceived as a gain. Because consumers are assumed to be loss averse, negative transaction utility should weight more in purchase decisions than positive transaction utility.

Empirical evidence, however, for an asymmetric effect of positive and negative transaction utility is mixed. A review by Kalyanaram and Winer (1995) counted eight studies reporting stronger effects of negative transaction utility, but also cites two studies in which positive transaction utility had a stronger impact on consumer behavior. More recently, Mazumdar et al. (2005) reviewed eight studies on this issue. Three found support for the loss aversion hypothesis, two studies observed loss aversion only for a minority of investigated products, and three found no support. In addition to the studies cited in these reviews, Raman and Bass (2002) reported stronger effects of negative transaction utility when analyzing data on frequently bought nondurables. Kalwani and Yim (1992) observed in their experiment that a specific brand was less likely to be chosen if a promotion was expected but did not occur, whereas the opposite event, an unexpected promotion, had no statistically significant effect. In an experimental study by Urbany, Bearden, Kaicker, and Smith-de Borrero (1997) perceived transaction utility was affected more strongly by prices higher than expected than by lower prices. However, Hoch, Drèze, and Purk (1994), by analyzing the impact of increasing and decreasing everyday prices on purchase behavior, found no evidence for an asymmetric effect of transaction utility.

To summarize, whereas the general impact of transaction utility on consumer behavior seems to be well documented in empirical research, results for an asymmetric response to negative and positive transaction utility are more puzzling. Experiment 1, therefore, tests for this asymmetric effect. Based on prospect theory's notion of loss aversion, we expect the impact of negative transaction utility on purchase decisions to be stronger than that of positive transaction utility.

Transaction Utility Versus Acquisition Utility

Relatively little is known of the interplay of transaction and acquisition utility. Thaler (1985) models the overall utility derived from a purchase as the sum of both forms of utility. In an experiment by Urbany et al. (1997) perceived acquisition utility had stronger impact on purchase intentions than perceived transaction utility. Grewal et al. (1998) discuss the possibility that both forms of utilities are interrelated and found, in an experimental study, that perceived transaction utility has indeed influence on perceived acquisition utility. Furthermore, the impact of transaction utility on purchase intentions was mediated by perceived acquisition utility, that is, transaction utility affected purchase intentions through influencing perceived acquisition utility.

Neither of these studies, however, tested for an interaction effect of transaction and acquisition utility on purchase intentions. One of the feasible interactions would be, for instance, that the effect of transaction utility is moderated by acquisition utility. This might be the case in situations where quality is particularly relevant to a customer. If customers find exactly what they have been looking for, the extra joy from getting a bargain might no longer play a role and transaction utility loses its impact.

We will test for this potential interaction effect in Experiment 2 by manipulating both forms of utility and by measuring participants' purchase intentions.

Experiment 1

In the first experiment we aim to replicate the general effect of transaction utility on purchase decisions reported in the literature. We expect a higher purchase intention when transaction utility is positive than when it is negative. Due to the mixed evidence for loss aversion in reactions to price changes, we will test for an asymmetry in the impact of negative and positive transaction utility. Negative transaction utility is expected to affect purchase intention more than positive transaction utility.

Material and Design

Two types of transaction utility will be analyzed. Type one is an experimental manipulation of reference prices in a questionnaire scenario. A reference price above the actual price corresponds to positive transaction utility and vice versa. We will refer to the second type as *real transaction utility*. It will be defined as deviation of the actual price shown in the questionnaire from the price participants indicated in the questionnaire that they usually pay for a similar product.

For the experimental manipulation of transaction utility, three versions of a paper-pencil questionnaire were devised which described short shopping scenarios. Each participant completed one version only. All scenarios started with the same situation: "*You are planning to buy a new pair of trousers. In a department store you discover a pair for €52.*" The rest differed across experimental conditions.

Transaction utility was manipulated by either providing a reference price above the actual price or below it. In a neutral control condition no reference price was suggested by the scenario.

In the *positive transaction utility condition* participants read that "*These trousers are in the sale and would have cost €68 otherwise.*" In the *negative transaction utility condition* they read "*Until recently these trousers were in the sale and would have cost only €36.*" In the *neutral condition* no information about the former price of the trousers was given. Please note that in all three conditions the actual price for the trousers was the same, namely €52.

Purchase intention, which participants indicated on a 9-point scale ("*How likely is it that you buy these trousers for €52*?"; *1 – very unlikely; 9 – very likely*), served as a dependent variable.

Besides their gender, age, and income, participants were also asked how much they typically pay for a pair of trousers. The typical price of trousers was elicited for two purposes. First, this variable served as a covariate in analyzing the effect of experimental manipulation. Second, it was used to compute a proxy for the *real transaction utility* participants perceived in the questionnaire's shopping scenario. The price participants indicated as typical can be seen as their natural reference price. Assuming that they compare the trousers' price in the questionnaire scenario with that which they normally pay, the difference (typical price – €52) can be understood as a proxy for the participants' individual *real transaction utility*. This measure was not affected by the experimental manipulation, $F(2, 86) = 0.82$, $p = .45$.

In the following, our hypotheses will be tested twice. First, we will analyze the effect of the experimental manipulation on purchase intentions. Second, our proxy for *real transaction utility* – defined as difference between the price participants normally pay in their real lives and the trousers' price in the questionnaire scenario – will be used in an additional quasi-experimental test of our hypotheses.

Participants

A convenience sample of $N = 90$ participants was recruited at the biggest railway station in Vienna, Austria. The mean age was 39.5 years ($SD = 15.3$) and about 58% were female. Regarding monthly net income, 39% earned less than €1,400, about 40% earned €1,401–2,200, and about 21% earned more than €2,201. On average, participants indicated they typically pay €55.50 ($SD = 27.5$) for a pair of trousers.

Results and Discussion

First, the effect of transaction utility as manipulated in the questionnaire scenarios will be reported. Next, purchase intentions are regressed to the measure for *real transaction utility*, defined as the difference between the normal price participants indicated they paid for a pair of trousers normally and the price in the scenario.

Regarding the effect of the experimentally manipulated transaction utility, a one-way ANCOVA with purchase intention as dependent and participants' typical price for the trousers as covariate, $F(1, 85) = 8.68$, $p < .01$, asserts that the experimental condition had affected purchase intention, $F(2, 85) = 3.26$, $p = .04$. Estimated marginal means of the purchase intention for the pair of trousers are 5.35 ($SE = .49$) in the *neutral condition*, 5.90 ($SE = .50$) in the *positive transaction utility condition*, and 4.13 ($SE = .49$) in the *negative transaction utility condition*.

To test for the proposed asymmetric effect of losses and gains, simple contrasts were computed. Whereas purchase intentions are about the same in the *neutral* and in the *positive transaction utility condition*, contrast estimate = 0.51, $p = .47$, the *negative transaction utility condition* lowered purchase probability significantly as compared to the *neutral condition,* contrast estimate = −1.22, $p = .04$ (one-tailed). These findings support the notion that loss aversion plays a role in how transaction utility is perceived. A reference price below the actual price had a stronger impact on purchase probability than a reference price above.

One participant had to be excluded from the analysis of the *real transaction utility* measure (typical price of trousers – €52) due to a missing value. For the remaining 89 participants a mean value of 3.53 ($SD = 27.47$) was computed. About 60% of participants exhibited a negative value ($M = -15.72$, $SD = 10.60$), and 40% a positive value ($M = 31.86$, $SD = 18.54$). To test if participants' purchase

intentions in the questionnaire's shopping scenario were affected by this proxy for their *real transaction utility*, and for a further check of the hypothesis about an asymmetric effect of positive and negative transaction utility, a linear regression analysis was computed. For this purpose, the measure for *real transaction utility* was split into two predictors: A dummy coded variable indicating the sign of transaction utility (0 – positive, 1 – negative), and its *z*-transformed absolute value indicating the absolute amount of utility. Together with their interaction term these two predictors were included in a regression equation with participants' purchase intentions as a dependent variable. The model explained about 16.8% of the variance in purchase intentions, $F(3, 85) = 5.71$, $p < .01$. The dummy that indicates the sign of transaction utility, $\beta = -.42$, $t(85) = -3.69$, $p < .01$, and the interaction term, $\beta = -.25$, $t(85) = -1.95$, $p = .05$, significantly predicted purchase intentions. As to be expected, the absolute amount of utility did not, $\beta = -.13$, $t(85) = -0.94$, $p = .35$. Figure 1 shows the estimated slopes separately for positive and negative transaction utility. The observed interaction effect can be interpreted in favor of the hypothesis about the asymmetric effect of positive and negative transaction utility: The difference between the price participants normally pay in real life and the actual price in the scenario only matters if negative. In other words, whereas negative transaction utility seems to restrain buying, positive transaction utility seems not to affect purchase decisions.

Findings from Experiment 1 provide further evidence for the relevance of transaction utility in consumer decisions. The different reference prices in the questionnaire scenarios, as well as participants' natural reference prices, affected purchase intentions. Furthermore, both analyses showed a stronger impact of negative transaction utility than of positive transaction utility. From Experiment 1 it seems that the effect of transaction utility is asymmetric and consumers are liable to loss aversion.

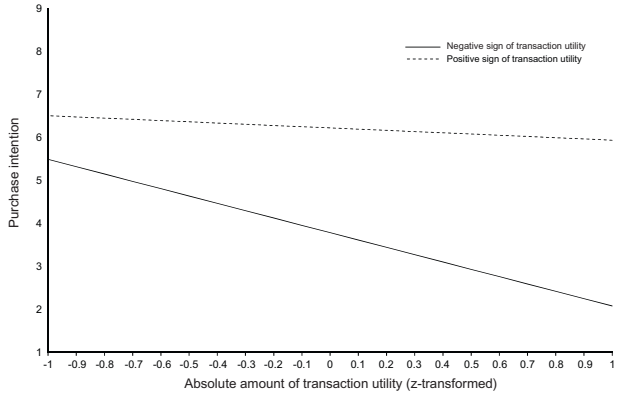

Figure 1. Estimated slopes for the interaction effect of the amount of real transaction utility and its sign on purchase intention (Experiment 1).

Experiment 2

In the second experiment we will test for a potential interaction of acquisition and transaction utility on purchase decisions. Does making a bargain become less important if a product or service is desired particularly for its practical value? The second rationale is to validate the proxy for *real transaction utility* we have used in Experiment 1. For this purpose the measure is applied to predict values on a self-developed *perceived transaction utility* scale. Furthermore, as in Experiment 1, we will use the *real transaction utility* proxy to check for asymmetric effects of transaction utility.

Material and Design

The questionnaire scenario described essentially the same shopping situation as in the previous study. Two levels of acquisition utility (high vs. low) and two levels of transaction utility (positive vs. negative) were manipulated, resulting in a 2×2 factorial design. Each participant was assigned to only one of the four conditions.

Acquisition utility was manipulated by varying the desirability of the product. Participants in the *high acquisition utility condition* read: "*You are planning to buy an elegant pair of trousers. In a department store you discover a pair for €52, which are exactly what you have been looking for.*" The scenario in the *low acquisition utility condition* was: "*You are planning to buy an elegant pair of trousers. In a department store you discover a pair for €52, which fit you quite well but are not as elegant as you wanted them to be.*"

Transaction utility was manipulated as in the previous study by providing different reference prices in the scenarios. Participants in the *positive transaction utility condition* read that "*These trousers are in the sale and would have cost €68 otherwise.*" The opposite information was given in the *negative transaction utility condition*: "*Until recently these trousers were in the sale and would have cost only €36.*"

As dependent variable purchase intentions for the pair of trousers were measured on a 9-point scale ("*How likely is it that you buy these trousers for €52?*"; *1 – very unlikely; 9 – very likely).*

As in the first study the participants' typical price of trousers was elicited. This variable served again as a covariate in analyzing the effect of the experimental manipulation, and was used to approximate the real transaction utility participants perceive in the deal offered in the questionnaire scenario. The measure for the real transaction utility was computed by subtracting the price participants normally pay in real life and the trousers' price in the scenario. It was independent of the experimental manipulation, and was neither affected by manipulations of *acquisition utility*, $F(1, 116) = 0.74$, $p = .39$, of *transaction utility*, $F(1, 116) = 1.01$, $p = .32$, nor by their interaction, $F(1, 116) = 0.02$, $p = .90$. The measure was used for an additional test of the hypothesis about an asymmetric effect of positive and negative transaction utility.

To validate the proxy for *real transaction utility*, a scale for *perceived transaction utility* was developed. *Real transaction utility* was expected to be a significant predictor of *perceived transaction utility*. Overall 10 items were formulated on the basis of psychological explanations for the effect of transaction utility that are discussed in the literature (i.e., elevated mood by getting a bargain, perceived fairness of the deal, psychological income effect). Participants indicated their agreement on a 9-point scale (1 – *totally disagree*; 9 – *totally agree*) with these statements. On the basis of reliability analysis three items with item-scale correlations below .40 were excluded. The remaining seven items formed the *perceived transaction utility* scale, Cronbach $\alpha = .87$.

Finally, participants indicated their gender, age, income, and as mentioned above the price they would typically pay for a pair of trousers.

The experimental manipulation will be used to test for a possible interaction effect of transaction and acquisition utility. Subsequently the proxy for *real transaction utility* will be validated by relating it to *perceived transaction utility* as measured by our scale. Finally the proxy for *real transaction utility* will be used in a further test of the hypothesis on an asymmetric effect of positive and negative transaction utility.

Participants

A convenience sample of $N = 121$ participants was recruited at the biggest railway station in Vienna, Austria. The mean age was 38.4 years ($SD = 13.8$) and 53% were female. In terms of income, 43% earned less than €1,400 monthly, about 44% earned €1,401–2,200, and about 13% earned more than €2,201. On average participants indicated they typically pay € 58.20 ($SD = 28.4$) for a pair of trousers.

Results and Discussion

The effects of experimentally manipulated transaction and acquisition utility on purchase intentions are reported first. After validating the proxy for *real transaction utility* by the *perceived transaction utility* scale, it will be applied once more to test for an asymmetric effect of transaction utility.

To test for the impact of the experimental manipulation of transaction and acquisition utility on purchase intentions, a two-way ANCOVA with participants' typical price of trousers as covariate was conducted. Purchase intentions were significantly affected by the covariate, $F(1, 115) = 4.44$, $p = .04$. Estimated marginal means for purchase intentions in each condition are provided in Table 1. ANCOVA showed a main effect of *acquisition utility*, $F(1, 115) = 12.03$, $p < .01$, and a main effect of *transaction utility*, $F(1, 115) = 12.72$, $p < .01$. The interaction did not reach significance, $F(1, 115) = 0.95$, $p = .33$. Hence, the assumption that acquisition utility moderates the impact of transaction utility could not be supported.

Table 1. Estimated marginal means and standard errors for purchase intentions by condition (Experiment 2)

	Transaction utility			
	Negative		Positive	
Acquisition utility	*n*	*M*(*SE*)	*n*	*M*(*SE*)
Low	30	3.92 (.46)	31	5.12 (.45)
High	30	5.07 (.47)	30	7.16 (.46)

Notes. Means are adjusted for the price participants indicated they typically pay for a pair of trousers ($M = 58.2$, $SD = 28.4$). Purchase intentions were measured in terms of probability on a 9-point scale (1 – *very unlikely; 9 – very likely*).

Real transaction utility was defined in the first study as the difference between what participants indicated they normally pay for a pair of trousers and the price in the questionnaire scenario. To test if this measure ($M = 6.17$, $SD = 28.42$) is actually a proxy for the transaction utility participants perceived in the shopping scenario, a linear regression was run with the questionnaire's *perceived transaction utility* scale ($M = 4.02$, $SD = 1.72$) as a dependent variable. Both variables were *z*-transformed for this analysis. One participant was excluded due to missing values. For the remaining 120 participants *real transaction utility* predicts *perceived transaction utility*, $\beta = .41$, $t(118) = 4.84$, $p < .01$, explaining 16.5% of the variance, $F(1, 118) = 23.38$, $p = .01$. Furthermore, *perceived transaction utility* mediates the impact of the *real transaction utility* measure on purchase intentions (according to the approach of Baron & Kenny, 1986): The initial relationship of *real transaction utility* and purchase intention, $\beta = .22$, $t(118) = 2.49$, $p = .01$, $R^2 = .05$, $F(1, 118) = 6.21$, $p = .01$, is nonsignificant, $\beta = .08$, $t(117) = 0.81$, $p = .42$, after controlling for *perceived transaction utility*, $\beta = .37$, $t(117) = 3.94$, $p < .01$, $R^2 = .16$, $F(2, 117) = 11.26$, $p < .01$. Tolerance values of .84 for both predictors suggest acceptably low multi-colinearity. The Sobel test, $z = 3.06$, $p < .01$, confirms mediation. Hence, our measure of *real transaction utility* seems to be a valid proxy for the transaction utility participants have perceived in the shopping opportunity described in the scenario.

As in the analysis reported in Experiment 1, the *real transaction utility* measure was used to test for an asymmetric effect of transaction utility, that is, a stronger impact of negative deviations of the actual price from the reference price than of positive deviations. Again the variable was split into a dummy coded variable indicating the sign (0 – positive, 1 – negative), and its absolute value. Of the participants, 55% exhibited negative values with a mean absolute value of 14.12 ($SD = 9.49$), and 45% exhibited positive values with a mean of 30.96 ($SD = 23.74$). The dummy variable, the *z*-transformed absolute value of real transaction utility, and their interaction term were included as predictors in a regression equation with purchase intention as a dependent variable. The model explained only

9.3% of variance in purchase intentions, $F(3, 115) = 3.96$, $p = .01$. As in the previous study, the dummy indicating the sign of transaction utility predicts purchase intentions, $\beta = -.35$, $t(115) = -3.41$, $p < .01$, and the absolute amount of utility does not, $\beta = -.06$, $t(115) = -0.51$, $p = .61$. By contrast to Experiment 1, however, the interaction term had no predictive value for purchase intentions, $\beta = -.11$, $t(115) = -1.04$, $p = .30$. Hence, although providing further evidence for a general effect of transaction utility, this analysis yields no additional support for the hypothesis about the asymmetric effect of positive and negative transaction utility.

To summarize, also in the second study experimental manipulation of transaction utility affected purchase intentions. However, its effect was independent of acquisition utility. No interaction between the two forms of utility was observed. The measure for *real transaction utility* was validated by relating it to a scale on *perceived transaction utility.* An additional test of the asymmetric effect we observed in Experiment 1 found no further support. By contrast to our previous findings, no difference in the impact of positive and negative *real transaction utility* was found.

General Discussion

Results from both studies confirm the significance of transaction utility in consumer decisions. As proposed by Thaler (1985, 1999), consumers seem to compare actual prices with a reference price to judge the value of the deal.

Furthermore, we found support for an asymmetric effect of positive and negative transaction utility in the first experiment. Whereas negative transaction utility affected purchase intentions, no significant effect of positive transaction utility was observed. An attempt to replicate this finding in the second study failed, though a similar tendency was observed. Note, however, that the analysis in the second study was based solely on our proxy for real transaction utility, whereas the asymmetric effect was found in the first study for the experimentally manipulated transaction utility *and* for the proxy variable. A possible explanation for these inconsistent findings is, therefore, that the proxy may be too prone to errors for testing this hypothesis. Our results add further evidence to the mixed findings of previous studies on asymmetric effects (compare reviews by Kalyanaram & Winer, 1995; Mazumdar et al., 2005).

The finding of stronger impact of negative than of positive transaction utility is in line with prospect theory (Kahneman & Tversky, 1979; Tversky & Kahneman, 1992). Consumers seem to exhibit loss aversion in perceiving price differences, that is, negative differences seem to weight more in their decisions than positive differences. It should be noted, however, that our operationalization of negative transaction utility in the experiment allows for an alternative explanation. The product in the respective questionnaire scenarios was offered at a reduced price. This is a marketing measure many retailers take, though it seems questionable if it is still effective. Due to the high frequency of such measures consumers may have become so used to pay the reduced price (cf. Kalwani & Yim, 1992), that indication of a former price is perceived as a marketing trick. If such a reference price – suggesting positive transaction utility – is dismissed as a marketing trick, it would lose its impact on the purchase decision. Conversely, a price suggesting negative transaction utility would still affect the consumer.

Though transaction utility and acquisition utility both affected purchase intentions, no interaction between the forms of utility was observed. By contrast to our hypothesis, the impact of transaction utility is not moderated by acquisition utility. This finding is supportive for the model of Grewal et al. (1998), who argue that transaction utility is an antecedent of *perceived* acquisition utility and demonstrated that the transaction utility effect is mediated by perceived acquisition utility. We cannot test for mediation with our data.

A limitation of our findings is that the experimental approach allowed us to maximize internal validity of our studies, but at the price of losing external validity. For instance, it may be criticized that such a clear distinction of transaction and acquisition utility as we made in our second experiment might not be possible in real purchase situations (cf. Grewal et al., 1998).

Transaction utility theory has a multitude of consequences for marketing practice. Frequently retailers attempt to influence perceived transaction utility, for example, by providing discount coupons or by denoting the manufacturer's suggested retail price. In many situations, however, customers are also confronted with negative transaction utility, for example, if they miss a promotion, or if the price tag shows special offers for customer club members but they do not hold such a club card. In light of our observations, it seems as if avoiding negative transaction utility would have stronger impact on sales than marketing activities that emphasize the value of a deal.

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