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AN IMPLICIT MEASURE OF PRICE PERCEPTION: EXPLORING THE ODD-PRICING EFFECT

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EXTENDED ABSTRACT -

The tendency of retailers to price their products with a ".99" or ".98" ending is ubiquitous in the marketplace. Instead of a jar of mayonnaise costing \$3.00, we usually see a price of \$2.99. Late-night infomercials promote items that cost \$29.99, not \$30.00. And even the tennis shoes we buy in the mall cost \$79.99 instead of \$80.00. Odd pricing, or setting prices for goods and services just below a common or even price, has been an everyday practice for years. Nonetheless, researchers still understand relatively little about whether this practice is successful in increasing sales, and even less about the process through which such odd pricing may benefit the bottom line.

What little research that exists regarding the odd-pricing effect can largely be categorized into two groups: research that examines the effect of odd pricing on purchases, and research that examines the potential mediators of odd pricing effects. Researchers have demonstrated that people are more likely to buy or think they would buy odd-priced items (e.g., Schindler & Warren, 1988; Schindler & Kibarian, 1996). The mechanism, however, is less clear. Whereas some evidence supports the notion that people "round down" and thus misperceive odd prices (the "level hypothesis:" odd prices are perceptually rounded down; Schindler & Wiman, 1989), other research suggests that the mere image of odd prices makes products seem less expensive (the "image hypothesis:" odd prices are used as a heuristic that the product is less expensive; Schindler, 1991).

Our research extends the understanding of odd prices in that it demonstrates that people perceive odd prices differently *upon initial perception of the prices*. Participants were presented with a series of questions on computers about how many items they could purchase for \$75.00. Participants reported their estimates once for each of twelve target products, one-third of which were evenly priced (e.g., \$3.00), one-third of which were odd-priced at a one-cent discount (e.g., \$2.99), while the rest were odd-priced at a twelve-cent discount (e.g., \$2.88). Participants were told to report their answers as quickly as possible and that they should not take more than five

seconds in responding to any item. In addition, target prices were randomly presented along with filler prices.

When comparing even prices with "99" odd prices, we found a significant main effect of price ending, indicating that participants reported that they could buy significantly fewer even-priced products than they could 99-priced products. The results indicated that across the four price levels, although reducing the price of a product is actually a trivial discount of 0.3%, the difference was perceived as a substantial discount of 14%. When comparing even prices with "88" odd prices, the main effect of price ending was only marginally significant: the mean number of products purchasable at the even price was only marginally less than the number of products purchasable at the "88" price ending. The results indicated that across the four price levels, although reducing the price of a product is an actual discount of 3.4%, the difference was perceived as a discount of 11.7%.

Future research may utilize this implicit method of measuring price perception to better understand the mechanism underlying odd pricing effects. One study will involve using the method to test the level and image hypothesis. If the image hypothesis mediates the effect, we should find that odd prices that end with a "9" will be perceived as less expensive than odd prices that do not. This may be evidenced by participants' thinking that they can buy more of a \$1.69 product than a \$1.68 product. Conversely, if the level hypothesis is correct, we should find a continuous trend that any odd price will be perceived approximately equivalently. This may be demonstrated by participants' thinking that they can buy about the same number of products priced at \$1.69 and \$1.68. In a second study, we plan to measure price perception both implicitly (using the method discussed herein) and explicitly (by simply asking participants their subjective perception of how expensive a product is). We expect to find that the implicit measure of price perception mediates the effect of odd pricing on purchase decisions better than does the explicit measure.

The completed study, as well as the proposed future research, will therefore collectively provide evidence about the underlying reasons why odd pricing influences purchasing decisions. The first study clearly demonstrates that even at a level more basic than purchase decisions, people actually *perceive* odd prices as being much lower than even prices. Again, although the odd price was trivially lower than the even price, the perceived magnitude of that difference was much greater (as much as 14%). Future research will use this method to demonstrate why either limit or image effects (or both) account for the effect of odd pricing on price perception. Finally, additional future research will demonstrate that implicit perception of price mediates the effect of odd pricing on purchase decisions.

Although the process of odd pricing is long-standing, research about odd pricing is still in its infancy. This research will help advance our understanding of the underlying mechanisms of odd pricing, as well as provide a measurement technique and theoretical directions for future study.

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