

Consumer Decision Making with Limited Information: Purchasing “Tech” Swimsuits

Robert E. Wright
University of Illinois at Springfield

Consumers are frequently involved in a purchase decision making process where they have limited information about the quality of the product being purchased. In such situations, consumers may resort to using a choice heuristic to simplify the decision making process. This paper discusses the situation where use of the anchor and adjustment heuristic may induce consumers to pay a high price for a product, based on using a high priced, high quality product as the anchor, and implications for marketers.

INTRODUCTION

Consumers regularly make purchase decisions. Such decisions are meant to maximize a consumer's utility. The consumer purchase decision making process is therefore of paramount importance to marketers. One particular area of interest is the situation in which the consumer has limited information relative to the seller in terms of product attributes. With limited information, the consumer must determine some methodology to use in making a decision. While the decision itself may be quite complex, consumers with limited information may seek some decision process to simplify the decision making process. Consumers frequently use some type of decision making heuristic to aid in decision making in these situations. This paper discusses how such decision making heuristics may impact decision making where consumer knowledge of product attributes is relatively low.

REVIEW OF LITERATURE

Decision making under uncertainty has been widely studied. For example, Platt & Huettel (2008) examined brain scans of subjects making different types of decisions under uncertainty. They noted that different areas of the brain were activated, depending on the type of decision being made. It is therefore apparent that deep physiological processes are involved when making decisions under uncertainty.

Tversky and Kahneman (1974) discussed the mechanics of how people make decisions under uncertainty. As decision making is frequently very complex, involving a number of variables, people may use some type of rule to take a complex judgment situation and simplify it. Tversky and Kahneman note that such decision making heuristics often work fairly well, and lead to satisfactory outcomes. One of the critical heuristics discussed by Tversky and Kahneman is that of the anchoring and adjustment heuristic. Others such as Johnson and Payne (1985) also noted that people prefer to limit their cognitive efforts in decision making, and use heuristics to limit that effort.

ANCHORING AND ADJUSTMENT AND TECH SUITS

The key to the anchoring and adjustment heuristic is that people begin with an initial value, which serves as an anchor, and then adjust from that value to reach a final value. For example, if estimating a coworker's salary, one would might start with the coworker's boss's salary and adjust downward, or start with a lower level employee's salary, and adjust upward. Of critical importance is the tremendous impact starting values can have on the final value reached in an anchor and adjustment scenario (Epley and Gilovich, 2006).

One particular instance where the anchoring and adjustment heuristic appears to have been used is in the purchasing behavior of consumers regarding competitive swimwear. For a significant portion of history, even those swim suits worn by the top competitors in the sport were a decidedly low tech, inexpensive product. While swimsuit manufacturers constantly developed newer, supposedly "better" racing swim suits, the prices of such suits remained at a modest level.

However, technology of swimming was altered dramatically with the introduction of the "fastskin" swim suits in 1999 (Craik, 2011). Swimsuit manufacturers had developed swimsuits with different types of materials and construction in their efforts to reduce drag, and thus lead to faster swimming performances. Drag is a key element affecting swimmers speed in the water (Moira, et. al, 2010.) Reduction of drag can therefore be a huge advantage to a swimmer in a race.

As the concept of the "high-tech" swimsuit gained traction, the suits were seen as a distinct advantage to athletes in competition. Many top level competitors were early adopters of these new suits (largely due to the fact that they were paid to wear such suits). These top level swimmers immediately began spreading the word on the competitive advantage conferred by such suits.

The full body swim suit covered the entire swimmer's body, with the exception of the hands, feet, and head and neck area. This was a dramatic change from the minimal coverage of the traditional Speedo brief male swim suit. While the trend had been to produce a smaller, lighter swimsuit which would reduce drag, that was changed when swimsuit manufacturers began to experiment with new swimsuit materials in the belief that certain materials would actually produce less drag than a swimmer's uncovered skin. Although marketed as having distinct features which would seem to offer a competitive advantage, it was not clear to what degree, if any, these suits were actually offering a technical advantage in the pool. An increase in amount of material, along with the marketing of such suits as having "technical" features which would increase performance, was accompanied by a dramatic increase in price. Male swimmers' suits increased from the \$20-\$40 range for traditional brief suits, to hundreds of dollars. In a breakthrough for the new tech suits, in 2008, Michael Phelps swam to 8 gold medals at the Beijing Olympics wearing the latest "tech suit" from Speedo. Along with other purported technical details, this suit contained non-textile materials. These non textile materials appeared to produce a significant increase in the performance of swimmers using these suits. To remain competitive in the rapidly changing marketplace, other manufacturers responded with suits with new materials that appeared to increase swimmer buoyancy, and therefore speed in the swimming pool (Brammer, Stager, and Tanner, 2012). In the 2009 Swimming World Championships, numerous world records were shattered. Based on these results, it seemed clear that these tech suits did, in fact, contribute a significant advantage to wearers. Along with the increase in performance came a significant increase in price. High end "tech suits" were now priced in the \$300 to \$400 range (as noted on Kiefer.com and websites of various name brand manufacturers such as Speedo.)

The use of the new tech suits was compared to doping, as they seemed to provide an artificial increase in performance. The swimming community had many discussions about various aspects of such suits being used in competition. In 2010, the rules regarding swimwear were rewritten, banning the new materials that had been used in the tech suits, and limiting the amount of coverage of a swimmer's body by the swimsuit.

In response to the rule changes, manufacturers continued to advertise technical advantages to the suits, within the new rules. However, it is not clear what particular advantages the technical suits developed after the change in the swimwear rules still give to competitors. However, the high prices of the new tech suits were in line with the prices of the original, performance enhancing, now banned suits.

The top swimmers endorse the new tech suits and/or get free suits from manufacturers, and therefore the top performances are done by swimmers wearing the new versions of the tech suits. However, the consumers

have little actual knowledge about the extent to which such suits may confer an advantage in terms of performance. Consumers (competitors) do not have the ability to rigorously test the tech suits against other options using standard testing protocols. They have limited information about the actual technical specifications of such suits, and the impact of such suits on performance. All the average consumer knows is that the “best” swimmers in the world are using these tech suits. Given the extensive investment in terms of time and money that competitive swimmers typically make to pursue the sport, the price of the tech suits does not seem unreasonable.

IMPACT ON PRICING AND CONSUMER PURCHASE BEHAVIOR

How do swimmers decide what price is appropriate to pay for a top of the line “tech” suit? Consumers in general develop reference prices for a particular category of product. Consumers may form reference prices from a variety of sources. Particularly of interest is the use of prior experience with the product or a similar product, and product promotion (Raghubir, 2006). Erdem and Keane (1996) also note that usage and advertising give consumers signals about a product. The tech suits had high price points compared to previous suits, with men’s suits ranging up to \$400 or more. This was in startling contrast to the price of a traditional, low tech suit of \$20 to \$40. However, those swimmers who chose not to purchase a tech suit were at a significant disadvantage in competition. It became accepted that the high priced tech suits led to better performances in the pool. Thus, for many swimmers, the anchor point for price was in the \$400 range, and the anchor point in terms of quality was the significantly improved performance provided by the tech suits.

After the rule changes banning the materials that seemed to confer most of the advantage of the tech suits, manufacturers have continued to produce and market “high tech” suits. These suits are said to provide core stability and reduced drag. On the Speedousa.com website (accessed on April 4th, 2016), the LZR Elite High waist jammer for men is listed at \$359. The material and construction of the suit “improves the linkage of the muscular kinetic chain,” and uses a fabric “providing high compression and reducing drag but increasing the muscles efficiency,” according to the website. However, consumers are typically not in a position to scientifically test such claims as this.

As Erdem and Keane (1996) point out, consumers tend to be risk averse, thus preferring to stick with a familiar brand. Therefore, they simplify the decision process by using the anchor and adjustment heuristic. In terms of pricing, if consumers use \$400 as an anchor for pricing of male “tech suit,” then prices in the \$250-\$350 range do not seem at all unreasonable. Similarly, if consumers use the banned high tech suits as an anchor in terms of performance, then consumers would also expect some significant improvement in their swim times with the new tech suits. Raghubir (2006) notes that consumers subjectively value money and prices. While objectively \$350 might seem a very high price for a swim suit, subjectively, if consumers relate the price to a prior reference price of \$400, it may seem to be a bargain. As Epley and Gilovich (2006) note, consumers will stop adjusting after they reach a plausible estimate. With a very high anchor, slightly lower prices would seem to be a very plausible estimate for an appropriate price.

CONCLUSION

Whether intentional or not, the swim suit manufacturers have gained an immense pricing advantage since the advent of the high tech swim suits. High tech suits incorporating new materials gave swimmers a significant improvement in performance, at a significant increase in price. As these suits set the standard for pricing, they became the anchor. This has allowed swimsuit manufacturers to continue to charge high prices for “tech suits” with traditional fabrics, as consumers adjust pricing expectations from the high priced tech suits. This is despite the fact that the evidence for performance enhancement of the new “tech suits” is limited, in contrast to the fairly well established performance enhancement effects of the former, now banned, tech suits.

IMPLICATIONS

This “natural” experiment has demonstrated how consumers use the anchor and adjustment heuristic in their decision making regarding competitive swim suits. If marketers are able to produce a high priced, higher performance model of a product, consumers may use that price and performance as an anchor for future products, even though future products may not be nearly as high a level in terms of performance for the price.

LIMITATIONS

This naturally occurring experiment concerned only one product class. The demand for swimwear for high performance athletes may be different from the demand for other consumer products. It is also a product which is difficult for consumers to objectively evaluate. Any increases in performance by those wearing a particular type of swim suit might be a function of a variety of factors such as maturation of the swimmer, increases in training levels, nutritional changes, psychological changes, etc.

SUGGESTIONS FOR FUTURE RESEARCH

Future research should explore the extent to which introduction of technologically superior products can set the standard for expectations of price points for a product class, despite the fact the other versions may not have the technological attributes of the initial product.

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