# An Empirical Examination on Anchoring and Scarcity Framing in Secondary Ticket Markets

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**Thursday, October 25, 2018** **25-minute oral presentation**
**11:30-11:55 AM, Ballroom D1** **(including questions)**

The secondary ticket market has revolutionized into a $15 Billion industry with more than thousands of secondary resale markets in the US ("Ticketing Today"). With increased competition of online ticket marketplaces, businesses have experimented myriads of online marketing techniques to differentiate themselves and make their platforms more appealing to buyers and sellers alike. Nonetheless, research has been limited to actually test the effectiveness of these emerging industry practices. (Brett Goldberg, CEO and founder of Tickpick, personal communication, September 2017).

Ticket marketplace distributors have primarily displayed different visual and graphics to convey scarcity of tickets that are available on their respective websites. The idea behind disclosing this type of information is to signal a sense of sellout risk to buyers and induce early purchase (Aggarawal, Jun, & Huh, 2011). Data representation of numeric scarcity can lead to different judgment perceptions of urgency for consumers (Hoffrage, Gigeranzer, Krauss, & Martignon, 2002). For example, if a stadium consists of a total of 40,000 seats, is there a difference in scarcity perception when the buyer is presented with the information that '400 tickets are remaining' against 'less than 1% remaining'? Contrarily, for games of low demand is it effective to display percentage figures instead of large figure sums of tickets remaining (i.e 56% vs 22,400 seats available)? From a managerial perspective, the understanding of the effectiveness of numeric scarcity can help marketers better target buyers and implement the dominant strategy under different circumstances.

Similarly, marketplace providers fundamentally reveal different price cues as their initial anchor. For instance, Stubhub has presents a single ticket price (from $179) for different seat sections whereas Ticketmaster displays a min-max price range ($179 - $264) as their initial pricing cue on their website and applications. Anchoring research supports that demonstrating a singular low price anchor may generate a lower estimation of the perceived value of the ticket, leading to the belief that the ticket may be underestimated at the certain time and thereby increasing purchase for consumers (Mussweiler & Strack, 2000). However, a min-max price anchor may demonstrate a larger variance of deals in the uncertain situation and thereby display higher levels of opportunity cost for the lower price option (Smith & Hantula, 2003). The effectiveness of the two competing strategies has yet to be tested and will be further examined in this study.

From a normative economic theory perspective, consumers are assumed to be rational choice agents who do not systematically exhibit logical fallacies in their judgment and decisions (Johnson-Laird, 1983). However, behavioral researchers have introduced alternative perspectives in understanding how agents systematically make irrational decisions under uncertainty situations (Kahnemann & Tversky, 1984). While the information from a particular problem may remain the same, it may be perceived, organized, and interpreted differently; it may be structured differently; and the problem may be solved in a different context, by different people or at different times.

Hence, this study aims to directly test

(1) Which numeracy frame (frequency vs percentages) works more effectively in signaling scarcity for high and low demand sport games?

(2) Which price anchor (lowest price vs min-max range) raises more urgency and effectively increases the purchase likelihood for consumers?

To further examine these questions, we adapted the theoretical framework of Dwyer, Drayer and Shapiro (2013)

who utilized and measured two key constructs that reflect the two risk factors that dictate consumer's advanced purchase decision for sport tickets; Expected Ticket Availability (ETA) and Expected Likelihood of Finding a Lower Rate (ELR). The fluctuating patterns of ETA and ELR revealed in Dwyer et al (2013) called for the need to develop modal strategies that reflect how consumer's deal with uncertainty cues in the advances sales market. To this extent, this study tests the boundary condition of this previous study by examining how consumer's subjective probability assessments (ETA and ELR) can be distorted by scarcity framing and price anchoring.

A total of 620 respondents completing an online survey were recruited via Qualtrics over a one week period. Respondents were regionally confined to Eagles and Giants fans, to fit the demographic descriptions of the study. Participants who agreed to participate in the study, were randomly assigned to a vignette ticket purchase scenario. The main study of interest utilized a 2 (Demand : high vs low) x 2 (Numeracy framing : frequency vs percentages) factorial between group study design, where subjects were randomly assigned into five groups (including a control group scenario). The scenario controlled extraneous factors of seat location, time and date of the event. According to the scenario, participants were asked to book two tickets prior to the event. After reading the scenario participants are asked two questions rating their subjective likelihood of ETA and ELR estimates. The survey also asked about participant's attitude and behavior including their ticket purchase experience, team involvement, behavioral involvement.

A multivariate analysis of variance (MANOVA) will be conducted to determine the overall differences in the mean scores of ETA, ELR probability estimations across the four different manipulation conditions. Tukey post hoc tests will be conducted to determine which combined treatment levels (for high and low demand games) to exhibit greater mean differences. Due to the use of the same dependent variables in the two separate procedures (scarcity & anchoring), a Bonferonni adjustment will be made. The significance value will be set at .025 to adjust for testing the two main effects.

While the data collection is complete, the study is in-progress and research findings will be discussed and presented at the SMA conference. The presentation will also discuss practical implications by offering insights on when the scarcity problem in most likely to manifest for consumers and provide direction on marketing implications through messaging and framing.

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