

Revealing a Double Jeopardy Effect in Radio Station Audience Behavior

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Scores of consumer behavior studies have confirmed what has been called a *double jeopardy effect*, whereby brands earning small market shares attract fewer customers but also experience less customer loyalty than more popular brands. This two-fold plight of the small brand has also been detected among consumers of media, such as newspapers and television programs. This study hypothesized a similar double jeopardy behavior among radio station audiences. Using ratings-based turnover ratio and exclusive cume as operationalizations for listener loyalty, an analysis of over 1,600 stations revealed that, despite radio's emphasis on niche marketing, a significant double jeopardy effect can still be found. Furthermore, station competition and program format were tested as intervening variables.

A brand's market share is driven by two consumer behavior components: (a) the number of individuals who buy a particular brand and (b) the number of repeat purchases made by these individuals. Studies dating back to the 1960s have repeatedly confirmed that there is a direct relation between market share and consumer loyalty in that market leaders tend to exhibit greater loyalty in terms of repeat business than less successful brands. The term *double jeopardy effect* has been ascribed to the opposite phenomenon, whereby brands earning small market shares attract not only fewer buyers but also fewer loyalists. For most retailers, the notion of a small but loyal customer base has proven to be more wishful thinking than hard science.

In terms of media, evidence of a double jeopardy effect has been detected among newspaper readers and television audiences in that highly popular media brands encourage more repeat exposure or more extended exposure than less popular competitors. Based on this accumulated body of knowledge, the researchers were curious to see if a similar effect might be found in radio listening behavior. To date, no published academic studies have addressed this specific topic. An additional reason for investigating this phenomenon for radio is a compelling argument expressed by some scholars that highly competitive niche markets might not be as conducive for revealing double jeopardy effects as broad-based markets. Aside from satisfying mere intellectual curiosity, evidence of double jeopardy can have important implications for radio station operators, particularly in the area of strategic planning for market share growth.

The relation between audience share and audience loyalty was analyzed using Arbitron ratings data collected from over 1,600 radio stations tabulated by the *Duncan Radio Market Guide*. Audience *share* was defined in the conventional manner as the percentage of listeners to a station compared with the total number of active listeners for a specified time period. Audience loyalty was measured according to two common radio industry statistics: *turnover ratio* and *exclusive cumes*. These terms will be explicated further in the Method section. The investigators were also curious about the potential influence of *program format* and *number of competitors* as possible intervening variables.

BACKGROUND AND LITERATURE REVIEW

The relation between a brand's share of market and its purchase loyalty has been a topic of concern for retail business professionals and market researchers for over three decades. Among the consistent findings has been a so-called double jeopardy effect, originally coined by McPhee (1963). In essence, this phenomenon depicts the plight of less popular consumer brands in that they experience fewer repeat purchases than more popular brands. This consumer behavior has been observed across dozens of product categories in several countries, including the United States, Great Britain, and Japan (Ehrenberg, Goodhart, & Barwise, 1990). According to Smith and Basu (2002), achieving a threshold of market dominance appears to infuse brands with extraordinary customer loyalty, whereby "brand dominance becomes deeply imbedded and therefore, much more difficult to dislodge" (p. 1).

The underlying psychology for this phenomenon is that double jeopardy will arise whenever competitive consumer brands differ in their popularity (e.g., share of market). The power of simple brand familiarity, sometimes referred to as *brand awareness*, *brand saliency*, or *mere exposure*, has not been lost on researchers in marketing and advertising. Many studies have found that the most potent motivator for a brand purchase, particularly in situations of consumer uncertainty, is simple

but overwhelming familiarity (Hoeffler & Keller, 2003). Outspoken double jeopardy researcher Andrew Ehrenberg maintained that the key measures of brand performance, such as repeat-buying and consumer loyalty, are direct functions of market share. As a result, "there are no such things as 'strong' and 'weak' brands. There are only big brands and little brands" (Ehrenberg, Barnard, & Scriven, 1997, p. 1). Other researchers maintain that this posture is overly rigid and that big brands don't become big by accident. Instead, they enhance their market share by building brand equity. In particular, Chaudhuri (1995) provided a plausible argument that double jeopardy theory and brand equity theory are far more alike than they are different, with each using consumer brand loyalty as its most obvious behavioral outcome.

Regardless of the attitudinal underpinnings, one common observation from scrutinizing the literature on double jeopardy is that the empirical evidence and resulting theory implies that in terms of customer behavior, share drives loyalty and not the reverse. When looking at the two primary marketing strategies for increasing share— attracting more customers and increasing repeating buying by current customers—the first option seems to be the most effective. After reviewing dozens of published double jeopardy studies, Ehrenberg et al. (1990) concluded "There is no convincing evidence of marketing strategies that have yielded large increases in average purchase frequency of a brand without concurrently increasing the number of individual customers" (p. 3). That is, strategies designed exclusively to encourage repeat buying from a constant customer base seldom work. Instead, successful marketing strategies aimed primarily at attracting more customers—typically stealing them away from the competition in a zero sum market—is the most efficient means of increasing market share. Furthermore, as market share approaches a certain threshold, repeat buying also begins to rise, thus contributing even more to the firm's bottom line.

This type of double jeopardy consumer behavior has also been revealed within the domain of media consumption. For example, a study conducted in the United Kingdom found that less popular newspapers were not only read by far fewer people, but were also read less frequently by those who did read them. Conversely, publications with substantially higher circulation (higher market share) were read more often (Ehrenberg et al., 1990). In addition, a double jeopardy effect has been found among television programs. Several studies, including Barwise (1986); Barwise and Ehrenberg (1987); Barwise and Ehrenberg (1988); and Goodhart, Ehrenberg, and Collins (1987), found that higher rated prime time series generated greater repeat viewing than lower rated series. In line with the assumptions of double jeopardy theory, less popular series were viewed not only by fewer people but also less frequently than popular series. Contrary to these findings, Webster and Wang (1992) found some evidence of double jeopardy but only within certain dayparts.

Although the aforementioned television studies defined audience loyalty as weekly or daily repeat viewing of individual programs, McDowell and Dick

(2001) approached the topic by defining loyalty as audience *retention* over time, comparing ratings turnover (cume divided by average quarter hour [AQH]) over multihour dayparts. This daypart retention approach is similar to most radio listening behavior and was adopted for this study. It should be noted that, although McDowell and Dick (2001) did find a double jeopardy effect for television, the study focused only on the four major broadcast networks and did not explore the far more niche-oriented program networks found on cable.

Looking at the radio industry in a case study of one market, Dick and McDowell (2004) explored several plausible ways to acquire circumstantial evidence of listener loyalty, including manipulations of audience turnover and exclusive cume. Although the researchers were not looking for double jeopardy per se, the data suggested only a weak correlation between share and loyalty. However, considering that this was merely an operational exercise using a single-market case study, there remained a need to search for a double jeopardy effect among a large, diversified group of radio markets and stations.

Radio Niche Format and Double Jeopardy

One possible exception to finding a double jeopardy effect within radio is the highly fragmented nature of radio formats and narrowly targeted audiences. Ehrenberg et al. (1990) suggested that the effect may not be as strong in a niche marketing environment, but to date there has been no empirical work investigating this proposition.

Unlike television, the radio industry has a long history of coping with dozens of competitors in the same marketplace. Although the television networks enjoyed a three-network oligopoly in the 1970s and 1980s, the FCC licensed hundreds of new radio stations. For instance, according to Arbitron, over the past 20+ years, the number of FM stations operating in the United States has more than doubled (Arbitron Report, 2004). To survive in such a competitive environment, radio operators cultivated niche programming, where the goal was to cater to the tastes of a relatively narrow audience segment (Keith, 2004; Tanel & Wenmouth, 1998).

Along these same lines, Dimmick (2003) offered an appropriate theory of the niche as a means of explaining modern media competition and coexistence. In its most succinct form, the theory maintains that, for a media business to survive and prosper, it must adapt and evolve through its marketing environment. Furthermore, a niche is fundamentally a relation between an individual element and its surrounding "population." Although this population can be biological, sociocultural, or economic (such as a radio market), the common dynamic is the competition for scarce resources. The ultimate goal is to develop a niche that thrives without exhausting itself from fighting too many competitors for the same limited resources. The lesson to be learned is that media businesses exist and persist over time despite what often seems to be intense competition for resources (i.e., audiences and ad-

vertisers). A basic premise is that niche similarity leads to *competition*, whereas niche differentiation leads to *coexistence*.

Niche theory proposes that small brands can construct highly differentiated niches that make them less vulnerable to direct frontal attacks from a larger competitor. By cultivating a unique niche, one could logically assume that customers might be less likely to sample other highly dissimilar brands, therefore suppressing a double jeopardy effect.

Along the same lines as Dimmick (2003), radio stations have attempted to differentiate themselves to avoid pure head-to-head competition for the same target audience. The most conspicuous means of expressing this differentiation (i.e., niche) has been through *program formats*. Depending on one's industry source, radio formats can be broken down into dozens of categories. Typically, these categories appeal to different demographic groups. Assuming an overall double jeopardy effect was found among all stations, it seemed plausible to explore the notion that program format might be a moderating influence.

Coinciding with an inquiry into niche program formats was a parallel concern with market size, in terms of the number of direct and indirect competitors in a given radio market. One would assume that overall audience shares for stations licensed to small markets would be somewhat larger than those licensed to larger markets, especially in a zero sum competitive environment. Therefore, would small markets be more likely to reveal a stronger double jeopardy effect than large markets with more competition? In addition, the notion of *number of competitors* can be broken down an additional step by examining the number of competitors in single market that broadcast essentially the same program format. In other words, regardless of the overall number of stations operating in a market, a station with more head-to-head competition in niche content might be more susceptible to a double jeopardy effect than another station operating with an exclusive format. This study examined both factors as intervening variables.

Measuring Broadcast Audience Behavior

For the sake of brevity, we assume the reader has some basic knowledge of Arbitron ratings methodology and the various uses of ratings data in broadcasting management. This information is available from several sources, including Keith (2004) and Webster, Phalen, and Lichty (2000). Also, the Arbitron Company website offers a wealth of information (www.Arbitron.com). On a more scholarly level, the company also publishes an annual detailed methodology summary for its diary-based reports (Arbitron Methods, 2005). The remainder of this section addresses specific ratings statistics as defined by Arbitron (Arbitron Report, 2004) and elaborated by Webster et al. (2000).

AQH audiences are expressed as total persons (00s) and as percentages in the form of rating points and share points. These data signify the average number of

audience members listening to a station for at least 5 min per quarter hour throughout a multihour daypart. Cume is shorthand for cumulative and signifies the number of unduplicated audience members listening at least 5 min per quarter hour throughout a multihour daypart. As with AQH, cume is expressed as total persons (00s) and as a percentage of the market population (a cume rating). The definition of cume is identical to *reach*—a term used regularly by advertisers and media buyers to identify the number of unduplicated audience members exposed to a commercial message. Again, the key difference between AQH and cume audience measures is audience duplication. Although AQH estimates will include the same listeners over successive quarter hours within the defined daypart, cume estimates tabulate a listener only once, regardless of the number of quarter hours of listening. A radio station typically experiences substantially larger 7-day weekly cume audiences than AQH audiences. As elaborated later in this article, the formula for audience turnover is cume divided by AQH.

Expressions of Audience Loyalty

Webster et al. (2000) maintained that audience loyalty is difficult to define precisely because it means different things to different people. There are several accepted ways to assess audience loyalty using ratings data, each expressing a somewhat different perspective. These include *exclusive cume*, *audience turnover*, and *time spent listening* (TSL). Exclusive cume is a narrower conceptualization of cume in that it is defined as unduplicated audiences that listen to that particular station. Arbitron expresses exclusive cume data as percentages (i.e., percent exclusive cume). There is an intuitive appreciation that persons who listen to only one radio station during a specified daypart logically must be considered loyal. Another suggested measure of loyalty—*audience turnover*—takes into account the relation between cume and AQH audiences (cume/AQH). If changes in audience share had no influence on the relation between AQH and cume, one would expect turnover ratios (cume/AQH) to remain fairly constant, regardless of increases or decreases in share values. However, the double jeopardy theory asserts that as audiences increase, this relation changes, whereby high turnover would reflect poor station loyalty and visa versa. Finally, TSL is a measure of the total amount of time in aggregate an audience member spends listening to a particular station, inferring that loyalty is a function time. At first, we were ready to adopt this operationalization, but it was rejected for two reasons. First, as Webster et al. (2000) asserted, TSL is essentially the inverse of audience turnover, whereby the formula for TSL is AQH persons divided by Cume persons, then multiplied by the number of quarter hours found in the daypart (AQH/cume \times number of dayparts). Consequently, by definition, TSL is merely another side of the same coin (stations exhibiting high turnover logically would exhibit low TSL and visa versa). Furthermore, we believe that TSL data, ex-

pressed in units of time, can be misleading in that they are not necessarily a measure of *continuous* listening but rather a summation of all listening episodes, regardless of how many times the listener may have switched stations and returned. Dick and McDowell (2004) offered a more detailed exploration of this definitional problem that is beyond the scope of this study. We assert that exclusive cume and turnover ratio better express the audience dynamics of a station.

Premise for This study

Based on the aforementioned literature review and theoretical discussion, one can hypothesize that from a conceptual standpoint, there is a functioning relation between a radio station's popularity and audience loyalty. Translating this conceptualization into ratings-based measures of audience behavior, the researchers proposed three operational hypotheses and a research question. The first two hypotheses test the basic concept of double jeopardy.

H1: There is a positive relation between share and percent exclusive cume.

H2: There is an inverse relation between share and turnover ratio.

Next, the same double jeopardy effect was reconsidered on the individual format level.

RQ: Does radio program format influence measures of double jeopardy?

The last step was to consider the intervening effect of competition in the double jeopardy model.

H3: The level of competition will affect the relation between share and loyalty. This hypothesis was tested two ways.

H3a: The number of stations in the market will affect the relation between share and loyalty.

H3b: The amount of direct competition in format will affect the relation between share and loyalty.

METHOD

The raw data for this study were Arbitron ratings acquired from a university subscription to *2002 Duncan Radio Market Guide* (Duncan Data, 2002). Until its regrettable discontinuation in 2002, each year this proprietary subscriber-based business publication analyzed the audience and revenue performances of radio stations in the United States. These data sets constituted a census of what Duncan defined

as *viable radio stations*, defined as stations that compete in the same market for advertising revenue as opposed to including noncommercial stations and stations licensed to adjacent markets that may generate what Arbitron designates as “out of market” audience activity that in all likelihood does not influence media buying. Because investors and financial analysts have used Duncan’s Guide primarily, the text examines the top 100 markets redefined by revenue spent on radio advertising rather than population. This constituted 1,637 stations.

The aforementioned hypotheses and research question variables were operationalized in the following manner:

1. *Audience share* was defined as a station’s AQH share of persons 12 and older listening during the Monday through Sunday, 6:00 a.m. to 12 a.m. demographic/daypart. Although not available directly from the published report, the share figures can be extrapolated readily from Duncan’s data reflecting (a) share of revenue and (b) conversion ratio, derived from share of audience divided by share of revenue.

Audience share presented a model specification problem in that within a zero sum market, one station’s audience share is dependant on the performance of other stations in the market. No mathematical correction can eliminate this problem completely. Audience is a finite resource shared among the stations. At the same time, the double jeopardy effect depends on a station’s *relative* success within its own market and not across all markets.

2. *Audience Loyalty* was defined in two ways: (a) by each station’s *percent of exclusive cume* and (b) by each station’s *turnover ratio* (cume persons divided by AQH persons). As with audience share, the data were derived from the persons 12 and older, Monday through Sunday, 6:00 a.m. to 12 a.m.

3. *Double Jeopardy*, from a statistical perspective, would be revealed by (a) a positive relation between share and exclusive cume and (b) a negative relation between share and turnover ratio.

4. *Program format* was defined as a possible intervening variable influencing double jeopardy. All stations in the Duncan Report were identified by one of 42 possible format designations. These included not only single formats such as AOR and CHR but also subformats such as Black-Gospel and combined formats such as Hispanic-Talk. Because the number of stations assigned to some format groups was too small for any reliable statistical analysis, the researchers collapsed the master format list into eight combined format categories. These included Adult Contemporary, Album-Oriented Rock, Black, Contemporary Hits Radio, Country, Ethnic, Easy Listening, Oldies, and Talk.

5. *Stations in the market* were determined by counting the number of stations listed in the market by Duncan. However, Duncan excluded noncommercial stations.

6. *Direct competition* exists when two or more stations in the market report exactly the same format.

Data Analysis Protocols

The primary components of the double jeopardy effect are audience share and audience loyalty. To better understand the dynamics of this relation, we wanted to isolate and analyze the possible moderating influence of (a) market size, expressed as number of competing stations within a market and (b) program format, and more specifically, situations where several stations within a market were competing within the same format. To control for market size, station shares and station loyalty scores were standardized using *z* scores. Program format, addressed in the prior section on operational variables, was analyzed as a separate intervening variable.

RESULTS

The data set represented all 1,637 stations from the top 100 revenue markets as defined by Duncan. The typical radio market had 23 viable stations achieving a mean share of audience of 5.3. On the average, stations had an exclusive cume of 8.7% and a turnover ratio of 18.4.

Our first step was to test two hypotheses involving the existence of double jeopardy with two measures of audience loyalty.

H1: There is a positive relation between share and percent exclusive cume.

H2: There is an inverse relation between share and turnover ratio.

The most direct method to test the initial two hypotheses was to conduct Pearson Correlations. In both cases, the hypotheses were supported. The correlation between *z* scores of exclusive cume and audience share was $r = .42$ ($p < .000$; one-tailed). The correlation between *z* scores turnover ratio and audience share was $r = -.37$ ($p < .000$; one-tailed). H1 and H2 were supported by these data. Although all tests in this study were performed using both measures of loyalty, they proved to be statistically redundant. Consequently, to remain within the appropriate article length of this publication, the remaining Results section of this study uses only exclusive cume data. (Detailed analyses of station turnover ratios are available on request from the authors.)

RQ: Does radio program format influence measures of double jeopardy?

As mentioned earlier, the original 42 formats were collapsed into nine sufficiently large categories for reasonable analysis. The nine formats ranged from a low of 105 stations for Hispanic/Ethnic to a high of 262 for talk/news/sports stations. A

group of 38 stations did not fit any of the other categories and were dropped from this analysis.

By looking at only the slope in the regression equation, we can directly compare the effect among formats (see Table 1). In effect, slope reflects the degree to which one variable changes as a consequence of changes in another variable. R^2 reflects the explanatory power of the equation. Country, adult contemporary, oldies, and contemporary hits radio showed the strongest effect of double jeopardy with relatively high R^2 . On the other hand, easy listening and Black stations showed the weakest effect of double jeopardy and weak R^2 . Based on these results, there is support for the contention that double jeopardy effect is moderated by format. That is, although increases in audience shares corresponded with observable increases in audience loyalty, this relation is not consistent across all program formats.

H3a: The number of stations in the market will affect the relation between share and loyalty.

H3b: The presence of direct competition will affect the relation between share and loyalty.

Hypotheses H3a and H3b look at interaction effects of competition. In H3a, competition was measured as the number of stations in the market, whereas in H3b direct competition in format was used. A moderated multiple regression (MMR) analysis was introduced to examine both direct and interaction effects while also examining directionality. MMR also allows researchers to consider the relative importance of the interaction effects. Typically, regression analysis allows the re-

TABLE 1
Results of Regressions by Format

<i>Formats Consolidated</i>	<i>N</i>	<i>Adjusted R²</i>	<i>F</i>	<i>Unstandardized Intercept</i>	<i>Coefficient Slope</i>
All stations	1,610	0.17	352.34*	0.00	0.42*
Adult contemporary	215	0.36	123.07*	-0.42*	0.55*
Album-oriented rock	187	0.27	68.53*	-0.29*	0.48*
Black	176	0.08	16.41*	0.35*	0.30*
Contemporary hits radio	165	0.33	81.15*	-0.49*	0.50*
Country	153	0.35	81.53*	0.56*	0.58*
Ethnic	105	0.13	16.59*	0.61*	0.49*
Easy listening	110	0.07	9.41*	0.85*	0.34*
Oldies	226	0.22	65.15*	-0.24*	0.52*
Talk	262	0.39	166.11*	-0.25*	0.45*

Note. Predictors: (constant); z score: Audience share; Dependent z score: percent exclusive cume.
* $p < .01$.

searcher to look at the relation of one variable to another and the predictive power of that relation. MMR takes the additional step by allowing the researcher to look at the interaction or moderating effect on a relation (Hair, Anderson, Tatham, & Black, 1989). The technique is relatively simple. With the regression equation

$$\text{Exclusive Cume} = \alpha + \beta_1 \text{ share} + \beta_2 \text{ competition}$$

The betas for share and competition are used to analyze the ability of the variable to predict the variance in loyalty. Adding a third term to the equation

$$\text{Exclusive Cume} = \alpha + \beta_1 \text{ share} + \beta_2 \text{ competition} + \beta_3 (\text{Share} \times \text{Competition})$$

The final beta can be used to analyze the interaction effect of competition within the share–loyalty relation.

The previous equation became the basis of the test for the two H3 hypotheses. H3a looked at general competition in the market. Although the regression equation was significant ($F = 117.3, p = .00, R^2 = .177$), the significance was based solely on the double jeopardy effect. The betas for competition in market and the interaction term were not significant. Moreover, the equation does not produce an increase in *r*-square. H3a is not supported, indicating that the mere number of stations in the market did not have a significant effect or interaction on double jeopardy.

H3b tested the more narrow interaction effect of direct competition in format on double jeopardy. Again, the regression equation was significant ($F = 119.13, p = .00, R^2 = .180$) and this time the R^2 increased slightly over an equation without the interaction effect. The beta for direct competition was not significant—meaning direct competition was not effective in predicting loyalty. However, the beta for the interaction effect was significant ($\text{Share} \times \text{Direct Competition}, p = .034$). The beta for the interaction term had a positive slope ($\beta = .073$), indicating that as direct competition increased, the effect of double jeopardy also increased. Because the beta for this interaction term was significant, H3b was accepted.

DISCUSSION

Evidence of double jeopardy was found using both measures of audience loyalty (namely percent exclusive cume) and turnover ratio. The findings suggest that despite radio's emphasis on niche programming, audiences consolidate their listening toward the more popular station. As one radio program director of a classical music station once told the investigators, "At first we thought we attracted a small but loyal audience, but after looking at the research, we concluded that our audience was just small" (T. Godell, personal communication, January 2001).

Program format was found to be an important intervening variable in assessing the importance of double jeopardy. Based on these findings and the knowledge

provided in the literature review, one can state with some confidence that a double jeopardy effect is pervasive among all kinds of mass media.

The data did not support the notion that double jeopardy is influenced by the mere number of competitors assigned to a market. There was support for the intervening variable of direct format competition. That is, when two or more stations within a market reported the exact same format, the leading station was more likely to experience an enhanced double jeopardy effect.

Limitations

It should be noted again that this study was close to a complete *census* of the top 100 radio revenue markets and therefore, the typical limitations of sampling error, common to most mass media research, were not a factor here. However, stations not included in the top 100 markets might behave differently. Furthermore, this deficiency may be the reason why market size (defined as number of competitors) did not appear to be a contributing factor to the observed double jeopardy behavior. Perhaps with a greater range in market size, including small markets not included in this study, market size would have emerged as a means to explain some of the variance in the results.

Another limitation was the fact that only one broad daypart and one demographic category were available from the Duncan Guide—Monday through Sunday, 6:00 a.m. to 12:00 a.m., persons 12 and older. In terms of broad strokes for exploratory analysis, this is an ideal all-inclusive measure. However, just as the investigators found differences due to program format, it is indeed possible that the double jeopardy phenomenon is also influenced by time of day, age, or sex.

Similar to the broad daypart issue, this study may have overgeneralized some formats. For example, the poor predictive power of both Black and ethnic radio formats may have been due to collapsing stations into too few distinct categories. The rationale was to generate sufficient numbers for analysis but this may have been a disservice to the unique characteristics of some less popular formats.

As mentioned earlier, TSL is a limited indicator of loyalty because it is an aggregate measure. However, Nielsen Media Research has introduced a television ratings statistic called Length of Tune In that reveals the average length of time audiences watch a program before tuning away. This would be a welcome statistic for radio and could be achieved easily, especially if Arbitron adopts its much-publicized electronic Portable People Meter technology.

Another limitation is the “chicken or the egg” dilemma of wrongly attributing a cause and effect relation to data that can only reveal correlations. As mentioned in the literature review, prior double jeopardy research in consumer goods asserts that increased share begets repeat purchasing. The findings from this study cannot support or reject such an assertion. Without introducing a time series analysis or a con-

trolled experiment, it is statistically impossible to show conclusive evidence that changes in audience share *cause* changes in exclusive cumes or turnover ratios.

In the same vein, another limitation of sorts was the high degree of variance observed within the dataset. Despite revealing significant regularities in audience behavior among several hundred stations, there were many outliers that bucked the trend. These stations merit further investigation.

It is always possible that the particular year used for analysis is not typical or is no longer typical. A trend study covering several years may be warranted. Also, because this study represents only the top earning markets, dramatically different results may be found in smaller markets.

Finally, future research will have to recast the data set. Duncan's American Radio is no longer producing these annual reports.

Management Implications

Is there any practical relevance for radio managers to care about the audience phenomenon of double jeopardy? The results of this study suggest that stations exhibiting high market shares cultivate exceptional audience loyalty, which makes the station less vulnerable to attack than less popular stations. For radio operators, this knowledge can justify increased investment in programming and marketing assets intended to increase market share. Although Dick and McDowell (2004) failed to show a relation between share and loyalty, their goal was to find a plausible *measure* of audience loyalty. Although this study did show modest support for a relation, the *r*-squares did not support the contention that share is an effective measure of loyalty. However, it does provide persuasive evidence that share influences loyalty.

As stated earlier, consumer research indicates that the most efficient strategy to increase market share is not to increase the frequency of purchases but to increase the number of new customers. Moreover, loyalty appears to manifest itself "automatically" with increased share. Attracting new customers can be a perplexing business. Arbitron reports that over an average week, the typical radio audience member listens regularly to several stations, as exemplified by the dataset for this study, which revealed relatively small exclusive cumes but considerable audience turnover for most stations. As with branded packaged goods, radio audiences "shop around" amid an array of brand choices. In advertising parlance, this grouping of acceptable brand choices is often referred to as a consumer's *consideration set*. Recognizing that nurturing exclusive brand loyalty is nearly impossible, a more realistic marketing objective is to have a brand included in as many consideration sets as possible. Some media researchers looking at audience behavior for television and cable, such as Ferguson and Perse (1993), referred to this preferred subset of media brands as a viewer's *channel repertoire*. It seems plausible that any one station or channel might be included in several different audience repertoires. This is not to discredit strategies intended to retain audiences over time (i.e., in-

crease TSL), but the double jeopardy research suggests that this approach is less effective given the investment of time, people, and money. Determining how to get a station included in more audience repertoires is not within the scope of this article but is certainly a worthwhile topic for future research.

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