

Introduction

This chapter provides a comparison of two studies that were conducted in 1992-3 and in 2005-6. Chapter Three, entitled “Representativeness and Role Evaluation,” presents the results of the first study and this chapter presents the results of the second study. The two studies had two primary goals. First, they were designed to determine whether television broadcasts in the Washington, D.C. Metropolitan Statistical Area (MSA) were representative of Black Americans. Second, the studies were constructed to determine the probability that the sightings of Black Americans on television were associated with stereotypical images of Black Americans. Given that the two studies were conducted in virtually identical fashion, it is appropriate to perform an intertemporal comparison of these studies to determine whether change occurred over the 13-year period between the studies and to determine the extent of that change.

Why conduct this comparison? Mainly because this book addresses the question of whether adverse stereotypical images of Black Americans are harmful. Chapter Five, which discusses Black unemployment and Infotainment, provides evidence that such images create adverse economic outcomes for Blacks using an analysis that is based on data covering the period 1971 – 2002. Obviously, the analytical results of Chapter Five warrant a call for change. In anticipation of those results and that call for change, this chapter provides certain insights about how change can occur with or without systematic efforts to create it. Therefore, this chapter should not only be read in connection with Chapter Three, but with Chapter Five as well. In fact, the three chapters help one recognize that television and the media in general can create adverse outcomes for Black Americans, but that there is the possibility of change. As we will see in Chapters Eight and Nine, we can use certain techniques to guide that change and, given our knowledge of how media affects economic outcomes, we can come to grips with how improved economic outcomes may be in the offing for Black Americans in the future.

The next section of this chapter provides a review of the methodology that was used for the study. Afterwards, the results of the study are considered. Subsequently, the data from the two studies are compared and an effort is made to decipher the reasons for differences in results. In the conclusion to the chapter, these results are interpreted and questions are asked about what they portend.

Review of the Study Design

As mentioned at the outset, the study that produced the results that will be presented in this chapter was conducted in almost identical fashion to the study that was presented in Chapter Three. The two falsifiable hypotheses (H_{01} and H_{02}) cited in Chapter Three were retained.

Random observations were made of television in the Washington, D.C. MSA during a seven-day period (Sunday, December 4 to Saturday, December 10, 2005).

The days and times during which the observations were performed are consistent with those presented in Appendix B of Chapter Three.

During the observations, data were collected for the same variables that appear in Appendix A of Chapter Three with one exception. When the sighting of a Black American was associated with an advertisement, the price of the product being advertised was estimated using seven broad price categories. This variable was added with the intent of determining whether advertisers target only lower priced products to Black Americans. Chapter Six of this book, which is entitled *60 Minutes*, revealed that advertisements that were broadcast as part of that program primarily included Black Americans when low-priced products were being advertised. The practice of primarily targeting low-priced products to Black Americans may be viewed as a form of discrimination, because it may be based on the assumption that Blacks can only afford low-priced products—an assumption that is not consistent with reality.

The standard for representativeness was updated based on the U.S. Department of Commerce's Census Bureau data for the population in the Washington, D.C. MSA. Data for 2003 (the most recent period for which data were available at the time of this writing) from the Census Bureau (2006, 137) indicated that Black Americans constituted 26.4 percent of the population in the areas. This study concerned determining whether Black Americans appeared on television on a representative basis; i.e., 26.4 percent of the time. Put differently, H_{01} will be rejected or not rejected depending on whether Black Americans appear or do not appear every 3.78 minutes.¹

Using the collected data, the identical Logit regression model that was described in Chapter Three was estimated; i.e., the revised model that was based on Equation 1, the results for which were presented in Table 1 of Chapter Three. Although alternative model specifications were estimated using the newly collected data, including factoring in the estimated cost of advertised products that was discussed above, no significantly meaningful results were obtained.

Every attempt was made to be consistent with, the 1992-3 study. However, there was one deviation that should have very little impact on the results that are presented here. Recall from the 1992-3 study that the dataset contained 116 observations. For the 2005-6 study, the dataset contains 114 observations; for the current study, there were 10 missed observations and two overruns. The 114 available observations ensure the statistical validity of our estimates at the 93.7-percent, as opposed to the 95-percent, level.

Results

The statistical results of the current study are available from the author upon request. Beginning with the first falsifiable hypothesis on representativeness, the

¹The 3.78 minute criterion differs slightly from the 3.76 minute criterion that was used for the 1992-3 study.

mean time required to sight a Black American upon turning on the television was 3.00 minutes; the minimum sighting time was one second and the maximum was 23.75 minutes. While the mean sighting time is well below the 3.78 minute criterion, a 95-percent confidence interval around this value encompasses values that exceed the criterion.² Consequently, as was the case for the 1992-3 study, the null hypothesis (H_{01}) must be rejected that Blacks experience proportional representativeness on television in the Washington, D.C. MSA.

Tables 1 and 2 provide the results of the Logit regression model that tested for the probability that sightings of Black Americans on television in the Washington, D.C. MSA were associated with stereotypical images of Black Americans. But before discussing the results that are presented in Table 1, it is important to mention that the McFadden R-Square, our chosen goodness of fit measure, that was derived from the Logit regression model using the 2005-6 dataset declined to 7.0. The McFadden R-Square that was derived from the 1992-3 dataset was 26.7. Corrected for degrees of freedom, the McFadden R-Square fell to 0 from a 1992-3 dataset value of 20.5. Clearly, the 2005-6 dataset reflects a much poorer fit for our Logit regression model than the 1992-3 dataset.

Table 1.—Logit Regression Model Results

Variable Name	2005-6 Study Estimated Coefficients (Standard Errors)	1992-3 Study Estimated Coefficients (Standard Errors)
Skin color	0.95147 (0.56179)	2.3724 (0.76191)*
Program Type	0.57913 (0.46469)	-1.0927 (0.51302)*
Day	0.15205 (0.60239)	1.7052 (0.52412)*
NBC (Network 1)	-2.7176 (0.94440)*	-2.5439 (0.95165)
FOX (Network 2)	-2.2000 (0.76925)*	-2.0589 (0.80951)*
ABC (Network 3)	-2.7809 (0.81195)*	-2.2130 (0.92807)*
CBS (Network 4)	-1.6057 (0.72425)*	-2.4854 (0.92609)*
WDCA/UPN (Network 5)	-1.9309 (0.73512)*	-3.3276 (0.95675)*
WFTY/WBN (Network 6)	-1.7980 (0.79935)*	-1.2340 (0.90478)

*--Statistically significant at the five-percent level.

Therefore the table 1 results are not surprising. The data show that not one of the three non-network variables' estimated coefficients is statistically significant for the 2005-6 dataset; all of the network variables are statistically significant. Recall that the negative and statistically significant estimated coefficients on the network variables means that, when the value for the remaining dummy variables in the model is 0 (i.e., when the Black American sighted on television is light skinned, when the sighting is associated with an advertisement, and when the sighting is associated with a week day), then the probability is reduced that the sighting of the Black American on television is associated with a stereotypical role.

² Given a standard deviation of 4.65 minutes, the upper bound of a 95-percent confidence interval is 12.12 minutes.

It is noteworthy that the estimated coefficient for the skin color variable is statistically significant at the 10 percent level, indicating that it is not unreasonable to conclude that Black Americans with dark skin color are likely to be associated with stereotypical images on television when they occur. Interestingly, the size of the estimated coefficient for this variable has declined dramatically: From 2.372 for the 1992-3 dataset to 0.951 for the 2005-6 dataset.

Generally, the Logit regression results that were derived using the 2005-6 dataset and that are presented in table 1 infer that sightings of Black Americans on television are not likely to be associated with adverse stereotypical images. Table 2, which reflects the success with which the model accurately predicted outcomes, shows that the Logit regression model accurately predicted 86 or 75.4 percent of the 114 observations. This compares with a 77 percent success prediction rate achieved with the 1992-3 dataset. As might be expected, 30 or 26.3 percent of the 114 2005-6 dataset observations were associated with stereotypical roles, while 51 or 44.0 percent of the 116 observations in the 1992-93 dataset were stereotypical roles. Using a Chi-square statistic with one degree of freedom permits rejection of a null hypothesis that the two datasets are similar at the one-percent level.³

**Table 2.—Prediction Success Table for Logit Regression Model:
2005-6 Versus 1992-3***

Predicted Observations	Actual Observations			Total
	0	1		
0	84 (52)	28 (14)		112 (66)
1	0 (13)	2 (37)		2 (50)
Total	84 (65)	30 (51)		114 (116)

*--1992-3 values are in parenthesis.

As in Chapter Three, consider the Z-index and predicted probability (P*) statistics that were derived from the 2005-6 Logit regression model. The mean value for the Z-index was -1.431 with a standard error of 0.706; the mean P* value was .2632 with a standard error of 0.124. Using the equation provided in footnote 15 of Chapter Three, point probabilities and related confidence intervals were derived based on these mean Z-index and P* values.

The mean Z index value translates into a probability of 0.242 with a 95-percent confidence interval spanning from .074 to 0.56. Similarly, the P* value translates into a probability of .565 with a 95-percent confidence interval spanning from 0.505 to 0.624. These statistics permit rejection of H₀₂. In other words, results from the 2005-6 dataset indicate that researchers who conduct similar studies are likely to find evidence of Blacks performing stereotypical roles on television.

³Comparing the 1 (30 and 51), 0 (84 and 65) values from the 2005-6 and 1992-3 Logit regression models, respectively, with the latter being viewed as the expected values, a χ^2 value of 14.20 was derived. The critical χ^2 statistic with 1 degree of freedom at the 1-percent level is 6.63; hence, rejection of the null hypothesis.

Table 3 provides statistics on the share of stereotypical versus astereotypical roles that were associated with observations made for each of the six networks considered in this study.

Table 3.—Black American Roles on Network Television: 2005-6 Versus 1992-3*

	NBC	FOX	ABC	CBS	UPN	WB50	Total
Total Observations	13 (14)	26 (28)	21 (19)	19 (19)	18 (20)	17 (16)	114 (116)
Stereotypical Roles	2 (8)	7 (10)	3 (11)	7 (10)	5 (3)	6 (10)	30 (52)
Percent Stereotypical Roles	15% (57%)	27% (36%)	14% (58%)	37% (53%)	28% (15%)	35% (63%)	26% (45%)
Astereotypical Roles	11 (6)	19 (18)	18 (8)	12 (9)	13 (17)	11 (6)	84 (64)
Percent Astereotypical Roles	85% (43%)	73% (64%)	86% (42%)	63% (47%)	72% (85%)	65% (37%)	74% (55%)

*--1992-3 values are in parenthesis.

The table provides clear evidence of the reduction in stereotypical images that were observed during the 2005-6 versus 1992-3 study. Each network, except for UPN, saw a reduction in the proportion of sightings that reflected stereotypical images of Black Americans. (The reasons for these changes, particularly for UPN, will be discussed in the conclusion to this chapter.) Analogously, each of the networks, except for UPN, saw an increase in the number of sightings that were associated with astereotypical or positive images of Black Americans. A multinomial Chi-square test would undoubtedly result in a decision to reject a null hypothesis that the 2005-6 and 1992-3 proportions of stereotypical and astereotypical images associated with the networks are similar.

Comparing the 1992-3 and 2005-6 Datasets

Given the previously described statistically significant differences in the two sets of Logit regression and other analytical results, it might prove useful to consider differences in the underlying 1992-3 and the 2005-6 datasets. Table 4 provides a comparison of variables from the two data sets that are directly reflective of the Black Americans that were sighted on television.

Table 4.—Comparison of Selected Statistics for Variables in the 1992-3 and 2005-6 Datasets

Variables	(A) 2005-5 Data Values (Percentages)	(B) 1992-3 Data Values (Percentages)	(C) 2005-6 versus 1992-3 Differences (A-B)
Sex [Males]	68 (60%)	75 (65%)	-7 (-5%)
Age [Adults]	107 (94%)	97 (84%)	10 (10%)
Skin Color [Dark]	81 (71%)	92 (79%)	-11 (-8%)

Table 4 data reveal that the two datasets are quite different with respect to the sex, age, and skin color variables. An analysis of the data pushes one toward concluding that significant change occurred in the images of Black Americans that were broadcast on television in the Washington, D.C. MSA between 1992-3 and 2005-6. In Chapter Three, it was contended that males were more likely to be involved in stereotypical roles than females. Table 4 indicates that the proportion of Black males observed during the study declined by 5 percent. In what might be considered an offset to the latter outcome, it was also contended in Chapter Three that adults were more likely to be associated with stereotypical roles than youth. Table 4 shows that the proportion of Black adults sighted during the 2005-6 study increased by 10 percent over the 1992-3 study. Finally, swinging the pendulum back in the opposite direction, it was predicted correctly in Chapter Three that dark-skinned Blacks would be more directly linked to stereotypical television roles than light-skinned Blacks. Table 4 shows that the proportion of dark-skinned Blacks sighted in the 2005-6 study declined by eight percent over the 1992-3 study. In sum, two of these three key variables point toward fewer adverse stereotypical roles being sighted on television in the 2005-6 versus the 1992-3 period.

Earlier in this chapter, there was a discussion on efforts to discern whether advertisers were “biased” toward Black Americans in the sense that they targeted Blacks by casting them in advertisements primarily for low-priced products. The logic is that people concede that they can and should purchase a product when they observe a comparable (race, sex, age, etc.) personality purchasing the product. Forty-two of the 114 observations in the 2005-6 dataset were advertisements. A mean price of \$3,783.21 was derived for the products that were featured in these advertisements, which included Black Americans.⁴ Nine of the ads reflected a mean price of \$2.50; nine reflected a mean price of \$15.00; seven had a mean price of \$62.50; seven reflected a mean price of \$550; nine reflected a mean price of \$13,000.00; and one reflected a mean price of \$37,500.00. No Black American sightings were linked to the advertisement of products that were classified in price categories with a mean price greater than \$37,500. Close

⁴Estimated mean prices for the products advertised were derived by classifying products in seven broad price categories: <\$5; >\$5-\$25<; >\$25-\$100<; >\$100-\$999<; >\$1,000-\$25,000<; >\$25,000-\$50,000<; and >\$50,000. Once classified in these broad price categories, advertised products were assigned a price equivalent to the midpoint of the price category two which it was assigned; e.g., \$2.50; \$15.00; \$62.50; \$550.00; \$13,000.00; and \$37,500.00.

scrutiny of the microdata revealed that an automobile was the advertised product with a mean price of \$37,500. In other words, Black Americans were not associated with advertisements for very high-priced products, such as homes, which infers that there may be some bias against Blacks in advertisement on the networks featured in this study.

Conclusion

What do the data and the Logit regression results mean? It has already been inferred that the data indicate that change occurred between 1992-3 and 2005-6. In 1992-3, the U.S. was returning to a growth trend after a short economic recession in 1990-1. During the second half of the 1990's, the U.S. economy experienced explosive growth as information technology and related industries benefited from innovation and a pressing need to prepare for Y2k (the millennium change-over). At the beginning of the 21st century, the economy slowed in response to a bursting of the dot.com bubble and events related to 9/11, before resuming strong growth—this time led mainly by residential construction. By the end of 2005, the “housing bubble” was already contracting, which impacted economic growth.

These economic developments brought with them a changing perspective of Black Americans. As one might expect, Black employment followed the aforementioned economic cycles as it always has. Blacks contributed to innovation and other economic booms just like other ethnic groups in the nation. The important question is, however, “Did these economic developments fundamentally change underlying perceptions of, or opinions about, Black Americans?” *A priori*, the evidence provided by the current study would lead one to answer the question with a “yes.” However, without being a purveyor of gloom and doom, circumspection is suggested in concluding that the results from the current study provide a definitive answer to the question.

Why? Because, as discussed in Chapter Two, the technology boom of the 1990's brought with it strong growth in communications industries and a trend toward audience segmentation.⁵ Audience segmentation means that networks target their content for specific audiences. By 2005, it was common knowledge that efforts were well underway to steer a large segment (low to moderately educated Blacks) of the Black television audience to music networks, such as BET, which broadcasts a large amounts of Black music videos; to general entertainment networks such as UPN and WBN, which broadcasts large amounts of entertainment programs that feature Black characters; and to sports networks such as ESPN, which broadcasts heavy doses of sports programs that feature Black athletes. This is not to say that the Black audience is monolithic, but the fact that these networks have continued to provide a staple diet of these programs, indicates that the networks are satisfied that they are attracting the intended audiences. In fact, table 3 bears these facts out in that UPN was the only network in the 2005-6 study to show an

⁵See Turow (1997) for an analysis of the methods and impacts of market and audience segmentation.

increase in the number of stereotypical images of Blacks over its reading in the 1992-3 study.

Audience segmentation was not practiced as strenuously during the 1992-3 period. During that period, networks took more of a scatter-gun approach to attracting audiences—judiciously blending Black and White characters to optimize audience size. The advent of audience segmentation as a concept did away with this approach to attracting audiences. Given that four of the five remaining networks in our study (ABC, NBC, CBS, and FOX) appear to focus their attention primarily on White audiences, it stands to reason that we would see fewer stereotypical roles and more light-skinned Black Americans on these networks in the 2005-6 dataset. Why? Because these networks have structured their programming to appeal to a White and to an educated Black audience, which likely has a reduced affinity for stereotypical images of Black Americans. Given that a sizeable percentage of the random observations in the current study are linked to these four networks, the foregoing explanation for the Logit regression results for the current study is reasonable.

The logical argument follows: “If Blacks are no longer portrayed in adverse stereotypical roles on these networks, then the adverse effects of television are disappearing.” This argument is only partly correct. It is only partly correct because the analysis only concerns a subset of all networks. Therefore, it is now paramount that a more thorough analysis of television be conducted, which should span all networks; including cable and pay per view networks.

What we know is that the BET, UPN, and WBN’s of the world, because they broadcast a significant amount of programs that feature Black Americans, feature Black Americans in stereotypical roles. These roles create a negative feedback loop: Blacks inculcate the stereotypical behaviors that they observe on these networks, which ultimately produce adverse economic outcomes for Blacks.

In addition, there may be other cable and pay per view networks that reflect a greater preponderance of adverse images of Blacks than do the ABC, CBS, NBC, and FOX network. These cable and pay per view networks should be monitored for such images and efforts should be made to remove them.

But it does not stop there. As discussed in Chapter Five, media images are everywhere today. Therefore, an all-out effort is required to monitor all of the sources of media images to ensure that adverse stereotypical images of Blacks are not reflected and do not create economic harm.

Consequently, although the study presented in this chapter produced certain results that signal improving circumstances, the jury is still very much out on this question. Further study is required before we can conclude that all is well on the television media front for Black Americans.

References

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APPENDIX A
SURVEY INSTRUMENT

EVALUATION OF BLACK AMERICAN PORTRAYALS ON TELEVISION

DAY _____ DATE _____ TIME _____

NETWORK: NBC_ FOX_ ABC_ CBS_ WDCA_ WFTY

TIME OF SIGHTING A BLACK AMERICAN (IN MINUTES AND SECONDS)

_____Seconds

SEX: MALE ___ FEMALE ___

AGE: YOUTH [<0-18<] ___

ADULT [<18] ___

SKIN COLOR: DARK ___ FAIR ___

PROGRAM CATEGORY: PROGRAM ___ ADVERTISEMENT ___

If Advertisement, value of Product Advertised

<\$5 ___ >\$5 - \$25< ___ >\$25 - \$100< ___ >\$100 - \$900< ___

>\$1,000 - \$25,000< ___ >\$25,000 - \$50,000< ___ >\$50,000 ___

ROLE EVALUATION

STEREOTYPICAL ___ ASTEREOTYPICAL ___

STATEMENT CONCERNING THE IMAGE PORTRAYED BY THE BLACK AMERICAN SIGHTED.