

# The Role of Television in the Construction of Consumer Reality

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This article presents the results of a two-study inquiry into a particular type of consumer socialization: the construction of consumer social reality via exposure to television. In study 1, estimates of the prevalence of products and activities associated with an affluent lifestyle were positively related to the total amount of television respondents watched. The amount of television viewing was shown to function as a mediating variable between the demographic variables income and education and the affluence estimates. In study 2, which consisted of student participants who were either very heavy or very light soap opera viewers, heavy viewers again provided higher estimates of the prevalence of the same types of products and behaviors measured in study 1. In addition, heavy soap opera viewers constructed their estimates significantly faster than light viewers, which suggests that relevant information is more accessible in memory for heavy viewers than light viewers. The results are consistent with heuristic processing strategies, particularly the availability heuristic, in which individuals infer prevalence from the ease of retrieval of relevant examples (Tversky and Kahneman 1973).

For many scholars (Fiske 1987; McLuhan 1964), one of the more socially significant events of the twentieth century has been the introduction and rapid diffusion of television. Those authors hold that television has forever changed our families and the way we elect our leaders, set social policy, judge the accused, and view ourselves in relation to others. Some believe this is because television has supplanted reading and interpersonal narrative as our primary means of storytelling and myth delivery (Silverstone 1991) and has thus fundamentally changed our culture (McLuhan 1964). Across diverse theoretical

formulations, television is widely acknowledged as a powerful agent of socialization.

Our intent in this article is to explore television's role as a possible agent of consumer socialization and, further, to better understand the mental mechanisms by which this process may occur. We investigate television programming's role in providing consumers with information used in constructing their mental representations of the material world (i.e., that portion of the environment pertaining to the ownership or consumption of goods and services). More specifically, we address whether the viewing of television programming affects viewers' perceptions of societal affluence. Is watching relatively more television associated with believing the material world to be relatively more affluent? Such mental representations of the material world are an outcome of socialization and have been recognized as such by early researchers in their conceptualizations of the consumer socialization process (Parsons, Bales, and Shils 1953; Ward 1974). However, very little research has directly examined television programming as an agent of consumer socialization.

This article presents the results of two studies that involve this type of consumer socialization. In the first study, we report survey data that test the relationship between television exposure and the perceived prevalence of specific consumption-related indicators of affluence. In the second study, we more directly examine psychological

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process through a quasi-experiment in order to suggest how, from a memory retrieval perspective, television information contributes to these consumption-related beliefs.

## TELEVISION, SOCIAL REALITY, AND CONSUMPTION

Television has a number of essential qualities that may contribute to its impact as an agent of consumer socialization. First, television is ubiquitous. Between the end of World War II and the early 1960s, television went from scientific novelty to something as common to American households as a sofa. Today, more American families have television sets than have telephones (Bureau of the Census 1995). The average American family watches more than seven hours of television per day, the average individual more than four hours per day (Nielsen 1995). In terms of exposure, television rivals many traditional socialization agents such as school, church, and even parents.

Second, television's effects are often invisible. Because so many Americans watch television, its effects can become obscured. Watching television is so common that we may simply be too immersed to easily observe its influence. As Allen (1992) explains, "It is the very ubiquity of television and the intricate ways it is woven into the everyday lives of so many people that make it so difficult to analyze. . . . For many people (myself included), television has the same status in their lives as the food they eat for breakfast or the way their faces look in the morning; it is something so much a part of day-to-day existence, that it remains invisible as something to be analyzed or consciously considered" (p. 3).

In addition, television has other characteristics that contribute to its socializing effect. Television supplies its viewers with images, accounts, and stories of life that are often far removed from the viewer's daily experience and social milieu (Altheide and Snow 1979; O'Guinn and Faber 1991; Richins 1995). It offers a view of what Goffman (1966) referred to as "backstage behaviors," or those private moments of others to which we are typically not afforded access other than through reading or dramatization. Furthermore, whereas messages from other sources vary from household to household, television's message is much more homogeneous (Gerbner et al. 1986). Even with an increasing number of channels and some corresponding increase in programming diversity, many scholars (Fiske 1987; Miller 1988) argue that the basic structure and thematic center of television have not changed much at all.

It is also important to understand that television's representations of social reality are often discrepant from so-called objective reality (census data, surveys, etc.). Content analyses of television programs have consistently identified important differences between the television world and the real world (Gerbner et al. 1980a; Lichter, Lichter, and Rothman 1994). Examples of such differ-

ences include findings that violence is 10 times more prevalent on television than in the real world (Gerbner et al. 1980a), male television characters outnumber female characters three to one (Gerbner et al. 1980a), and characters in the 25–45-year-old range are overrepresented, but people younger or older than this age range are underrepresented relative to their real-world frequencies (Gerbner et al. 1980b). Particularly relevant to the present study, professionals—especially doctors, lawyers, and wealthy businessmen—predominate on television, as does the upper middle class. On the other hand, blue-collar and "low-status" occupations (with the exception of police officers) are significantly underrepresented compared with their numbers in the real world (Lichter et al. 1994).

Television is also full of representations of consumption (DeFleur 1964), many involving members of social classes and spheres very different from those of most Americans (Comstock et al. 1978; Hennigan et al. 1982). Television commonly uses consumption symbols as a means of visual shorthand; what television characters have and the activities in which they participate mark their social status with an economy of explanatory dialogue. Viewers see and hear what members of other social classes have and how they consume, even behind their closed doors.

Finally, it is important to consider that, although television's representations are discrepant from so-called objective reality, they are not *too* discrepant. Viewers still recognize them as familiar. Ong (1977) noted that "television blurs the fictional with the real on a scale previously inconceivable" (p. 15). This blurring is very significant because consumers may passively accept as real those television representations that are somewhat, or even significantly, skewed. While watching television in a passive state of engagement (Krugman 1965; Ray 1973), it is very unlikely that viewers would typically conduct their own stringent content analyses and reject television representations as entirely unreal because of these chronic over- or underrepresentations. It may thus be easier than we would like to believe for viewers to accept television reality as the way the world really is.

Each of us likes to think of himself as being rational and autonomous. Our ideas seem to be peculiarly our own. It is hard for us to realize how little of our information comes from direct experience with the physical environment, and how much of it comes only indirectly, from other people and the mass media. Our complex communication systems enable us to overcome the time and space limitations that confined our ancestors, but they leave us with a greater dependence on others for shaping our ideas about how things are in the world. While becoming aware of places and events far from the direct experience of our daily lives, we have given up much of our capacity to confirm what we think we know. (McLeod and Chaffee 1972, p. 50)

## Cultivation Theory

Cultivation theory (Gerbner et al. 1977) holds that television viewing significantly assists in creating or cultivat-

ing a view of reality that is biased toward the highly formulaic and stylized narrative content of television. Given that television is a medium in which viewers regularly suspend their disbelief, often in what some believe to be a passive cognitive state, cultivation theory posits that heavier viewers of television will have beliefs about the social world that are more consistent with televised social representations than will light viewers. To the heavy television viewer, the real world becomes more like the TV world.

Research on cultivation theory has shown consistent correlational support for the assertion that television programming, with its constant and relatively narrow messages, produces a conformity of social perceptions, norms, and even values. For example, studies have found that heavy television viewing correlates with higher estimates of the prevalence of prostitution, alcoholism, and drug use (Shrum and O'Guinn 1993; Shrum 1996), with greater faith in doctors (Volgy and Schwarz 1980), and with higher estimates of crime and violence (Gerbner et al. 1977; Shrum and O'Guinn 1993). Moreover, these findings persist in the presence of a number of control variables (e.g., income, education, age, and various individual differences variables). Although the correlational evidence for a cultivation effect does not demonstrate causality (Hirsch 1980; McGuire 1986), it remains consistent (for a review and meta-analysis, see Morgan and Shanahan [1996]). Still, the cultivation hypothesis is considered by some communications researchers to be an open research question (Hawkins and Pingree 1990), often because of its lack of explanatory cognitive processes.

### Consumer Cultivation

There have been at least three studies that have addressed some aspect of the association between television exposure and perceptions of affluence. Fox and Philliber (1978) found a significant relation between the amount of viewing and perceptions of societal affluence, but this relation was diminished to nonsignificance when income and education were added as control variables. On the other hand, Potter (1991) produced modest but significant correlations between the amount of television viewing and perceived affluence among high school students, even when using various control measures, including demographic, information-processing ability, and information-seeking variables. Finally, a study of Israeli viewers' perceptions of American programs on Israeli television found that heavy viewers gave higher estimates than light viewers of the percentage of Americans owning various household items and the average earnings of American families (Weimann 1984), even in the presence of several control variables.

There are a number of issues regarding these three studies that limit their usefulness and may also account for the inconsistent results. In particular, the Fox and Philliber (1978) study failed to find an effect of television

viewing on estimates of affluence. However, the manner in which television viewing was operationalized in the Fox and Philliber (1978) study was problematic and may have contributed to the null findings. Specifically, the operationalization of level of television viewing classified respondents on the basis of how many days per week they watched at least one hour of television. This seems an ambiguous measure of total weekly television viewing that lacks construct validity, as it would classify as a heavy viewer someone who watches one hour of television each day (seven hours per week) but would classify as a light viewer someone who watches four hours on only three days (12 hours per week). The other two studies, although finding a cultivation effect, are limited as well. The Weimann (1984) study looked only at Israeli viewers living in Israel and contained no controls for direct contact with American culture (e.g., visits). The Potter (1991) study looked only at high school students in a university town, which may have limited the range of control variables (e.g., parents' income, education, and occupation).

### PROPOSED MODEL

Because of the aforementioned qualities of television and the predictions of cultivation theory, we believe that exposure to the world as it is portrayed on television has the potential to influence consumers' perceptions of the very existence or incidence of things, including consumption objects and activities often associated with a more affluent lifestyle. If unchallenged, these perceptions can become part of enduring mental and social representations. Consumers may begin to believe that the material and consuming world, or at least part of it, exists as it is constituted on television. This effect may be subtle and go largely unnoticed because so few are left untouched by the consensus of television reality.

It is important to note, however, that we are not claiming that television viewing is the only consumer socialization agent that might influence perceptions of the material world. Clearly, one's daily life experiences outside the context of television viewing will also influence social perceptions. In fact, it is the concurrent effect of such daily experience variables on both social perceptions and the amount of television viewing that has necessitated the use of demographic variables as statistical controls in previous cultivation research. The model we propose incorporates demographic variables—in particular, education and income—and actual direct experience measures and our socialization variable of primary interest, television viewing.

### Income and Education

Previous cultivation research has shown income and education to co-vary with a number of different social reality judgments (Hirsch 1980). One's social circum-

stances are obviously important in the production of consumption-related perceptions and beliefs. In terms of perceptions of affluence, it seems reasonable to expect that income level will be positively related to the amount of actual experience that people have with particular consumption objects and behaviors associated with affluence. In turn, the amount of experience with such objects or behaviors may be positively related to people's perceptions of the real-world prevalence of these objects and behaviors. For example, higher-income consumers should be more likely than lower-income consumers to have experience with the trappings of a more affluent lifestyle, and their perceptions of affluence may be largely a function of their experiences with their own wealth. On the other hand, less wealthy consumers should have relatively less experience with objects and behaviors associated with affluence, and their income (in isolation) may serve to suppress estimates of affluence-related products and behaviors.

Education is also important in this context, independent of income. Education is traditionally held to afford individuals a wider worldview and a broader social perspective and to contribute to a more socially informed citizenry. Viewed as a knowledge variable, education may afford people a more veridical and accurate view of the world, including the material world.

Education and income have also been shown to correlate negatively with the amount of television a person views (Condry 1989). This relation is typically explained in terms of the increased leisure and cultural opportunities afforded those who are more affluent and/or more educated. That is, those with less education and income tend to be heavier television viewers because of fewer alternate leisure activities and the low cost of television viewing (Gerbner et al. 1980a). Although we are not completely comfortable with the elitist assumptions of this explanation, the relationship has nevertheless been very consistent.

## Direct Experience

Most models of television effects leave out the direct experience variable and simply indicate a direct relation between demographic variables and social perceptions, with the assumption that the demographic variables fully capture direct experience. However, it is certainly possible to be wealthy yet not own particular products (e.g., a swimming pool). To more accurately account for direct experience, we measured it and included it in the model.

## Hypotheses

Given the above interrelationships among demographics, television viewing, and social perceptions, we hypothesize and test the following relationships in study 1 (see Fig. 1).

**H1:** We expect the amount of television viewing to correlate positively with estimates of the prevalence of particular products and behaviors associated with affluence (affluence estimates), which indicates a cultivation effect.

**H2:** We also expect that the extent of direct experience with these products and activities will be positively associated with affluence estimates.

However, we do not expect that these effects occur in isolation. The following hypotheses are consistent with previous research.

**H3:** We also expect that income will correlate negatively with amount of television viewing.

**H4:** We also expect that education will correlate negatively with amount of television viewing.

**H5:** We expect that income will correlate positively with direct experience with affluent products and behaviors.

Note that no relation between education and direct experience is hypothesized. We reasoned that the only relation between education and direct experience with affluent products and behaviors should be due to the covariation between income and education. On the other hand, if education indeed functions as an accuracy or knowledge variable, we make the following prediction.

**H6:** We expect that education will be negatively related to estimates of affluence.

Thus, we expect that television viewing will mediate the relation between demographic variables (income and education) and the affluence estimates. Similarly, we expect that direct experience will mediate the relation between income and the affluence estimates.

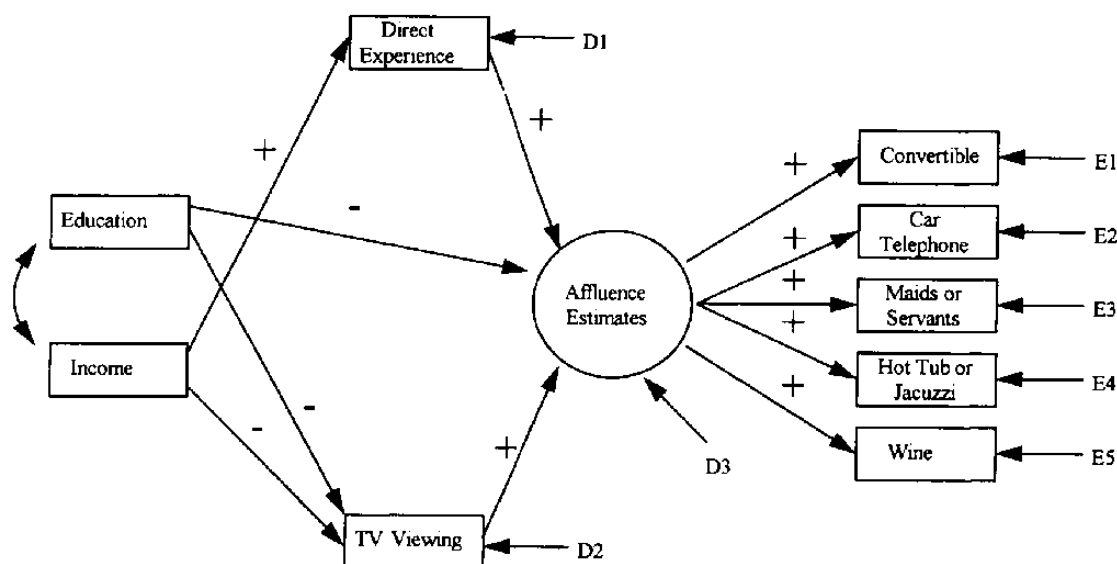
## Psychological Process

In addition to documenting the effects of television viewing and how it is situated in a broader social context, we are also interested in how this effect may occur at the individual level. One of the major criticisms of cultivation theory is that a mental mechanism that can account for cultivation effects has not been explicated (Hawkins and Pingree 1990; Shrum 1995). In other words, cultivation theory provides no explanation as to why television information apparently influences these perceptions, even though most people do not think television portrayals are necessarily veridical.

One psychological process explanation for television's effect on social judgments relates to the research on information accessibility. This research suggests that when individuals are asked to make a social judgment, they typically do not perform an exhaustive search of memory for information pertaining to that judgment. Rather, they



FIGURE 1  
PROPOSED STRUCTURAL MODEL INDICATING MEDIATING ROLE OF TELEVISION VIEWING  
AND DIRECT EXPERIENCE ON AFFLUENCE ESTIMATES



NOTE.—D<sub>n</sub>, structural model residuals; E<sub>n</sub>, measurement model residuals.

tend to rely on a subset of information that is most accessible from memory (for reviews, see Sherman and Corty [1984]; Wyer and Srull [1989]). Research has shown that a number of factors influence either the momentary or enduring accessibility of particular information. Such factors include recency and frequency of activation of a construct (for reviews, see Sherman, Judd, and Park [1989]; Wyer and Srull [1989]), vivid or easily imagined objects or events (Sherman et al. 1985), and distinctiveness, prominence, self-relevance, and similarity to other constructs (Higgins and King 1981).

Recency, frequency, vividness, distinctiveness, and prominence have particular relevance to cultivation research.<sup>1</sup> Heavy viewers, by definition, watch television more frequently than light viewers and have a higher probability of having watched television more recently. Thus, it is reasonable to think that information obtained from television would be more accessible for heavy viewers than light viewers. Moreover, given the nature of television portrayals, the television information that is stored may also be very vivid and distinctive, contributing further to its enhanced accessibility for heavy viewers.

Finally, research on judgment and decision making provides insight as to how the accessibility of information—in this case, television information—may influence esti-

mates of the prevalence of particular products and activities. The availability heuristic suggests that individuals may estimate the frequency or probability of occurrence on the basis of ease of retrieval, or accessibility, of the information from memory (Tversky and Kahneman 1973). Specifically, the more easily instances of a particular construct come to mind, the higher the frequency and probability estimates that people make. Thus, if television viewing does indeed make relevant information more accessible for those who view more often, heavy viewers should give higher estimates than light viewers (see Richins [1995] for a similar argument).

In terms of social reality construction, the critical question pertains to the nature of television information that is stored in memory. In other words, what types of images do heavy viewers typically encounter on retrieval? As discussed earlier, research has indicated several areas in which the world as it appears on television differs from the real world. For example, professional occupations are overrepresented and blue-collar occupations are underrepresented relative to their real-world frequencies (Lichter et al. 1994). Given the overrepresentation of professionals, and of affluence in general (DeFleur 1964), it stands to reason that these occupational and status representations may be accompanied by representations of products and consumption behaviors that signify success and wealth.

These apparent biases of television portrayals suggest that much of the television information that is very accessible for heavy viewers may consist of images of affluence and products associated with affluence. Consequently,

<sup>1</sup>Distinctiveness of a construct refers to the uniqueness of its attributes (e.g., lone woman in a group of men). Prominence of a construct refers to the quality of its attributes (e.g., intensity, vividness, complexity). Thus, vividness (e.g., intensity of color) of a construct is a subset of prominence (Higgins and King 1981).

when asked to form a judgment related to these topics, heavy television viewers should have more easily accessible information in memory than light viewers.

Study 2 directly tests these propositions with the following hypotheses.

- H7:** Heavy viewers should give higher estimates of the prevalence of particular products and behaviors associated with affluence, consistent with a cultivation effect.
- H8:** Information used in constructing the judgments should be more accessible for heavy viewers than light viewers, which indicates an accessibility effect.

## STUDY 1

### Method

**Sample.** A stratified random sample of the general population of Illinois was used for this study. The state was divided into three sampling groups: Chicago, Chicago suburbs, and the remainder of the state. This sampling procedure is routinely used and produces good sample parameters at a reasonable cost. The method of *n*th name sampling was used to pick the sample from each group. A total of 2,929 units were selected with telephone directories as the source. A mail survey was administered to the 2,929 sample units. Instructions in the cover letter specified that anyone in the household (provided they were 18 years of age or older) was eligible to complete the questionnaire. In order to increase the response rate, a follow-up letter, a second mailing to nonrespondents, and a follow-up postcard to the second mailing were sent out.

Of the 2,929 surveys mailed, 169 were returned marked undeliverable, leaving 2,760 presumably delivered. Of these 2,760 surveys, 801 were returned by the respondents, yielding a response rate of 29 percent. Of the 801 returned, 16 were discarded for various reasons (unreadable, partially completed, etc.), yielding 785 valid surveys.

Comparison of the final sample to state and national population characteristics indicates that the sample characteristics for age, gender, and household size were generally representative of those of the state and nation (sample characteristics are based on the 686 respondents remaining after listwise deletion of missing data). Income of the sample was representative of the state, and education was only slightly higher than state and national averages (13.6 years for our sample, compared with state and national averages of 12.5 years). Our sample showed a somewhat greater percentage of white respondents compared with the state average,<sup>2</sup> and our sample marital

status rate was roughly equivalent to the national average (62.5 percent and 59.0 percent, respectively).

**Measures.** Five questions were used to measure perceptions of affluence. The questions were developed on the basis of a content analysis of prime time and daytime television programs. One week (Monday–Friday) of prime time (7 P.M.–10 P.M. CST) programming for the three major networks was videotaped (45 hours total). Three days of daytime programming (9 A.M.–3 P.M. on Monday, Thursday, and Friday) were also recorded, with the three days randomly matched with the three networks, for a total of 18 hours of daytime programming. This sampling procedure for daytime programming was used because daytime programs tend to run every day, and this method ensured that all programs would be sampled.

The purpose of the content analysis was to abstract consumption activities or products that were prominent in these programs. Our analysis differed from the type of content analyses that consist strictly of head counts of people, objects, or actions. Rather, we sought to identify instances of prominent markers of affluence. As both Greenberg (1988) and Lichter et al. (1994) have suggested, simple counting tends to overemphasize background text and undervalue constructs that are central to plot and character development. On the other hand, an analysis that is contextual allows the researcher to make interpretive judgments having knowledge of not only the research purpose but the particular stylistic and generic elements of the televised texts as well. We believe that focusing on prominence is particularly appropriate given our theoretical reasoning regarding the role that construct accessibility may play in estimates of affluence.

Coders were trained by the senior researchers. The coders received instruction and practice on television programs not included in the sample. Three coders were randomly assigned to a particular network, and each coder viewed all of the programs recorded for that network (the one coder/one network decision was not considered problematic given the very homogeneous nature of programming across networks; Miller 1988; Signorielli 1986). Coders were given explicit instructions to focus on and note affluence-related objects and behaviors that appeared prominent. Cues to prominence included but were not limited to vividness, intensity of portrayals, and centrality to the plot and/or character (what is central in a particular scene or setting).

All three coders then met with the senior researchers to analyze the findings and determine commonalities across the programs analyzed. Five possessions and behaviors were noted by all three coders, and corresponding items were developed for inclusion on the survey. The survey asked respondents to provide percentage estimates of the prevalence of U.S. households owning a car telephone (although now more common, cellular phone penetration at the time of data collection was less than 10 percent; Cellular Telephone Industry Associa-

<sup>2</sup>In this study, 91.9 percent of our sample was white, as opposed to the 77.5 percent reported for Illinois and the 79.2 percent for the United States in the 1990 U.S. Census. This discrepancy may, however, be somewhat artificial because Hispanic persons often self-identify as white.

tion, cited in Johnson [1996]), a convertible automobile, or a hot tub or jacuzzi; having maids or servants; and having wine with dinner (see App. A for exact wording of the items). The senior researchers then viewed all of the programs to provide their own validation of the items chosen. These possessions and behaviors are similar, and often identical, to those noted by Hirschman (1988) in her analysis of the television programs *Dallas* and *Dynasty*, which suggests a high degree of reliability in the coding of prominent possessions and behaviors associated with affluence.

Direct experience with each of the affluence-related products or behaviors was also measured. Respondents were asked to report whether they currently owned a car, telephone, convertible, or hot tub/jacuzzi; if they currently had maids and servants; and if not, if they had these things within the last five years. Respondents were also asked if they regularly had wine with dinner. A composite measure of direct experience was then constructed by summing the number of positive responses.

Education was measured as the total number of years of formal schooling of the respondent. Annual household income was metrically scaled from \$0 to "over \$100,000" in \$10,000 increments. Age was measured with an open-ended question that asked respondents to report their current age in years. Materialism, with Belk's (1985) scale, was also measured to serve as a possible control variable, because we thought it possible that both the affluence estimates and television viewing may be related to level of materialism.

Television viewing was assessed by having respondents indicate the number of hours per week they view particular program categories and then summing across categories. These categories were soap operas, news, sports, movies, comedy, action/adventure, and drama.<sup>3</sup> In terms of television viewing, the sample results were lower than the national average ( $\bar{X}$  = 23 hours vs. 28 hours; Nielsen 1993).

## Results and Discussion

Viewers' estimates of the prevalence of the five products and activities associated with affluence were com-

bined to form one latent structure (affluence estimates,  $\alpha$  = .79). The two exogenous variables are years of formal education of the respondent and household income.<sup>4</sup> The model is specified such that the exogenous demographic variables affect both directly and indirectly (through their effect on television viewing and direct experience) the affluence estimates.

A total of 686 respondents were used in the analysis (listwise deletions account for missing data). The covariance matrix (see App. B) of the observed variables was used as input, and the model parameters were estimated with the generalized least squares (GLS) method. The GLS method was used because it does not assume multinormality among the observed variables. The model was fit with LISREL VIII (Jöreskog and Sörbom 1993).

Three alternative models were tested against the proposed model. This analysis used a nesting approach in which each model is compared with the next in sequence (Anderson and Gerbing 1988). The four models are hierarchical (from most parsimonious to least), which allowed us to assess the improvement in fit by testing the change in chi-square for significance. Model 1 specifies no directional paths (null model) and provides a baseline for comparing the other models. Model 2 specifies education as an exogenous variable with direct effects on the affluence estimates and income as an exogenous variable with direct effects on affluence estimates and indirect effects through direct experience. Theoretically, this can be thought of as a very straightforward sociological model in which demographic variables predominate. The model includes all variables except television viewing and thus allows us to assess the contribution of adding television viewing in subsequent models. Model 3 was identical to Model 2 except that television viewing was included as an additional exogenous variable with direct effects on the affluence estimates. Thus, this model adds television viewing not as a mediator but as a predictor independent of education and income. Model 4 (proposed model; see Fig. 1) specified income and education as exogenous variables and television viewing and direct experience as endogenous, mediating variables and included the direct effect between education and the affluence estimates. This model is directly derived from our understanding of the extant theory presented earlier.

Table 1 shows that each successive model fits better than the preceding one (indicated by the significant change in chi-square values), and our proposed model

<sup>3</sup>Our choice of total television viewing as the independent variable, rather than more specific measures such as program category or individual programs, was influenced by our goal of looking at the effect of television as a social system. Thus, in study 1, we view the influence of television as largely a sociological phenomenon, which is consistent with Gerbner's position. Moreover, a number of researchers consider the television-viewing habits of the general population to be largely habitual, nonselective, and governed much more by time constraints and previous viewing than by active selection of programs (Goodhart, Ehrenberg, and Collins 1975; Kubey and Csikszentmihalyi 1990). However, other researchers contend that at least some viewers are selective (Rubin 1985) and that a focus on the particular programs should thus yield larger viewing effects (Hawkins and Pingree 1981). We agree that some types of viewers are indeed selective, which influenced our selection of program category (soap operas) as the independent variable in study 2, as students are one group of viewers that tends to be very

selective in their viewing habits (Rubin 1985). The choice of program category in study 2 also worked well with our goal of investigating psychological processes involved in social reality construction.

<sup>4</sup>Age and materialism were uncorrelated with both the intervening variables and the dependent variable and thus were not included in the model. We should note, however, that the lack of an effect of materialism may have been due to the low reliability of the measured construct ( $\alpha$  = .62).

TABLE 1  
MODEL FIT SUMMARY FOR FOUR MODELS TESTED IN STUDY 1

Model	$\chi^2$	df	$\Delta\chi^2$	$\Delta df$	Standardized RMR	GFI	AGFI	CFI	IFI
1	362.25*	30	...	...	.22	.88	.82	.83	.83
2	147.02*	26	215.23*	4	.11	.95	.92	.94	.94
3	141.95*	25	5.07*	1	.10	.95	.92	.94	.94
4	58.90*	24	83.05*	1	.04	.98	.96	.98	.98

\* $p < .05$ .

(Model 4) fits the data very well. The ratio of chi-square to degrees of freedom was low ( $58.90/24 = 2.45$ ), as was the root mean square residual ( $RMR = 0.04$ ). However, Jöreskog and Sörbom (1993) argue that chi-square tends to increase with violations of multinormality. The goodness-of-fit index ( $GFI = .98$ ) and the adjusted goodness-of-fit index ( $AGFI = .96$ ), both of which are robust against nonnormality, also indicated a good fit (Jöreskog and Sörbom 1993; Tanaka and Huba 1985). The comparative fit index ( $CFI$ ; Bentler 1990) and incremental fit index ( $IFI$ ; Bollen 1989) both equaled .98.

Table 2 shows the structural and measurement model results for the proposed model (Model 4). For the measurement model, the standardized factor loadings of each observed variable on the latent variable were significant. With respect to the path coefficients for the structural model, all of the paths were significant. These results are consistent with our predictions. Most critical, inspection of the individual path coefficients reveals that the path between television viewing and the affluence estimates was positive and significant, which is consistent with a cultivation effect, thus supporting Hypothesis 1.

Direct experience was also a significant positive predictor of affluence estimates, consistent with Hypothesis 2. This finding is consistent with our contention that television is not the only variable that may influence perceptions of affluence. However, although direct experience (ownership) clearly has an effect, not everyone has such experience to draw on, and the mediating effect of television viewing noted in this study indicates an alternative source of information that has a significant effect on estimates of affluence.

The effects of income and education on television viewing and direct experience were also consistent with predictions. Income and education were both associated with less total television viewing, and income was positively related to direct experience, confirming Hypotheses 3–5. Also, education had a negative direct effect on the affluence estimates over and above the mediated effect, consistent with Hypothesis 6, which suggests that education may influence accuracy, as we speculated.

The indirect effects, obtained by multiplying the intervening direct effects, are revealing as well. For exam-

ple, consider the indirect effects of income on the affluence estimates. When mediated by hours of television viewing, the indirect effect of income on estimates of affluent products is negative ( $-.19 \times .15 = -.028$ ). As income decreases, television viewing increases, which in turn increases the affluence estimates. The same pattern is observed for the indirect effect of education on the estimates, when mediated by television exposure ( $-.21 \times .15 = -.031$ ). As education decreases, television viewing increases, which in turn has the effect of increasing the estimates of affluence.

Overall, the results support a model in which television viewing significantly affects the perceptions of affluence. Those who watch comparatively more television tend to believe more people have possessions and engage in behaviors associated with a more affluent lifestyle. However, although study 1 provided evidence that the cultivation effect exists in the consumption domain and situated this finding within important demographic and experiential measures, the study offers limited insights into the psychological mechanisms through which the effect works. Study 2 was designed to not only replicate the findings of study 1 but also explain the effects in terms of cognitive processes. The study empirically tests the notion that relevant information is more accessible for heavy viewers than for light viewers, thus offering evidence of at least one possible psychological mechanism involved in this phenomenon.

## STUDY 2

Study 2 differs from the first study in that the sample and independent variable were constructed differently. Past cultivation studies have typically used a total, or composite, measure of television viewing. This more global television measure provides for a test of the effect of viewing television in general, and it is an appropriate approach when the objective is to understand the global effects of the medium on social perceptions. This was the case with study 1. In order to address mental process issues, it is important that we are able to better isolate the television effect. Thus, study 2 compares only very heavy viewers and very light viewers of a particular pro-



TABLE 2  
STRUCTURAL AND MEASUREMENT MODEL RESULTS FROM STUDY 1

Parameter	Unstandardized path coefficient	Standardized path coefficient	t
Structural model coefficients:			
Education on TV viewing	-.99	-.21	-5.33*
Education on affluence estimates	-.81	-.23	-5.40*
Income on direct experience	.12	.39	10.99*
Income on TV viewing	-1.06	-.19	-4.80*
Direct experience on affluence estimates	2.78	.21	5.87*
TV viewing on affluence estimates	.11	.15	3.41*
Measurement model coefficients			
Affluence estimates and convertible	.79	.71	16.16*
Affluence estimates and car telephone	1.00	.71	NC
Affluence estimates and maids or servants	.86	.75	15.99*
Affluence estimates and hot tub or jacuzzi	.81	.68	14.98*
Affluence estimates and wine with dinner	.97	.49	11.15*

NOTE.—NC, Not computed; constrained to 1, in the unstandardized solution, to fix the scale of affluence estimates.

\* $p < .05$ .

gram type so as to better investigate the effects of television viewing and the processes that underlie them.

## Method

**Sample.** The sample consisted of students from an introductory advertising class at the University of Illinois. Students were useful for this study because as a group they tend to watch less television than the general public but within their group tend to watch many of the same television programs (Rubin 1985). This pattern is for the most part due to time constraints resulting from alternative activities (e.g., studying, socializing, recreation) and the fact that they are members of a fairly homogenous group with similar interests and schedules. This viewing behavior thus provides an opportunity to select participants who are heavily exposed to particular types of programming but who do not watch great amounts of other television, making for a cleaner quasi-experimental situation.

In order to determine viewing characteristics of the participants, the entire participant pool was given a preliminary questionnaire ( $n = 268$ ) at the beginning of the semester, which measured various aspects of television viewing, including the frequency of viewing of specific programs. The results from this questionnaire indicated that daytime soap operas were the most popular general category (see Rubin [1985] for similar findings) and that *L.A. Law* was the most popular evening program. *L.A. Law* is an evening soap opera and thus may be considered to be very similar to the daytime soap operas. In fact, the results of our content analysis indicated that even though the programs differed slightly from each other in terms of subject matter, the same overall themes emerged for all of the shows. For these reasons, rather than analyze

the daytime soap operas separately from *L.A. Law*, we combined the data across the two program groups. Participants were put in the light soap opera group if they indicated watching zero hours of soap operas in an average week and indicated watching zero hours of *L.A. Law* in an average month (viewing zero of four consecutive shows). Thus, light soap opera viewers watched little of either daytime soaps or *L.A. Law*. Participants in the heavy soap opera category either indicated they watched at least five hours of soap opera programming in an average week or indicated they typically watched four *L.A. Law* episodes in an average month (four of four consecutive shows). However, the participants were not aware of the criteria for their selection; they were told that their selection was random. In total, 51 participants took part in the study, 36 in the heavy-viewing condition and 15 in the light-viewing condition.

**Dependent Measures.** In order to develop the dependent measures for this study, a content analysis was conducted on soap opera and *L.A. Law* episodes. Two consecutive weeks of three particular soap operas, *All My Children*, *The Young and the Restless*, and *Days of Our Lives*, were videotaped. These three shows accounted for over 90 percent of the soap opera-viewing hours indicated in the screening questionnaire. Four consecutive episodes of *L.A. Law* were also videotaped. In addition, weekly synopses of the three soap operas, which covered a four-week period and appeared in the student newspaper, were gathered for use in the content analysis.

The methods employed in the content analysis were virtually identical to those used in study 1. Three new coders were instructed to focus on affluence-related possessions and behaviors that were prominent and appeared important in conveying information about characters and

plot. Training included practice sessions on soap operas that were not a part of the sample. The only deviations from the procedure used in study 1 were that newspaper synopses of the programs were also consulted to provide convergent evidence and two experts (self-described habitual viewers of the particular programs) were consulted to validate the research findings.

Eight particular possessions or behaviors were noted by all three coders. In addition, both of the habitual soap opera viewers indicated that these possessions or behaviors were common in the soap operas they watched (things seldom seen on soap operas were also included in the list in order to assure discrimination on the part of the experts). On the basis of the possessions and behaviors noted in the content analysis, eight survey items were developed that asked for percentage estimates of the ownership of such objects as diamond necklaces, swimming pools, and luxury cars and estimates of participation in activities such as having wine with dinner, attending charity balls, belonging to a country club, getting a manicure, and traveling outside the United States on business (see App. A for the exact wording of the items). Note again that a number of these possessions and behaviors (i.e., jewelry, swimming pools, luxury cars, charity balls, wine with dinner) were also identified by Hirschman (1988). These estimates served as dependent measures in testing for a cultivation effect (Hypothesis 7).

We were also interested in determining whether, during the construction of the judgments (affluence estimates), relevant information was more accessible for heavy viewers than light viewers. A frequently accepted method of testing for accessibility is to measure reaction time (response latency), which is the time needed to generate a response (for a review, see Fazio [1990]). The logic is that the faster someone is able to generate a response, the more accessible the information retrieved from memory. Thus, the response latencies to the above eight items served as dependent measures for testing for an accessibility effect (Hypothesis 8).

**Control Variables.** Potential confounding variables were measured in order to minimize the possibility of alternative explanations for the observed effects. With respect to the social reality estimates, the demographic variables of gender, grade point average (GPA), income of the student's family, and materialism could potentially influence the magnitude of the responses. Gender may be related to interest in and involvement with the particular products and behaviors. As a surrogate measure of intelligence, GPA may relate to actual accuracy of the response. Family income may relate to interest and involvement, as well as experience, with the consumption-related topics, and level of materialism may have a similar effect. Materialism was again measured with Belk's (1985) scale.

With respect to the response latencies, GPA, need for cognition, and impulsivity are individual difference vari-

ables that could provide alternative explanations for the observed relationship between TV-viewing habits and response time. An individual's GPA may relate to reading and processing time. Need for cognition (Cacioppo and Petty 1982) was measured in order to address the possibility that heavy television viewers may also be more prone to simply responding quickly without much elaboration. Need for cognition is an individual difference variable that measures the extent to which an individual enjoys engaging in effortful cognitive activities and thus may relate to the tendency to elaborate. It is also possible that response time may be a function of impulsivity. If heavy viewers are indeed more impulsive, then the hypothesized effects (faster latencies for heavy viewers) may be confounded with impulsivity. The Eysenck Personality Inventory (EPI) was administered for this purpose, and the impulsivity subscale was used as the control for impulsivity (Eysenck and Eysenck 1968).

In addition to the response latencies for the estimates (target latencies), baseline latency measures were included to account for individual differences in response time (Fazio 1990). These measures were unrelated to the focus of the study and included six items consisting of questions such as "What percentage of cars are brown?" "What percentage of birds are blue?" and so forth. Such baseline measures should account for individual differences in reading speed and constructing judgments in general. Preliminary analyses showed that the baseline measures were related to the target latency ( $r = .36, p < .02$ ). Therefore, the baseline measures were used as control variables in the analysis of the response latencies (Fazio 1990).

Finally, for both the affluence estimates and the response latencies, it is possible that the hypothesized effects may not actually be due to the amount of soap opera viewing but instead may be a function of the total amount of television a person watches. To address this possibility, we also included total television viewing as a control variable.

**Procedure.** Participants in the study performed the exercise on a microcomputer. Following established procedures for reaction time studies (Fazio 1990), participants were instructed to be both quick and accurate. On directions to start the exercise, participants were instructed via the computer screen to press the space bar in order to receive a question. When the space bar was pressed, the first question appeared (the questions asked for a response that indicated a percentage). Because the reaction time program we used allowed only single-digit responses, participants indicated their percentage response by pressing keys labeled from 0 to 9. Each key corresponded to an intuitive percentage response range: a response of "2" indicated a range of 20 percent to 29 percent, a response of "4" indicated that the participants believed the percentage was between 40 percent and 49 percent, and so on. (Pretests indicated that the participants

became very familiar and comfortable with the procedure after a small amount of practice.) As soon as a key was pressed, indicating a response, the question disappeared and the participant received a prompt to press the space bar for the next question. An internal clock recorded the time between when the space bar was pressed (causing the question to appear) and when the response was entered. After participants received extensive practice to facilitate using the scale, they then provided the target estimates. After completing the reaction time exercise, participants then received a pencil-and-paper questionnaire that measured television viewing and the various control measures mentioned previously.

## Results and Discussion

Our first step, prior to testing for effects, was to factor analyze the eight dependent variables. The results initially indicated a two-factor solution. However, two of the items (owning a diamond necklace and traveling outside the United States on business) loaded on both factors. Removal of these two items resulted in a one-factor solution that was internally consistent ( $\alpha = .84$ ). Thus, a composite variable (affluence estimates) was computed by averaging the responses to the six remaining items.

To test the hypotheses that heavy viewers will give higher affluence estimates and respond faster to the dependent measures than light viewers, hierarchical multiple regression analyses were performed (analysis indicated no violation of the assumption of equal slopes). In the first entry step, the control variables were entered as a block. Control variables were selected for inclusion in the analysis if the correlation between the control variable and the dependent variable met the criterion of  $r > .20$ .<sup>5</sup> In the next step, soap opera viewing (dummy variable coded 0 for the light-viewer group and 1 for the heavy-viewer group) was entered. Recall that our sample selection procedure obtained participants who were very heavy viewers or very light viewers of either daytime soap operas or *L.A. Law*. The  $\Delta R^2$  represents the amount of variance accounted for by the soap opera-viewing variable, after controlling for the potential confounding variables entered in the first step.

We expected that heavy viewers would give higher affluence estimates than light viewers, consistent with a cultivation effect (Hypothesis 7). Evidence supporting this hypothesis can be found in the top portion of Table 3. The results indicate that after accounting for the effects of the control variables, the amount of soap opera viewing still accounted for a significant portion of the variance in

TABLE 3

EFFECT OF SOAP OPERA VIEWING ON AFFLUENCE ESTIMATES AND RESPONSE LATENCIES FOR STUDY 2

Dependent variable and variable entered	$\beta$	$\Delta R^2$
Affluence estimate:		
Control variables:		
Total TV viewing	.30*	
Income	-.20	
GPA	-.18	
Total for block	.19*	
Soap opera viewing	.32*	.10*
Response latency:		
Control variables:		
Total TV viewing	-.09	
GPA	-.21	
Baseline latency	.33*	
Total for block	.17*	
Soap opera viewing	-.37*	.14*

NOTE.—Total model results for the affluence estimate: multiple  $R = .54$ ,  $R^2 = .29$ ,  $F = 4.11$ ,  $p < .01$ ; total model results for response latency: multiple  $R = .56$ ,  $R^2 = .31$ ,  $F = 4.56$ ,  $p < .005$ .

\* $p < .05$ .

the affluence estimates ( $R^2 = .10$ ,  $F = 5.76$ ,  $p < .05$ ). The positive  $\beta$  indicates that higher estimates were associated with heavier viewing, and examination of the means for each viewing level indicates that heavy viewers gave estimates that averaged about 6 percentage points higher than those of light viewers (16.7 percent vs. 10.9 percent). The results also show that the control variables were significantly related to the affluence estimates. In particular, those who watch more total television gave higher estimates. However, the fact that soap opera viewing remained a significant predictor after controlling for the effect of total television viewing suggests that the specific viewing of soap operas explains unique variance in the affluence estimates.

We also expected that heavy viewers would respond faster than light viewers when constructing their estimates, consistent with an accessibility effect. Evidence supporting this hypothesis (Hypothesis 8) can be found in the bottom portion of Table 3. The results indicate that level of soap opera viewing was a significant predictor of speed of response ( $\Delta R^2 = .14$ ,  $F = 8.05$ ,  $p < .05$ ). The negative  $\beta$  indicates that heavier soap opera viewing was associated with faster (smaller) latencies, and examination of the means indicates that heavy viewers responded about a second and a half faster than light viewers (3.2 seconds vs. 4.9 seconds). As with the affluence estimates, the control variables as a block were significantly related to speed of response, and in particular, the baseline latencies were positively related to speed of response.

An alternative explanation for the cultivation effect noted in this study is that heavy soap opera viewers simply gave higher estimates than light viewers to all types of

<sup>5</sup>Typically, potential control variables that are not significantly correlated with the dependent variable are not included in the analysis. However, in our case, the correlations may not have reached significance because of the somewhat low sample size. Thus, to be conservative, we used the  $r > .20$  criterion.

questions. However, two pieces of evidence suggest otherwise. Recall that baseline latencies (percentage of birds that are blue, cars that are brown, etc.) were included to control for individual differences in response time. If in fact heavy viewers overestimate all questions, we should see this effect in their responses to the baseline measures. However, soap opera viewing was not significantly related to these responses ( $p > .50$ ). We also included two questions that pertained to things underrepresented on soap operas (percentage of households that have pets and percentage of population that is African-American).<sup>6</sup> Neither of the estimates were related to level of soap opera viewing (pets,  $p > .54$ ; African-Americans,  $p > .70$ ).

A similar argument may be made that heavy soap opera viewers respond faster than light soap opera viewers to all types of questions. However, as with the estimates, level of soap opera viewing was not related to speed of response to the baseline estimates ( $p > .50$ ), to the percentage of households owning pets ( $p > .40$ ), or to the percentage of the population that is African-American ( $p > .40$ ).

These results provide information on two levels. First, what people watch on television appears to influence their perceptions of what the material world is like. Our content analysis pinpointed particular possessions and behaviors associated with affluence that were prominent parts of soap operas, and we found that heavy viewers of such programs tend to give the highest estimates of how frequently these possessions and behaviors occur in real life. These results replicate the findings from study 1 and conceptually replicate previous cultivation research by showing that the effects of television viewing include consumption-related social perceptions. Second, we also provided evidence of how this socialization effect may work at the psychological level. Specifically, we found that the relevant information that people use in the construction of their affluence estimates appears to be more accessible for heavy viewers than light viewers. Given the research on the availability heuristic (people base frequency and probability estimates on degree of accessibility), these results provide a plausible explanation for why heavy viewers give higher estimates than light viewers.

A comparison of the results of the effect of soap opera viewing on the estimates and latencies of those things overportrayed on television to the viewing effect on things underportrayed on television may be instructive in understanding how learning from television takes place. Our assumption has been that when people construct their estimates of the prevalence of the particular possessions and behaviors, they do so in real time through the recall of relevant information (exemplars) rather than retrieve

any type of prior judgment. An alternative possibility is that viewers update their general beliefs as they receive new information (i.e., during viewing) and then recall and use this general belief in constructing their estimates. However, if this process is in fact what is occurring, we should have noted no differences in response times between heavy and light viewers, only differences in the estimates. Similarly, for those things underportrayed on television, if beliefs are updated during viewing, we would expect that heavy viewers would give lower estimates than light viewers.

The data indicate that this is not the case. Rather, the data support a process whereby viewers catalog information in memory and retrieve this information when they construct their judgments. Following the availability heuristic predictions, people estimate frequency by the ease with which information is retrieved. This notion is also supported by the null findings for things underportrayed on television. In this instance, both heavy and light viewers should have relatively few television-supplied exemplars stored in memory (all else being equal) and thus should show no differences in either accessibility or magnitude of the estimates. This was in fact what we found. Although there may be many reasons for null findings, it is the case that the overall pattern of the data is consistent with the proposed model.

These results suggest that learning from television may be conceived of as a process that begins with an often passive acquisition of social information, with few goal-directed processing objectives other than to comprehend the information in an effort to be entertained. At a later time, when some judgment is required, this information is likely to be retrieved because of qualities such as the frequency, recency, and prominence of the memory stores. In a sense, learning occurs at the time of judgment rather than at the time of encoding, and this learning is a function of the accessibility of relevant information. Given this premise and the notion that information is stored or cataloged in memory for use at the time of judgment (see Wyer and Srull [1989] for a review of such evidence), it seems reasonable to view such accumulation of information and the resultant accessibility of this information as a socialization effect.

## GENERAL DISCUSSION

This article investigates the effect of exposure to television programming on normative social beliefs about the prevalence of products and activities associated with a more affluent consumer lifestyle. We examined this effect with two different methods and obtained consistent results. Both studies produced findings supported by theory and point to a common conclusion: heavy exposure to the consumption-rich portrayals of television programming is significantly associated with beliefs about what other consumers have and do. The results provide not only

<sup>6</sup>Greenberg et al. (1982) found that only 3 percent of speaking characters in daytime soap operas were nonwhite. Our own content analysis supported this, finding few African-American characters. Similarly, our content analysis found virtually no representations of pets.



evidence that this effect occurs in the consumption domain but also an idea of how it occurs.

This work departs from mainstream consumer socialization research in several ways. First, it investigates a different type of socialization than is typical in consumer behavior; we dealt with perceptions and beliefs about the social world as opposed to attitudes and beliefs about the veracity of advertised claims and the associated processing limitations of special audiences (e.g., children, the elderly). In doing so, we believe we are investigating the type of indirect, subtle consumer socialization that early socialization researchers (Parsons et al. 1953; Riesman and Roseborough 1955; Ward 1974) suggested. The results of this study imply that the subtle and covert influence of television affects normative consumption-related beliefs and, just as important, the accessibility of those beliefs, both of which we see as socialization outcomes.

Second, we studied adults rather than children, something that has long been called for in consumer socialization research. The majority of research has addressed the effect of socializing agents on the attitudes and behaviors of younger people. Our results imply that these socializing effects are discernable over the adult life span. Third, we studied television programming as opposed to the field's typical operational definition of mass communication as only advertising. Our results imply that when it comes to the formation and maintenance of social beliefs, television programming should not be overlooked in an attempt to better understand consumer socialization. Fourth, we incorporated measures of direct experience. Fifth, we added a psychological component to what had been largely a black-box formulation. Our results indicate that accessibility is an important factor in explaining how consumers form impressions from television about how other consumers live. The finding that television viewing does seem to affect normative perceptions of consumer behavior suggests that the mass media in general, and television in particular, deserve a prominent place in models of consumer socialization.

A general limitation, and one that applies to both studies, is the possibility of a third-factor explanation of the effects. Causality cannot be definitively established. However, the sociological nature of the theory (i.e., long-term, cumulative effects) makes an experimental approach problematic. This type of socialization is a life-long process and by definition cannot be manipulated in a laboratory. Although this limitation is important to acknowledge, the convergent findings across the two studies, samples, and methods, coupled with the support of a wide body of theoretical and empirical literature (often experimental), lend strong support to the belief that the noted effects are substantive. These data demonstrate, for the first time, a relation between television viewing and consumption-related perceptions of material affluence among adult U.S. consumers.

Krugman (1965) argued long ago that television's

power was not due to its ability to engage viewers in elaborate discursive thought but to the typical absence of that quality. Three decades later we have more specific ideas as to the mechanisms involved. Passive learning, coupled with the impact of accessibility on judgment, is strongly implicated in this social construction effect. Perhaps frequent television representations (visual and verbal) become so familiar that they begin to ring true (Schwartz 1982). The more familiar they become, the less the original learning context (e.g., from television) matters at judgment time (Roediger 1990), and the more true these television representations of social and material reality start to feel (Hawkins and Hoch 1992). There is also evidence that the acceptance of assertions offered without evidence increases with repetition (Arkes, Boehm, and Xu 1991; Gilbert, Tafarodi, and Malone 1993). Television-constructed social beliefs could be formed and maintained in this way, particularly if there is little ongoing, stringent, and highly elaborated error checking while consumers watch television. The observed effects are also consistent with Gilbert et al.'s (1993) idea that believing is cognitively much easier than "unbelieving." Certainly, viewers possess the ability to question and reject television's excesses. We do, however, believe that the nature of the medium itself, our lifelong familiarity with it, the sheer mass of our viewing, and the way in which television viewers typically choose to view contributes to its effects on viewers.

These results have important implications at the societal level. Our extensive use of and reliance on television allows us to believe that we know how others, with whom we may rarely have significant direct contact, live and consume. What we think other people possess and consume and how widespread we believe those objects of consumption (and the affluence it implies) to be are of undisputed significance in social theory. Such beliefs are in fact prominent in a great deal of classic sociological and economic thought. They likewise enjoy a long tradition in the arena of class struggle and even revolution, just as they are at the center of everyday social comparison (Richins 1991). Because of television's frequent representations of affluent consumer behavior, heavier viewers are more likely to believe the social world to be an affluent place. The resultant social beliefs about the material well-being of others may infuse and inform social and political discourse about everything from welfare reform to class envy. Richins (1995) argues that even the unconscious type of social comparison between the reality presented in advertising and people's own lives can raise expectations and increase discontent, "particularly in terms of their material possessions" (p. 593). We believe the same may be said of television programming. If members of a particular social strata believe that the material world of others is more bountiful than their own, they may feel slighted and disadvantaged. This may lead to more disenchantment about the social distribution of products and contribute to a sense of us versus them, of

haves and have-nots. For example, Hennigan et al. (1982) found that the introduction of television viewing in the 1950s was related to an increase in larceny and suggested that this relationship was due to a type of social comparison in which frustration, resentment, and envy resulted from the discrepancy between the abundant displays of affluence on television and the relative lack of affluence on the part of viewers. Such macroeffects may still be with us.

Our data indicate that, at least where consumption markers of affluence are concerned, those with less income and education are the most affected by televised representations of the consumption practices of others. This may help foster or exacerbate the perceived social distance and inequality of the distribution of the goods and services associated with the good life (Belk and Pollay 1985). Some consumers may get a very distorted view of what is contained in the standard package (Riesman and Roseborough 1955) of goods and services that comes to be expected by members of society. Although television may open windows on different social worlds, some of those worlds may look much better than one's own.

## Future Research

From a sociological perspective, there are a number of things that could follow in this stream of research. For one, the list of dependent variables could be extended to include value orientations such as materialism (Richins 1987) and belief in a just world as well as attitudes regarding quality of life and perceived marketplace equity. We should also more directly investigate social comparison (Richins 1995) and related affective outcomes (e.g., envy, dislike, distrust, attributions of greater happiness). If watching more television leads to believing the world is a more affluent place, do those who believe that others have more also believe that those others are happier as well? If so, what role does this play in keeping up with the Joneses who populate television and the socially constructed material world?

With respect to issues of psychological processes, there are additional promising paths. First, the application of the availability heuristic assumes that the exemplars retrieved and used to infer frequency are in fact relevant to the judgment at hand. However, people for the most part do not consider television examples to be veridical (Shrum 1995). Thus, it is likely that people are not aware of the source of the exemplars they generate, either through lack of motivation to ascertain the source (consistent with motivations associated with heuristic processing) or through the inability to determine the source of the information retrieved (Johnson, Hashtroudi, and Lindsay 1993; Wilson and Brekke 1994). One possible way of exploring this pos-

sibility is to prime source characteristics (i.e., television) prior to collecting judgment information. If priming source characteristics increases the ability of participants to determine (and therefore discount) television-related information, such priming conditions should moderate the cultivation effect. A second possibility for research is to test more directly the notion of heuristic processing by manipulating processing strategies. If heuristic processing is accounting for the effects of television viewing, then putting people in a heuristic processing mode should produce the same effects of television viewing that we noted in the two studies presented here. On the other hand, inducing participants to process systematically should reduce or eliminate the effect of television viewing on judgments.

These suggestions for further addressing the psychological processes underlying television social reality effects imply ways of moderating or even eliminating them, at least temporarily. However, it is unclear whether prescriptive remedies for cultivation in the real world would be successful. For one thing, research clearly shows that inducing people to forego the use of heuristic principles is remarkably difficult (Sherman and Corty 1984). Moreover, the nature of television viewing and how television information is acquired presents significant impediments as well. We argue that it is the subtle but relatively complete way in which television infuses modern daily existence and consciousness that gives it much of its power.

## Conclusion

It is commonly held in the social sciences that individuals rely heavily on perceptions of their social environment in the formation, maintenance, and mediation of impressions, attitudes, and behaviors. Furthermore, we know that these perceptions need not exist as reasoned, critically evaluated, or even elaborated thoughts for them to impact behavior. The realm of consumer behavior offers no exception; consumers are obviously influenced by perceptions of what others have and do. It is equally clear that not all of this information comes from direct experience, nor is it carefully evaluated prior to actual behavior. Unfortunately, models of social influence in the field of consumer behavior have not taken account of how or how much the institutionalization of television in American homes has impacted this process. The data presented here support the belief that television programming is a significant, yet overlooked, source of consumption-related social perceptions. "Knowing" how others live informs consumer expectations, satisfaction, motivation, and desire. We believe that representations of social reality frame and situate human behavior, including consumer behavior.

## APPENDIX A

TABLE A1

## POSSESSIONS AND BEHAVIORS

Variable	Wording and description
Measures for study 1:	
Convertible	What percentage of American households have a convertible automobile?
Car telephone	What percentage of American households have a car telephone?
Maids or servants	What percentage of American households have maids or servants?
Hot tub or jacuzzi	What percentage of American households have a hot tub or jacuzzi?
Wine with dinner	What percentage of American adults order wine when dining at a restaurant?
Dependent measures for study 2:	
Country club	What percentage of Americans belong to a country club?
Swimming pool	What percentage of households have a swimming pool?
Luxury car	What percentage of Americans own a luxury car?
Manicure	What percentage of adult women regularly get a manicure?
Charity balls	What percentage of adults attend charity balls?
Wine with dinner	What percentage of people regularly have wine with dinner?
Foreign travel	What percentage of executives travel outside the United States on business?
Diamond necklace	What percentage of women own a diamond necklace? <sup>a</sup>

NOTE. — In study 1, direct experience was measured as the sum of direct experience indicators that corresponded to the perception estimates (convertible, car telephone, maid or servant, hot tub or jacuzzi, wine with dinner). For each of the first four indicators, a score of 1 was assigned if the respondent answered yes to either of the questions, "Do you have a —?" or "If not, have you had one in the last five years?" For wine with dinner, a score of 1 indicated that the respondent answered yes to the question, "Do you generally order wine when dining at a restaurant?" Otherwise, for all indicators, a score of zero was given.

<sup>a</sup>Not retained after factor analysis.

## APPENDIX B

TABLE B1

## COVARIANCE MATRIX FOR OBSERVED VARIABLES IN STUDY 1

	Direct experience	TV viewing	Convertible	Car telephone	Maids or servants	Hot tub or jacuzzi	Wine with dinner	Education	Income
Direct experience	.77								
TV viewing	-1.70	228.59							
Convertible	1.05	27.18	164.98						
Car telephone	1.68	24.12	110.80	254.75					
Maids or servants	.96	35.55	85.67	103.41	167.88				
Hot tub or jacuzzi	.38	22.98	78.39	102.67	96.96	187.03			
Wine with dinner	4.19	19.39	101.77	125.07	104.88	84.31	514.15		
Education	.65	-14.25	-5.74	-7.11	-7.28	-8.89	-5.76	10.51	
Income	.94	-11.57	-4.25	-3.12	-4.25	-5.27	-6.1	3.84	7.38

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