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ABSTRACT

To enhance knowledge of media consumption processes, a study compared the abilities of six alternative gratification models to predict media satisfaction, specifically, satisfaction with television news. The models were three different formulations of gratifications sought/obtained discrepancies--two emphasizing gratifications obtained and one expectancy-value model. Two of the models also contained evaluation components in an effort to determine whether inclusion on these components increased the predictive powers of gratification models. Subjects, 178 college students, completed a gratifications sought scale concerning television in general, and a gratifications obtained scale concerning each respondent's most frequently watched evening news program. After a two-day period, the subjects completed evaluations of gratifications obtained from television news in general. In addition, the subjects completed a satisfaction scale dealing with television news. Taken as a whole, the findings provided support for a combined expectancy-value/gratifications obtained approach to explaining and predicting media satisfaction. Direct comparison of several theoretical models was found to be particularly useful in exploring the strengths and weaknesses of the different formulations. (FL)

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A COMPARISON OF GRATIFICATION MODELS
OF MEDIA SATISFACTION

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A COMPARISON OF GRATIFICATION MODELS OF MEDIA SATISFACTION

An examination of the recent uses and gratifications literature reveals that an increasing number of studies are concerned with the specification and testing of hypotheses about the interrelationships among gratifications sought and obtained, media behavior, and the antecedents and consequences of both media behavior and gratifications (e.g., Wenner, 1982; Rubin, 1981; Rubin and Rubin, 1982; Palmgreen and Rayburn, 1979, 1982; Palmgreen, et al., 1980, 1981; McLeod and Becker, 1974; Blood and Galloway, 1983; Levy and Windahl, 1983; Windahl et al., 1983; Rayburn and Palmgreen, 1983). While much conceptual, integrative, and methodological work remains to be done, the uses and gratifications tradition seems to be embarking upon an era of vigorous theoretical growth. Indications of this growth include a number of attempts at developing and testing models of gratifications sought and obtained (Palmgreen and Rayburn, 1979; Palmgreen, et al., 1980, 1981; McLeod, et al., 1982; Rayburn et al., forthcoming; Wenner, 1982; Levy and Windahl, 1983), and still more recent work on expectancy-value approaches to uses and gratifications phenomena (Galloway and Meek, 1981; Van Leuven, 1981; Palmgreen and Rayburn, 1982; Rayburn and Palmgreen, 1983; Blood and Galloway, 1983).

Few studies, however, have attempted an empirical comparison of alternative gratification models. Among the exceptions, McLeod, et al. (1982) sought to compare drive-reduction and exposure-learning models of gratifications sought and received from debate viewing. Wenner (1983) has contrasted the ability of transactional and discrepancy models of gratifications to predict exposure to and dependency on network evening news

programs and 60 Minutes. As Wenner points out, one of the more important theoretical issues faced by uses and gratifications researchers concerns the question of model specification. As he observes, "there has been no clear articulation of what the modeling alternatives are and no systematic testing of these alternatives" (p.2). Wenner's own results are an indication of the considerable benefits to be derived from such testing.

The present study endeavors in similar fashion to enhance knowledge of media consumption processes by comparing the abilities of six alternative gratification models to predict media satisfaction (in this case, satisfaction with television news). The six models include three different formulations of GS-GO discrepancies, two models which emphasize gratifications obtained, and an expectancy-value model. Two of the five gratification models also contain evaluation components in an effort to determine whether inclusion of the evaluation components increases the predictive powers of gratification models.

Media Satisfaction

A variable which has been largely overlooked in mass media research is satisfaction with the media experience. While fairly frequent reference to media satisfaction is made in the uses and gratifications literature, there have been few attempts at operationalization. At best, satisfaction has been equated with gratifications obtained, a theoretically ambiguous and unappealing solution.¹ This is somewhat puzzling given the popularity and utility of the satisfaction concept in other social science areas. Satisfaction is a key concept in areas such as organizational psychology (job satisfaction), organizational communication (communication satisfaction), and social

indicator research (life satisfaction). Satisfaction is also an important concept in marketing, where a great deal of work has been done in recent years on conceptualizing and measuring the satisfaction variable, particularly consumer satisfaction.

Oliver (1981) offers an excellent overview of marketing researchers' attempts to define consumer satisfaction. Satisfaction has been defined variously as "need fulfillment, pleasure/displeasure, expectation-performance interactions, evaluation of the purchase/consumption experience, evaluation of the benefits of consumption, comparison of actual with ideal outcomes, and the attribute 'deficit/surplus' obtained from the purchase" (Oliver, 1981, p.27). According to Oliver, current marketing perspectives view satisfaction as a complex emotional response following experience with a product, which is distinct from attitude: "attitude is the consumer's relatively enduring affective orientation for a product, store, or process (e.g., customer service), while satisfaction is the emotional reaction following a disconfirmation experience which acts on the base attitude level and is consumption-specific" (1981, p.40). Moreover, Oliver (1980) has shown that satisfaction is an antecedent to attitude change, and is an important correlate of behavioral intention to purchase and other marketing variables.

Since the outputs of mass media systems are often viewed as "products" subject to "consumption" by audience members, the potential applicability of marketing conceptualizations of satisfaction to mass communication research is obvious. We might expect satisfaction with a newspaper, television program or series, or magazine to be determined at least partially

by the gratifications perceived to be obtained from these media products. The discrepancy between gratifications sought and obtained may also be related to media satisfaction, perhaps more strongly than GO alone. Satisfaction may also turn out to be an important correlate of media dependency, exposure, and various media consequences. This is a broad research canvas which at present is largely empty. The present study attempts to sketch in certain essential features by testing six alternative gratification/expectancy-value models of media satisfaction.

A Gratifications Obtained Model

As we have noted, media satisfaction has often been equated by uses and gratifications researchers with gratifications obtained. The gratifications derived from media experience are extremely diverse, however, as indicated by their relatively complex dimensional structure (Palmgreen, et al., 1981; Levy, 1978; Katz, et al., 1973) and it hardly seems sensible to subsume such concepts as information, entertainment, parasocial interaction, and interpersonal utility under the single heading "media satisfaction." A more reasonable approach is to posit that such gratifications influence satisfaction levels; i.e., the extent to which a person actually obtains sought gratifications from media consumption should contribute to a person's satisfaction with that experience. Thus satisfaction may be viewed as a function of the sum of gratifications obtained, as expressed in the following model:

$$(1) \quad \text{Media Satisfaction} = \sum_{i=1}^n GO_i$$

where GO_i is the i th gratification obtained from exposure to a media object (e.g., medium, program, newspaper, etc.).

A Modified Gratifications Obtained Model

Model 1 assumes that all gratifications are equally valued by the audience member. This is clearly not the case, as work by Palmgreen and Rayburn (1982) and Blood and Galloway (1983) has demonstrated. From an expectancy-value perspective we would hypothesize that obtaining a positively valued gratification, or not obtaining a negatively valued gratification, should lead to satisfaction, while obtaining a negatively valued gratification or not obtaining a positive gratification should contribute to dissatisfaction. Thus, including the respondent's affective evaluation of gratifications obtained in a model should increase that model's ability to predict media satisfaction, as expressed below:

$$(2) \quad \text{Media Satisfaction} = \sum_{i=1}^n e_i GO_i$$

where GO_i is the same as in Model 1 and e_i is the respondent's affective evaluation of the i th gratification.

An Expectancy-Value Model

Although expectations (beliefs) about positively or negatively evaluated attributes possessed by a media object are not direct measures of gratifications actually obtained from media consumption, these beliefs are related to such gratifications (Rayburn and Palmgreen, 1983), and thus might be expected to be related to satisfaction. More precisely, beliefs about the gratification attributes possessed by a media object, when considered in conjunction with affective evaluations of those attributes, should be associated with satisfaction

with that object. This is expressed in the following model:

$$(3) \quad \text{Media Satisfaction} = \sum_{i=1}^n b_i e_i$$

where b_i is the perceived probability (belief) that media object X possesses a particular attribute, and e_i is the affective evaluation of the attribute. This will be recognized as the Fishbein and Ajzen (1975) model which predicts attitude. Although we have argued, along marketing theory lines, that attitude and satisfaction are different concepts, they are nonetheless related. It is, therefore, not surprising that the two concepts might share certain antecedents. In addition, Palmgreen and Rayburn (1982) report that the $b_i e_i$ index predicts GS. If it is also found to predict media satisfaction, then the expectancy-value approach will have received additional construct validation from a uses and gratifications perspective.

An Absolute Value Discrepancy Model

None of the preceding models takes into account the extent to which a particular gratification obtained is actually sought by an audience member.

It may be that the level of GS serves as a baseline against which GO levels are compared. Palmgreen and Rayburn (1979) adopted this approach in developing a GS-GO discrepancy model to predict exposure to public television. In this model exposure was hypothesized to be a function of the average absolute discrepancy between the gratifications the audience member is seeking and the extent to which he perceives he is obtaining those gratifications. The authors state that "The absolute value of the discrepancy is used because it is assumed that negative and positive discrepancies carry equal weight in determining exposure" (p.159). This assumption is based on Helson's (1964) adaptation level theory which posits that once a baseline state of homeostasis is established, exceedingly aversive or pleasant stimuli will be opposed by the central nervous system.

Such a discrepancy approach is also consistent with marketing conceptualizations of consumer satisfaction. Marketing researchers "generally agree that satisfaction results from a subjective comparison of the expected and received product attribute levels" (Oliver, 1981, p.26). This suggests the following model based upon adaptation-level theory principles:

$$(4) \quad \text{Media Satisfaction} = \sum_{i=1}^n |GS_i - GO_i|$$

Model 4 predicts a negative correlation with satisfaction, in that the greater the absolute discrepancy between GS and GO, the lower the satisfaction level should be.

A Simplified Discrepancy Model

Wenner (1983) has questioned Palmgreen and Rayburn's (1979) logic "that a given level of relative satisfaction (e.g., where GO exceeds GS) is equivalent to a comparable level of relative deprivation (e.g., where GS exceeds GO)"

(Wenner, 1983, p.7). He contends that a distinction should be made between positive ($GO > GS$) and negative ($GO < GS$) discrepancies, and advocates a simplified discrepancy model which eliminates the absolute value sign. This simplified model was found by Wenner to predict media dependency, even after controls for a number of other variables. We might also expect such a model to predict media satisfaction, as Wenner (1983) himself notes: "Positive (greater than zero) scores would indicate levels of relative satisfaction (or over-obtention) and a negative discrepancy score would indicate relative deprivation (or under-satisfaction or obtention)" (p.11). Such a simplified model is presented below:

$$(5) \quad \text{Media Satisfaction} = \sum_{i=1}^n (GO_{i1} - GS_{i1})$$

In this model, GS_{i1} is subtracted from GO_{i1} so that $GO < GS$ discrepancies will be given negative sign.

An Expectancy-Value Discrepancy Model

While we are inclined to agree with the basic logic behind Wenner's simplified discrepancy model, a serious drawback of the model is that it does not take into account the respondent's affective evaluation of particular gratifications or gratification-related attributes. We would not expect over-obtention of a negatively evaluated attribute to produce satisfaction, nor should under-obtention of such an attribute induce dissatisfaction. The simplified model should work reasonably well when all or most gratifications measured are positively evaluated (as is often the case in gratifications research), but should not be predictive of satisfaction or related variables when a number of negatively evaluated attributes are included. An alternative

model which includes the evaluation component is the following:

$$(6) \quad \text{Media Satisfaction} = \sum_{i=1}^n e_i (GO_i - GS_i)$$

The model predicts satisfaction in response to either over-obtention of a positively evaluated gratification or under-obtention of a negatively evaluated gratification. Dissatisfaction is predicted for over-obtention of a negatively evaluated gratification or under-obtention of a positively evaluated gratification.²

An examination of avoidance items employed in uses and gratifications studies (e.g., McLeod and Becker, 1974; Becker, 1979) reveals that the majority involve a negatively evaluated attribute (presumed to be gratification-related) which the media object in question (e.g., political television) is believed to possess. The remainder usually involve a positively evaluated attribute which the media object is believed not to possess. Including the evaluative component in gratification models thus offers a way to conceptualize media avoidances and to include such avoidances in the same model with conventional "positive" gratifications. The model above also relates such "avoidances" to dissatisfaction (when they are found) and to satisfaction (when they are not found).

METHODOLOGY

Questionnaires were administered to 178 students (from freshmen to seniors) from several undergraduate communication courses at the University of Kentucky. Questionnaires were administered in class. To qualify for the study students had to watch at least one network evening news program and one local news program per week.³

Measurement

Gratifications Sought

Fourteen gratifications sought items from a previous study of television news, as described in Palmgreen et al. (1980), were employed here. Respondents were asked to estimate on a seven-point scale (from "definitely applies" to "definitely does not apply") how much each gratification statement applied to them (e.g., "I watch TV news to keep up with current issues and events"). Respondents were instructed that television in general (both national network and local) was the focus of the study for the GS items and the items dealing with belief and evaluation.⁴

Gratifications Obtained

After measuring gratifications sought, gratifications obtained for a respondent's most-watched evening news program were measured by asking the respondent to reply to a reworded statement corresponding to each of the gratifications sought. For example, if a respondent reported CBS as his most-watched program, he was asked to respond to "CBS news helps me to keep up with current issues and events," etc. Again, a seven-point scale was used.

After a forty-eight hour period, respondents were asked to evaluate gratifications obtained from television news in general. Here they responded (on a seven-point scale) to items such as, "TV news programs help me to keep up with current issues and events." The two day period was instituted in order to minimize any "learning" that might have taken place by asking gratifications obtained items for most-watched programs followed immediately by GO items for television news in general.⁵ Results reported in Rayburn and Palmgreen (1983) indicate that GO from TV news in general

and GO from the respondent's most-watched evening news program are separate (though related) concepts. The results also suggest that GS and GO may be measured at the same level of abstraction and empirically separated in cross-sectional designs.

Belief and Evaluation

Prior to measuring GS and GO, belief and evaluation ratings were elicited for the same 14 characteristics of television news which were the focus of the GS and GO items.

For evaluation (e_1) respondents were asked to rate each characteristic on a seven-point scale (ranging from "very bad" to "very good") "according to whether you feel that feature is a good or bad feature for television news programs to have." For example the characteristic associated with the sample GS item above was "provides information about current issues and events."

Belief (b_1) measures were obtained by asking respondents to rate "the extent to which you feel TV news actually possesses each of the previous characteristics." Seven-point scales were again employed ranging from "very definitely not" to "very definitely."

Before proceeding we should note an important distinction between the concepts of "belief" (expectancy) and "gratification obtained." The concept of belief as used here refers to the subjective probability that a media object possesses a particular attribute in the general sense; i.e., as a defining characteristic of an object. By comparison, a gratification obtained in the abstract sense is not a belief at all, but is some outcome (cognitive, affective, or behavioral) of media behavior. Nonetheless, a

perceived gratification obtained is usually conceptualized and operationalized as a belief that a media behavior has a given outcome (although this often is not explicitly recognized). This belief, however, is personal in nature in that it represents the subjective probability that the media behavior (or media object) provides the respondent with a particular gratification. Thus, in our model "beliefs" and perceived gratifications obtained are both operationalized as expectancies, but with different referents.⁶

Media Satisfaction

General satisfaction with television news was indexed on a seven-point scale with the item: "Overall, how satisfied are you with the job television news programs do in providing you with the things you are seeking?" Satisfaction for the most-watched program was measured on the same seven-point scale. Satisfaction as measured in this manner denotes a general feeling of fulfillment as the result of repeated exposure to a particular content genre. Satisfaction with a particular consumption experience might also be measured of course (e.g., satisfaction with exposure to a single episode of a television program). Both approaches have been followed in marketing research.

Computed Indices

To test the models described in the introduction, several indices were computed. All computation of the indices follow in a straightforward manner from the equation for each model, with one exception. For Model 6 (the expectancy-value discrepancy model) the e_1 variable was recoded from a range of (+1 to +7) to (-3 to +3). This was done so that negative index scores would be yielded in two cases: 1) when $GO_1 > GS_1$ (over-obtention)

and the attribute is negatively evaluated; and 2) when $GO_1 < GS_1$ (under-
obtention) and the attribute is positively evaluated. Positive index
scores are assigned when: 1) $GO_1 > GS_1$ and e_1 is positive; 2) $GO_1 < GS_1$
and e_1 is negative.

Testing the Models

Rayburn and Palmgreen (1983) have demonstrated that GS_1 and $b_1 e_1$ are closely interrelated in a process model of media communication. In addition, because many of the models share common components, the models are not independent. Testing the various models, therefore, requires careful specification of variables which should be statistically controlled to provide the best non-spurious comparison of the theoretical (as opposed to simply predictive) utility of each of the models. Hierarchical regression analysis was employed in testing each of the models, controlling for all variables in the set $\{\Sigma GS_1, \Sigma GO_1, \Sigma b_1, \Sigma b_1 e_1\}$ which were not included in a particular model. This was done to reduce spurious correlation and to avoid part-whole correlation problems between model and control variables. For example, in testing Model 1 (ΣGO_1), controls were introduced for ΣGS_1 and $\Sigma b_1 e_1$ (Σb_1 was not controlled because $\Sigma b_1 e_1$ includes b_1). For Model 2 ($\Sigma e_1 GO_1$), ΣGS_1 and Σb_1 were controlled; however, $\Sigma b_1 e_1$ was not controlled because the model contains e_1 . Controlling for $\Sigma b_1 e_1$ would be inappropriate because its part-whole relationship with e_1 would have reduced artificially the partial correlation between $\Sigma e_1 GO_1$ and media satisfaction. The particular control variables employed in testing each model are specified in Tables 1 and 2. It should also be noted that the discrepancy models already contain reciprocal controls for GS and GO in the same sense that change scores provide reciprocal controls for pretest and posttest measures. That is, $(GO-GS)$ may also be viewed as a measure of GO, controlling for the level

of GS (or vice-versa).

In the hierarchical regression analyses, the model component was entered last in the equation in each case. We thus are provided with a measure of additional variance in media satisfaction accounted for by each model component after the introduction of appropriate controls.

RESULTS

The reliabilities (coefficient alpha) of the summated indices associated with the various models are depicted in Tables 1 and 2. The indices for the first three models (ΣGO_1 , $\Sigma e_1 GO_1$, $\Sigma b_1 e_1$) have very good reliabilities (above .80) for both television news in general and the most-watched program. The discrepancy model indices (Models 4, 5, and 6) have consistently lower reliabilities, with the absolute value discrepancy index exhibiting the lowest alpha value. The lower reliability of the discrepancy indices has a bearing, of course, on their predictive abilities, a point which we will explore later in greater detail.

We will first compare the models from a strictly predictive standpoint by examining the zero-order correlations with satisfaction (see Tables 1 and 2). For both the most-watched news program and television news in general, it is clear that the discrepancy models (Models 4, 5, 6) do not fare well, in comparison to the gratification obtained models (Models 1 and 2) and the expectancy-value model (Model 3). Models 1-3 all exhibit substantial zero-order correlations (.42 to .52) with television news satisfaction. The discrepancy model correlations are considerably lower. Of the latter models, the e-v discrepancy model (Model 6) is the best predictor of satisfaction for both most-watched programs and TV news in general, followed by the simplified discrepancy model (Model 5). The absolute value discrepancy

model (Model 4) exhibits the predicted negative zero-order correlation in both cases, but these correlations are not statistically significant.

The more important theoretical perspective requires examining the hierarchical regression analyses. With one exception (Model 3 for the most-watched program), the gratification obtained and expectancy-value models are superior to the discrepancy models. In fact, for TV news in general the increase in r^2 due to the addition of the model component to the equation is non-significant for all three discrepancy models, while Models 1-3 all exhibit significant increments (Table 1). For TV news in general, the expectancy-value model ($\Sigma b_i e_i$) is clearly the best model, accounting for an additional 7 percent of the variance ($p < .001$):

For the most-watched program (Table 2), the best predictor is the ΣGO_i model. Here the simplified discrepancy and expectancy-value discrepancy models (Models 5 and 6) do account for significant additional variance, while the contribution of the absolute value discrepancy model is again non-significant.

Level of Abstraction

Level of abstraction seems to have had a significant influence on the findings of the hierarchical analyses. One example of this influence is provided by the marked contrast in the predictive abilities of the expectancy-value model ($\Sigma b_i e_i$) for TV news in general and for the most-watched program. For TV news in general, belief (b_i), evaluation (e_i) and TV news satisfaction were all measured with respect to the same referent i.e., television news in general. For the most-watched program, on the other hand, television news satisfaction is indexed with respect

to this program, while b_1 and e_1 are measured with respect to television news in general. This may account for the fact that the additional r^2 contribution of the $\Sigma b_1 e_1$ model is non-significant for the most-watched program (where the measurement abstraction levels do not match), while the same model ranks first in predicting satisfaction with TV news in general (where the abstraction levels are consistent).

Level of abstraction may also help explain why Models 5 and 6 make significant contributions to variance in satisfaction with most-watched program, but do not account for significant variance increments for satisfaction with TV news in general. In the latter case the control variables in the equations ($\Sigma b_1 e_1$ for Model 5; Σb_1 for Model 6) are measured at the same abstraction level as the satisfaction variable, thus removing proportionally greater amounts of variance than in the case of the most-watched program where satisfaction and the control variables are measured with respect to different referents. If b_1 and e_1 had also been measured with respect to the most-watched program and such measures employed in the hierarchical analysis for the most-watched program, it is possible that the additional variance contributions of Models 5 and 6 would not have been significant. The results, then, would have been consistent with those in Table 1 for television news in general.

DISCUSSION

One puzzling aspect of these findings is that introducing the respondent's affective evaluation of gratification-related attributes did not result in the consistent superiority of Model 2 ($\Sigma e_1 GO_1$) and Model 6 ($\Sigma e_1 (GO_1 - GS_1)$) over their non-evaluative counterparts (Models 1

and 5, respectively). The findings here, however, may be an artifact of the restricted range of the evaluation measures. In this study, as in most uses and gratifications studies, the majority of gratification items were evaluated positively. Only one item ("Television news is often dramatic") was evaluated below the neutral point on the 7-point scale. This may have resulted in an underestimate of the predictive utility of the evaluative formulations. Research is needed which includes a greater range of negative versus positive gratifications before any firm conclusions may be drawn.

A further issue involves the apparent weakness of the discrepancy formulations. The failure of the absolute value model in particular supports Wenner's criticism that the model's inability to differentiate between over-obtaining and under-obtaining of gratifications mitigates its usefulness. The results here suggest that the absolute value model should not be employed in future research.

A methodological reason for the low predictive power of the discrepancy models as a group is that discrepancy measures in general are prone to reliability problems similar to those which plague change score measures (Cohen and Cohen, 1975; Cronbach and Furby, 1970; Hoge and McCarthy, 1983). This is confirmed in this study by the reliability coefficients reported in Table 1 and Table 2.

As an alternative to discrepancy models, Wenner (1982, 1983) has argued for a "transactional" approach in which measures involving GS and GO are entered separately in hierarchical regression models.

Ex post facto therefore, we tested transactional versions of Models 5 and 6. The transactional version of Model 5 is Model 7: $M.S. = \Sigma GS_1 + \Sigma GO_1$. The transactional version of Model 6 is Model 8: $M.S. = \Sigma e_1 GS_1 + \Sigma e_1 GO_1$. The results are presented in Table 3. It is clear in both the correlational and hierarchical regression analyses (again, with appropriate controls) that the transactional models are superior to their discrepancy counterparts.

A further interesting comparison involves comparing Model 7 ($\Sigma GS_1 + \Sigma GO_1$) with Model 1 (ΣGO_1), and Model 8 ($\Sigma e_1 GS_1 + \Sigma e_1 GO_1$) with Model 2 ($\Sigma e_1 GO_1$) (see Tables 1 and 2). The inclusion of GS components in Models 7 and 8 results in a slight increase in predictive power for both TV news in general and for the most-watched program in all four comparisons, although the small increments involved perhaps do not justify the increased model complexity. It is evident, in fact, that gratifications obtained are much more strongly related to media satisfaction than are gratifications sought, a theoretically plausible outcome. Parsimony would seem to favor, therefore, the gratification obtained models (Models 1 and 2) and, in one case, the expectancy-value model (Model 3), as the theoretically superior alternatives among the eight models tested.

CONCLUSION

Taken as a whole, the findings here provide support for a combined expectancy-value/gratifications obtained approach to explaining and predicting media satisfaction. Direct comparison of several theoretical models was found to be particularly useful in exploring the strengths and weaknesses of the different formulations. Future studies might well

investigate the relationships among expectancy-value/gratification models, media satisfaction, media dependency, and consequences of media consumption.

These studies should also test the generalizability of the findings^{7/6} of this study. Although the college students studied here were not found to differ appreciably from the general population with respect to the gratifications sought and obtained from television news, the models presented here should be tested with more heterogeneous samples and with other audience subgroupings.⁷ Other media and content types should also receive attention, hopefully within the framework of investigations which allow direct across-media or across-content comparisons.

FOOTNOTES

1. Carlson's (1960) study of "psychological satisfaction" and interest in news exemplifies the gratifications obtained approach. Burgoon and Burgoon (1979) developed predictive models of "satisfaction" with the newspaper. Their four-item satisfaction index is ambiguous, however. One item seems to tap gratifications obtained, while the other three seem to be indicants of general attitude.
2. The expectancy-value discrepancy model is very similar in many respects to Oliver's (1981) model of consumer satisfaction. This model matches consumer expectations with actual occurrences. Positive disconfirmation (leading to satisfaction) occurs when either low probability (unexpected) desirable events occur or high probability (expected) undesirable events do not occur. Dissatisfaction, on the other hand, occurs when low-probability undesirable events occur, or high probability desirable events do not occur.
3. Respondents were asked: "On an average Monday to Friday 5-day^{*} week about how many times do you watch _____?" Respondents were asked to give separate estimates of frequency of viewing of ABC World News Tonight, NBC Nightly News, CBS Evening News, and local television news.
4. Three UHF stations in the area provided local news and all three network evening news programs. Cable television (with CNN) was not available at the time of the study.
5. A separate study explored the test-retest reliabilities of the single-item GS and GO indices employed here. Eighty students in two communication classes were asked to complete the GS and GO items at the beginning of a regularly scheduled class period. The instructor then presented a 35-40 minute lecture, at which time the students again were asked to respond to the gratification scales. Students were not told to expect the second administration of the scales, and the intervening lecture acted as considerable recall interference. The mean test-retest correlation was .65 for the GS items, .70 for the GO measures. These are means for single-item indices. The reliability of summated indices can be expected to be higher (as was the case in this study--see Tables 1 and 2).
6. Gratifications obtained and beliefs also may be separated empirically, even when the two concepts are measured at the same level of abstraction. In this study, the correlations between each GO_i (TV news in general) and its corresponding b_i ranged from .39 to .64¹, with a mean of .53. When gratifications sought were controlled, the mean correlation (partial) was reduced to .39. While this indicates an expected moderate relationship, it does not indicate isomorphism.

Footnotes (continued)

7. A number of reasons lead to the tentative conclusion that the college students in this study do not differ greatly from the general population with regard to the gratifications sought and obtained from television news, and the relationship between these and related variables. When the GS_1 and GO_1 means in this study were compared with the means for the corresponding items in the Palmgreen, et al. (1980) study which involved a random sample from the general population, the means did not differ appreciably in absolute value. Moreover, the rank order of GS_1 item means for the students was quite similar to the rank ordering found for the more heterogeneous sample (Spearman's $\rho = .79$), indicating similar motivational hierarchies. Similar results were found for the GO_1 item means (Spearman's $\rho = .82$). Finally, the correlations observed between GS_1 and GO_1 in this study were very similar in magnitude to the correlations observed in studies employing more heterogeneous samples (Palmgreen, et al., 1980; Wenner, 1982).

REFERENCES

- Becker, L.B. (1979) "Measurement of gratifications." *Communication Research* 6: 54-73.
- Blood, R.W. and J.J. Galloway (1983) "Expectancy-value measures of audience uses and gratifications for media content." Presented to the International Communication Association, Dallas, Texas.
- Burgoon, M. and J.K. Burgoon (1979) "Predictive models of satisfaction with the newspaper," in D. Nimmo (ed.) *Communication Yearbook 3*. New Brunswick, N.J.: Transaction Books.
- Carlson, E.R. (1960) "Psychological satisfaction and interest in news." *Journalism Quarterly* 37: 547-551.
- Cohen, J. and P. Cohen (1975) *Applied Multiple Regression/Correlation Analysis for the Behavioral Sciences*. New York: John Wiley and Sons.
- Cronbach, L.J. and L. Furby (1970) "How should we measure change—or should we?" *Psychological Bulletin* 74: 68-80.
- Fishbein, M. and I. Ajzen (1975) *Belief, Attitude, Intention, and Behavior*. Reading, MA: Addison-Wesley.
- Galloway, J.J. and F.L. Meek (1981) "Audience uses and gratifications: an expectancy model." *Communication Research* 8: 435-450.
- Helson, H. (1964) *Adaptation-Level Theory*. New York: Harper and Row.
- Hoge, D.R. and J.D. McCarthy (1983) "Issues of validity and reliability in the use of real-ideal discrepancy scores to measure self-regard." *Journal of Personality and Social Psychology* 44: 1048-1055.
- Katz, E., Gurevitch, M., and H. Haas (1973) "On the use of the mass media for important things." *American Sociological Review*, 38: 164-181.
- Levy, M.R. (1978) "The audience experience with television news." *Journalism Monographs*, 55.
- Levy, M. and S. Windahl (1983) "Audience activity, gratifications and effects." Presented to the International Communication Association, Dallas, Texas.
- McLeod, J.M., C.R. Bybee, and J.A. Durall (1982) "Evaluating media performance by gratifications sought and received." *Journalism Quarterly* 59:3-12:59.
- and L.B. Becker (1974) "Testing the validity of gratification measures through political effects analysis", in J.G. Blumler and E. Katz (eds.) *The Uses of Mass Communications: Current Perspectives on Gratifications Research*. Beverly Hills, CA: Sage.

Oliver, R.L. (1981) "Measurement and evaluation of satisfaction processes in retail settings." *Journal of Retailing* 57:25-48.

_____ (1980) "A cognitive model of the antecedents and consequences of satisfaction decisions." *Journal of Marketing Research* 17: 460-469.

Palmgreen, P. and J.D. Rayburn (1982) "Gratifications sought and media exposure: an expectancy value model." *Communication Research* 9: 561-580.

Palmgreen, P. and J.D. Rayburn (1979) "Uses and gratifications and exposure to public television: a discrepancy approach." *Communication Research* 6: 155-180.

Palmgreen, P., L.A. Wenner, and J.D. Rayburn (1981) "Gratification discrepancies and news program choice." *Communication Research* 8: 451-478.

_____ (1980) "Relations between gratifications sought and obtained: a study of television news." *Communication Research* 7: 161-192.

Rayburn, J.D., P. Palmgreen, and T. Acker, (forthcoming) "Media gratifications and choosing a morning news program," *Journalism Quarterly*.

Rayburn, J.D., and Palmgreen, P. (1983) "Uses and gratifications and expectancy-value theory: merging two traditions." Presented to the Broadcast Education Association, Las Vegas, Nevada.

Rubin, A.M. (1981) "An examination of television viewing motivations." *Communication Research* 8: 141-165.

_____ and R.B. Rubin (1982) "Older persons' TV viewing patterns and motivations." *Communication Research* 9: 287-313.

Van Leuven, J. (1981) "Expectancy theory in media and message selection." *Communication Research* 8: 425-434.

Wenner, L.A. (1983) "Gratifications sought and obtained: model specification and theoretical development." Presented to the International Communication Association, Dallas, Texas.

_____ (1982) "Gratifications sought and obtained in program dependency: a study of network evening news programs and 60 minutes." *Communication Research* 9: 539-560.

Windahl, S., E. Hedinson, I. Højerback, and E. Nord (1983) "Perceived deprivation and alternative activities during a television strike." Presented to the International Communication Association, Dallas, Texas.

TABLE 1

Correlations Between Satisfaction with Television News and Various Models; and Regression Analyses Of Satisfaction with Television News and Various Models: TV News in General*

MODEL	Coeff. α	CORRELATION ANALYSIS		HIERARCHICAL REGRESSION ANALYSIS	
		Zero-Order r	r^2	Control Variables (entered first)	r^2 Increase due to Model Component (entered last)
1. ΣGO_1	.83	.52 (.001)	.27	$\Sigma GS_1, \Sigma b_1 e_1$	.02 (.02)
2. $\Sigma e_1 GO_1$	.83	.48 (.001)	.23	$\Sigma GS_1, \Sigma b_1$	.03 (.02)
3. $\Sigma b_1 e_1$	.81	.51 (.001)	.26	$\Sigma GS_1, \Sigma GO_1$	.07 (.001)
4. $\Sigma |GS_1 - GO_1|$	.61	-.12 (n.s.)	.01	$\Sigma b_1 e_1$	.00 (n.s.)
5. $\Sigma (GO_1 - GS_1)$	.71	.13 (.05)	.02	$\Sigma b_1 e_1$	.01 (n.s.)
6. $\Sigma e_1 (GO_1 - GS_1)$	.73	.17 (.02)	.03	Σb_1	.01 (n.s.)

*Significance levels shown in parentheses. N's vary from 174 to 178 depending on the number of missing cases.

TABLE 2

Correlations Between Satisfaction with Television News and Various Models; and Regression Analyses of Satisfaction with Television News and Various Models: Most-Watched Programs*

MODEL	Coeff. α	CORRELATION ANALYSIS		HIERARCHICAL REGRESSION ANALYSIS	
		Zero-Order r	r^2	Control Variables (entered first)	r^2 Increase due to Model Component (entered last)
1. ΣGO_1	.85	.49(.001)	.24	$\Sigma GS_1, \Sigma b_1 e_1$	.07(.001)
2. $\Sigma e_1 GO_1$	.83	.46(.001)	.21	$\Sigma GS_1, \Sigma b_1$	.04(.01)
3. $\Sigma b_1 e_1$	.81	.42(.001)	.18	$\Sigma GS_1, \Sigma GO_1$	.01(n.s.)
4. $\Sigma |GS_1 - GO_1|$	.64	-.07(n.s.)	.01	$\Sigma b_1 e_1$	.01(n.s.)
5. $\Sigma (GO_1 - GS_1)$	.72	.24(.001)	.06	$\Sigma b_1 e_1$	.03(.02)
6. $\Sigma e_1 (GO_1 - GS_1)$	.73	.26(.001)	.07	Σb_1	.03(.02)

*Significance levels shown in parentheses. N's vary from 163 to 166, depending the number of missing cases.

TABLE 3

Hierarchical Regression Analyses of Satisfaction with
Television News and Two Transactional Models: Most-
Watched Programs and TV News in General

MODEL	MOST-WATCHED PROGRAM*				TV NEWS IN GENERAL **			
	Multiple r	r ²	Control Variable (entered first)	r ² Increase due to Model Components (entered last)	Multiple r	r ²	Control Variable (entered first)	r ² Increase due to Model Components (entered last)
7. $\Sigma GS_1 + \Sigma GO_1$	.48	.23	$\Sigma b_1 e_1$	.08 (.001)	.51	.26	$\Sigma b_1 e_1$	.03 (.01)
8. $\Sigma e_1 GS_1 + \Sigma e_1 GO_1$	.45	.20	Σb_1	.06 (.005)	.48	.23	Σb_1	.04 (.005)

*n = 166

**n = 175