"Feeling Good" is the first television series for adults produced by the Children's Television Workshop, aired in prime time during 1974-1975 by the Public Broadcasting Service. The series attempted to reach the general public and motivate them to practice health maintenance behaviors. Various presentation formats were used. It was carried out in three phases, and a summative research plan was designed and undertaken by four independent research contractors to assess the series' impact. Although there were limitations in the evaluation process, general findings concerning audience, viewing effect, and media environment have implications for future research, practice, and policy. The complete evaluation report is presented as a separate ERIC document. (SC)
summary

Evaluation of the FEELING GOOD Television Series

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REPORTS OF "FEELING GOOD" SUMMATIVE RESEARCH


An overview of series development and evaluation, including a synthesis of studies conducted by the four independent research contractors cited below.


A condensation of the detailed report described above.


A study conducted in Boston, Dallas, Jacksonville (Fla.), and Seattle to assess effects of voluntary viewing. Using mail questionnaires, approximately 4,000 adults responded before, during, and after the test interval of November 20, 1974--May 21, 1975. Subgroups of a panel effects control group (not pretested) received either a mid-series or a post-series measure.


A field experiment with substantial low-income and minority representation (all female), conducted in Dallas, Texas, using personal and telephone interviews (N=400+). Random assignment to a group induced to view and be interviewed, a group induced only to be interviewed, or a group receiving no inducements; sub-categories added later were based on actual viewing experience. Interview waves before, during and after the test interval of November 20, 1974--May 14, 1975.


Four national surveys using personal interviews with independent samples of 1,500+ adults each. Surveys were conducted between December 1974 and June 1975. Assessed awareness of FEELING GOOD, sources of awareness, incidence of viewing, and incidence of selected health care practices.


A brief summary of national audience ratings for FEELING GOOD from November 1974 through January 1975 (Season A), April through June 1975 (Season B), and July through September 1975 (Season B rerun). The estimates are based on the Nielsen national Audimeter sample of TV households and include both Average Audience and Total Audience figures.
Introduction

FEELING GOOD was an experimental television series on health, produced by the Children's Television Workshop (CTW). It was the first CTW series designed for adults and the first to be aired in prime time. The series comprised 11 one-hour programs broadcast weekly from November 20, 1974 to January 29, 1975, and 13 half-hour programs broadcast weekly from April 2 to June 25, 1975; the latter programs were re-run from July 2 to September 24, 1975. The series was distributed through the 250 stations of the Public Broadcasting Service (PBS). The project budget of $7,400,000, covering a four-year period, included costs of production, content development, formative and summative evaluations, promotion, and special outreach activities conducted by CTW and several PBS stations.*

The general objective of the series was to motivate viewer to take steps which could enhance their own health and that of their families. A comprehensive

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* Major funding for the series was provided by the Corporation for Public Broadcasting, The Robert Wood Johnson Foundation, Exxon Corporation, and the Aetna Life & Casualty Company. Additional funding was provided by the American Cancer Society, American Heart Association, The Edna McConnell Clark Foundation, Robert Sterling Clark Foundation, The Commonwealth Fund, The Grant Foundation, Ittleson Family Foundation, The John and Mary R. Markle Foundation, National Cancer Institute, National Institute on Alcohol Abuse and Alcoholism, Surdna Foundation, and the van Ameringen Foundation.
evaluation plan was devised to determine the extent to which specific goals relating to this general objective were achieved. The report titled "Evaluation of the FEELING GOOD Television Series" brings together the results of complementary studies on the impact of FEELING GOOD conducted and reported separately by four independent research contractors. Also included are descriptions of the series' development and the summative evaluation plan, as well as discussions of general media strategy issues, evaluation issues, and opportunities for additional research. This is a condensation of the detailed report.

Rationale for the Series

At the time initial planning for the series began, in June 1972, the nation's annual health care costs were approaching $100 billion and increasing rapidly. Almost all of this amount was spent on treatment rather than on prevention of illness, and many studies indicated a need for more health education of the public: one out of three adults did not know any of the symptoms of cancer...half did not know their blood type...one-fourth did not know the symptoms of a heart attack. Medical authorities estimated that the incidence of heart disease could be reduced by half if available diagnostic techniques were fully used for early detection of heart problems, and that deaths from lung cancer could be cut by 60% if cigarette smoking were eliminated. There was evidence that heart ailments, cancer and venereal disease were on the increase despite the availability of means to reduce them. The infant death rate in the U.S. exceeded that of 14 other countries. Health conditions were considerably worse for the poor than for others; two out of five had serious health problems caused by malnutrition, for example, and most were unable to obtain adequate medical or dental care.
Health experts consulted during the first phase of work for the series agreed that major social and environmental changes would be required to ameliorate many of the adverse influence on health. However, there was also agreement that individuals could do a great deal on their own behalf by taking appropriate preventive actions and adopting a healthier "lifestyle." One advisor stated what became the implicit theme of the series: "It's what you do, hour by hour, day by day, that largely determines the state of your health, whether you get sick, what you get sick with, and perhaps when you die."

Although recognized as a high-risk venture facing enormous obstacles, it was considered worthwhile to see what a systematic and large-scale effort, using television in the service of preventive health measures, could accomplish. Previous CTW experience with its children's series SESAME STREET and THE ELECTRIC COMPANY had indicated that goal-directed programming—that is, programming accountable not only for the size of the audience attracted, but also for the impact on the viewing audience—could be effective in formats that combined entertainment and education. A set of management procedures, sometimes called "the CTW model," had evolved with these previous series. To the extent possible, similar procedures were to be applied to the new experimental series, although in many ways the barriers and goals would be more complex.

Issues in Getting People to Watch

A broadcast series cannot be forced on the audience, but must attract its audience in competition with a variety of television and non-television alternatives. To have an impact on an audience, there must first be an audience. While no specific number was set as a goal for audience size, the hope was that FEELING GOOD would at least do well relative to other prime time adult programs on PBS. Even this hope was ambitious, given several constraints
facing goal-directed series in general, and a goal-directed series on preventive health in particular.

There was little precedent in television for programming that focused on preventive health behaviors. Most commercial programs dealing with health had exploited the dramatic potential of medical crises. One of the major questions confronting the CTW series was whether programs stressing prevention rather than cure could attract an audience accustomed to seeing suspense-filled "doctor dramas" which reinforced the view that health problems are solved in hospitals. The theme of the series—health maintenance and illness prevention—lacked the inherent appeal of life-threatening situations that spark commercial fare.

There were expectations that an overtly educational series on health would tend to attract those persons already motivated to engage in good health practices. An extremely difficult task, therefore, would be to overcome the resistance of the unmotivated to view the series in the first place.

Programs attempting to attract a mass audience, as FEELING GOOD was, typically strive to use themes or personalities of very broad interest. Highly specialized interests are generally served by non-broadcast media. In the health area, topics such as nutrition are widely relevant, while others such as prenatal care apply to only a relatively small proportion of the population (although, in absolute numbers, even small proportions are very large, and the consequences of poor care quite severe). The question of how to incorporate themes that apply to particular subgroups while still appealing to a general audience had a major influence on the initial concepts for the FEELING GOOD series. The need to attract an appropriate audience prompted the decisions to use guest stars, to incorporate entertainment in the programs, and to treat several health topics in each show.
Feasibility of Inducing Behavior Change.

Many previous films and television programs on health were designed only to explore an issue or to convey information. FEELING GOOD was conceived as an attempt to do these things, but also, and more importantly, to influence behavior. A major question was whether a series oriented to preventive health measures could get viewers to take the actions recommended. Although considerable research evidence indicated that it is more difficult to produce behavior change than information gain, the primary intent of the series was to be motivational rather than informational.

Indeed, on several health issues, lack of information is not the major barrier to behavior change; many people who possess correct information fail to act on that information. Action steps are affected by a host of factors such as ingrained habits, perceived relevance and immediacy of the problem, costs, fear of outcomes, availability of services, convenience, and social support for taking or not taking the action. Relatively few of these factors can be influenced directly by a television program.

In many instances, preventive health appeals do not fall on "neutral" territory, but instead must face countervailing appeals. The amount of money and effort devoted to promoting cigarettes, alcoholic beverages, sweets, and "junk foods" is vastly greater than the amount of money and effort expended on all mass media health education campaigns combined.

Precedents in health education and in mass communication research offered little basis for optimism, given the difficult goal of behavior change. The basis for hope was in the experimental use of innovative formats, implemented in a systematic and large-scale manner, over a long period of time, within a management strategy that had been successful in different and more limited contexts.
Overview of Series Development

Before the premiere of FEELING GOOD, more than two years had been devoted to series development. Instead of an advance funding commitment for the entire project, the development process was divided into three phases, with initiation of each new phase dependent on successful completion of the previous phase. Developmental activities from the feasibility study in Phase I to full series production in Phase III are described under separate headings in this overview.

At the outset, the producers rejected conventional public affairs program formats for several reasons. These formats usually attract relatively small audiences of already-informed and motivated viewers. Rather than planning the series for an audience of people already interested in health, they chose to try to aim at all adults, with special emphasis on young parents and on low-income families. This emphasis was chosen because of the health needs of the intended audiences, and in spite of the fact that these segments of the population tend to be underrepresented among viewers of public television. To attract the diverse target audiences, it was felt that the series should cover a broad range of content and utilize a wide variety of entertainment and informational formats. An optimum blend of serious and light materials is extremely complex and difficult to prescribe, but early formative research, conducted to provide feedback to the production staff, indicated in general that test audiences were showing preferences for more serious material. The production staff developed a program vehicle they hoped would accommodate the sometimes-conflicting demands on the series.

The means chosen to link the varied kinds of segments to be used in each show (drama, comedy, documentary, etc.) was not a traditional host, but a repeating cast of characters who would work in or frequent a shopping center, particularly a dining counter/variety store called "Mac's Place." Such a
setting had several desirable features. Viewer familiarity with shopping centers was almost universal. A wide variety of roles and personality types could be incorporated in a small cast. Repeated exposure to the various character roles would allow minority and other audiences to identify with a particular character. Development of a simple plot or story line in each program could be spaced in segments throughout the program, interspersed with substantive segments in any type of format. Interest in the unfolding story could provide a motivation to continue to watch the program even through segments where health content was of minimal interest to a particular viewer.

CTW planned to produce 26 one-hour programs in the Mac's Place format, incorporating a schedule of topics and goals that would typically feature

1) a "major treatment" of up to 20 minutes length on a single topic;

2) up to three "minor treatments" of five to ten minutes each on other topics;

3) three or four "commercials," each about a minute in length; and

4) up to 20 minutes of introduction, closing, and transitional or bridging material.

In this plan, several topics would be treated in each program, and most topics would be addressed repeatedly throughout the series.

FEELING GOOD premiered on Wednesday, November 20, 1974, at 8:00 p.m. (EST) in competition with established series on two commercial networks (LITTLE HOUSE ON THE PRAIRIE and THAT'S MY MAMA) and a special on the third (THE OSMONDS). (Two weeks later, TONY ORLANDO AND DAWN began as a regular series in the same time slot.) In general, the reviews were favorable: of 50 reviews from around the country, 15 were highly favorable, five were mixed to good, and 11 were unfavorable. One of the latter appeared in the prestigious New York Times.

The national Nielsen Average Audience rating for the premiere show was 2.8, which was fairly high in comparison with most PBS prime time ratings. However, the ratings declined to an average of 1.4 rather than rising as CTW had hoped.
The new series was not living up to CTW expectations in other ways as well, and some basic strategies for the series, some of which dated back two years, were again questioned and discussed. A major issue was whether it was possible for a single series to satisfy the expectations of those with high interest in health topics and the appetite for entertainment of the non-motivated audience members.

There were limits in the amount of fundamental revision that could be incorporated in the original format. After the sixth program had been aired, CTW decided, with the concurrence of the series backers, to terminate the series after the eleventh program (January 29, 1975), and return two months later with a revised format. For convenience, the first version of the series, 11 one-hour programs, is called "Season A."

On April 2, 1975, FEELING GOOD returned for a 13-week period (Season B) in significantly altered form. The length of the show was cut from one hour to a half-hour. The Mac's Place segments and the continuing characters were dropped; Dick Cavett came aboard as host. In general, the series took on a more serious tone. Each show now treated a single topic rather than the multiple topics featured in Season A, and the anticipated breadth of audience appeal was weighed more heavily in topic selection for Season B. While behavioral goals were still of concern, there was more stress in Season B on information and attitudes. CTW management concluded that the experimental basis of the entire project warranted these major changes in mid-series.

It is important to be aware of the change from Season A to Season B as the development of the series is presented, because all preparatory activities were based on Season A assumptions. Extensive revisions in the summative evaluation designs were required by the change to Season B, forcing several trade-offs, and greatly increasing the complexity of the evaluation effort.
In view of this complexity, three levels of detail are offered the reader. In this overview document, the evaluation designs are sketched only briefly. In the summary report, an attempt is made to address the major points in the total evaluation program. The greatest amount of detail is available in the individual reports submitted by the four independent contractors.

**Development of the Series -- Phase I**

The feasibility study began in June, 1972, with a small staff which spent several months interviewing 170 experts in health and health education and critiquing existing film and television materials on health. In November, 1972, these efforts culminated in a 126-page proposal to produce the series. The proposal included significant premises for the development of the series--i.e., it would

1) consist of 26 one-hour weekly programs;

2) be aired in prime time over Public Broadcasting Service (PBS) stations, typically with a daytime rebroadcast during the same week;

3) be produced in some version of a magazine format;

4) incorporate goals going beyond information gain and attitude change to specific behavioral changes;

5) address multiple topics and multiple target audiences within each program;

6) emphasize health needs of the poor, but strive for appeal to multiple groups in the general population;

7) attempt to combine entertainment and health information in ways that would attract audiences with low motivation to seek health information; and

8) continue the use of organizational features which were successful with previous CTW series, such as heavy use of promotion, an extensive community outreach program, in-house formative research, and the use of outside contractors for the summative evaluation of the series. Significant consultative inputs for the series as a whole would be obtained from a National Advisory Council, and a Research Advisory Committee would help plan a comprehensive summative evaluation program.
Development of the Series - - Phase II

Phase II, which began early in 1973 and extended through December of 1973, was devoted to defining content areas, developing informational and behavioral goals, producing and testing an hour of television material in varied production formats, planning promotion campaigns, developing community outreach programs, and conferring with outside consultants on a plan for the summative evaluation of the proposed series.

Development of the Series - - Phase III

Phase III began early in 1974 and continued throughout production of the entire series. In July, 1974, a pilot show was completed for testing by the CTW Formative Research staff. Reactions to the pilot were obtained from 1,910 adults in 13 cities across the country. The pilot was altered in accordance with feedback from early audience testing and later appeared as the third program in Season A. By mid-September, 1974, the fall programs were in production. Phase III also included the changeover from Season A to Season B.

Some of the activities undertaken during Phases II and III are described briefly below.

Selection of Topics and Goals. During 1973, nine single-topic Task Force meetings were held with a wide range of experts in order to explore subjects for series coverage and ways to treat them. In an evolutionary process that extended into Phase III, the Research and the Content Development staffs used these and other inputs in selecting 11 priority topics: alcohol abuse, cancer, child care, dental care, exercise, the health care delivery system, heart disease, high blood pressure, mental health, nutrition, and prenatal care. Within the 11 topics, 70 behavioral goals, supplemented by information points to convey, were developed for use in series planning. The information goals were not viewed as ends in themselves, but were intended to support
and facilitate the achievement of the behavioral goals.

There was no initial assumption that each of the 70 behavioral goals would be covered in the evaluation, or would receive equal program emphasis, or would necessarily be treated in the series. In the 18 programs evaluated, 45 topic-specific goals (including nine not listed in the original 70) received some amount of treatment. In addition, three general behavioral goals on asymptomatic physical examinations and health information-seeking were treated indirectly.

Promotion and Utilization Activities. CTW's Public Affairs Division placed tune-in newspaper ads and on-air promos, generated additional publicity about the series premiere and individual programs, distributed 306,000 posters, prepared a monthly newsletter for 20,000 community leaders, and produced a 100-page Communications Manual for use by PBS stations. Major assistance in promoting viewership was provided by the local PBS stations and by many health agencies. Exxon, one of the series' chief underwriters, provided significant promotion for the series on commercial television and in national magazines.

Utilization and outreach activities were carried out by CTW's Community Education Services (CES), initially...
established to provide support services for SESAME STREET. CES used its seven regional offices around the country to contact organizations about the series, develop special community projects such as health fairs, assist PBS stations in selecting local health agencies from which viewers could obtain supplementary information on topics treated in the series, and a variety of other utilization activities. For example, CES's Southwestern Regional Office in Texas arranged for the Heart Association, the Dallas Museum of Health and Science, and health education students from Texas Women's University to screen 3,500 black and Hispanic residents of South Dallas for hypertension. In Mississippi, the CES office developed eight FEELING GOOD Health Fairs involving governmental health agencies, voluntary health organizations, colleges and universities, neighborhood health centers, and other community organizations. Other projects included nutrition education programs, in-school health education classes, field training experience for college students, and alcohol education campaigns. Many of these projects involved cooperative activities by community groups and resource agencies which had not worked together previously. Detailed descriptions of these activities and other CES projects related to the series are provided in a separate report available from CES.

The National Institute on Alcohol Abuse and Alcoholism provided special funds, to be supplemented locally, in support of utilization experiments by PBS stations in eight cities or regions: Jacksonville, Florida (WJCT); Seattle, Washington (KCTS); Cincinnati, Ohio (WCET); Jackson, Mississippi (WMAA); University Park, Pennsylvania (WPSX); Buffalo, New York (WNED); Maine Public Broadcasting; and San Francisco, California (KQED). The goal of the experiments was to determine various methods by which local stations could build community involvement around a national television effort. The station activities included a wide range of projects, such as producing local follow-up programs.
to hospitals; coordinating series topics with local health agencies; and operating local referral services.

**Summative Research (Assessment of Series Effects).** In accordance with procedures established with CTW's two previous series, formative or developmental research was conducted by an in-house research staff communicating directly with the production staff, while summative evaluation plans were developed in consultation with an outside Research Advisory Committee and then contracted by CTW to external research organizations for implementation. Early on, the strategy chosen was to use multiple designs and methodologies, wherein strengths in one study could compensate for weaknesses in another. The structure of the proposed series (which later became Season A), the goals to be covered, the target audiences to be reached, the distribution system to be employed, and the functions of the evaluation were all examined for their implications for the evaluation program as a whole.

In the judgment of the CTW research staff, the final design package accepted in the summer of 1974 represented the best combinations of what was desirable and what was possible. The five-study evaluation plan included

1) a multiple-city, large-sample panel study of voluntary viewing in a natural setting;

2) a field experiment in a community with good representation of low-income and minority audience members;

3) a series of four national surveys to measure trends in awareness of the series, viewing, and health behaviors;

4) a community monitoring study in which non-reactive institutional measures, such as type and frequency of visits to local health care centers, could cross-validate self-reports of series effects; and

5) national audience estimates for the series.

The community monitoring study was undertaken, but could not be completed because of lack of access to necessary records.
As stated earlier, the detailed CTW report and the individual contractor reports give rationales for the summative evaluation designs originally planned and fielded under Season A assumptions. These reports also give the reasoning behind the numerous design changes required by the mid-series switch from Season A to Season B. The individual design summaries below do not reflect the complexity of this evolution, but focus on the final versions of the studies as implemented.

Four-City Study of Voluntary Viewing. This study was conducted by the Response Analysis Corporation (RAC). The general goal was to assess selected cognitive and behavioral effects of FEELING GOOD on a large sample of geographically-varied voluntary viewers. "Voluntary viewers" refers to audience members who, in their natural in-home setting, viewed the series on their own accord, without any special research solicitation to either view or not view. Boston, Dallas, Seattle, and Jacksonville (Fla.) were chosen as test sites because of their geographic spread, the minority group representations in their areas, and the strong VHF signals of their PBS stations. A large random sample of adults (22,120) was screened to permit stratification of potential respondents into three levels of likelihood of viewing the forthcoming series. Oversampling from the high-likelihood group gave greater assurance that the large sample of series viewers needed for analysis purposes could be obtained. Mail survey methodology (which produced completion rates of 80% and above) was used for all subsequent measures: a pre-series baseline measure (N = 5,063) and three interim measures during Season A (N = 518, 466, and 411). Then, with several design modifications necessitated by the changeover to Season B, a Season B cognitive baseline was fielded (N = 2,731), and a final posttest measure (N = 3,709) was taken after program B-8. Subgroups of a panel effects control group (not
pretested) received either a mid-series or a post-series measure.

**Induced Viewing Field Experiment.** This study was conducted by the National Opinion Research Center (NORC) in a low-income community of Dallas, Texas. The sample consisted entirely of women and included deliberate over-representation of minority groups and low-income families known to be difficult to reach with public television, but an important segment of the target audience. Respondents were assigned to one of three treatment conditions: (1) induced financially to view the entire series and be interviewed repeatedly; (2) induced financially to be interviewed repeatedly (with no mention of the series); and (3) no inducement and no mention of the series. NORC later dichotomized each of these three groups into viewing-level subgroups on the basis of actual series viewing. Some original design features for assessing inducement effects and repeated measure effects had to be revised to accommodate the changeover to Season B. The final design incorporated a pre-series baseline measure (personal interview, N = 400), an interim measure in Season A (telephone interview, N = 136), a Season A posttest (telephone interview, N = 309), and a Season B posttest after program B-7 (telephone interview, N = 468).

**National Surveys.** The general goal of four national surveys, conducted by The Gallup Organization, was to establish nationally-generalizable trends throughout the series for awareness of FEELING GOOD, incidence of viewing, and incidence of various health care practices. Each survey involved personal interviews with an independent national sample of at least 1,500 adults. A limited number of FEELING GOOD questions were asked in each of these multiple-sponsor surveys, for reasons of economy. As a check on possible inflation of health behavior self-reports, the last two surveys incorporated an internal experiment: half the sample was asked to cite selected actions taken in the last six months; having done that, respondents were then asked which of those actions had been taken in the last two months. This two-month figure was
then compared with responses from the other samples which were asked only about the last two months.

**National Audience Estimates.** The size and characteristics of the audience viewing the series were ascertained by the A.C. Nielsen Company, using Nielsen's standard national sample of homes equipped with an Audimeter (N = approximately 1,200). The data obtained weekly throughout the series provided audience estimates for each program, and special studies on three sets of four programs furnished additional data on the cumulative audience, with breakdowns by age, income, education, household size, presence of children, and county size.

**Composite Scheduling of Summative Evaluation Measures.** The diagram below shows the timing of measurements in Seasons A and B for all contractors.

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<th>Contractor</th>
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<td>Program:</td>
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<th>Contractor</th>
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<td>Program:</td>
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As shown above, only Nielsen continued measurements for programs B-9 through B-13. The RAC assessment for Season B included programs B-3 through B-8; for NORC, it was programs B-2 through B-7. Effects from a substantial portion of Season B, therefore, could not be ascertained in this set of studies. The original plan to include all programs in the evaluation could not be followed because of the mid-season changes in content and scheduling.
Some Summative Evaluation Issues

Strengths and limitations of the set of complementary designs that comprised the summative evaluation package were analyzed before implementation, at the time of revision to accommodate Season B, and again after the studies were completed. All evaluations utilize trade-offs, require value judgments, and work within a variety of constraints. As comprehensive as this evaluation was, it could not address precise cost-benefit questions or compare the series evaluatively with other health education projects. Some goals and possible effects could not be measured at all because of budgetary, methodological, or time constraints. General issues that face field experiments and surveys, such as possible self-selection biases, inflation of behavioral self-reports, sample attrition, etc., also faced this evaluation and are reviewed in the CTW summary report. Some of the design strategies worked out to handle methodological problems are worthy of special note.

1. The RAC study was able to get responses from more natural viewers at lower cost because of disproportionate sampling from those identified before the series began as higher probability viewers. Weighting procedures were then used to approximate the proportions of viewers and non-viewers that would have been found in a simple random sample.

2. Persons who choose to view television programs on health topics are likely to be above average in health interest and knowledge. A means of estimating this "self-selection bias" was utilized by RAC to aid in interpreting data on program impact. Effects measures derived from content in a particular program were analyzed and compared across three audience categories: (A) those who viewed that
program; (B) those who viewed other programs but not that one; and (C) those who had not viewed any programs. A contrast between the first two audience categories provided at least a partial control for self-selection biases.

3. When it was noted that some self-reports of health behaviors on the first two national surveys appeared inflated, Gallup devised an experimental means of estimating the magnitude of inflation through two versions of interview questions used on the two subsequent surveys.

Other design features in the original set of complementary studies will also be of interest to the evaluation community. All are discussed in the more detailed summative evaluation reports.

Summary findings from these studies are presented below under three headings: The Audience, Media Environment Issues, and Viewing Effects.

The Audience for FEELING GOOD

The two studies that provided data on national audience size and composition were the Nielsen ratings and the Gallup surveys. Probably because of the quite different methodologies employed, Nielsen detected differences in audience size and composition between Seasons A and B, while Gallup did not. Both studies are in substantial agreement that most FEELING GOOD programs were viewed in 1-2% of the 68.5 million TV households in the U.S.

On each of four surveys spaced throughout the series, Gallup found that about 5% of all adults reported seeing at least one FEELING GOOD program within the preceding two months or so. Gallup data indicated that, although
awareness of FEELING GOOD was higher among younger, more affluent, and better educated adults, reported viewing showed little variation by demographic background. The last of the four Gallup survey reports includes this summary statement on the FEELING GOOD audience:

... the claimed audience for "Feeling Good" has remained unchanged since it was first measured in December 1974. There is little variation by demographic background. This suggests that the relatively high awareness of "Feeling Good" among the young, well educated, and higher socio-economic strata reflects the fact that those demographic segments tend to be well informed in general rather than being an indicator of greater interest in the show. Also, it appears that interest in "Feeling Good" is likely to be related to attitudes that are not specific to any one segment of the national adult population.

Nielsen estimates of national audience for the average minute of each program showed that Season A attracted an average of 1,152,000 adults per program, while Season B, broadcast at a time of year characterized by less overall television viewing, attracted about 986,000 adults per program. Nielsen's cumulative viewing figures for the first four programs in Season A and the first four in Season B indicated that the latter programs were attracting smaller proportions of low-income and low-education viewers. The cumulative number of "average audience" adult program exposures for Season A, Season B, and the Season B rerun was estimated by Nielsen to be 40,920,000. An "average audience" rating is an estimate of the household audience (percentage of all U.S. TV households) at the average minute of each week's telecast, including audience to any repeat telecasts during the week. The average rating for Season A programs was 1.4; for Season B it was 1.2; and for the Season B reruns it was 1.4. A basis for interpreting these ratings was provided in the Nielsen report to CTW, which stated that FEELING GOOD obtained more viewing households than two out of every three PBS prime time programs in the weeks for which comparative ratings were available during the 1974-1975 winter season.
The RAC and NORC studies, both conducted in limited sites under special conditions, could not assess the national audience. However, their findings are useful in understanding the media environment in which the series was competing, as discussed in the next section. RAC and NORC data indicated, on a variety of evaluative comparison measures, that a majority of viewers preferred the Season B programs over the Season A programs.

**Media Environment Issues**

In combination, several media-related factors can raise or lower expectations for viewership: e.g., PBS signal availability, awareness of PBS availability, favorable or unfavorable predisposition toward public television and toward a given program concept, awareness of FEELING GOOD, lack of other commitments at FEELING GOOD's broadcast time, interest in health programming, and so forth. The following paragraphs summarize some of the findings that bear on these issues.

Good PBS reception was reported by about 40% of the U.S. population, or half of the generally-assumed PBS coverage. Proportionately, the high-education group outnumbered the low-education group two to one in reporting good PBS reception. It should be noted, however, that self-reported PBS viewing was not restricted to households reporting "good" PBS reception. (Gallup)

Lack of knowledge as to whether PBS programming was or was not available ran about 25% overall. The proportion unaware of PBS programming was twice as high in the low-education group as in the high-education group. (Gallup)

In four cities with strong PBS stations, ability to specify the local PBS channel number was highly correlated with education level. Correct responses were given by 90% of those who had attended college, 81% of the high school-educated, and only 57% of those with a grade school education. (RAC)
Before the FEELING GOOD series began, more than half of the potential viewers were regularly viewing the commercial networks' programs at 8:00 p.m. on Wednesdays. Another 14% were unavailable for TV viewing at the time of the Wednesday evening FEELING GOOD broadcasts. (RAC)

Educational programming was the category viewed least by the NORC low-income sample. (NORC)

Lack of awareness of the series was a severe problem. Four out of five adults had not heard of the series during Season A; two out of three had not heard of it during Season B. The fact that most people were never aware that FEELING GOOD was on the air placed a non-programmatic limitation on the reach and impact of the series. (Gallup)

Preseries reaction to the concept of FEELING GOOD was 67% favorable, 22% unfavorable, and 11% uncertain. The translation of this into reactions to the specific FEELING GOOD programming is not precise, but it does describe the attitudinal climate before programming began. It implies that for the 22% "unfavorable," the actual programs probably would not be viewed even on a trial basis--and, if viewed, would have to overcome a negative bias. (RAC)

Considerable limitations are imposed by the cumulative impact of factors such as those described above. Nevertheless, because of the tremendous number of television households, the residual audience of "true prospects" is huge in absolute terms, making significant social problems such as health worthwhile for experimentation with goal-directed programming.

The goal-related effects of viewing the series, as assessed by the studies described earlier, are summarized below.
Viewing Effects

The contractors for the two major studies characterized their findings as follows:

NORC: "We interpret the findings from this field experiment as demonstrating that FEELING GOOD did have a significant impact on several different measures of health knowledge, attitudes, and behaviors, in a low-income sample of women. Thirty-eight of the outcome measures indicate some evidence of a significant viewing effect (12 with strong evidence, and 26 with partial evidence)."

RAC: "The series, overall, had a measurable impact on viewer behavior and cognition in health areas both less critical and more deeply value-related. Beyond some predilection toward health-oriented media offerings, viewers consistently demonstrated more knowledge about health matters and a greater proclivity to take steps to improve or safeguard their health than nonviewers. Most health areas which showed measurable change were those directly under respondent control and accomplished with a minimum of effort, but there were also examples of viewing impact on behaviors requiring more effort."

Originally, 70 behavioral goals, supported by points of information to convey, were developed for series planning. As the series was actually produced, through the extensive revision for Season B, several original goals received no programming and some others not on the original list were treated. The 18 programs evaluated (of 24 broadcast) addressed 45 topic-specific goals and three general goals. Topic listings in this summary are ordered by amount of treatment, which ranged from 74 minutes on seven programs (for heart disease) to four minutes on one program (for colon/rectum cancer). Of the 48 behavioral
goals, 33 were assessed with one or more measures. This summary classifies these 33 goals according to whether there was strong evidence, partial evidence, or no evidence of a viewing effect.

Since some goals were not measured at all, some were measured once, and others were measured several times, the outcomes were influenced to some extent by the measurement process as well as by the nature and amount of programming devoted to various topics. When at least one measure of a behavioral goal yielded unambiguous and statistically significant differences with appropriate comparison groups, it was considered as strong evidence of a viewing effect for that goal. Under that definition, strong evidence of effects was found regarding 10 behavioral goals (see Table A).

For an experiment such as this, it is believed appropriate to consider not only unambiguous and statistically significant measures, but also those measures showing neither a clear viewing effect nor a clear lack of effect. This "middle ground" is called partial evidence, and is indexed by any of the following conditions:

- an insufficient number of contrasts within a measure were statistically significant;
- the data were highly suggestive but fell short of statistical significance;
- frequent viewers were significantly different from nonviewers but not from less frequent viewers;
- there were indications that the finding was substantially confounded with some nonviewing effect.

Any viewing effect showing only partial evidence should, of course, be interpreted with caution. Given the multiple factors working against any evidence of behavioral impact, however, the presence of even equivocal evidence should be pointed out. Under the definition above, partial evidence of viewing effects was found regarding 14 behavioral goals. (see Table A).
In the formal evaluation program, which did not include unstructured viewer reactions or write-in requests for information in response to "referral spot" announcements, no evidence of viewing effects was found regarding nine behavioral goals. (See Table A.)

The differences between comparison groups in reporting various health behaviors ranged from small (e.g., 3% for seeking information about heart checkups) to substantial (e.g., 23% and 26% for women doing breast self-examinations). Across 39 measures which provided either significant or suggestive evidence of behavioral impact, appropriate comparisons showed 11 differences of 5% or less, 18 differences of 6-15%, and 10 differences of 16% or more.

The following behavioral goals were not measured directly:

- heart disease (people in high-risk categories for heart disease having a medical checkup; people encouraging others in high-risk categories for heart disease to have a medical checkup)
- alcoholism (discouraging others from driving after excessive drinking)
- parenting (parents engaging in activities to stimulate language development in children; parents preparing children for significant changes in their life situation)
- mental health (seeking professional help for an emotional problem)
- nutrition (eating more foods rich in vitamin A; giving children more nutritious snacks)
- breast cancer (encouraging someone to do breast self-examinations)
- accident prevention (avoiding circumstances which commonly lead to burn injuries)
- prenatal care (women seeking prenatal care early in pregnancy)
- exercise (checking with a doctor before starting a strenuous exercise program)
- stress (engaging in appropriate actions to reduce stress)
- hypertension (people with hypertension following medical advice for controlling it)
- colon/rectum cancer (people over 40 having a proctoscopic examination)
<table>
<thead>
<tr>
<th>Topic</th>
<th>Strong evidence</th>
<th>Partial evidence</th>
<th>No evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>heart disease</td>
<td>seeking information about obtaining heart checkups</td>
<td>examining drinking habits to detect a potential problem</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>seeking information about help for a drinking problem</td>
<td></td>
</tr>
<tr>
<td>alcoholism</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>mental health</td>
<td></td>
<td>encouraging someone to seek professional help for an emotional problem</td>
<td></td>
</tr>
<tr>
<td>nutrition</td>
<td>having more fresh fruit or fruit juice</td>
<td>using a steamer to cook vegetables</td>
<td>reducing consumption of foods high in saturated fat</td>
</tr>
<tr>
<td>breast cancer</td>
<td>encouraging someone to have a doctor examine her breasts</td>
<td></td>
<td>women asking a doctor or nurse to teach them how to do a breast self-examination</td>
</tr>
<tr>
<td></td>
<td>women performing breast self-examinations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>accident prevention or control</td>
<td>learning and posting the number of the local poison control center and other emergency numbers</td>
<td>storing hazardous substances out of children's reach</td>
<td></td>
</tr>
<tr>
<td>doctor/patient communication</td>
<td>writing down symptoms before visiting a doctor</td>
<td>asking a doctor to explain diagnosis, treatment, etc.</td>
<td></td>
</tr>
<tr>
<td>prenatal care</td>
<td></td>
<td>encouraging someone to see a doctor early in pregnancy</td>
<td></td>
</tr>
<tr>
<td>Exercise</td>
<td>Vision</td>
<td>Dental Care</td>
<td>Hypertension</td>
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<tr>
<td>----------------</td>
<td>---------------------------------</td>
<td>------------------------------------</td>
<td>--------------------------------------</td>
</tr>
<tr>
<td></td>
<td>having an eyesight examination</td>
<td>cutting down on sweet snacks for children</td>
<td>making a trial use of disclosing tablets</td>
</tr>
</tbody>
</table>
Clockwise from upper left:

"Davey" -- documentary on mental health

Helen Reddy -- song on prenatal care

Bill Cosby -- monologue on immunization

Bob & Ray -- sketch on dental care

Dr. William Lathan -- demonstration on nutrition and the heart

"A Family's Story -- documentary on breast cancer
Pearl Bailey -- song on heart care
Estelle Parsons -- drama on alcoholism
Johnny Cash -- song on mental health

Objective of the series was to motivate good preventive health practices. Instruments to that end, and specifically to teach facts. Many informatics were, and those items showing strong or positive knowledge or opinions are summarized also cites under topic-specific heading showing no viewing effect. The "no information points is not included here be those items that realistically could or the majority of information measures did n
### Table B. KNOWLEDGE/OPINION EFFECTS

<table>
<thead>
<tr>
<th>Topic</th>
<th>Strong Evidence</th>
<th>Partial Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>heart disease</td>
<td></td>
<td></td>
</tr>
<tr>
<td>alcoholism</td>
<td>Parents who drink a lot are more likely to have children who drink a lot.</td>
<td>Alcoholism is easier to treat in its early stages.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>People can be called alcoholic only if they drink so much that they can't work (disagree).</td>
</tr>
<tr>
<td>mental health</td>
<td></td>
<td></td>
</tr>
<tr>
<td>nutrition</td>
<td>Eating fruit helps clean the teeth.</td>
<td>A person seeking help from a psychologist or psychiatrist is basically a weak person (disagree).</td>
</tr>
<tr>
<td></td>
<td>Butter contains more cholesterol than margarine.</td>
<td>Eggs contain a lot of cholesterol.</td>
</tr>
<tr>
<td></td>
<td>It is not good for health to eat the skin of chicken or turkey.</td>
<td>It takes less time to steam vegetables than to boil them.</td>
</tr>
<tr>
<td>breast cancer</td>
<td>(Learning how to do a breast self-examination from television)</td>
<td>A woman is still capable of having a normal sex life after breast removal.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Women should examine their breasts for lumps every month.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>With early detection and treatment, the large majority of women recover from breast cancer.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Only a minority of lumps discovered in the breast turn out to be cancerous.</td>
</tr>
<tr>
<td>patients' rights</td>
<td></td>
<td></td>
</tr>
<tr>
<td>dental care</td>
<td></td>
<td></td>
</tr>
<tr>
<td>vision</td>
<td>People over 35 should have a glaucoma check every year.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A person with diabetes in the family runs a greater risk of having glaucoma.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A child's eyes should be checked before age six, and can be done before he/she learns the alphabet.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A person can have glaucoma and not know it.</td>
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</tr>
<tr>
<td></td>
<td>Amblyopia is the condition of underuse of one eye.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A child with amblyopia may see well with one eye and appear to have normal vision.</td>
<td></td>
</tr>
<tr>
<td>stress</td>
<td>Taking tranquilizers is not a good way of dealing with stress.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Stress can be helpful as well as harmful.</td>
<td></td>
</tr>
<tr>
<td>hypertension</td>
<td>High blood pressure can be asymptomatic.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Blacks are particularly susceptible to high blood pressure.</td>
<td></td>
</tr>
<tr>
<td>hearing</td>
<td>Parents can't always tell if their child has a hearing problem.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Nearly one in five preschool children has less than normal hearing.</td>
<td></td>
</tr>
<tr>
<td>allied health personnel</td>
<td>Much of the work a doctor does can be done by specially trained personnel who are not doctors.</td>
<td></td>
</tr>
<tr>
<td>uterine/cervical cancer</td>
<td>Cervical cancer has a cure rate of nearly 100% when caught early.</td>
<td></td>
</tr>
<tr>
<td>colon/rectum cancer</td>
<td>Most colon/rectum cancers can be diagnosed by a proctoscopic examination.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Nearly 75% of all deaths from colon/rectum cancer could be prevented with early detection.</td>
<td></td>
</tr>
</tbody>
</table>
Additional Evidence of Effects. Some effects of the series were not assessed within the formal, data-based evaluation program. For example, there were reports that the series stimulated cooperation among health agencies and increased the visibility of some PBS stations, but such "institutional" outcomes were not evaluated systematically. Responses to "referral spots" on the programs, in which viewers were invited to request topic-specific supplementary information from local agencies, could not be assessed rigorously because of wide differences in monitoring arrangements across communities. In the only instance where viewers were invited to write directly to CTW (for a Quitter's Kit for smokers, offered on program B-12), more than 40,000 requests were received. The American Dental Association received 6,000 requests for a sample of dental disclosing tablets offered on another program. Other referral spots drew fewer responses to various agencies, but the number could not be tallied with precision.

Viewers in both the RAC and NORC studies were asked to state in their own terms what effect, if any, the series had on their health knowledge and behavior. Although the responses were not analyzed by the contractors as a part of the evaluation, it is of interest to note that a substantial proportion of respondents offered examples of things they had learned or done as a result of the series. The responses lack the qualities of statistical data, but they add a human dimension to the evaluation. Some examples are given below.

"The program made me examine my breasts more closely and sure enough I did detect a lump on my left breast. I immediately called a doctor next morning and within a week was operated on. By acting so quickly the lump was localized and had not spread much, but it was malignant. It was three weeks ago. I'm fine now."

"I insisted a relative have her blood pressure checked. As it turns out, it may have prolonged her life."
"I realized after watching the show on depression that I needed help. I learned that it's an illness, and treatable."

"I have a relative whose life resembled the housewife's, and watching the show gave me the courage to talk to her about alcoholism because I learned so much from this episode and recognized her symptoms."

"I don't let my husband eat as many eggs. I guess I'm more conscious of my heart and health before something goes wrong. We're really careful now about fatty foods and saturated fats."

"The poison show reminded me that even though my kids are six and four, they can still get into things and it's dangerous to have all that stuff down in their reach. Cleaning supplies and different chemicals and bleach, now I've got them put away."

"I try harder to take better care of my health since I'm expecting another child. I am eating a better balanced diet than when I had my last baby."

"The program helped my husband at a time when we had lost several close relatives and he had lost a job. After 35 years together, we found if we talked it out it was easier to accept and adjust to hurt."

"As a high school biology teacher I suggested to my students (all Black) that they watch the show and we took the blood pressure of each student. Two are now taking medication for this condition."

"I went for the first really complete physical I have ever had, and found a bad kidney in time to save it."

"By seeing these programs I learned to relax and lose fear when I talk to my doctor. I have always had a fear of seeing a doctor."

Many other comments like these were offered by viewers, and a number of them are included in the summary report under specific topic headings.

Some people have said that even a single life saved, or one child spared a lifetime of blindness, has a value beyond the cost of a television series. Yet those who must decide what kinds of efforts will be undertaken in the future are necessarily concerned with the scale or amount of effects produced. For this purpose the relatively rigorous type of evaluation conducted for FEELING GOOD is required. Anecdotal evidence of impact can
be dramatic, but it is clearly insufficient as a basis for assessing program impact or for comparing the effectiveness of various programs.

Concluding Comments

In view of numerous obstacles to effecting behavior change, there is evidence that FEELING GOOD was at least partially successful in dealing with a wide-ranging and ambitious set of goals. The programs appeared to be particularly effective in motivating audience members to seek additional information about their health, and to encourage their friends or relatives to take appropriate preventive health actions.

What conclusions can be reached about the series from the evidence now available?

- The series reached approximately a million adults each week, a number which remained fairly stable despite differences in the length of the programs, the number and kinds of topics treated, the production formats used, and several other factors. The cost per viewer was about the same as the cost of many health pamphlets, and obviously far less than the cost of a visit to a physician or clinic. These two facts suggest that future programs with similar purposes should experiment with simpler production techniques to see whether greater efficiency or cost-effectiveness could be obtained. They also indicate that although a weekly information/entertainment series on preventive health (and perhaps on other topics as well) probably cannot draw a substantial share of viewers from the audience normally watching programs designed purely for entertainment, the absolute numbers are large enough to make purposive programming a worthwhile investment.
Unless fairly detailed information regarding the characteristics of target audiences is obtained in advance of program planning, it is likely that programs will contain some elements regarded by viewers as irrelevant to their concerns. The staff of FEELING GOOD made numerous efforts to obtain adequate information on audiences' health beliefs and practices, but satisfactory information was not available for some topics. If possible, future large-scale health education projects should carry out extensive "audience diagnostic research" as a supplement to other information where needed, and do so before major decisions regarding program content and formats are made.

Given the perceptual set of audiences toward familiar types of programs (news, variety, documentary, drama, etc.), it is extremely difficult to blend entertainment, information, and motivation in a continuing series. Each of these three elements sometimes works against the other two. Any new series on television has a less than even chance of surviving beyond one season; for a new series with an unfamiliar style or unusual combination of elements, the odds are probably even poorer, despite the fact that novelty will attract some viewers to sample a program.

There is no formula for producing effective health education material to reach a general audience of voluntary viewers. Some of the segments in FEELING GOOD were clearly more effective than others, but there were both weak and strong examples in each production format. The fact that the Season B programs were received more favorably than the Season A programs by test audiences indicates that a desired evolution had taken place; however, the lack of change in audience size from Season A to Season B illustrates the fact that program
appeal is only one of the elements in a complex system which also involves promotion, signal availability, competitive programming, and many others.

Given the multiple barriers to producing behavior change—particularly when some of the changes sought involve daily habits and other matters of "lifestyle"—extensive experimentation with various combinations and types of programming is justified. Five pilot programs were produced and tested in the developmental phase of SESAME STREET, while only one was done for FEELING GOOD. Since the latter series was trying to reach a more heterogeneous audience, in a more competitive program environment, on a wider array of topics, and with more complex and ambitious goals, it would seem that a greater amount of pre-broadcast experimentation would have been appropriate.

In her 1972 book Evaluation Research, Carol Weiss commented that...

"...An evaluation study does not generally come up with final and unequivocal findings about the worth of a program. Its results often show small, ambiguous changes, minor effects, outcomes influenced by the specific events of the place and the moment. It may require continued study over time and across projects to speak with confidence about success and failure." (p. 3)

The evaluation studies conducted to assess the impact of FEELING GOOD produced evidence that the series had a number of demonstrable effects on viewers' health knowledge and behavior. This is in itself a considerable achievement. The interpretation of the findings, however, will depend largely upon the expectations brought to them, since there are no absolute standards for judging efforts of this kind. It is more than the customary call for more research to say that establishing a proper comparative context for interpreting the results "may require continued study over time and across projects."
The final chapter of the CTW report provides several suggestions regarding additional research which could increase the value of the FEELING GOOD experiment. These include relating the summative evaluation results to formative research findings (based on program-testing data obtained from 7,000 adults); identifying effective production elements by relating segment and program characteristics to response measures; carrying out secondary analyses of the summative evaluation data; comparing FEELING GOOD with other televised health programs on a variety of dimensions; testing the programs on a younger target audience; and conducting longer-term assessments of program impact.

The final chapter also discusses several issues pertaining to goal-directed uses of television: combining "messages" and entertainment, series vs. specials, scheduling strategy, commercial vs. public broadcasting, reached vs. varied target audiences, working relationships between producers and researchers, and the relative amount of emphasis placed on delivering a service vs. producing new knowledge about purposive communications.

During its period on the air, FEELING GOOD was only a small part of the nation's total health education effort. The health problems which motivated the production of the series remain, and attempts to reduce them through education will continue on a large scale. Thus the primary contribution of the evaluation report is not as history, but in its implications for future policy and practice. This perspective has been used in analyzing and reporting the evaluation of this experimental series in the hope that the findings regarding program impact, the descriptive data on various health beliefs and behaviors, and the methodological details presented will be useful in the planning and evaluation of future efforts of this kind.