## **Television Addiction**

## Theories and Data Behind the Ubiquitous Metaphor

### ROBERT McILWRAITH

University of Manitoba

**ROBIN SMITH JACOBVITZ** 

University of New Mexico

ROBERT KUBEY

Rutgers University

**ALISON ALEXANDER** 

University of Massachusetts, Amherst

"Everyone knows" that television is addictive—Marshall McLuhan (1978) said so himself. From 65% to 70% of adults surveyed believe that TV is addictive (McIlwraith, 1990; Smith, 1986), although far fewer appear to believe that they personally are addicted. The problem with studying the phenomena of popular culture is that pronouncements and speculative phrasemaking tend to establish the conventional wisdom on topics like this long before anyone has even collected data. Although television addiction is widely believed in, it has only rarely been empirically studied. In this article, we bring together the existing psychological data on television addiction and TV addicts to examine how much of what we "know" really is so.

## IS TELEVISION A "REAL" ADDICTION?

Television addiction does not mean being "hooked" on particular TV content—everyone has his or her favorite soap opera or Monday night football program. TV addiction means dependence on the television medium itself, regardless of whatever content happens to be on. Allegedly, something about the television medium compels us to watch it and to continue watching

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longer than we mean to once we have begun. The metaphor for prolonged attention to television used to be "hypnosis," but lately "addiction" has become the central metaphor for our interaction with television (and, it seems, for much of the rest of modern life). The idea of TV addiction goes one step beyond hypnosis: It implies not only that television controls us but that it controls us through its effects on us, effects that we are reluctant or unable to do without.

Anecdotal and journalistic accounts of TV addiction abound in the popular press (Winn, 1977), but except for the research described in this article, there have been virtually no empirical studies of TV addiction.

From a critical theory perspective, the popularity of the "addiction" metaphor to describe television use can be seen as based on two widely held and fundamentally discrepant beliefs about the medium. The first part of this fundamental discrepancy is the belief that television is "mere" entertainment, that it is socially harmless and value free, and that it is not an important use of time. Heavy viewers typically characterize television as seductive but harmless, a freely chosen activity under their control, or attribute their television viewing to external, temporary circumstances (Foss & Alexander, 1987). They define television viewing as a peripheral activity, nothing that should have any consequences for defining them as persons. They "see through" TV programs, and assume that this protects them from the effects. A similar process of trivialization of television is the attitude, frequently encountered by communications researchers, that television is not a sufficiently important subject for academic study or research (Alexander, 1990).

The second part of the fundamentally discrepant view of television is the public perception that the media are powerful and harmful, a force to be feared. This may be in part because North American society regards entertainment as morally suspect and unproductive. There is also widespread fear that contemporary media have harmful effects - on others (it is common to find that although many people believe TV is dangerous and potentially harmful, few, if any, feel that they themselves were harmed by it). Critical theorists describe media messages as being carefully crafted by a dominant elite who own the means of producing and distributing those messages and therefore create messages that are in the best interests of the dominant elite. According to this view, discussions of passive, controlled TV viewers are really reflecting concerns about domination versus autonomy in contemporary society (Alexander, 1990). The power and persistence of the addiction metaphor lies in the fundamental duality of our perspectives about media in society: On one hand, they are trivial amusements for the unsophisticated; on the other hand, they are profoundly disturbing social forces (Alexander, 1990).

One means of determining whether television viewing is addictive in any nonmetaphorical sense is to compare it against the clinical criteria for other addictions—the term "addiction" has, in fact, been eliminated from the revision of the third edition of the *Diagnostic and Statistical Manual (DSM-III-R)* of the American Psychiatric Association (1987) and replaced by the term "dependence." Dr. Allen Frances, overseer of the manual's revision, concluded that in the broader sense, there are many kinds of compulsive behavior that could be considered addictive, including compulsive television viewing (see Goleman, 1990).

DSM-III-R lists nine possible criteria for making a diagnosis of substance dependence. Three are deemed necessary for making a diagnosis of "mild dependence." TV use by some individuals may fulfill up to five of the DSM-III-R criteria for dependence (Kubey, 1990c):

- 1. "Substance often taken in larger amounts or over a longer period than the person intended" (APA, 1987, p. 167). A great many people may meet this criterion. In a recent Gallup poll, for instance, 42% of 1,241 adult Americans surveyed reported that they "spent too much time watching television" (Gallup & Newport, 1990). Viewing more than one intends is frequently reported in the popular literature on television (Mander, 1978; Steiner, 1963; Winn, 1977). Prolongation of viewing, once begun, is substantially due to marketing and production techniques (e.g., "teaser" advertisements for upcoming programs or newscasts embedded within the program one is currently viewing) and not just to the personality or psychological processes of the viewer.
- 2. "The person recognizes that substance use is excessive and has attempted to reduce or control it but has been unable to do so (as long as the substance is available). In other instances the person may want to control his or her substance use, but has never actually made an effort to do so" (APA, 1987, p. 166). There are many anecdotal reports of people feeling unable to reduce their TV viewing without getting rid of the TV set entirely. By this criterion—simply recognizing that TV use is excessive—all 42% of the aforementioned respondents to the Gallup poll could be considered as meeting a second criterion for dependence. There has been an increase over time in the proportion of Gallup poll respondents who feel that they watch too much TV—this figure was only 31% in the late 1970s (Kubey, 1990c). Thirteen percent of respondents interviewed by Gallup considered themselves to be addicted to television, although it is hard to know what weight to give to such global self-diagnosis (Kubey, 1990c).
- 3. "Important social, occupations, or recreational activities are given up or reduced because of substance use. Persons may withdraw from family activities and hobbies or . . . use the substance in private (APA, 1987, p. 167).

Although television can bring family members together, there are also data demonstrating an association of heavy viewing with less social and family contact (Kubey, 1990a, 1990b, 1990c). The impact of TV viewing on participation in other recreational and social activities has been well documented in the work of Williams (1986). Some people use television to purposely avoid contact with other family members, and in households with a high population density, this use of television may be beneficial (Rosenblatt & Cunningham, 1976).

- 4. "With heavy and prolonged use, a variety of social, psychological and physical problems can occur and are exacerbated by continued use of the substance" (APA, 1987, p. 167). Research studies have shown that some people feel more passive after TV viewing than before they began and that this passivity can decrease the likelihood that viewers will become involved in more active and rewarding activities (Kubey & Csikszentmihalyi, 1990a). Lack of exercise and obesity constitute potential negative physical sequelae of heavy television use (Dietz & Gortmaker, 1985; Taras, Sallis, Patterson, Nader, & Nelson, 1989).
- 5. "With continued use, characteristic withdrawal symptoms develop when the person stops or reduces intake of the substance. Symptoms vary greatly across classes of substances" (APA, 1987, p. 167). This is the most difficult of the five applicable criteria for television dependence to nail down. The data, though not hard to come by, are largely anecdotal descriptions of withdrawal-like symptoms (Condry, 1989; Kubey & Csikzentmihalyi, 1990a; Steiner, 1963; Winick, 1988; Winn, 1977). It does seem plausible that if a family has been spending most of its free time together over a period of years watching television—as is the case with the majority of Americans—it may take some days or weeks for the family to reconfigure itself around a new set of activities. Because TV viewing is so easy to do, family members may have failed to develop other ways of spending time together.

Arguably, then, by *DSM-III-R* criteria television use by some individuals could be considered a mild dependence, sharing certain behavioral characteristics with substance dependence and other forms of compulsive behavior. The *DSM-III-R* criteria are, however, only descriptive in nature and are silent on the subject of the causes of dependence.

#### EMPIRICAL STUDIES OF TV ADDICTS

The first empirical study of television addiction and self-described TV addicts was conducted by Smith (1981, 1986) prior to the publication of DSM-III-R. She derived an operational definition of TV addiction based on

descriptions of the phenomenon in the popular literature, which included the following:

- 1. Television functions as a sedative.
- 2. TV addiction does not bring satisfaction.
- 3. There is an absence of selectivity in addicts' viewing.
- 4. Addicts feel a loss of control over their viewing.
- 5. Addicts lose a sense of time passing.
- 6. Television provides meaning and purpose in their lives.
- 7. Their time is structured around the TV set.
- 8. They feel they watch too much TV.
- 9. They feel angry with themselves for giving in to its effects.
- 10. They cannot wait to get back to TV when they have been away.
- 11. They try to quit and fail.
- 12. They experience withdrawal symptoms when they try to quit.

From these frequently reported descriptors, an 18-item questionnaire using a 5-point scale was created to assess the degree to which respondents felt each of these behaviors was characteristic of them. The 18-item Television Addiction Scale was embedded in a much larger set of questions to avoid inducing a response set; the scale also included items assessing amount of TV viewing, attitudes toward TV, life stresses, sociability, happiness, activity level, and personal values. This questionnaire was administered by mail to a sample of adults in Springfield, Massachusetts, and 491 usable responses were returned (full details of the methodology are published in Smith, 1986).

It was hypothesized that if TV addiction were a real syndrome, then the reported addict behaviors should co-vary or cluster together. Contrary to this hypothesis, however, a confirmatory factor analysis of responses to the 18 TV addiction items did not produce a single general factor as the best solution. In addition, the single most frequent response to 17 of the 18 TV addict items was "never"; that is, the behavior of TV addicts as reported in the popular literature was rated as highly uncharacteristic of themselves by the overwhelming majority of respondents (Smith, 1986). However, 64% of them agreed with the statement "TV is addictive."

Only 11 of the respondents to Smith's questionnaire circled the response "I'm addicted to TV," but an examination of the characteristics of these individuals shed little light on the reasons why people would describe their TV viewing as an addiction. Five of the self-described TV addicts were male; 6 were female. Their average age was 46 years (range: 26 to 82). Their average score on the 18 addiction items was 26.2 versus the group mean for the entire sample of 10.7. The degree of reported symptomatology even among these individuals was still very low though, since the maximum score

possible on the Television Addiction Scale was 72. These 11 self-described TV addicts reported viewing an average of 55.6 hours of television per week (their individual reports ranged from 34 hours to 90 hours). Other than being heavy TV watchers, the 11 self-described TV addicts had little in common. They ranged considerably in age, employment, marital status, degree of self-rated happiness, sociability, and life stress. They did not hold more negative attitudes toward TV than did other viewers. In conclusion, it appeared that "there is no stereotypical TV addict" (Jacobvitz, 1990), at least insofar as this self-report study could measure the construct. Nevertheless, the 11 individuals who characterized themselves as TV addicts did score significantly higher than other viewers on the Television Addiction Scale and did watch a staggering amount of television each week; these findings provided some support for the validity of Smith's measure.

To understand how television might create a dependency, the psychological mechanisms underlying television addiction or dependence must be investigated. We now turn to an examination of data on four proposed models of how television addiction or dependence might operate.

# FOUR THEORETICAL MODELS OF TV ADDICTION: WHY IS TELEVISION "ADDICTIVE" AND FOR WHOM?

Four theoretical models of television addiction or dependence that have been proposed in the popular and the psychological literature were examined in a recent study (McIlwraith, 1990). The four theoretical models tested were (a) that TV addiction is based on television's effects on imagination and fantasy life; (b) that TV addiction is a function of television's effects on arousal level; (c) that TV addiction is a manifestation of oral, dependent, or addictive personality; and (d) that TV addiction is a distinct pattern of uses and gratifications associated with the television medium. In the case of some of these models, different theorists have advanced diametrically opposed views as to the mechanisms by which a particular variable may contribute to TV addiction.

Subjects in this study were 136 undergraduate students enrolled in introductory psychology courses at the University of Toronto. They received experimental credit for participating in the study. Subjects completed the following questionnaires in counterbalanced order: the Short Imaginal Processes Inventory (SIPI; Huba, Singer, Aneshensel, & Antrobus, 1982), the Eysenck Personality Questionnaire (EPQ; Eysenck & Eysenck, 1975), the Television Addiction Scale (Smith, 1981, 1986), and the Television Use Styles Questionnaire (TVUSI; Schallow & McIlwraith, 1986-1987). To

partially disguise the intent of the Television Addiction Scale, its items were embedded within the Television Use Styles Inventory, which asked respondents about a wide variety of behaviors and attitudes related to television viewing. Questions on cigarette smoking, alcohol drinking, and consumption of junk food (defined as "foods that you believe have little or no nutritional value and probably are bad for you in some way") were also included.

In addition to the Television Addiction Scale, Smith's groundbreaking study had included a question assessing respondents' self-perception of whether they were addicted to television. McIlwraith (1990) suggested, however, that Smith's (1981) question confounded frequency of TV viewing with belief in personal addiction, by using the following wording:

How would you describe yourself?

- 1. I avoid watching TV.
- 2. I watch TV very rarely.
- 3. I watch TV now and then.
- 4. I watch TV every day.
- 5. I'm addicted to TV.

McIlwraith's (1990) study attempted to remove the confound by asking directly about TV addiction. The following question was embedded within the TVUSI questionnaire about television habits:

I'm addicted to television.

- 1. Strongly disagree.
- 2. Disagree.
- 3. Neither agree nor disagree.
- 4. Agree.
- 5. Strongly agree.

Subjects completed all questionnaires anonymously in groups. After they had completed the study, they were debriefed about the purpose and hypotheses of the research.

Data were analyzed in two ways. First, TV addiction was treated as a dichotomous categorical variable by identifying a group of self-labeled TV addicts (subjects who responded "agree" or "strongly agree" to the item about personal addiction to TV) and a comparison group of nonaddicted TV viewers (subjects who responded "disagree" or "strongly disagree" when asked if they were addicted to TV). Seventeen self-labeled TV addicts were identified and contrasted in multivariate analyses with 104 nonaddicted TV

viewers. (Fifteen subjects who responded "neither agree nor disagree" to the TV addiction question were excluded from these analyses.) Multivariate analysis of variance comparing the addicted and nonaddicted groups on all questionnaire variables (imaginal processes, EQP personality dimensions, TV use styles, and reported indulgence in oral vices) revealed that the two groups differed significantly overall (F = 2.59, p < .005). Subsequently, univariate analyses of variance were performed on the data from each instrument (i.e., separately for each theoretical model).

In the second set of analyses, TV addiction was treated as a continuous variable, as measured by scores on Smith's Television Addiction Scale, and data for all subjects were correlated with their scores on the other measures (all significance levels reported for correlations are two-tailed, due to the opposing predictions by various theorists about the direction of the relationships between personality characteristics and TV addiction. For the full sample, total Television Addiction Scale score correlated +.60 with self-labeled TV addiction.

The finding in this study that one eighth (12.5%) of subjects considered themselves to be addicted to TV contrasts with the much lower rate (less than 2%) found by Smith (1986) in her larger and more representative sample (although it is close to the 13% reported by Gallup & Newport, 1990); this may be due to differences in how the question was asked in the two studies or to several other possible reasons, such as increased popularization of the term "TV addiction" during the time since Smith's data were collected, or it could be that a university student sample contains more individuals willing to label themselves as TV addicts than Smith's much more heterogeneous community survey sample. Both studies (McIlwraith, 1990; Smith, 1986) found considerable evidence of a "third person effect" (Davison, 1983): Most subjects believed that TV was addictive, although far fewer believed that it had affected them personally in this way.

#### TV ADDICTION AND FANTASY LIFE

McLuhan wrote that television was a unique technology because unlike movies, TV's light images come through the screen right at the viewer. In effect, the viewer is the screen (McLuhan, 1962; McLuhan & McLuhan, 1988). Because the TV picture is rear-projected and does not exist anywhere outside the viewer — that is, does not become a picture at all until the viewer's brain decodes it from a few thousand dots of light — McLuhan believed that television drove attention inward. Television, by its structure rather than its content, led to excessive preoccupation with fantasy and inner experience,

he believed. According to McLuhan, TV accounted for the interest in meditation, mysticism, the occult, and hallucinogenic drugs among the young people of his day, and he was among the first to call television an addiction (McLuhan, 1964, 1978).

Just the opposite view regarding television and fantasy life was put forward by Drs. Jerome and Dorothy Singer (1981, 1983), who theorized that TV watching prevents fantasizing, both directly through a series of orienting reflexes which hold viewer attention on the rapidly changing external stimulus of the TV screen and indirectly by displacing imaginative play and reading—activities which could promote fantasy and imagination (see also Williams, 1986). Growing up deficient in personal fantasy and imaginal skills, the child is then prepared for a lifetime of dependency on commercially produced "fantasies" on television, the Singers argued.

Thus while McLuhan believed that TV addiction resulted from excessive orientation toward fantasy and inner experience, the Singers suggested that it is due to insufficient fantasy and imagination, resulting in excessive orientation toward external stimuli. These hypotheses were explored by using the SIPI to assess the quality of imagination and fantasy among TV addicts and nonaddicted viewers.

Self-labled TV addicts scored significantly higher than nonaddicted viewers on the Poor Attentional Control subscale of the SIPI (p < .05). That is, self-labeled TV addicts reported more mind wandering, distractibility, boredom, and unfocused daydreaming than did the nonaddicted TV viewers.

Smith's Television Addiction Scale correlated with Poor Attentional Control ( $\pm$ .24, p < .05). It also correlated significantly with the Guilt and Fear of Failure Daydreams subscale of the SIPI (= .27, p < .005), although this latter correlation may be a result of the large number of items emphasizing guilt found in both measures.

No significant difference was found between self-labeled TV addicts and nonaddicted viewers in amount of positive, imaginative fantasy. The Positive-Vivid subscale of the SIPI correlated essentially zero (+.02) with Smith's instrument. Positive-Vivid fantasy was also essentially uncorrelated (+.03) with hours of television watched during a week in McIlwraith's sample of young persons. Thus the SIPI data support neither McLuhan's nor the Singers' predictions about an association between television viewing and positive, creative fantasy. Several other studies (McIlwraith & Schallow, 1982-1983, 1983; Schallow & McIlwraith, 1986-1987) reported essentially no relationship between this healthy style of recreational fantasy and TV use. The association of TV viewing with poor control of attention and dysphoric,

ruminative fantasies has also been previously reported (McIlwraith & Schallow, 1982-1983, 1983; Schallow & McIlwraith, 1986-1987).

#### TV ADDICTION AND AROUSAL LEVEL

The second theoretical position considered by this study was that television addiction has something to do with arousal level, with either sensation seeking or stimulus avoidance; this is another hypothesis that has been argued both ways in the literature.

Eysenck (1978) hypothesized that extroverts would become addicted to television because of their low threshold for boredom and their seeking to increase their level of arousal. Milkman and Sunderwirth (1987) argued, however, that TV addicts seek to escape from excessive stimulation and to reduce arousal by withdrawal into absorption in TV viewing; in other words, they are introverts in Eysenck's personality model. One reason for these discrepant predictions may be that Eysenck's view was based largely on consideration of arousing sexual or violent content shown on television, while Milkman and Sunderwirth focused more on the social (or asocial) nature of the TV viewing experience and ignored TV content. To address these hypotheses, Introversion-Extroversion scores from the EPQ were examined.

When self-labeled TV addicts were contrasted with nonaddicted viewers by means of analysis of variance, no significant differences were found for any of the personality dimensions of the EPQ. There was also no difference between groups on the EPQ Lie subscale, suggesting that socially desirable response tendencies did not affect the likelihood of reporting oneself to be a TV addict.

Smith's Television Addiction Scale was correlated with Introversion (+.26, p < .05) and with Neuroticism (+.22, p < .05). Eysenck's (1978) suggestion that TV addiction is based on sensation-seeking received no support. Milkman and Sunderwirth's (1987) notion that TV addicts are seeking to escape or withdraw from overstimulation received some support from the modest association of reported TV addict behaviors with Introversion and Neuroticism.

#### TV ADDICTION AND ORALITY

Milkman and Sunderwirth (1987) postulated that television addiction is an oral-level addiction and that TV addicts are excessively oral characters.

If TV addicts are oral or dependent personalities, it was hypothesized that they might show a pattern of overindulgence in other oral behaviors (McIlwraith, 1990). For this reason, the study inquired into subjects' oral vices: cigarette smoking, alcohol use, and consumption of junk food.

Self-labeled TV addicts did not differ from nonaddicted TV viewers in reported consumption of tobacco, alcohol, or junk food.

Reported consumption of junk food (but not alcohol or tobacco) was correlated with scores on Smith's instrument (+.22, p < .05). The association of snacking with heavy television viewing has been reported elsewhere (Dietz & Gortmaker, 1985). No evidence for a pervasively oral or multiply addictive, dependent personality among TV addicts can be adduced from this extremely limited probe of the hypothesis; however, this hypothesis deserves further investigation with more detailed measures of addictive behaviors, not just reported consumption.

#### TV ADDICTION AND USES AND GRATIFICATIONS

The fourth theoretical viewpoint examined in this study was a uses and gratifications approach from the communications field. It was hypothesized that people might label themselves as addicted to television because they use television for different purposes or in different ways than the rest of the viewing population. The well-known ambivalence of viewers about their television viewing (Fowles, 1982; Jankowski, 1983) might be implicated in the decision to attribute excessive viewing — particularly viewing of aesthetically offensive or mindless programming—to forces beyond their control (McIlwraith, 1990). Uses and gratifications of viewers were investigated by means of a questionnaire previously used in other studies of television viewing (see Schallow & McIlwraith, 1986-1987). Responses to the TVUSI questions in this sample reduced to five factors, four of which were virtually identical to those found in earlier studies of TV use styles (Schallow & McIlwraith, 1986-1987):

Dysphoric Moods. Using television viewing to modulate affect or to counteract some unpleasant mood state.

Filling Time. Television use when bored, alone, or faced with nothing to do.

Disapproval of TV. Embarrassment over watching programs one considers to be stupid and mindless; feeling that children should not be allowed to watch too much TV.

Other Video Technologies. Ownership of personal computers and home video games.

The fifth factor identified was clearly interpretable as:

Divided Attention. Having the TV on while doing other things.

Subjects' scores on these five viewing style factors were used in the analysis. Self-labeled TV addicts reported watching more TV on average than did nonaddicted viewers (21.3 hours per week as opposed to 10.6 hours per week). Not surprising, therefore, TV addicts reported significantly more Divided Attention (having the television on while doing something else such as eating, housework, or studying) than did nonaddicts. Smith's Television Addiction Scale correlated .45 (p < .005) with the Divided Attention factor.

Self-labeled TV addicts were significantly more likely than nonaddicted TV viewers to report watching TV when they were in some Dysphoric Mood state (lonely, sad, anxious, or angry) and to be distracted from things that were bothering them. Responses to Smith's instrument correlated .50 (p < .005) with the Dysphoric Moods factor.

Self-described TV addicts were also significantly more likely than nonaddicted viewers to report that they watched TV to Fill Time, to be entertained, when they had nothing to do, or when they were bored (correlation with the Television Addiction Scale = .35, p < .005). Kubey's (1986) research on the use of television to cope with unstructured time is consistent with this finding.

Self-labeled TV addicts were no more or less likely than nonaddicted viewers to report playing video games or owning home computers, despite the hardware similarity to television.

An interesting finding was that TV addicts did not differ from the nonaddicted group in their aesthetic or moral evaluations of TV content. The groups did not differ in their attitudes about restriction of children's TV viewing time, in their feelings that TV content was "stupid and mindless," or in their embarrassment over the types of programs they watched. The hypothesis that viewers who used the television medium extensively to meet their needs for relaxation, distraction, and affect modulation, although embarrassed or offended by program content, might resolve this uncomfortable state of cognitive dissonance by attributing their viewing to an addiction rather than to personal choice or poor taste received no support from the data in this study. Self-labeled television addicts were significantly more likely than nonaddicted viewers to report using television to cope with unfilled time, boredom, or unpleasant moods, but, as Smith (1986) also found, they did not differ in their evaluations of TV content or the degree of embarrassment over content viewed (McIlwraith, 1990).

## HOW TELEVISION MEETS VIEWER'S NEEDS

The Experience Sampling Method (ESM) studies have provided data that, while still based on self-report, go beyond the retrospective questionnaire investigation of people's experience of television to provide more ecologically valid measures of TV use in its natural environment (Kubey, 1984, 1986, 1990a; Kubey & Csikszentmihalyi, 1990a, 1990b). These studies shed light on the ways in which the experience of TV viewing affects viewers, how it satisfies their needs in ways that may foster dependence.

In studies using the ESM, subjects are asked to report what they are doing and to indicate how they are feeling each time they are signaled throughout the day with a radio-controlled beeper that they carry with them for a week's time. Subjects are typically signaled six to eight times per day at random intervals from morning until night. In response to each signal, they fill out a small report form, rating themselves on a number of standard, brief psychological measures of mood and mental activity. The ESM has allowed researchers to study television viewing as it naturally occurs outside the laboratory and also to compare the experience of TV viewing with other activities.

In several ESM studies conducted since the mid-1970s, it has been found that television viewing typically involves less concentration and alertness and is experienced as more passive than most any other daily activity, except for those occasions when people report that they are "doing nothing" (Csikszentmihalyi & Kubey, 1981; Kubey, 1984; Kubey & Csikszentmihalyi, 1990a). These very basic findings held up for people from age 10 to 82 years and from samples from the United States, Canada, West Germany, and Italy.

The main experiential reward of TV viewing is relaxation, but the relaxed and passive bodily and mental states associated with viewing may make it difficult for many people to turn the set off (Kubey, 1984; Kubey & Csikszentmihalyi, 1990a). Furthermore, the passive state does not stop once people stop viewing—it can spill over into how people feel afterward (Kubey, 1984; Kubey & Larson, 1991). Viewers continue to feel relaxed over many hours of viewing, but some report less satisfaction from television, deteriorating mood, and greater difficulty concentrating the longer they view (Kubey, 1984; Kubey & Csikszentmihalyi, 1990a). That heavier viewers enjoy viewing less may be a parallel with other forms of dependence (Kubey, 1990c).

The "passive spillover" effect suggests that TV viewing can inculcate passivity in some viewers, at least in the short term. The viewer finds it more

and more difficult to turn the set off the longer he or she views, even though he or she may not feel quite as good emotionally as a viewing session becomes prolonged. Other research has shown that passivity can also lead to mild guilt and self-contempt (Bower, 1973; Furu, 1971; Himmelweit & Swift, 1976; Steiner, 1963), especially among educated populations.

Television viewing is negatively reinforced by TV's ability to enable people to escape from stress into relaxation (Kubey, 1990c; Kubey & Csikszentmihalyi, 1990b). Heavy users are also particularly likely to feel bad when alone and in unstructured situations such as waiting in line-being "between activities" (Kubey, 1986). This finding may suggest dependence on the medium for filling the voids that accompany solitude or open time. One interpretation is that TV viewing is simply symptomatic: that people who do not tolerate themselves well in isolation or in unstructured situations will gravitate to television in order to feel less alone and to be more psychologically structured. In this regard, it is interesting to note the paucity of social supports among heavy TV viewers found in Kubey's (1986) study, and the observation by Smith (1986) that a number of self-reported TV addicts identified in her study were divorced, unemployed, or living alone. In fact, television can effectively distract the viewer from the negative cognitions that can contribute to dysphoric states (Bryant & Zillmann, 1977, 1984; McIlwraith & Schallow, 1983; Singer, 1980).

Not only does television relax people, it does so very quickly. Within moments of sitting or lying down and pushing the power button, most viewers will feel more relaxed than they did before. Viewing seems to be particularly effective in reducing normal stress or mild tension. Viewers remain relaxed while they watch TV because television viewing is so extraordinarily simple to do and because complexity and intellectual challenge have been driven out of most programs precisely because people use television to relax and escape. Because both relaxation and escape are obtained almost immediately on pushing the TV set's power button, a strong conditioned association between television and relaxation is quickly formed (Kubey, 1990c). The association is then repeatedly reinforced because although the quality of other emotional and mental states may deteriorate somewhat over prolonged viewing, viewers remain relaxed throughout. Viewing begets viewing: One must keep watching in order to feel relaxed (Kubey, 1990c).

Relative to some of the other possible means available to bring about relaxation, television is one of the quickest and certainly among the cheapest. And unlike conversation or games, one does not need anyone else around in order to watch TV.

Prolonged viewing is also maintained by skillful promotion of subsequent programs within programs currently being watched by television producers whose goal is maximization of audiences for advertisers.

#### CONCLUSIONS

It seems clear from the research reviewed here that the television medium can readily and effectively relax and distract viewers and decrease negative affect (Kubey & Csikszentmihalyi, 1990a; Schallow & McIlwraith, 1986-1987); viewers may come to depend on this effect and use the medium to excess in order to achieve and maintain it. Given that television is freely and plentifully available, it remains to be determined whether or not such a use of television for affect modulation constitutes a significant impediment to adaptive functioning for a significant number of persons.

More research is needed to establish the incidence and prevalence of clinically significant problems associated with television dependence. To do this, clearer operational definitions of TV dependence must be developed. Although it is interesting to know what sort of person is willing to diagnose him- or herself as a "TV addict" (McIlwraith, 1990), such self-report studies can have little clinical significance. More stringent criteria for establishing the presence of a clinically significant dependence, analogous to substance dependence, must also include a temporal dimension (APA, 1987): Have these behaviors been present for some time, or are they only fleeting or situational (Foss & Alexander, 1987)?

At this point, the data on personality of self-described television addicts are sparse and unclear, in part due to the small samples of such persons studied thus far (11 in Smith's study, 17 in McIlwraith's). In-depth clinical case studies of individuals reporting problematic television dependence would also be extremely useful (testimony in the murder trial of Ronnie Zamora in the 1970s comes closest to such a clinical report; see Fowles, 1982).

Researchers in this area are often asked how to break the television habit. There are few, if any, empirical studies comparing methods for reducing excessive television viewing, although there are a number of published accounts and recommendations based on common sense or generalizations from self-control techniques used in gaining control over other habits (e.g., Jason, 1987; Jason & Rooney-Rebeck, 1984; Wilkins, 1982; Winn, 1987).

Although television addiction has been the focus of substantial public concern, professional psychology has given the phenomenon little attention.

With growing emphasis on the cognitive and attentional processes that maintain TV viewing, we expect that this topic will be increasingly studied.

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