Television Dependence, Diagnosis, and Prevention:

With Commentary on Video Games, Pornography, and Media Education

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Abstract

The diagnostic criteria for substance dependence used by psychologists and psychiatrists are applied to known features of habitual television viewing behavior. The case is made that for some persons, television viewing habits may constitute psychological dependence. Methods aimed at controlling media habits are offered as is advice for those responsible for children. Consideration is also given to contemporary challenges posed by media violence, pornography, and computer and videogame habits. A section on media education is included.

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In this chapter, I first examine what is known about psychological dependence on television, applying the psychiatric criteria used in diagnosing substance dependencies to viewing habits. The chapter then turns to concerns about how people can gain greater control over their viewing, with specific attention to the concerns of those responsible for children.

Because media violence is so often the focus of society's concerns about the non-discriminant and unsupervised use of television by children, I also offer observations on this topic. The chapter next considers the positive potentials posed by video and computer games but also why use of these new media can be habit forming. Finally, the long-standing controversy over the effects of pornography is addressed, as is the question of whether there is such a thing as pornography addiction. New concerns about interactive erotica are raised. In light of the foregoing, at the conclusion of the chapter I briefly consider the value of formal media education.

Television Dependence

Many people today believe that television viewing can be addictive. Although only 2 percent and 12.5 percent of adults in two separate surveys believed that they were addicted, 65 to 70 percent believed that others were addicted (McIlwraith, 1990; McIlwraith, Smith, Kubey, & Alexander, 1991; Smith, 1986).

Although it is tempting to use the term "addiction" when referring to individuals who report upwards of 60 hours of viewing each week, the term connotes different things to different people. It seems likely that less confusion will result if we are more careful in the words we choose.

Indeed, the prime diagnostic manual used by psychotherapists throughout North America, the American Psychiatric Association's (1994) Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, (D.S.M.-IV), does not use the term "addiction," nor did its previous edition published in 1987. Instead, the committees that wrote D.S.M. preferred the term "substance dependence" to conceptualize what others might call addiction. Still, there remain researchers and clinicians who use the term "addiction," especially with regard to pornography. As a result, in the pages ahead I will use that term from time to time.

How the Viewing Habit is Formed

Before launching into a more general discussion of television dependence, I want to recount some of the relevant findings I have reported in earlier research using the Experience Sampling Method (ESM). Since the mid-1970s, my colleagues and I have used this method to study how people use and experience television as well as other media.

The ESM involves having research subjects report what they are doing, and how they are feeling, each time they are signalled with a radio controlled beeper. Each respondent typically is signalled six to eight times each day, from morning till night, for a week. The timing of the signals is predetermined by the research team to occur at random intervals, and participants do not know when to expect a signal. The research has enabled us to study television viewing along with other daily activities as they naturally occur.

In addition to the beepers, participants also carry a small booklet of self-report forms. After each signal, the individual stops to fill out a short report form telling us how he or she felt on a number of standard psychological measures of mood and mental activity. The ESM has already proved useful in the diagnosis and understanding of psychopathologies such as the eating disorders bulimia and anorexia (Johnson & Larson, 1982; Larson & Johnson, 1985), drug and alcohol abuse (Larson, Csikszentmihalyi, & Freeman, 1984), schizophrenia (deVries, Delespaul, Dijkman, Theunissen, 1986), and multiple personality disorder (Lowenstein, Hamilton, Alagana, Reid, & de Vries, 1987).

With the ESM we have found that television viewing typically involves less concentration and alertness--and is experienced more passively--than almost all other daily activities, except when people report "doing nothing" (Csikszentmihalyi & Kubey, 1981; Kubey, 1984; Kubey & Csikszentmihalyi, 1990a). These very basic findings have held up for people from ages 10 to 82 and from people studied in the United States, Canada, West Germany, and Italy.

The main positive experience people report when viewing is relaxation, but the relaxed and passive bodily and mental states associated with viewing may also make it difficult for many people to turn the set off. Furthermore, the passive viewing state doesn't stop once people turn off the set--it can "spill over" into how they feel afterward. Most viewers continue to feel relaxed regardless of how long they view but some report less satisfaction and greater difficulty concentrating the longer they view (Kubey, 1984; Kubey & Csikszentmihalyi, 1990a).

The spillover effect suggests that viewing can inculcate passivity in some viewers, at least in the short term, and it appears that many viewers find it more difficult to turn off the set the longer they view. Activities that might have seemed simple to do at 6:00 pm begin to appear more formidable as the viewer becomes accustomed to spending time passively.[1]

The mood modulating and psychological coping features of television use are evidenced in ESM studies by the fact that people who report feeling significantly worse early in the afternoon are more likely to report later the same day that they watched a lot of television, whereas people who report feeling better in the afternoon are more likely later that day to report a light night of viewing (Kubey, 1984; Kubey & Csikszentmihalyi, 1990b). That people use television to escape negative and unpleasant moods has been shown by others as well (Steiner, 1963; Schallow & McIlwraith, 1986-87). In fact, adults who called themselves "TV addicts" were also significantly more likely than "nonaddicted" viewers to report using television to cope with negative moods such as loneliness, sadness, anxiety, and anger (McIlwraith, 1990).

Television has been found to distract viewers from the negative thinking and rumination that can contribute to unpleasant mood states (Bryant & Zillmann, 1984; McIlwraith & Schallow, 1983; Singer, 1980; Singer & Singer, 1983). And viewing appears to be particularly effective in reducing normal stress and mild tension (Milkman & Sunderwirth, 1987). The distraction function of TV has even been found to reduce patients' reports of pain during dental procedures (Seyrek, Corah, & Pace, 1984).

Self-labelled "addicts" say they are particularly likely to use television when they have nothing to do and to fill open time (McIlwraith, 1990). By comparison with light viewers who watch less than two hours a day, heavy viewers (more than four hours) generally report feeling worse when alone and when in unstructured situations such as waiting in line or when "between" activities (Kubey, 1986).

These findings suggest a possible dependence on the medium for filling the voids that accompany solitude or open time. Sensation-seeking and avoidance of unpleasant thoughts, memories, and emotions have also been theorized to be at play. Eysenck (1978), for example, theorized that extraverts would become dependent on television because of a low tolerance for boredom and a need to increase arousal.

One interpretation is that viewing is simply symptomatic, that is, people who feel anxious when alone or in unstructured situations will gravitate to television in order to feel less anxious and alone and more psychologically structured. Put another way, people use television to distract themselves from their negative ruminations and mood states by letting the medium help structure their attention. In one way, the effect may not be very different from the immediate, positive change in mood observed in an infant when his or her attention is suddenly structured by the sound and sight of a shaking rattle.

In both the United States (Smith, 1986) and Canada (McIlwraith, 1990) researchers have studied self-labelled "TV addicts." In both studies they scored significantly higher than viewers who described themselves as "nonaddicted" on measures of mindwandering, distractibility, boredom, and unfocused daydreaming (from the Poor Attentional Control scale of the Short Imaginal Processes Inventory, a relatively simple paper and pencil psychological measurement instrument). This suggests the possibility of a vicious circle wherein the experience of negative moods and thoughts when alone and when unstructured may interact with the ease with which people can quickly escape these feelings by viewing (Kubey, 1986). As a result of many hours spent viewing television over many years, some people may become unpractised in spending time alone, entertaining themselves, or even in directing their own attention (Harrison & Williams, 1986; Kubey, 1986; Kubey, 1990a; Singer & Singer, 1983).

Many hours spent watching television each day over many years may also decrease tolerance of the self. Conceivably, lonely people who are generally more inclined to use television in the first place may, in turn, become even more uncomfortable when alone and left without the quasi-social experience the

medium offers. As Harrison and Williams (1986) put it, constant use of television "seems unlikely to encourage the ability to tolerate aloneness with one's thoughts and ideas" (p. 125). Heavy viewers do tend to have more time on their hands, typically spending more time alone than light viewers. Among the demographic groups with more heavy viewers in their ranks are the old, the unemployed, and persons recently divorced or separated (Huston, et al., 1992; Kubey, 1980; Kubey & Csikszentmihalyi, 1990a; Smith, 1986; Steiner, 1963; Williams, 1986).

In short, a television viewing habit may be self-perpetuating. Viewing may lead to more viewing and may elicit what has been called "attentional inertia," i.e., "the longer people look at television, the greater is the probability that they will continue to look" (Anderson, Alwitt, Lorch & Levin, 1979, p. 339). Discomfort in noncommitted, or solitary time, can lead to viewing, but after years of such behavior and a thousand hours or more of viewing each year, it seems quite possible that an ingrained television habit could cause some people to feel uncomfortable when left with "nothing to do," or alone, and not viewing (Kubey, 1986).

Not only does television viewing relax people, anecdotal reports indicate that it relaxes them quickly. Within moments of sitting or lying down and pushing a TV set's power button, many viewers report feeling more relaxed than they did before. And because the reinforcement of relaxation occurs quickly, people readily learn to associate viewing with relaxation. The association is then repeatedly reinforced (operant conditioning) because although the quality of other emotional and mental states may deteriorate somewhat, viewers remain relaxed throughout viewing (Kubey, 1984; Kubey & Csikszentmihalyi, 1990a). The habit is readily formed, but can be very difficult to break (Daley, 1977; Winick, 1988).

Let's consider drug use for a possible analogy. "The attribute of a drug that most contributes to its abuse liability is not its ability to produce tolerance or physical dependence but rather its ability to reinforce the drug-taking behaviors" (Swonger & Constantine, 1976, p. 235). This is why both the speed of a drug's effect and how quickly it leaves the body can be critical factors as to whether or not dependence occurs. It's important to note that reinforcement needn't be experienced consciously for it to be effective.

It may prove instructive to consider the induction of relaxation with two common tranquilizers (benzodiazepines), Valium (diazepam) and Tranxene (clorazepate). The time it takes for Valium to take effect and actually reduce anxiety is shorter than for Tranxene. It is in part because of the fast relief from tension provided by Valium that some people are at greater risk of developing a substance dependence with it than with Tranxene. Some physicians prescribe

Tranxene precisely for this reason. In other words, if a person is rewarded with a significant change in mood shortly after taking a substance, it is more likely that the person will use the substance frequently than if it were slower acting.

By the same token, some tranquilizers and anti-depressants whose "half-lives" are very short--the drug leaves the body rapidly relative to other drugs--can also be more habit forming precisely because the patient is more likely to be aware that the drug's effects are wearing off. When the return to feeling badly is rapid, the tendency to turn to the drug for relief once again can be greater than if its effects were to wear off more gradually.

Returning to television's effects, the relaxation effect appears to be most noticeable when the viewer is viewing, not afterward--we found little evidence that people feel better or more relaxed after viewing (Kubey, 1984; Kubey & Csikszentmihalyi, 1990a). Thus, the change in mood that one experiences from the time of viewing to when one suddenly stops viewing may be abrupt, perhaps more comparable to the effect of drugs that wear off quickly than slowly. These principles may be involved in the development of some television dependencies.

Viewing also begets more viewing because one must generally keep watching in order to keep feeling relaxed (Kubey, 1984; Kubey & Csikszentmihalyi, 1990a). A kind of psychological and physical intertia may develop. Although paying the bills might not have seemed difficult immediately after dinner, after two or three hours spent with TV, viewers become accustomed to having their experience effortlessly and passively structured. Getting up and taking on a more demanding task may begin to seem more formidable.[2]

Relative to the other possible means available to bring about distraction and relaxation, television is among the quickest, and certainly among the cheapest. And unlike conversation or games, one does not need anyone else to watch TV. Indeed, in many western, developed nations television is readily and instantly available 24 hours a day. Nowadays, with well over 30 cable channels available to most North American households, one can almost always find something of interest to view. Self-control over one's viewing may have become more of a challenge for many than it was in the not so distant past (Kubey, 1990a).

Applying D.S.M.-IV Substance Dependence Criteria

Using the American Psychiatric Association's (1994) diagnostic and statistical manual (D.S.M.-IV) as a guide for making a diagnosis of television dependence is instructive. Indeed, Dr. Allen J. Frances, who oversaw the most recent revision of

the manual concluded that "Under the broader definition, many kinds of compulsive behavior could be considered addictive, including obsessive sex or compulsive television viewing (italics added)" (Goleman, 1990, p. C8).

D.S.M.-IV lists seven possible criteria for making a diagnosis of substance dependence (pp. 176-181). Three must apply in order to make a diagnosis of "dependence." Diagnosis also involves a time dimension: D.S.M.-IV states that "dependence is defined as a cluster of three or more of the symptoms listed below occurring at any time in the same 12-month period" (p. 176).

In considering these criteria and the relevant literature on television viewing, five of the seven diagnostic criteria would appear to be applicable to television viewing and its concomitant behaviors and effects. The two D.S.M.-IV criteria that I believe do not readily apply to television viewing habits, or are less applicable, are reported first.

Less Applicable Criteria

1. #1 in D.S.M.: "Tolerance, as defined by either of the following: (a) a need for markedly increased amounts of the substance to achieve intoxication or desired effect" or "(b) markedly diminished effect with continued use of the same amount of the substance" (p. 181).

Even here, however, it is noteworthy that we have found that viewers obtain the benefit of relaxation when they are viewing. It is for this reason, among others, that we have hypothesized that viewing often continues for as long as it does. Heavier viewers also enjoy their viewing less on average than do light viewers (Kubey, 1984; Kubey & Csikszentmentmihalyi, 1990a).

2. #7 in D.S.M.: "The substance use is continued despite knowledge of having a persistent or recurrent physical or psychological problem that is likely to have been caused or exacerbated by the substance" (p. 181).

As will be noted below, there may be a small percentage of people for whom this criterion could be applied, but the use of the word "knowledge" demands awareness, and awareness of having a significant physical or psychological problem due to TV use is probably rare. Still, it is almost certainly the case that some individuals recognize that their television viewing habit interferes with their social relations, level of physical exercise, or work habits. In these instances, television, could be seen as exacerbating physical or psychological problems.

There is evidence that children and adolescents who view a great deal of television tend to be more obese than those who view less, (Dietz & Gortmaker, 1985; Taras, Sallis, Patterson, Nader, & Nelson, 1989).[3] There is also new research suggesting that a child's metabolism slows down when watching television. Furthermore, consumption of "junk food" among adult self-labeled TV addicts is higher than for "non-addicts" (McIlwraith, 1990). Some people also report feeling more passive after viewing than before they began, and this passivity may decrease the likelihood that viewers will become involved in more active and potentially rewarding activities (Kubey, 1984; Kubey & Csikszentmihalyi, 1990a; Kubey, 1990a).

Applicable Criteria

Now let us turn to the more relevant diagnostic criteria. As with those above, I have used the exact language of D.S.M.-IV. Each criterion is followed by observations regarding how known television behaviors are related.

1. #3 in D.S.M.: "The substance is often taken in larger amounts or over a longer period than was intended" (p. 181).

It is common for viewers of all ages to report sitting down to watch just one program but to end up watching much more than planned. Thus, this diagnostic criterion may fit many viewers.

In a Gallup Poll, 42% of the 1,241 U.S. adults who were surveyed reported that they "spent too much time watching television" (Gallup & Newport, 1990). Mander (1978) reported that some of the typical viewers he interviewed said things such as, "If a television is on, I just can't keep my eyes off it" and "I don't want to watch as much as I do but I can't help it. It makes me watch it" (p. 158). Reknowned psychologists Milton Rosenberg (1978) and Percy Tannenbaum (1980) have each reported on the strong attraction and hold of television in their own lives (for a discussion see Kubey & Csikszentmihalyi, 1990a, p. 38; also Winick, 1988).

Indeed, the viewing habit is so entrenched in many people that the choice to view is made almost automatically (Kubey, 1990a; Williams & Handford, 1986). Once dinner is done--or the dishes washed--many individuals sit down to watch television regardless of what programs are on.

2. #4 in D.S.M.: "There is a persistent desire or unsuccessful efforts to cut down or control substance use" (p. 181).

As noted above, it is common for people to report that they believe they spend too much time viewing. This belief itself appears to be on the rise. The percentage of adults in the United States who felt that they watched too much television in the late 1970s was 31 percent, 11 points lower than the 1990 figure of 42 percent (Gallup & Newport, 1990).

It is also relatively common for people to report that they feel powerless to stop viewing on their own without abandoning the set altogether, or interfering with it electronically (Daley, 1977). Some people have told me that they have given up their cable subscriptions precisely so that they have less choice and will thereby

watch less. And as stated in D.S.M.-IV, technically one need only have a "persistent desire. . . to cut down or control substance use" for the criterion to apply. Presumably, some of the Gallup Poll respondents would qualify.

3. #5 in D.S.M.: "A great deal of time is spent in activities necessary to obtain the substance. . . , use the substance (e.g., chain smoking), or recover from its effects" (p. 181).

Clearly, with the vast majority of Americans spending two to four hours daily with television, or over half of all their leisure time, a great deal of time is spent using television.

4. #6 in D.S.M.: "Important social, occupational, or recreational activities are given up or reduced because of substance use" (p. 181). "The individual may withdraw from family activities and hobbies in order to use the substance in private" (p. 178).

There is a good deal of research that shows that television can bring family members together, but also that it can reduce familial contact (Bronfenbrenner, 1973; Kubey, 1990b,c; Maccoby, 1951; NIMH, 1982; also Huston & Wright's chapter in this volume). Not a few adults feel neglected by their partners who use television heavily (e.g., so called "football widows"). People have reported to me that they feel that they must regularly compete with television personalities for the attention of family members (Kubey, 1994).

Many people also use television (not to mention other media) purposely to avoid contact with their family. Particularly disturbing is the suggestion that some children may be emotionally, and perhaps even physically, neglected because their caregivers are too engaged in television programs to attend to their needs (Desmond, Singer, & Singer, 1989; Shanahan & Morgan, 1988).

With regard to recreation, some viewers will necessarily engage less in other activities if they are spending three, four, or more hours each day watching television. For example, Williams and Handford (1986) found that adolescents and adults participated much less in community activities and sports when TV was available than when it was not (see Williams' chapter in this volume).

As for occupational activities, there undoubtedly are people who bring work home from the office but do not do as much (or perhaps a lower quality job) than they might because of a television habit that is not under control.

5. #2 in D.S.M.: "withdrawal, as manifested by either of the following: (a) the characteristic withdrawal syndrome for the substance" or "(b) the same (or a closely related) substance is taken to relieve or avoid withdrawal symptoms" (p. 181). Withdrawal includes "a maladaptive behavioral change" and it is noted that "withdrawal symptoms vary greatly" (p. 178).

This criterion is a bit more difficult to apply to television viewing behaviors because we are largely limited to anecdoctal reports and a small number of social science studies of withdrawal-like symptoms.[4] Still, such reports are not hard to find.

Steiner (1963), for example, presents individuals' reports of a variety of behaviors of psychological interest that occurred following the loss of a television set due to a technological malfunction. Here are three examples: "The family walked around like a chicken without a head." "It was terrible. We did nothing--my husband and I talked." "Screamed constantly. Children bothered me and my nerves were on edge. Tried to interest them in games, but impossible. TV is part of them" (p. 99). In her informal interviews, Winn has presented many similar anecdotes (1977, pp. 21-22).

Today, such reports are less frequent, in part because many homes have more than one set. To be completely without a television set today is unusual, which is perhaps still another sign of how entrenched television viewing has become.

Nonetheless, Winick (1988) offers a valuable review of studies of families whose television sets were in repair. He writes:

> The first 3 or 4 days for most persons were the worst, even
>
> in many homes where viewing was minimal and where there were
>
> other ongoing activities. In over half of all the households,
>
> during these first few days of loss, the regular routines
>
> were disrupted, family members had difficulties in dealing
>
> with the newly available time, anxiety and aggressions were
>
> expressed, and established expectations for the behavior of

> other household members were not met. People living alone tended to be bored and irritated. Over four-fifths of the respondents reported moderate to severe dislocations during this period. . . . The fifth to eighth day represented, in many cases, some form of readjustment to the new situation. By the second week, a move toward adaptation to the situation was common. (p. 221-222)

Daley (1978) offers a similar account of his family's difficulties stopping viewing, as well as how easily the habit reformed itself after six months of abstinence (pp. 147-148).

A number of newspapers, in the United States and abroad, have offered money as an incentive to get individuals or families to stop viewing television for some limited period of time, often a week or a month (reviewed in Condry, 1989; Kubey & Csikszentmihalyi, 1990a; Winick, 1988). Increased tension among family members has been described and many families could not complete the period of abstinence agreed upon (Ryan, 1974). In a German study it was reported that there was increased verbal and physical fighting after viewing stopped.

If a family has been spending the lion's share of its free time together over a period of years watching television--as is the case for many families today--it may take some days or weeks, or longer, for the family to reconfigure itself around a new set of activities. Particularly because watching television is so easy to do, family members may have become less imaginative about other ways to spend their time together.

In sum, although there is not a great deal of hard empirical evidence, it does seem likely that some individuals--and perhaps entire families--go through something akin to withdrawal if television suddenly disappears. Furthermore, in congruence with section "b" of this criterion, other enjoyable leisure and media activities are typically used to supplant TV viewing for those trying to give it up. It is also interesting to note that television is sometimes used by individuals seeking to withdraw from drugs such as heroin, cocaine, and alcohol as a less

harmful means of escape and distraction (personal communication, Dyznskyi, Oct. 20, 1994; Kubey & Csikszentmihalyi, 1990a, p. 184-5).

As can be seen, when DSMIV's diagnostic criteria are applied to television viewing habits a diagnosis of substance dependence can be made for many people. The key missing feature, it would seem, is that we are not accustomed to thinking of television as a substance: it is neither a liquid (alcohol), nor a solid (a pill). Still, the viewing of television does, in some way, involve taking something into the body, even if that something is only light and sound, and even if no residue of the substance can be later found in the body. Though it may not be a substance, millions of people nonetheless believe that they, or people they know, need to gain better control of their use of the medium. It is to that end that we next turn our attention.

Controlling the Television Habit

Although methods to diagnose television dependence have not been established, there are ways that individuals or families can achieve better control of their viewing habits. A few suggestions follow, but I must note that these are commonsense measures and although some have been tried by individuals, none, to my knowledge, has been put to controlled, empirical test. One exception is the introduction of a behavioral approach employing a "token economy" wherein children earn tokens by engaging in non-TV activities that parents wish to encourage. The tokens can then be used to "buy" television time. In one early test, only very limited success in curbing heavy television use among children was achieved (Jason, 1987).

But such an approach raises a new problem. Does making television the reward--or removal of TV, the punishment--simply increase the general sense among children and adults that television is among the most preferred of activities?

As with other habits and dependencies that people wish to change, it may be most helpful initially for people simply to recognize how much they are viewing, and how frequently or infrequently television provides the rewards and benefits they want to obtain. One way to do this is to keep a diary for a week of all programs viewed. For many, adding up the hours at the end of the week can be quite sobering. Some people may also be assisted by rating the quality of their experience with TV, or how much they enjoyed or learned from various programs. Again, at the end of a week, such a diary may prove illuminating.

Taking stock of how much TV we watch may be especially striking when we consider that North Americans have an average of 5.5 hours of free time each day (Robinson, 1989) and typically view TV for more than three hours each day. In short, for most people, more than half of all free time is spent watching televisions.

Or we could do a little arithmetic. If a person lives to 75 and typically sleeps about eight hours a night, he or she will have lived 50 waking years. If viewing television consumes four hours each day, or 25% of each 16 hour waking day, one can then conclude that 12.5 of the person's 50 waking years will be spent watching television. This may be how some people wish to spend their time, but few people have assessed their viewing habit in these terms.

But it is rarely enough merely to raise awareness of how much we are viewing. It is also important to exercise will power and to find other activities to supplant the time with television.

With regard to will, it may not really be quite as difficult as it sometimes seems simply to turn off the set. Viewers often know that a particular program or movie-of-the-week is not very good within the first few minutes, but instead of switching off the set, they view for the full two hours--perhaps with some minor interest in whether it was the yogurt store manager or the aerobics instructor who committed the murder--and then feel cheated and contemptuous of themselves for having "wasted" their time.

We may be able to effectively reduce our viewing by becoming more cognizant early on that sometimes we are not really missing so much after all. Five or ten minutes after turning off an only somewhat gripping mystery story, we rarely care any longer what was going to happen.[5]

As for supplanting television viewing with other activities, generating a list of enjoyable and/or constructive activities that can be done in or around the home may prove helpful. The list might be posted on the refrigerator, or even on the TV set. Using such a list of enjoyable leisure activities has proved effective for patients suffering from mild depressive episodes (Lewinsohn, 1974).

Instead of reflexively going to the television as soon as dinner is done, those interested in reducing their viewing can go to the list to help remind themselves of other activities--calling a friend, writing a letter, reading, playing cards or a board-game, paying the bills, working on a computer, polishing shoes--that might be done instead of watching TV. The idea is to break the repetitive, habitual, and self-perpetuating nature of the habit.

Of course, it must be noted that television producers are masters at finding clever ways to get people to view longer than they had originally intended. New stories are "teased" in the preceding hours with titillating suggestions that spike viewer interest and increase the possibility that we will view beyond the single program that we may have planned to watch.

Using a television guide can also be helpful in cutting down on TV viewing. We can choose which programs to watch ahead of time and then watch only those programs preselected, slotting other activities between the shows we don't want to miss. A VCR can also be effective in time-shifting. (Actually, many viewers never return to some of the material they've taped, which is itself an indication that viewing those programs was not so critical after all.) The VCR also permits

viewers to speed-search through unwanted material. One viewer who likes sketch comedy reports that by taping his favorite comedy program, "Saturday Night Live", and by then eliminating the opening monologue, the musical guests, all of the ads, and the sketches that he can tell aren't gelling from their inception, he can reduce what was once a ninety minute experience to one that takes as little as 20 minutes.

Or for a small charge ($8-12), anyone can set up their own mini-film festival at home, renting films by a favorite director, thereby making the experience a more personally active one by stopping and studying particular scenes. Such a use of the VCR might actually increase one's total time with TV, while making a much more discriminating and rewarding viewing experience possible.

Altering viewing habits can be particularly difficult in families because, as with so many other features of family life, television viewing is often systemic in nature. As with couples who smoke and wish to quit, reduction of television viewing is likely to go more smoothly if family members work together and decide jointly to get their habit under control.

One frequent choice of those wishing to reduce their viewing is to go "cold turkey." Indeed, the fact that many people choose this approach is another way in which television dependency is similar to substance dependencies. Quite a few people have told me that if they own a television, viewing soon begins to dominate family life and that the only way they can get things under control is to remove the set altogether, or to cancel their cable subscription.

Daley's (1978, p. 147-148) experiences in trying to curtail his family's viewing may prove interesting for some readers. There is also a book on the subject, Breaking the TV Habit by Joan Wilkins (1982). And there are now also special electronic switches that can be attached to a television set permitting only those members of the household who have a code number or combination to "unlock" the set. Some people consider this to be an extreme approach. Others find it an easy way for parents to control their children's viewing.

Nowadays, many new television sets include design features that make it possible to block out particular channels. Recently, members of the U.S. Congress and Senate have advocated the development of a "V chip", a microchip built-in to new television sets, that would permit caregivers to block the reception of any program with a high violence rating. Of course, such a development is contingent on the television industry rating such programs and encoding them with the appropriate readable violence code.

Parental Responsibility, Children, and Violence

In making decisions and judgments about what is in the best interests of a child, and especially about children and media, it is critical to remember that every child is simultaneously unique and changing--often rapidly. Furthermore, every medium is different, and TV shows, videogames, movies, and books offer an enormous range in content, form, and style. Still, there are some similarities across most children at different ages and across media and different programs, games, and stories. So while idiosyncratic judgments with regard to each child are critical, there are also some general observations that can be made.

Today, we probably have more children at risk for developing a dependency on television than ever before. I have observed, as have others (James Hutchinson, M.D., personal communication, April, 1994), that a substantial number of parents do not believe that they can, or should, control their children's viewing. Some believe that there is no potential harm in anything that a child might watch. They believe that children can negotiate the television text on their own.

Many parents have reported to me that it is beyond their ability to limit their children's viewing. None of us wants to be a dictator, but in my opinion parents should not back off making decisions with regard to what their children may view on television. If parents are not in reasonable control of their households, and their children and their activities, we might conclude that the socialization process is, at best, undergoing change. At worst, one might expect all manner of social problems to ensue (Kubey, 1994).

Parental monitoring of children's viewing is important because I believe that there are certain kinds of programs and material that are unsuitable for some children, young children in particular. I am especially concerned about "reality programming" and news programs that often engender unnecessary and substantial fear. Indeed, I am as concerned about the fear-induction effects of violence as I am about the potential modeling effects (Kubey, 1987).

Children sometimes need to be supervised in their use of television, videogames, computers, and other media, just as they sometimes need supervision when carving a pumpkin, walking down stairs, or riding a bicycle on the street. The idea that a great many different children's activities need to be monitored from time to time but somehow only media activities can be completely unsupervised is ludicrous to me, yet some would seem to hold to such a position

As with any activity, too much of the same thing may not always be best, especially for a developing child. If other activities and experiences are not occurring with the frequency that a caregiver or parent deems to be appropriate because of a television or videogame habit, then, in my opinion it is the right and responsibility of the caregiver to limit such activities. Children ought to get outside now and then, they ought to sleep a reasonable number of hours, and when they're old enough they ought to read and do their homework.

Just as we wouldn't permit children to eat all the candy they collect on Halloween, or permit a child to read at night with poor light until his or her eyes are strained, so too must caregivers make similar judgments about the use of television and videogames.

Simultaneously, we must also encourage children to develop their own internal self-monitoring abilities so that they can increasingly make these determinations for themselves.

Much of what I have just written will strike many readers as obvious. I have made these points for two reasons. The first is that some media analysts, most often those allied with the "cultural studies" approach to media studies--an approach that has made many important contributions to our understanding of how audiences experience and understand the media--believe that parents ought never to censor or prohibit a child from partaking in any medium or story that they might wish to experience. For some, it is a presumptuous and arrogant act for a parent to intrude on or censor the media experience of a child.

For theoretical, political, and pedagogical reasons, some theorists have concluded that the media are a different kind of stimulus or phenomenon from things such as fire, "dangerous strangers", candy, and unguarded cliffs and stairs. Television shows, books, and videogames are all cultural products and can be actively "negotiated" by audience members. Notably, much of the research on such negotiations, or "readings," of media texts has been done with adolescents and adults, not children.

Developmental psychologists have been criticized by some cultural studies advocates for being too proscriptive in their views about appropriate media content for children (Seiter, in press). There are leading cultural studies scholars who seem to suggest that the only media effect with which we need to concern ourselves is what these theorists see as the negative effect of developmental psychologists and other "authorities" pontificating to the culture-at-large through the media and causing "moral panics" about the potential harms of media (Buckingham & Sefton-Green, in press; Seiter, in press).

My second reason for emphasizing the need for caregivers to supervise children's media use is that many parents report that they were not restricted in their own viewing when they were young and yet they often watched a lot of violence on television. Insofar as they believe <u>they</u> were not psychologically harmed in any way, they now believe that they can safely permit their children to watch whatever they like.

When confronted by the idea that contemporary adults were not at all harmed by the violence they viewed as children, and that thus there is no need to monitor a contemporary child's viewing, I would suggest consideration be given to the five ideas that follow.

First, perhaps such parents have been affected but not aware of the effect(s)--perhaps many of us have become desensitized to violence in the media in ways that we do not even recognize.

Second, many of today's movies that later find their way on to television are far more graphically violent than most anything experienced in film or television 15 or 20 years ago. People's bodies and heads are sometimes blown apart, in slow motion, and in convincing and disturbing detail (Kubey, 1987). Women in some movies are pursued by mass-murderers with the camera taking the point-of-view of the stalker, helping to enhance the sense that the viewer is doing the stalking.

Third, increasingly of late, television news programs show much more than they once did of the graphic results of violence upon humans. Young children are particularly likely to be frightened by this kind of material and older children and adolescents fear that it may happen to them (see Joanne Cantor's chapter). The recent media feeding frenzies over the abduction and killing of Polly Klass in California and over Susan Smith's murder of her two young sons in South Carolina have upset tens of thousands of children, most unnecessarily in my view. In fact, quite a few adults tell me that they are increasingly being disturbed and frightened by the news they see on television.

Fourth, although many television programs and videogames are both fun and educational, there also are many other things that we want our children to do. Sometimes television viewing and videogame play gets in the way. Less structured activities also may offer children more opportunities to develop their imagination and creativity than the often structured nature of media activities.

Fifth, today no one who cares for children and who monitors their TV viewing can be assured that the child won't suddenly be confronted with a message that is frightening and/or inappropriate. Indeed, polls have shown that more parents now than in the past feel compelled to suddenly turn the set off when some frightening or problematic event is being presented. Nowadays, many parents make sure that the remote control is nearby whenever they view with their children.

My older son was 6 when he first watched The Wizard of Oz on TV, a favorite movie of mine that my wife and I concluded was now appropriate for his viewing, even though it contains frightening scenes of flying monkeys and witches melting. During one commercial break, at around 7:30 pm, CBS promoted a story to be shown a few days hence on its popular program "60 Minutes". The ad included both a voiceover and words on screen promoting a story entitled "Kids Killing Kids?" The promotion was dominated by news footage of a child being

rushed into a hospital emergency room on a stretcher, wrapped in gauze and bleeding. My son was frightened by what he had seen and heard. He wanted to know whether or not kids really killed kids. We talked about it for a while, even though it meant missing Dorothy's initial meeting with the Cowardly Lion.

I am not recommending that children be constantly supervised, only that for many children today, television's current offerings demand more vigilance on the part of parents than was the case 30 or 40 years ago. And I believe that we need to become more savvy about violence in the media and the different forms it takes as I believe that some forms of violence are much more problematic for children than others, an issue to which I turn next.

Media Violence Versus Fairytale Violence

Some parents report to me that they are worried that their child has developed an obsession with a particular videotape and worry that there's something awry. Although I know of no research on the subject, it's my strong hunch that this is a fairly normal phenomenon--at least in statistical terms owing to the number of parents who inquire about it--but also because children have long had favorite storybooks or fairytales that they want read to them over and over again.

In the recent past, few parents worried much if their toddler carried a worn copy of Sleeping Beauty everywhere she or he went. But the sight of a young child carrying about the VHS version of Aladdin seems to some like another thing altogether. I'm not sure that it is.

The late Bruno Bettelheim (1976) had it right, I think, in claiming in his book, The Uses of Enchantment, that fairy tales are often used by children to deal with common anxieties and concerns. By having the same story read over and over, the child gains a kind of psychological mastery over material that may have been initially upsetting.

Just as we adults will try to gain a similar mastery over difficult material by rereading the same gutwrenching paragraph in a novel where the protagonist is suddenly attacked, or killed, or finds out that she is really the child of someone else, so too will some children take comfort in hearing the same story over and over again.

To be sure, if the child wants to watch wrestling every night, this is a different matter and there are different questions at play because in this case the violence is graphic, realistic, and in the here and now. The great thing about fairy tales, and

many other children's stories, is that the story almost invariably occurs "long, long ago and far, far away."

Unlike TV news and a great deal of other televised content which gives every appearance of being immediate, real, and urgent, the early exposition in children's fairytales typically distances the child from the potentially threatening events of the story in both time and place. This is the genius of such stories and Bettelheim hypothesized that they had evolved this way and had been handed down through the ages precisely because of these characteristics. The other reason that they have survived is that they are thought to deal effectively with what Bettelheim and many other child psychologists believe to be the common problems and fears of children concerning abandonment, sibling rivalry, self-control, and identity: "am I really their child, was I adopted," and so on.

When the fairytale is being read to the child, the child is also physically close to the parent or caregiver, often sitting on a lap. The caregiver is able to sensitively monitor the child's reactions and tell whether the story is too much. If the child's body suddenly stiffens, the reader knows it. And of course, by being physically close to a parent, or other familiar caregiver, the young child is, almost by definition, in a secure, safe, and familiar setting when the fairy tale is being read. In marked contrast, all too many frightening stories on television are experienced by the child when alone or when only with other children, hence there is little or no adult monitoring of both content and reaction.

As noted, much contemporary television material is seemingly "live," as with news and "reality" programs that purport to be real, although they are often re-enactments and always carefully, and often intentionally, edited for optimal impact and fear induction. Two professional wrestlers committing mayhem on one another gives every appearance to the child of being real, graphic, frightening, and occurring in the here and now. It is a far different story from "Hansel and Gretel," a fairytale often cited for its particularly violent elements, albeit ones that are set far enough away, and long enough ago, and in a fanciful enough manner that most children can readily handle the story.

I might add that I have also been asked whether it is wise for children to watch themselves over and over again on a videotape. One parent asked whether it was OK for his young daughter to watch herself have a bath each night on videotape. This kind of question is very difficult to answer. I would be somewhat concerned about overfeeding the child's healthy narcissism and would probably limit the viewing of such a tape if it were my own child, especially if the child rarely took a real bath, but as with so many judgments that a parent must make, I leave this

one for the individual parent to assess with regard to their best sense of their child's vulnerabilities and strengths.

Viewing with Children

Experts on children and media generally advise parents to frequently watch TV with their children to help them understand what they are viewing and for children to learn from their parent's reactions. If a parent sees someone, real or fictional, on television doing something they find unacceptable there is nothing wrong, in my opinion, with expressing disapproval. Or, perhaps better, one might ask what the child thinks or feels about what the person did. Just as parents let their children know on occasion that the child's behavior needs improvement, or that some adult or child in real life is doing something wrong, so too may they want to point these things out on television.

Just as importantly, we should also point to behaviors that we believe are exemplary and deserving of replication. All too often, we tell children what we don't want them to do rather than what we want them to do. Positive reinforcement is generally more effective than punishment.

This is not to say that we should overburden children with constant instructive talk during television viewing. That would be a mistake, too. I am only arguing that parents can use television as a learning tool in the home.

Parents also need to be wary of severely criticizing certain programs that their children enjoy. Clearly, as noted above, if you believe a program is not appropriate for your child you have the right to turn it off or make a comment. If, however, your child loves, say, Mr. Rogers' Neighborhood or Barney, and even if you find these programs childish and occasionally silly, I recommend that you not show disrespect for your child's developing tastes and predilections by laughing at or deriding his or her favorite program. Recognize that these programs are designed for very young children, not for you! That's why they seem childish. Every child's program cannot be Sesame Street, a program that often appeals to both adults and children. I'll have more to say about more formal media education at the conclusion of this chapter, but let us first turn our attention to video and computer games.

Videogames and Computer Games

Today, media psychologists are asked as often about computer and videogames as about children's television habits. And with videogames the term addiction comes up even more often. It is not difficult to apply many of the same explanations offered earlier regarding how television dependence may develop to explain in part the newer phenomenon of people's affinity for these games. As

with television, the games offer the player a kind of escape, and as with television, players learn quickly that they momentarily feel better when playing computer games, hence a kind of psychological reinforcement develops.

But computer and videogames also have particular characteristics that make children and adults especially likely to report that they are "addicted" to them. There is the general challenge posed by the game and the wish to overcome it and succeed, and there is the critical characteristic that the games are designed to minutely increase in challenge and difficulty along with the increasing ability of the player.

In being programmed to constantly challenge players at their current ability, video and computer games offer a nearly perfect level of difficulty for the player who enjoys such challenges. Many of us are never quite as exhilarated as when we have harnessed our abilities and set them against a difficult but surmountable challenge (Csikzsentmihalyi ,1990). Video and computer games can offer children and adults such a challenge.

Indeed, as we have written elsewhere, computer and videogames offer all the essential features that we know are likely to result in a "flow" experience of intense, enjoyable, high concentration and involvement: closely matched skills and challenges in the activity and rapid feedback regarding one's performance (Kubey & Csikszentmihalyi, 1990a). The games give the player nearly instantaneous feedback as to whether the last activity (shot, jump, run, or whatever) was successful. In computer play, as with sports, musical performance, and many hobbies, the feedback is quick and clear, and insofar as it is often occurring at the height of one's own personal level of performance, it's no wonder the games are extremely engaging and, perhaps, "addictive."

It should be noted that there have been a few cases reported in the news in recent years in North America and in Britain indicating that a very small number of children have exhibited symptoms of epilepsy in response to the flashing colors and other stimuli in the games. Videogame manufacturers have not denied that this can occur and some have warned adults to be on the lookout for such problems.

Through watching my own son and his friends play video and computer games I have observed that children exhibit different levels of eye and mental fatigue in response to different games. My son can play some games for 45 minutes straight with no evidence of such symptoms. But in other very intense games I have observed that after only 10 or 15 minutes his eyes begin to blink rapidly and

mental fatigue seems to set in. Indeed, I have my own variable visual (and auditory) tolerance for different games.

Parents have reported to me that long hours of uninterrupted videogame play have occasionally left a child feeling nauseated or listless. Before I learned more about such effects, I once let my son play too long and after about 90 minutes he was complaining of slight nausea and fatigue. Even if you love videogames and encourage children to play them, it might sometimes be the case, as with other activities, that too much of a good thing is not so good.

How can you limit children's videogame or computer play? One obvious and effective technique is to tell a child, and his or her friends, that they may only play for some specific period. This might be 20 to 40 minutes depending on the game, who the kids are, the time of day, the weather outside, how much mental and physical energy they have left, and, yes, perhaps even whether you can stand to hear the Super Mario Brothers music one more time before losing your sanity.

To enforce the limit, I have found it very effective to use a kitchen timer and to set it to the time I have deemed appropriate. I do not generally advise putting the ticking timer right on top of the TV or computer, lest we make too much of it. I leave mine in the kitchen near where my son and his buddies play their games and when it rings, they know to stop. And they do!

Were I to suddenly come in and tell them that 20 minutes were up, they would try to negotiate with me for more time. The timer seems to externalize responsibility--I happen to think in an acceptable way in this instance--and the children believe in its authority. Can I get the behavior I seek with my own voice? I can. But it is by my authority that the timer is set in the first place and it generally works better.

Dependence on Pornography

We have not yet paid attention to a type of media content that has also often been claimed to be "addictive," one that has always been controversial and will surely remain so in the years ahead. Indeed, with the advent of interactive pornography available via CD-ROM, the debate over the value or harm of pornography is sure to heat up once again. In the concluding pages of this chapter, I will review some of the alleged effects of traditional pornography available via magazines and video, their alleged potential for habit formation, and will then turn my attention to new concerns that I believe are raised by the delivery of interactive erotica.

Research and reporting on pornography's effects has long been politicized and thus it can be especially difficult to weigh the validity and veracity of some contributions to this literature. And as with other media effects debates, it is very difficult to disentangle cause from effect. Still, a number of researchers and clinicians report both negative effects and evidence for dependence, or in their words, addiction, with regard to the use of pornography. Indeed, as will be seen, some of these negative effects are thought to be inevitably intertwined with "pornography addiction."

There is the frequent claim, for example, that large private pornography collections are often found by authorities in the residences of persons arrested for sexual crimes (Cline, 1994; Reed, 1994), especially pedophiles (Lanning & Burgess, 1989). There is also evidence indicating that some rapists and child molesters use sexually explicit materials both before and during some sexual assaults (Marshall, 1988). At a minimum we must say that a relationship between the frequent use of pornography and problematic sexual disorders exists for some individuals. Whether the pornography is merely symptomatic of the disorder, or plays a causal role, is much more difficult to establish.

Still, for some, there is little doubt that both negative effects and pornography addiction do indeed occur. Reed (1994), a practising psychiatrist, is explicit in his presentation of specific criteria that he believes would constitute an addiction to pornography (pp. 251-252). He notes that the D.S.M. itself recognizes that many paraphilias (compulsive sexual deviances) frequently involve the use and collection of pornography. Reed lists 13 paraphilias and how they are related to the use of pornography.

Cline (1994), a clinical psychologist who has treated hundreds of people with sexual disorders, describes a four-step process in the involvement of his patients with pornography. First described is an "addiction effect" wherein the person comes back repeatedly for more material because it provides "a very powerful sexual stimulant or aphrodisiac effect followed by sexual release most often through masturbation" (p. 233).

Cline goes on to describe an "escalation effect" in which there is an "increasing need for more of the stimulant to get the same effect" obtained initially (p. 233). Third, he observes "desensitization" in which things that might have once seemed shocking become less so and are thereby legitimized. Fourth, Cline claims that there is an "increasing tendency to act out sexually the behaviors viewed in the pornography" (p. 234).

A number of psychological and physiological mechanisms have been posited for how pornography addiction might develop. Among the most common is that sexual gratification is a powerful reinforcer (Lyons, Anderson, & Larson, 1994). This is the "addiction effect" described above by Cline wherein learning is made all the more powerful by virtue of the sexual release that attends pornography's use. Here, Cline draws on McGaugh's (1983) memory research that suggests that experiences that co-occur with high emotional arousal may be better remembered. Reed (1994) suggests the possibility that some such learning might be occurring on the biological as well as the psychological level when he points out that "the neurotransmitters that are activated by pornography use may trigger similar neural pathways as cocaine or heroin" (p. 265).

I earlier applied an operant conditioning approach to the role relaxation plays in the development of the television viewing habit. It certainly makes sense that the pleasure accompanying orgasm may increase the potential for a habit to develop for some users of pornography, especially those who have few or no other outlets for sexual gratification. The early literature on sexual behavior points to strong associations developing between the particular ways in which first or early sexual gratifications were obtained and the object or means of that gratification (Ellis, 1906, 1936). If one's primary means of sexual gratification at an early and impressionable age is via a particular technique or a particular object of desire, then there may be a kind of fixation on that technique and/or object.

Cline argues further that if sexual problems can be alleviated in sex-counseling clinics with the use of sexual films, books, and videos as tools in therapy, then one must suspect that exposure to pornography can also have an effect. For Cline, and for many other observers, pornography provides powerful occasions in which modeling and imitative learning can occur.

Zillmann and Bryant (1988b) have made an important experimental contribution to the addiction hypothesis in showing that prolonged exposure to pornography can decrease some people's level of satisfaction with their partners and with the quality of their sex lives. Zillmann (1994) has gone on to propose that in many instances, "initial sexual dissatisfaction drives exposure to pornography" and a vicious circle then ensues. With consumption of pornography, the dissatisfaction grows stronger and draws the person into further consumption. For Zillmann, consumption of pornography invites comparisons which help drive dissatisfaction: "consumers compare what they have, by way of sexual intimacy, with what pornography tells them they might and should have" (p. 210).

I have similarly proposed that the frequent exposure of highly romanticized and sexually arousing material on television, and elsewhere in our mainstream contemporary media, may fuel similar dissatisfactions and a propensity toward invidious comparison in a much broader spectrum of the population than was previously the case (Kubey, 1994; see also Bryant & Rockwell, 1994).

Other effects of pornography, aside from dependence--or addiction--and modeling have been studied and merit comment. Weaver (1994) has reviewed evidence indicating that exposure to pornography increases "sexual callousness" toward women. This callousness includes increased aggressivity toward women as well as a desensitization to the injury that violence or sexual assault causes.

Zillmann and Bryant have been interested in the degree to which "family values" may be on a collision course with pornography, and they again offer experimental evidence. These studies (see Zillmann, 1994 for a review) typically expose an experimental group of adults to pornographic videos over a number of weeks (often 6). Then, a week after the exposure, the groups' answers to survey questions are compared with those of a control group that was not exposed.[6]

The researchers' studies show that experimentally produced prolonged exposure to pornography results in a greater acceptance of both male and female promiscuity, and that as promiscuity is presumed to be more natural, adults also begin to assume that faithfulness among sexual intimates is less common than is assumed by those in the control group. The participants subjects also report being more accepting of nonexclusive sexual intimacy for <u>themselves</u>.

In one study, when asked "Do you feel that the institution of marriage is essential to the well-functioning of society?", 60% of the control group agreed, but this was true for 38.8% of the group exposed to pornography. Zillmann and Bryant (1988a) have also reported that exposure to pornography reduced the desire of their research participants, male and female, student and nonstudent, to want to have children. Zillmann (1994) suggests that this finding may:

> Support the contention that prolonged consumption of
>
> pornography makes having children and raising a family appear
>
> an unnecessary inconvenience--presumably because pornography
>
> continually projects easy access to superlative sexual
>
> gratification, these gratifications being attainable without

emotional investment, without social confinements, without

economic obligations, and without sacrifices of time and

effort. (p. 208)

In this regard, the immediate gratification that commercial television so frequently offers and promotes may in its own right be in conflict with the values of constancy and commitment so necessary to the healthy functioning of family life (Kubey, 1994).

It is important to point out that the VCR has led to an explosion in pornographic videos and that such materials are today far more accessible to people, including children and adolescents, than they have ever been before. And, if a pornography habit--or addiction--can indeed develop, it would seem more likely to develop if pornographic materials can be easily obtained and if the use of such materials is socially sanctioned.

It is not difficult to imagine how young people can come into contact with such materials. Even if a 12 year old boy cannot rent a pornographic video on his own, it may well be that his friend's older brother who is 16, but looks 18, can. And, of course, an increasing number of parents own such materials and keep them in their homes. Pornography is also now available via television cable systems.

Although I by no means frown on all uses of pornography, I do believe that it is not to be recommended for certain audiences. Again, I believe it is unwise for a 12 year old boy to experience hard core pornography, especially as it is likely to be one of the child's very first exposures to sexual intimacy and because as already noted, early intense sexual experiences may constitute particularly powerful early occasions for learning and impression formation.

Zillmann and Bryant's work suggests that such materials might also prove detrimental in the formation of a boy's impressions of female sexuality insofar as most such pornography depicts women as sexual objects whose primary goal is to serve the sexual desires of men. An occasional viewing of such materials by a pubescent or prepubescent boy might not have any deleterious or strong effects. But when we recognize that some boys may view such material every few days--or even more often, and if we add that the boy typically seeks and obtains sexual release upon viewing, I believe we raise the possibility that not only may a strong habit develop, but it may be one that we would not want to encourage, especially when we consider that this same boy is likely to begin having his first real sexual experiences with a girl or young woman in the not so distant future.

These concerns are multiplied when we consider the current advent of interactive, CD-ROM driven erotica. Typical of this new technological innovation are products such as "Virtual Valerie." They present movie quality images of young women who take their clothes off at the command of the viewer. Women on the screen can also be programmed at the touch of a button to say arousing things to the viewer, as well as to perform a variety of sexually suggestive acts before the viewer's eyes. The CD-ROM technology and software for interactive erotica are developing rapidly and this is already believed to be one of the leading applications of CD-ROM, interactive media.

Let's return again to our 12 year old boy. Imagine that he has obtained copies of a couple of interactive video products such as Virtual Valerie. Imagine that he interacts with them while masturbating a number of times a week, typically spending 10 to 30 minutes in each encounter, off and on for three years before, at age 15, he goes on his first date with a real young woman his same age. Might his expectations of how she will act and how he should act if they become intimate have been altered by the many hours spent with his interactive pornography disks?

As yet we do not know the answer. Conceivably there may be salutary benefits. Perhaps this form of pornography will help some people fantasize and obtain sexual release in such a way that there is a reduction in the commission of sexual crimes (see Linz and Malamuth, 1993, for a review of research on the positive cathartic effect of traditional pornography). Still, combining common sense with what we know about the learning of sexual behavior, I must say that I am concerned about young people, as well as some adults, overusing, and perhaps becoming dependent on, such a form of entertainment.

On Media Regulation and Media Education

The growth in media in this century has been nothing short of phenomenal. The electronic media--from radio and television to video games and computers--have revolutionized the ways in which we are entertained and receive information and how we perceive the world around us. The development of these media technologies and media content can be partly credited to the economic and political freedoms that we enjoy. It is hard to imagine so much material being developed or new technologies being invented and proliferating so quickly were it not for free markets and the profit motive.

At the same time, unbridled development in the media industries, as with many industries, can also bring problems. Just as unregulated manufacturing industries

can pollute the land, air, and water that sustain life, so too can irresponsible, profit-driven media production pollute the public mind and experience of a culture. The commercialization of news may foster competition and the quick dissemination of breaking stories, but it may also lead to sensationalism and lack of care in the preparation of information for public consumption.

The commercialization of entertainment has brought about ever more media materials, many of them charming, educational, and inspiring. But much material of questionable value is also available. Increasingly, it seems, many citizens have come to the conclusion that the media are making available ideas and practices that are at odds with the very values that they would wish the society to uphold. To my mind, more often than not, such media excesses are both initiated and encouraged by the commercial underpinning of media production and the delivery systems we have adopted as a society. This is not easily changed.

The Federal Communications Commission (FCC) in the United States could surely threaten license revocation with greater frequency than it currently does (almost never) and actually revoke licenses from time to time when stations and networks are clearly not fulfilling their public service requirements. I also think it is appropriate for the public, through its local, state, and federal governments, to put pressure on the media industries to operate in the public interest. Consumer boycotts are a sensible means of advocacy and public protest. After all, the founding of the United States was marked by a consumer boycott of tea.

More government funding for public broadcasting is also called for. Britain and Canada invest 5 to 10 times as much money per capita into their public broadcasting systems than does the United States.

Public broadcasting is especially important for the less economically advantaged in our society, particularly children. Most poor households do not have cable, and thus, virtually the only remaining television programming available for such children in the United States that is not governed by the whims of the marketplace is PBS.

Ideally, media producers would self-govern as it is very problematic to engage in official censorship. But because I do not expect Hollywood to reform itself along the lines that I might like, and because I do not expect governments to intervene substantially, nor am I entirely comfortable with them doing so, I have long since come to the conclusion that one of the best possible responses to the media environment in which we now live is media education.

Adults need to help children become more savvy about the media, more media literate if you will, and I believe we need to develop formal media education in the schools. Tens of millions of children spend upwards of four hours daily in contact with the electronic media, and they will likely continue to do so as adults. Much of our political and commercial discourse occurs in the media. That most of our schools provide no formal training in how these media are produced, and in how they communicate and persuade, is shortsighted at best.

Let me be clear that I do not advocate an end to traditional training in literature and the print media. Far from it. Rather, I advocate educational inclusion of the other media that occupy our attention and thoughts in the modern world (Kubey, 1991). The idea that we should not teach about film of television because they are somehow not in the same league with great literature is to my mind an antiquated and demonstrably false notion. Film and television such as Welles' Citizen Kane and Capra's It's a Wonderful Life or Burns' The Civil War are as

evocative, as artfully told, and as quintessentially "American" as any of the print literature that is often deemed appropriate for English (or History) classes.

The prime reason that students don't study these sorts of film and television stories is because our educational system hasn't yet adjusted to modern modes of storytelling, because teachers have not been trained to teach about film and television, and because our society assumes that popular entertainment is not worthy of study. Critics who say that we should not use popular, commercial materials in the contemporary classroom may not know that many of both Twain's and Dickens' original works were first read in the popular magazines and newspapers of their day.

Formal media education is rapidly developing in many countries around the world. Australia recently mandated media education for virtually 100% of its students from Kindergarten to grade 12. Since 1987, Ontario, with roughly one-third of Canada's population, has mandated media literacy instruction in English classes for all students from grades 7-12. In 1995 in England, it is expected that some 20,000-30,000 students will take one of their advanced level examinations for university admission in media studies. Scotland and South Africa can also boast substantially more formal development of media education than can the United States, leaving the very country that produces more of the world's media product than any other as the least developed media educator in the English-speaking world. How this has come about is another subject (Kubey, in press, b). Suffice it to say that much work needs to be done.

Notes

1. This is not to say that viewers don't also view television in a more active frame of mind, from time to time, but our research shows that viewers generally report feeling passive when viewing. For most viewers, active viewing moments are infrequent by comparison (Csikszentmihalyi & Kubey, 1981; Kubey, in press, a).

There are some researchers who conclude that viewers, especially young children, are not passive when they view and that children do not adopt the "zombie-like" expression often described by parents and depicted in comics. However, much of this research is done in laboratories where people may well engage in a more active form of viewing than in the comfort and familiarity of their own homes. The experimental viewer often anticipates that they will be tested after viewing, and they often are. The same problem of distorting results can occur when people are asked by researchers to carefully describe what a

particular program means to them, or why they watch it. As pointed out by Ang (1985) and others, it is possible that in both experimental and field research, the phenomenon under study--audience activity or a retrospective assessment of one's thinking processes during viewing--is confounded by the very methods used. Because all of our ESM studies have not singled television out from other daily activities and because we ask only for very simple affective and cognitive assessments, we are confident that the same influences do not pertain.

2. Indeed, research going back nearly three decades in the United States, England, and Japan has demonstrated that TV viewing passivity often is associated with mild feelings of guilt and self-contempt (Bower, 1973; Furu, 1971; Himmelweit & Swift, 1976; Steiner, 1963)--especially among more affluent and educated viewers.

3. According to Robinson et al. (1993), however, in some cases this relationship may be extremely weak at best, and causal inferences may not be warranted.

4. It's interesting to note that there are very few reports of patients' television viewing habits in the clinical literature, yet some psychotherapists have told me that difficulty limiting viewing (or more frequently, limiting their partner's or children's viewing) is sometimes raised by patients in therapy. More frequently, patients in psychotherapy compare their own experiences, feelings, and ideas to those of particular characters in television programs they watch. This is particularly likely to occur at moments of intense emotion in therapy (James Hutchinson, M.D., personal communication, February 1994). Such a phenomenon may be rather benign, but it may also indicate externalization, i.e., avoiding and defending against fully experiencing and taking ownership of uncomfortable thoughts, feelings, and behaviors.

5. However, Tannenbaum (1980) showed that suspense plots can indeed be gripping. Under experimental conditions he found that some viewers will go to considerable lengths to see how a suspenseful story turns out.

6. People in both groups are randomly assigned to these two treatment conditions. Most of this research has been done with college students, but the researchers have also occasionally expanded their research to community samples.

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