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RESEARCHING MEDIA EFFECTS

THEORISING MEDIA EFFECTS

The primary effects of media exposure are increased violent and aggressive behavior, increased high-risk behaviors including alcohol and tobacco use, and accelerated onset of sexual activity. (Villani, 2001)

Little consensus exists...[and] research which has examined audiences is rarely able to demonstrate clear effects of the mass media. (Cumberbatch and Howitt, 1989)

To agree that there are severe limitations of research design in the experimental literature is not tantamount to confirming that psychological research reveals 'absolutely nothing' about children's use of violent video games. (Kline, 2003a)

If social influence is 'any process whereby a person's attitudes, opinions, beliefs, or behaviour are altered or controlled by some form of social communication' (Coleman, 2001) then the question here is what kind of influence is exerted by the media? As befits the complex role of media and communications in today's society, theories of media influence or power abound, some identifying a particular process, some entailing almost a theory of society, some framed as macro-theories of power, others as micro-theories of attitude change (McQuail and Windahl, 1993). Consequently, there are many ways of thinking about harm and offence as these may result from exposure to specific media contents. Different approaches have each spawned a range of empirical investigations over past decades, and the field is now vast. Specific potential harms have attracted more or less attention, as have different audience groups. By far the greatest research effort has been devoted to the effects of media, especially television, on children, especially in relation to violence.

Despite its vast size, it is widely acknowledged that the body of available research is less than ideal. Many studies are designed to identify correlations not causes. Possible confounding factors tend to be examined where convenient to measure (e.g. age, gender) while key factors may be neglected (e.g. parental mediation, personality, social inequalities, peer norms). Restrictions on

research funding are evident in the plethora of studies with small samples and simple measures, and in the paucity of longitudinal designs and the lack of good replications. On the positive side, much of the research has been funded by public bodies, conducted by independent researchers, and published in peer-reviewed journals available in the public domain.

McQuail observes that ‘the entire study of mass communication is based on the premise that there are effects from the media, yet it seems to be the issue on which there is least certainty and least agreement’ (1987: 251). By contrast, home, school and peers are all readily acknowledged as major influences on children’s development, though the theories and methods designed to investigate them are complex, diverse and often contested. In the contentious field of media effects too, the research questions asked are remarkably similar to those asked in the fields of education, sociology and psychology regarding the many other potential socializing influences. As in those fields, the media effects literature is divided on questions of methodology (what counts as evidence) and politics (why are certain research questions asked), resulting in confusing messages to policy-makers. Yet it seems that straightforward answers are more often expected, in relation to media influence.

BEYOND SIMPLE EFFECTS

One problem endemic to these debates is the markedly simple, even simplistic nature of the questions often asked about the effects of the media in both public and academic discussion (e.g. Is television bad for children? Do video-games make boys violent?; Gauntlett, 1998).¹ Yet if we set aside the media coverage that often accompanies new findings – admittedly often sought and sanctioned by the researchers – and instead examine the peer-reviewed published articles, we find that, by and large, effects researchers do not claim simply that, for instance, children copy what they see on television. Rather they tend to claim, carefully, that certain media contents increase the likelihood that some children, depending on their cognitive and social make-up, may copy what they see, provided they have interpreted the content in a particular way (this in turn depending on its textual framing – e.g. an association between violence and reward) and if their circumstances encourage such behaviour (e.g. playground norms) and – here a long list may follow, identifying a variety of contingent factors. Such qualified and contingent answers do not make life easy for industry or regulators; nonetheless, when dealing with complex social phenomena (violence, aggression, sexuality, prejudice, etc.), many factors – including but not solely the media – must be expected to play a role.

There are, arguably, rhetorical advantages to posing questions in a form that makes them ‘impossible’ to answer, and this points us to a further problem, namely the highly polemic nature of the debate, pushing opponents to extreme, polarized positions. These opposing views often, though not always, draw on psychological versus cultural studies traditions of studying the media.² In their volume, Alexander and Hanson (2003) pit opposing sides directly, showing the theoretical and methodological disputes at stake. Asking, for example, whether television is harmful to children, Potter (2003) takes a psychological perspective, pointing to the extensive body of research pointing to harmful effects, while Fowles (2003), from a cultural studies perspective, identifies a series of methodological issues (artificial experiments, small effect sizes, inconclusive fieldwork) that undermine claims for effects. Potter concludes that media violence has become a

public-health problem; Fowles is concerned that this represents a scapegoating of the media that distracts politicians from addressing the main causes of violence in everyday life.

On reading the advocates of the pro-effects and null-effects camps, we suggest that the rhetoric of their reviews is perhaps as persuasive (or unpersuasive) as their content. Each side notes the methodological inadequacies of opposing evidence, not applying the same critique to the evidence that supports their case. Each side presents their supporting evidence second, as the 'answer'. Psychological researchers tend to ignore their critics; cultural researchers tend to deride the experimental research uniformly. However, although posed as alternative positions, we will suggest that it is possible to reconcile them, by concluding that the evidence points to modest harmful effects for certain groups, these effects being perhaps smaller than the many other causes of violence that may, in turn, merit greater public policy interventions but they are not, nonetheless, either insignificant or unsusceptible to intervention.

In undertaking the present literature review, we attempt to sidestep the over-simplifying and polarizing approaches to the question of media influence, neither recapping old debates nor categorizing findings into pro- and anti- camps, for this field has been reviewed more than many.³ Nor is our focus on the degree to which research evidence can or should inform policy-development (see Barker and Petley, 2001; Kunkel, 1990; Linz, Malamuth, and Beckett, 1992; Rowland, 1983), though it will be apparent that our preference is for a balanced, non-partisan approach that seeks a precautionary and proportionate response to questions of media harm and offence.

SHORT AND LONG TERM EFFECTS

Many theories exist regarding the nature of media effects (see Anderson et al., 2003; Bryant and Zillman, 2002; MacBeth, 1996; McQuail, 2005; Signorelli and Morgan, 1990). The literature may be divided theoretically into research focusing on short-term cognitive, affective (or emotional) and behavioural effects on individuals and research focusing on long-term effects, these each being theorized at different levels of analysis (effects on individuals, social groups and society as a whole). There is also, separately, a considerable psychological literature on child development, on attitude formation and persuasion, on identity and social behaviour, much of which informs theories of media effects. Although this review is not the place for an elaborated theoretical discussion, certain key points may be made regarding research of different kinds.

Effects research is so-called because it positions the media as a cause and the individual's behaviour as an effect of that cause. However, most theories do not pose mechanistic explanations parallel with physical processes; rather they develop models of psychological processes, combined with statistical (i.e. probabilistic) testing of directional ($a \rightarrow b$) hypotheses derived from those models. Further, many theorists acknowledge the bi-directional nature of social influence (e.g. media exposure \rightarrow aggression but also aggression \rightarrow media exposure choices). Media effects are generally identified through statistical comparisons (in experiments, between experimental and control groups; in surveys, between high and low exposure groups), a statistically significant finding meaning that the measured difference between the groups would not be expected by chance. The findings are thus probabilistic, and do not imply that each individual in the group is affected equally or even at all.

Most empirical research measures short-term effects, though they are often hypothesized to accumulate so as to result in long-term effects. Thus, the evidence usually pertains to short-term effects (e.g. measurements of effects over a matter of minutes or days following media exposure), but theoretically, long-term effects are postulated through the repetition and reinforcement of the short-term effect, this resulting in a more fundamental alteration to the individual (e.g. personality, emotions, thoughts, self-perception, habitual behaviours) or society (see below). Many different kinds of effects have been examined over the years – cognitive, affective or emotional and behavioural effects (e.g. encouraging racist stereotypes, engendering fear reactions, increasing the likelihood of aggressive behaviour).

Some theories link these different effects together: for example, media content → cognitive effects → emotional effects → behavioural effects. Other theories propose multiple steps: for example, media content → priming of attitudes → increased availability of attitudes for subsequent recall → behaviour. In relation to media violence, Browne and Pennell (2000) identify the following possible outcomes: (i) disinhibition – violence becomes seen as normal, reducing social inhibitions to act aggressively; (ii) desensitization – familiarity with violent images makes the observer more accepting of violence, so that more extreme violence can be tolerated; (iii) social learning (imitation) – through repeated viewing of rewarded violent acts, observers learn to associate violent behaviour with being rewarded; (iv) priming – violent images prime already present aggressive thoughts, feelings and actions, strengthening associations and making violent effects more likely.

As for short-term effects, long-term effects may be theorized as purely individual effects (e.g. an early fear response which has long-term effects on anxiety or nightmares; or the interaction between childhood abuse and early exposure to pornography in the aetiology of an adult abuser). They may also be theorized as long-term aggregate effects (e.g. the ‘drip-drip’ effect of stereotypical portrayals that contributes to normative prejudices among the majority): as cultivation theorists observe, television is ‘telling most of the stories to most of the people most of the time’ (Gerbner, Gross, Morgan and Signorielli, 1986: 18).⁴ While most concern centres on unintentional effects of this kind, some may be deliberately planned, as in media or information campaigns (advertising, fund-raising, political campaigns, public information, propaganda); theories of persuasion make little distinction based on intentionality.

Further theories propose effects not at the aggregate but at the collective or societal level (e.g. television’s role in a growing social tolerance to homosexuality, or the press’ role in a growing intolerance to immigrants in society). These may be termed ‘reality-defining’ effects (McQuail, 1987), namely the systematic tendencies of the media, through the repetition of many similar messages, to affirm and reinforce the particular cognitions that fit one version of social reality (e.g. stereotyping or exclusion of certain groups or experiences); for children, these effects are part of socialization. It is here that researchers explore the possibility that media content shapes the social construction of reality (irrespective of whether or not the content also reflects that reality).

Others propose long-term collective effects which are mediated by personal or social influences (e.g. the influence of the news agenda is perpetuated by being taken seriously by opinion leaders

who then repeat and perpetuate that agenda; or the way that the teen peer group takes up and then exerts pressure on the group to continue to favour the latest fashion brand or food product). Different again, mainstreaming theories propose a collective and long-term effect not in terms of content but by excluding (through social pressure) the expression of non-standard, 'extreme' or critical voices, thereby reinforcing (i.e. preventing change to) the moral *status quo*.

DIRECT AND INDIRECT EFFECTS

Although research generally examines the effect of media exposure on an outcome, theoretically it is recognized that multiple other factors are likely to affect the outcome also; the media thus represent one causal factor in a multi-factorial framework (e.g. advertising → children's food choice, but so too does parental diet → food choice). Since these multiple factors themselves are likely to interact or mutually influence each other, this further complicates the study of indirect effects (e.g. advertising → parental food choice → children's food choice → selective viewing of advertising). Note that, importantly, effects theories are neutral regarding the harmful or pro-social nature of the effect. In other words, the same processes of persuasion are assumed to underlie effects judged positive (e.g. encouraging helping) or negative (e.g. encouraging aggression), though often the former effects are deliberate (as in public-health campaigns) and the latter unintentional. As noted earlier, we do not here review the also-sizeable research literature on the potentially beneficial effects of exposure to media content, including educational benefits, though many of the same conclusions apply there also.

Many of these theories, being concerned with long-term social change, must contend with many confounding variables and problems of inference in relating evidence to theory, this making the demonstration of media effects more difficult. Often they rely on the demonstration of short-term effects consistent with their long-term claims, longitudinal studies being in short supply. However, proponents of such theories can establish that evidence is (or is not) consistent with their hypotheses, and/or that the evidence supports one theory better than another. They are at their weakest when establishing the underlying mechanisms by which they propose media effects to work in the long-term.

As with short-term effects, most long-term media effects are proposed to operate in tandem with other factors, so that outcomes (e.g. social norms, behaviours, beliefs) are multiply caused by factors themselves likely to interact with each other. Long-term effects are, indeed, more likely to be indirect (mediated by, interacting with, other factors) than are short-term effects demonstrated under controlled conditions. As with short-term effects too, the hypothesis for a long-term media effect makes no necessary assumption regarding the agency of individuals or groups. Particularly, the assumption of social (or media) influence is taken as an inevitable and essential part of social life, not as a denial of the individual's choice or responsibility.

To clarify the distinction between direct and indirect effects, it must first be acknowledged that, leaving aside the simplistic claims noted earlier, the media represent one source of influence among others. Only thus may the relations among these multiple influences be addressed. One may hypothesize:

- Direct effects, in which one or many factors independently influence attitudes or behaviour. If many factors, each may exert a greater or lesser influence, and each contributes separately and additively to the consequences.
- Indirect effects, in which the many factors interact, so that one factor influences another when working through one or more intervening variables. It may take several factors working together to bring about the effect. One of them may alter the effectiveness of another. One may provide the background conditions under which another has its effect. Indirect relations between media exposure and measures of effect are thus conditional on other factors and so these latter must be included in research.
- Consequently, 'the total effect of one variable on another is the sum of its direct and indirect effects' (Holbert and Stephenson, 2003: 557).

Once we acknowledge that social outcomes are multiply caused, we must also acknowledge multiple possible paths of influence and, therefore, numerous possible processes of persuasion. However, since indirect effects bring together different factors in the social environment, including forms of face-to-face and institutional influence as well as media influence, the outcomes are harder to conceptualize theoretically and harder to track methodologically.

For example, many believe that 'research generally affirms that through language people can establish, maintain, legitimize and change the *status quo* or essentially construct a social reality' (Leets, 2001: 298). So, if language thus creates a negative stereotype of a social group, this can, many argue, constitute harm. However, the chain from media to social exclusion is so indirect as to challenge any research methodology. As Holbert and Stephenson (2003) comment, worryingly few empirical studies consider the importance of the media's indirect effects.

THE POLITICS OF MEDIA EFFECTS RESEARCH

Academic critics of media effects research are not only concerned about possible theoretical or methodological inadequacies of the findings. Indeed, the methodological disputes over samples, experimental controls, measurement and validity provide a means, a language, through which a more theoretical and political, even philosophical debate is being held regarding not only the nature of harm and offence but also why questions about these are being asked: this surely provides one reason why the scientific debate seems to run and run.

For example, there has been longstanding concern over the use of social science research as a justification for film regulation (e.g. Barker, Arthurs, and Harindranath, 2001; Gilbert, 1988; Mathews, 1994), not least because of the history of film censorship (e.g. Park, 2002) and media censorship more generally (Heins, 2001). There seems, in public discussion, often very little distance between 'regulation' and 'censorship', especially in relation to film, video and DVD content where a greater diversity of genres, aesthetic experimentation and catering for niche interests is evident than for a more 'mainstream' medium like television. Intriguingly, it has also been argued that moral panics are in the economic interests of and may be encouraged by certain sectors of the industry to create a niche or cult market outside the mainstream (Jancovich, 2002).

Others argue that ‘violence’ as an area of public concern is socially and historically constructed to achieve certain forms of political control while masking other forms of societal violence (particularly those committed by established authorities); ‘violence’ is by no means a natural category of behaviour (Barker, 2004). When cultural critics attempt to take on the censorship argument in relation to children, their case is unconvincing and inconclusive (e.g. McGuigan, 1996).⁵

In general, the position adopted by critics of media effects is itself complex and multi-dimensional. Broadly, it raises concerns over the moral and political role of social scientists in responding to an ‘administrative’ policy agenda (Lazarsfeld, 1941). In brief, critics of effects research are concerned that this body of research is:

- Motivated by moral panics (amplified by the popular media) which accompany each new medium (preceding television, games or the Internet and back to the introduction of cinema, comics, and even earlier), channelling and appeasing public anxieties about economic and technological change.
- A scapegoating of the media, distracting public and policy attention from the real ills of society (and the real causes of crime/violence/family breakdown, etc. – most notably, poverty and inequality).
- A middle-class critique of working-class pleasures (in which the working-class are construed by effects research as irrational masses, undisciplined media consumers and so blamed for social unrest and disorderliness).
- A denial of the agency, choice and wisdom of ordinary people who, if asked, have more nuanced, subtle and complex judgements to offer about media content, who do not react in simple and automatic ways to media content, and whose critical media literacy should be recognized and valued.
- An unfortunate, even improper collaboration between supposedly objective social scientists and supposedly public-spirited policy-makers, the former gaining funding and reputation, the latter gaining justification for repressive and censorious but popular regulation.
- A normative justification for ensuring public support (‘manufacturing consent’) for the establishment and the capitalist *status quo* by excluding the public expression (and mobilization) of diverse views, critical voices, niche interests or alternative perspectives.
- A covert justification for strengthening a populist/moral/religious agenda that is against the enlightenment principles of the rights to freedom of expression.

Many of these arguments have widespread public and academic support (Barker and Petley, 2001; Drotner, 1992; Pearson, 1983; Rowland, 1983; Winston, 1996). They draw on recognized social values – freedom of speech, criticism of institutional censors, concern for the rights of the individual, including respecting the validity of people’s own experiences, scepticism about

academic funding decisions, concern to avoid moral or media-created panics, determination to avoid being distracted from more fundamental social ills, and so forth. Ironically, those advocating the critical position also believe the media to be a powerful and often malign influence on society, but they tend to frame that influence at a societal level (focusing on media influence over institutions, culture, society) rather than at an individual level.

From the point of view of the evidence base, one consequence has been the development of an alternative body of evidence – mainly using qualitative social research methods and asking different, more critical and contextual questions, according to a different, more culturally-oriented research agenda. Some of the often qualitative research that is emerging – typically based on exploratory or interpretative interviews and discussions with the public – provides a valuable counter to the otherwise dominant quantitative approach to media harms and offence. Where these studies pertain, even if indirectly, to questions of harm and offence, we have included them in what follows, in the interests of constructing a more balanced and multi-dimensional approach to the question of media harm than is often the case, particularly in psychologically-oriented literature reviews.

DETRIMENT, PROPORTIONALITY AND RISK

In translating the above theoretical, methodological and political considerations into the policy arena, a key question is what regulatory weight should be attached to evidence of risk? One approach is to estimate what statisticians term the ‘size of the effect’. For example, Hearold (1986) conducted a meta-analysis of the findings reported in 230 studies of television violence, encompassing some 100,000 subjects over the past 60 years.⁶ In general, the correlations between viewing and effect vary between 0.1 and 0.3. These are small effects, but one should note that statistically significant findings are not necessarily significant in social or policy terms. In other words, it is a matter of judgement (by policy-makers as well as researchers) whether effects which, as in this case, account for some 5 per cent of the variation in behaviour, are important or not, or whether they are more or less important than other factors.⁷

A satisfactory explanation of social phenomena, such as violence, stereotypes, consumerism or prejudice, will involve understanding the combined and interactive effects of multiple factors, of which television may be one such factor, although probably not a major one. For example, in a study that, unusually, compared the effect size for television with that for other influential factors, television was found to play only a small role: this particular study was in the field of television advertising, and found that viewing television advertising accounted for 2 per cent of the variation in children’s food choice, compared with 9 per cent for the influence of parental diet on children’s diet (Bolton, 1983). In this context, we can interpret the research findings for media harm as ‘modest’ in their effect size. In another example, in his work on electronic games, Anderson (2003) calculates the correlation across 32 independent samples studied to be $r = 0.20$ (confidence interval, 0.17– 0.22); this suggests that playing violent video-games accounts for 4 per cent of the variation in aggressive behaviour (Anderson and Murphy, 2003),⁸ a figure that is broadly in line with meta-analyses for television violence (Hearold, 1986).⁹

What is generally lacking in this literature is a wider consideration of other factors that also influence aggression (although see Southwell and Doyle, 2004). However, Anderson, Gentile, and Buckley (2007: 143) compile a table comparing effect sizes for a wide range of factors associated

with adolescent violence, as reproduced below. This suggests video-game and media violence play a substantial role, although the effect sizes they report here are higher than those found in several other studies:

Table 2.1 Longitudinal effect sizes of several empirically identified long-term risk factors for aggressive and violent behaviour.

<i>Risk factor</i>	<i>Effect size</i>	<i>Variance accounted for (%)</i>
Gang membership	.31	9.6 per cent
Video-game violence*	.30	8.8 per cent
Psychological condition	.19	3.6 per cent
Poor parent-child relations	.19	3.6 per cent
Being male	.19	3.6 per cent
Prior physical violence	.18	3.2 per cent
Media violence**	.17	2.9 per cent
Antisocial parents	.16	2.6 per cent
Low IQ	.11	1.2 per cent
Broken home	.10	1.0 per cent
Poverty	.10	1.0 per cent
Risk-taking	.09	0.8 per cent
Abusive parents	.09	0.8 per cent
Substance use	.06	0.4 per cent

Adapted from US Department of Health and Human Services (2001) *Youth Violence: A Report of the Surgeon General*. Rockville, MD: US Government Printing Office.

* From Study Three, with sex statistically controlled.

** From Anderson and Bushman (200).

Seeking to link such findings to policy decisions, Kline (2003b) offers a risk-based view of what accounting for 10 per cent of the variance explained (as cited by Freedman, 2002) really means in practice. He points out that:

The Youth Risk Behavior Surveillance data for 2001 of over 1,300 teenagers finds that 33 % report getting in a fight during the last year. Since 16% of the US population of 276 million is between 12–20 we can estimate that $.16 \times .33 \times 276 = 14,572,800$ fights take place each year. Using Freedman's estimate that 10% of those fights can be accounted for by the statistical relationship between violent media consumption and aggression, we can estimate that about 1.45 million more fights take place every year than would happen by chance, or for other reasons.

As he goes on to add, drawing on Popper's epistemology of falsification:

No experiment can ever prove media violence affects behavior, but rather only weaken our belief that there are no consequences from persistent exposure to media violence. That is generally the conclusion reached by the American Psychological Association.

In short, Kline seeks to move the debate from one of debating causality (yes or no), a debate that becomes polarized between freedom of expression and censorship positions, or that takes a reductionist approach to research evidence (can research show that child x will respond in a predictable manner to image y?). Instead, he advocates debating and weighing risk factors within a multi-factorial account. Arguing, in this case, about the potentially harmful effects of computer games, he observes that:

Given the diversity in children's circumstances, there is little reason to expect uniform behavioral responses to violent entertainment among children whose circumstances and experiences are diverse. This is also why most contemporary effects researchers do not predict that a majority of children will be negatively influenced by media violence. It is only by factoring in environmental factors numerically that social psychological researchers will be able to explain why not all heavy consumers of violent entertainment grow up in some situations to be aggressive and antisocial while non-gamers become serial killers.

Quoting the American Surgeon General's review of evidence for media harm in 2001, Kline adds:

The Surgeon General's media risk model does not predict that young people will uniformly commit aggressive acts immediately after watching because media effects interact with other risk factors experienced within peer groups, schools, families, communities. Weighing up the available evidence according to well established epidemiological criteria for studying causality in multiple and interacting determinacy relations... he recommends a precautionary rather than panglossian principle stating that 'Research to date justifies sustained efforts to curb the adverse effects of media violence on youths. Although our knowledge is incomplete, it is sufficient to develop a coherent public health approach to violence prevention that builds upon what is known, even as more research is under way'.

What follows from the risk model is the hypothesis that altering risk factors will alter outcomes. Kline thus criticises those who assume:

...that violence has always been with us throughout history and is so pervasive in our culture that there is nothing we can do about it. A recent natural experiment conducted by Tom Robinson in San Jose suggests otherwise. Robinson (2001, 2000) reasoned that if the amount of media use really is a factor in the violence effect (because of increased exposure) then reducing that media consumption should reduce the risk. He tested this causal hypothesis, finding that schools that participated in the media education program not only reduced their media consumption by 25% but also enjoyed in a significant reduction in playground aggression and had more children with a lower rate of increase of body fat.

Unfortunately, as already noted, while much evidence has examined individual risk factors – such as media exposure – little if any has compared risk factors, examining their combined influence on the outcome of interest (e.g. aggressive behaviour). Given the paucity of such evidence, the precautionary principle has generally been applied, policy dictating that it is always better to err on the side of caution:

The precautionary principle is not merely confined to the spheres of health and science. In today's risk-averse world, just about every sphere of life, from business and politics to parenting and health, is increasingly organised around the notion that it is better to be safe than sorry. (Guldberg, 2003)

In such circumstances, the burden of proof is said to lie with those who downplay the risk of disaster, rather than with those who argue that the risks are real, even if they might be quite small (Runciman, 2004).¹⁰ Hence, the precautionary principle:

...should be considered within a structured approach to the analysis of risk which comprises three elements: risk assessment, risk management, risk communication. The precautionary principle is particularly relevant to the management of risk. (Van der haegen, 2003: 3)

NOTES

1. Society does not ask, for example, whether or not parents have 'an effect' on their children or whether friends are positive or negative in their effects. Yet it persistently asks (and expects researchers to ask) such questions of the media, as if a single answer could be forthcoming. Nor, when it is shown that parents do have an influence on children do we conclude that this implies children are passive 'cultural dopes', or that parental influence is to be understood as a 'hypodermic syringe', as so often stated of media effects. Nor, on the other hand, when research shows that parental influence can be harmful to children, do we jump to the conclusion that children should be brought up without parents; rather we seek to mediate or, on occasion, to regulate.
2. The psychological tradition underpins classic 'effects' research, framing the media as a source of social influence that impacts on the individual, albeit as one of many influences. The cultural studies tradition is generally critical of effects research, focusing more broadly on media power in society (rather than on individuals) and critical of the ways in which such concepts as violence or sexuality are socially constructed by policy-makers and effects researchers.
3. For recent reviews, we would direct the reader to Cantor (2000), Perse (2001), Singer and Singer (2001), Villani (2001). For critical discussions of media effects research, see Barker and Petley (2001), Kline (2003b), Livingstone (1996), Cumberbatch and Howitt (1989).
4. In seeking analogies to explain long-term but gradual effects, Gerbner (1986) talks of the 'drip-drip effect' of water on a stone – a small effect that nonetheless wears away the stone; Potter (2003) uses the analogy of the orthodontist's brace exerting a weak but constant pressure that brings about a crucial realignment over time.
5. Cultural defences of challenging or controversial material (e.g. Barker, 2004; Gee, 2003) often stress that just such material is valued by people to stimulate their rethinking of normative or established views or roles, here drawing on a long tradition arguing for the cultural merits of diverse media. We note, however, that this defence is not generally offered in support of those in the audience who express pleasure in identifying with the aggressor or in viewing violence or suffering for its own sake (though such a defence is made of people's right to enjoy pornography for sexual pleasure). In other words, researchers (like the public) are inclined to treat violent content and sexual content rather differently.
6. 'Meta-analysis seeks to combine the analyses from all relevant individual studies into a single statistical analysis with an overall estimate and confidence interval for effect size' (Givens, Smith, and Tweedie, 1997: 221).
7. At best causal models usually account for only a proportion (usually no more than 20 or 30 per cent) of the variance in a dependent variable. For this reason causal models include a residual or error term to account for the variance left unexplained. There are, after all, many other social characteristics which affect how people behave, apart from those measured.
8. Though greater, according to Anderson, than the effect of condom use on decreased HIV risk or the effect of passive smoking on lung cancer.

9. Anderson (2002) follows statistical convention in describing such effect sizes as 'small to moderate', stressing that these are of considerable concern because of the repeated nature of video-game-playing in everyday life. Intriguingly, a 'best-practices meta-analysis' showed that studies that are better conducted (in terms of their reliability and validity) tend to show stronger effects of violent video-games on aggression and aggression-related variables than do less well-conducted studies (Anderson et al., 2003). A further meta-analysis of 25 studies suggests a slightly lower correlation between video-game-play and aggression at $r = 0.15$ (Sherry, 2001).
10. Tickner, Raffensperger, and Myers (1999) list the components of a precautionary approach, including taking precautionary action before scientific certainty of cause and effect; seeking out and evaluating alternatives, and shifting burdens of proof.

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3

TELEVISION

INTRODUCTION

The continued pervasiveness of television viewing is well-documented (Ofcom, 2007; Roberts, 2000). It accounts for a significant proportion of media use in the United Kingdom, still mainly of the free-to-air channels although, for certain demographic groups, the niche channels are watched or used more. It is also used increasingly with other media, and the Internet has had the greatest impact on viewing (Livingstone, 2002; Livingstone and Bovill, 2001; Nie, Simpson, Stepanikova, and Zheng, 2004).

Recent research by Ofcom notes that for children of all ages in the United Kingdom (5–15 years old), television remains the medium that is most used (15.8 hours per week), although viewing is in decline (Ofcom, 2007). For older children (aged 12–15 years old) television viewing is even higher at 17.2 hours, as shown in the figure below.

The importance and perceived impact of television in people's lives have been long researched. Studies have been undertaken to understand how it affects people, how it shapes them and how

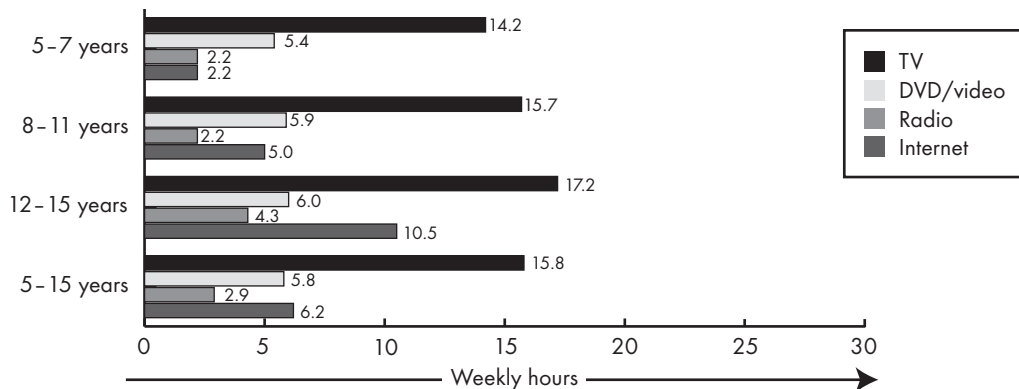


Figure 3.1 Media consumption (self-reported) – among children 5–15 years.

they respond to it. Certainly the audience has very clear views about broadcasting and is sophisticated, understanding the conventions of scheduling, for example, or the relevance of context in framing their perceptions of the appropriateness of material (Ramsay, 2003; Svennevig, 1998; Towler, 2001).

In their extensive review of media use and exposure among American children, Comstock and Scharrer (2007) observe that:

The feature that distinguishes screen from interactive media is the content that is not open to alteration by the decisions of the user. (Comstock and Scharrer 2007: 12)

With the growth of the multi-channel environment, the traditional focus on television as equally available to everyone is shifting. First, audience fragmentation across multiple television channels is already fairly advanced (Webster, 2005), with some evidence also of polarization.¹ Second, it seems that audience choice is increasingly programme – rather than channel – based. Nearly all empirical research on harm and offence has addressed content broadcast on the main channels. There has been little or no published academic research which has addressed the changes in audience attitudes or behaviour that may be caused by developments in the nature of the television viewing experience. For example, there is research that shows how the experience of viewing a film on a small television screen is different from seeing it on a large screen at the cinema, but there is not yet research evidence that shows how viewing that content on a large screen with surround-sound, in one's home, may be different from the conventional television viewing experience.

Before reviewing the research evidence, it is worth reiterating that we will not consider either the positive effects of television viewing (where there is a large literature) or such potential harms as consumer detriment or physical health. Instead, our remit is to examine the research literature for evidence of the risk of harm and offence with regard to media-related content. It is also important to note that much of this literature has come from the United States, as will be indicated below where appropriate, as this has a different television regulatory environment from the United Kingdom. Last, we observe that research often examines the effects of exposure to media content which is not necessarily that intended for the age group researched. Particularly, since many children watch television content other than that specifically made for them, the research reported below investigates the effect on children of viewing content intended for a wider or older audience. Unfortunately, it is not always possible to determine, from the published research reports, exactly what kind of content was studied and nor, therefore, exactly how the particular research studies might be relevant to the UK audience.

The research effort in recent years has concentrated on:

- The way in which television might influence audience attitudes and behaviour.
- The effects of violent television content, especially on the young.

- The effects of television content on the sexualization of the young and other development processes (such as attitudes towards body image or substance abuse).
- The effects of reality-defining variables such as stereotypes on audiences.
- The offence caused by, for example, the use of swearing and offensive language.
- The way in which facts and information are presented – most notably, in the news.

Much of the debate about the potential influence or effects of broadcasting has rested on a debate about the child audience. The positive influences of children's broadcasting are recognized (although not discussed here) and studies have monitored closely the development and changes in the provision of programming targeted at children in the United Kingdom (Ofcom, 2007; Atwal, Millwood Hargrave, Sancho, Agyeman, and Karet, 2003; Davies and Corbett, 1997; Blumler, 1992). These argue that children should be able – and have a right – to experience a wide and diverse range of programming aimed at their particular interests. Patricia Edgar, the founder of the Australian Children's Television Foundation and a driving force in children's television production, wrote in 2005:²

We know the importance of a child's early years. If children are not given the stimulation and support they need in those early years, they will grow up to become marginalised adults. Their health, literacy, and physical skills are all-important. But just as crucial for their social well-being is the development of their emotional and moral intelligences. Children require healthy bodies, educated minds, and an understanding of their social purpose... television can have a positive role to play.

While Comstock and Scharrer note that use of television (time spent viewing) is also high in the United States, their analysis of the research shows that relatively low levels of attention are given to much television viewing. It is when choices are being made between media and media content that more attention is paid to preferred types or genres of content. Their review looks at the way in which interest in the media develops and suggests that viewers start to use television images to form their own identities and vision of the 'outside' world and society from quite a young age. These potential socializing effects of the media are not only important when thinking of how perceptions of the outside world may be formed, but also in terms of the way in which people may feel marginalized or excluded: some people seldom see people like themselves on the screen.

Davies et al. argue, drawing on data gathered as part of a research project examining the changing nature of children's television culture, that those who seek to preserve children from 'poor' television are making judgements about children's tastes (Davies, Buckingham, and Kelley, 2000). In talking to children themselves, the researchers find that there are clear distinctions made by children between programming aimed at them and those made for adult audiences. Davies et al. discuss children's programming in terms of 'absences' – that is, children's programming does not contain offensive language, sex and so on, and children aspire to programmes targeted at an older audience. They suggest that children's assertions of their own tastes 'necessarily entail a form of

“identity work”—a positioning of the “self” in terms of publicly available discourse and categories’. The view of children’s programming through an adult’s eyes is very likely to be different. Many of the studies identified within this review examine reactions to a range of programmes, not necessarily those made for a youth audience.

In coming to a conclusion about the role of television in children’s lives and its possible effects and influences, Comstock and Scharrer note a sharp divide between content designed for young children and that made available to older children (from about 10 years of age):

We are struck by the realisation that there are largely two different worlds of content – the protective, educational, and prosocial bubble provided by media for the very young (infants, preschoolers, and children of early elementary age) and the sometimes harsh and often sensationalised material of media for older children, teenagers and the general audience (music television, internet sites, primetime television, video games). The two exist with little buffer forcing an abrupt change when ‘children’s media’ are no longer satisfying. (Comstock and Scharrer 2007: 117)

In the following sections, the research literature which has examined the potential for the impact of television is presented, for all segments of the audience as well as children and young people. Much of the research has considered the portrayal of violence and sex on television, in particular. However there have been other areas that have been researched, in particular for their ability to give offence – what Barnett calls an ‘affective’ notion of harm (Barnett and Thomson, 1996).

ISSUES OF GENERAL OFFENCE

The update of the literature, examining research evidence since 2005, concentrates on the evidence for harm, while the first edition had looked at the evidence for both harm and offence. It had found little academic research into offence caused by viewing television, with most research effort concentrated on harm. However, there was a substantial body of market or social research conducted by regulators and the industry which had looked at issues of offence. Ofcom’s 2006 ‘Communications Market Report’ shows that perceptions of standards on television have been fairly stable in the recent past. While almost half the sample (47 per cent) think standards have not changed over the previous year, 40 per cent think standards have declined. The proportion saying they have been offended by something on television has remained unchanged since 2004 at 32 per cent.

In the 2005 Communications Market Report, most respondents (84 per cent) had thought that material that might offend them personally could be shown, but after a clear pre-transmission warning. The 2006 Report explored the public’s views towards children and their exposure to different media types. The figure below shows that there was most concern about the Internet, while post-watershed television programmes on terrestrial television were the second area of most general concern. Ofcom notes that these concerns were not affected by the parental status of the respondent.

As in previous years, most (71 per cent) thought that the primary reason for regulating television was to protect children and youth, with 25 per cent thinking that television should be regulated

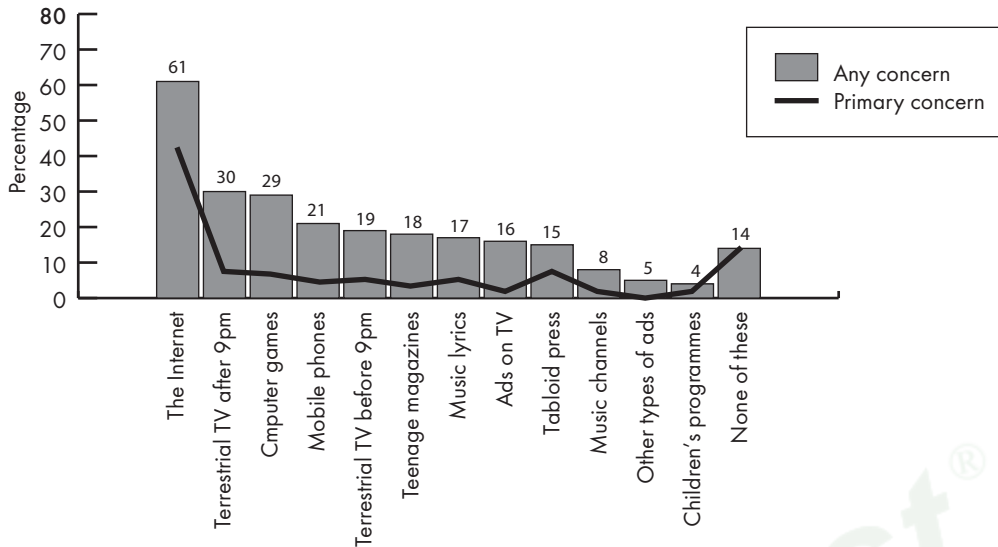


Figure 3.2 Concern over children's exposure to different types of media content.

'to protect the public at large'. Complaints statistics compiled by Ofcom for the calendar year 2004 bear out these concerns. They show a total of 9,297 complaints about television received (74 per cent of all television complaints) related to harm and offence. 61 per cent of these concerned general offence, 11 per cent were about language, 8 per cent religion and 8 per cent sexual portrayal, and 3 per cent were about depictions of violence. A further 282 complaints about radio related to harm and offence (54 per cent of all radio complaints). For radio, sexual portrayal and violence are of less concern, while language attracts a greater proportion of complaints.

Similar data have been found in other countries. In Australia, around one in three people consistently reported having seen material on broadcast television that they were 'offended by' or 'concerned' about (Cupitt, 2000). The top concerns are the portrayal of violence and the nature of news/current affairs programmes (e.g. intrusive images of suffering, violence, bias and inaccuracy). Further, half of the survey respondents agreed that news and current affairs programmes put unnecessary emphasis on personal characteristics (ethnicity, sexuality, disability etc.). The information used to prepare viewers for potentially distressing images is judged appropriate by four in five respondents. Concern is also expressed regarding the unrealistic nature of violence in televised films (e.g. violence presented without consequences, unnecessary graphic content, glamorization of violence).

However, recent research by the communications regulator in Australia (the ACMA, 2007) shows that, when asked to rate their level of concern about a range of possible issues, media and communication related concerns do not stand out from other issues. As in the United Kingdom, of the media and communication activities, the Internet gives rise to the most concern (two in five parents express some level of concern) while television viewing and gaming come next. Despite

these concerns, parents recognize the benefits of these media and communication opportunities: almost all that ‘the internet provides learning or educational opportunities for their children, while the main benefits of watching television are perceived to be its educational value and its contribution towards their children keeping in touch with the world around them’. The study also notes that the age of the child is the most influential factor in determining parental levels of concern about each technology type:

Parents express concerns about television viewing more frequently in relation to younger children, whereas gaming concerns are more frequent in relation to 12–14 year olds. Concerns about internet use are more common for parents of 12–17 year olds, and mobile phone concerns are focused on the 13–17 year old age bracket...Parents of boys are more often concerned about video and computer games than parents of girls, but the reverse is evident for use of mobile phones.

Unlike both the United Kingdom and Australia, in New Zealand (2008) parents are more concerned about their children’s exposure to television media content than the Internet (84 per cent and 48 per cent respectively). If concern is expressed, they are most commonly worried about violent content (51 per cent), sexual material (33 per cent), and inappropriate language (20 per cent). 22 per cent mention specific programmes – the news is mentioned by 15 per cent of concerned parents. The 9–13 year old children interviewed agree – content that they most commonly say bothers or upsets them relates to violence (29 per cent), sexual content/nudity (21 per cent) and scary/spooky things (20 per cent). Asked what they themselves think is not suitable for children of their age to see on television, half mentioned violence (51 per cent), while just over a third said bad language (36 per cent), sexual content/nudity (34 per cent) or ‘adult’ programmes with explicit sexual content (33 per cent). Their reasons centre on a perception of them as ‘an undesirable influence on children’s behaviour’ (59 per cent). Younger children (6–8 years old) are more likely to talk about the negative effects, such as getting scared and having nightmares (47 per cent).

In 1998, the Independent Television Commission in the United Kingdom became the first broadcasting regulatory body to use citizens’ juries to examine public attitudes towards the regulation of broadcasting (Independent Television Commission, 1998). This methodology had been developed with the political process in mind but has since been used successfully for examining attitudes to the media (including television and film) (Ramsay, 2003). The format of the citizens’ jury brings together a group of randomly chosen people to deliberate on a particular issue, in this case, broadcast content regulation. In the two ITC juries, participants spent time collecting information and hearing presentations by ‘witnesses’ selected on the basis of their expertise. Trained moderators supervised the process and the jurors were able to cross-examine the witnesses. They then delivered a report on what they saw as the purposes and principles of such regulation, determining that the main thrust of regulation was to protect children and provide sufficient information for adults to regulate their own viewing. They identified six guidelines in particular for such content regulation:

- The watershed should be maintained at around 9 p.m., before which material unsuitable for younger viewers should not be shown.

- The use of strong language or scenes of sex or violence must be justified by the context of the programme, whether fact or fiction.
- Warnings should be used with discretion where relevant, before or during the programme. There should be an indication of content and perhaps an agreed system of warning symbols in the television guides that appear in newspapers and magazines.
- Broadcasters should be aware of individual and national sensitivities, and avoid intruding into private grief.
- Pornographic material could be shown provided it was legal and limited to pay-per-view or subscription channels.
- Advertisements should be truthful and not misleading.

The Broadcasting Standards Council (BSC)³ commissioned a panel of monitors for some years to report on their television viewing and their opinions of the broadcasting standards issues within programmes, such as the amount of violence, swearing and offensive language or sexual explicitness. Panellists also had to say whether or not they thought such material was editorially justified. Each panel reported for two weeks and there were four reporting periods in a year. In 1999, the data from these panels were presented along with the results of a survey of public opinion about broadcasting, conducted among over 1,000 people (Broadcasting Standards Commission, 2000). That study found that half the sample (50 per cent) spontaneously expressed a concern about television, with age and gender as significant variables – female respondents and those who were older were considerably more likely to voice concerns (56 per cent of those who expressed concern were women and 72 per cent were over 65 years old).⁴

Nonetheless, when monitors were asked in detail about the issues they were concerned about, most said that the majority of incidents they noted (of violence, swearing and offensive language or depictions of sex) were justified within their editorial context. The conclusion drawn was that ‘because respondents may think television covers an issue “too much”, it does not necessarily follow that offence will be caused’. What is of prime importance is the context in which the issue is presented and the other expectations that viewers have built based on their prior knowledge of the way in which programmes are scheduled, for example, or the actors involved in the production.

Ofcom offers a definition of ‘context’ in Section 2.3 of the Broadcasting Code which illustrates the breadth of possible viewer expectations (Ofcom, 2005). Context includes (but is not limited to):

- the editorial content of the programme, programmes or series;
- the service on which the material is broadcast;

- the time of broadcast;
- what other programmes are scheduled before and after the programme or programmes concerned;
- the degree of harm or offence likely to be caused by the inclusion of any particular sort of material in programmes generally or programmes of a particular description;
- the likely size and composition of the potential audience and likely expectations of the audience;
- the extent to which the nature of the content can be brought to the attention of the potential audience (for example by giving information) and
- the effect of the material on viewers or listeners who may come across it unawares.

No research was found that discussed the effects of changes in any of these contextual variables that might be driven by recent technological change, such as the use of personal video recorders to cross the watershed for example. Hanley (1998b) described how audience expectations can be affected by new technology. In her study, respondents might have found content that shocked them when they first acquired cable or satellite television. Once they had learned how to navigate it and had understood its particular conventions (such as the scheduling differences from free-to-air television), they found little reason to complain.

VIOLENCE

Much of the research literature considering the possible negative effects of media content continues to focus on the medium of broadcast television, and on the depiction of violence, in particular. The audience of specific concern has been children, ranging from the very young to adolescents and – in terms of data collection – college students. Now, with increasing potential access to an ever-widening array of media content, there has been an increase in expressions of concern about the possible effect or influence of violent media content on children. In the foreword to the *Yearbook on Children and Media Violence*, Carlsson describes the genesis of the UNESCO International Clearinghouse on Children and Violence on the Screen, set up in the 1990s, to look at the research evidence for harm that may be caused to children viewing such content (Carlsson and Von Feilitzen, 1998). She describes how;

Many discern a relationship between the rising level of violence and crime in everyday life, particularly violence committed by children, and the scenes of violence shown on television and video and simulated acts of violence in video and computer games.

To this list of media are now added the Internet and mobile communications. The Yearbooks have expanded to include all these forms of delivery, comprehensively collating the latest research on children and media content. The organization has now been renamed the International Clearinghouse for Children, Youth and Media (Nordicom, n.d.) to reflect this change.

Much of the research into children's attitudes towards violent media content is television-based. Television was the first widely available medium. Its rapid growth mirrored an interest – particularly in the United States – in behavioural psychology. This experimental, often laboratory-based, system of study has not been used as widely in other countries. For example, the United Kingdom, Australia or France (see Zann, 2000) tend to employ qualitative research techniques, often in conjunction with quantification, such as the administration of questionnaires. As Barker and Petley argue, these layered methodologies offer a more rounded picture of how the media and audiences interact than do the experimental studies from the United States (Barker and Petley, 2001):

An array of methods of investigation has been developed in recent years which has been proving its usefulness, and offering insights and explanatory models which can transform our picture of these media, their audiences and their social, cultural and political implications.

All the research methods recognize that the media do not operate in a vacuum and, in general, that there are some effects on children. Where they differ is in terms of what those effects might be, how direct they are and if there is a causal link between viewing behaviour and subsequent (violent) behaviour. Back in the 1950s, Hilde Himmelweit had argued:

Television can't alter a child's basic personality. It might change some of his opinions and attitudes but definitely not his character. There was no evidence in our study that the kind of personality the child has influences the type of programmes he chooses to watch. A child brings his personality to the set, not the other way round. (Himmelweit, Oppenheim, and Vince, 1958)

This review found most research in this area still comes from the United States, a different regulatory regime from that of the United Kingdom, especially in terms of programming made for, and available to, a child or youth audience. Further, the review found that much recent work, itself, consists of research reviews of projects that have been undertaken in the field of media effects research and media violence.⁵ This review will look at those reviews but will highlight original contemporary research, where possible, and will draw out those projects in particular which are based in the current UK television viewing environment. The analysis of such research in this central area of discussion about the media and violent content is framed by the notion that the media create a response in children (not necessarily negative). The research evidence is considered in order to make a judgement as to whether or not the response is behavioural or attitudinal, if it is short-term or has long-lasting effects, and – finally – if it might be harmful to the child or to society. Potter and Mahood (2005) in the United States accept that:

Many studies have been conducted to link particular elements in a treatment with particular behavioural outcomes, but we are not sure about the process that takes place inside a person's mind that is the linkage between the treatment and effect.

The chapter 'Researching media effects' describes the various methodologies used in the projects covered by this review. There is also a short, helpful summary of research methodologies used in the United States by Anderson and Bushman (2002; see also Singer and Singer, 2001).

TOWARDS A DEFINITION OF VIOLENCE ON-SCREEN

The wide-ranging and comprehensive ‘Report of the Commission on Children and Violence’, convened by the Gulbenkian Foundation in the United Kingdom, had defined violence as ‘behaviour by people against people liable to cause physical or psychological harm’ (Calouste Gulbenkian Foundation, 1995). The Commission looked at all kinds of violence to and by children and young people, including violence portrayed in the media. It did not find the place of the media significant, except as providing a window on the world – the report highlights as particularly important the way in which role models are portrayed on television (especially male role models and especially those involved in sports).

On-screen violence has been defined in a number of ways which have evolved as research has uncovered more and more nuances in the way in which viewers watch violent images. Morrison undertook a wide-ranging qualitative study of attitudes to violence on television on behalf of the content regulators and major broadcasting organizations in the United Kingdom (Morrison, 1999). ‘Real-life’ violence was defined by participants as ‘actuality’ material. Fictional violence, on the other hand, was categorized into three types:

- Playful violence: clearly unreal, with little significance beyond its entertainment value.
- Depicted violence: characterized by realism, has the potential to ‘assault the sensibilities’.
- Authentic violence: violence set in a world that the viewer can recognize, such as domestic violence.

Within each category, Morrison identified two factors which determined how violent a scene was considered to be: (i) the nature and quality of the violence portrayed (the primary definer) and; (ii) the way in which it is portrayed (the secondary definer).

The Communications Research Group had undertaken content analyses of depictions of violence in the United Kingdom from 1992. In 2002, they revised the definition of violence used for the content analyses to encompass Morrison’s findings (British Broadcasting Corporation, Broadcasting Standards Commission, and Independent Television Commission, 2002):

A violent act is any action of physical force, with or without a weapon, used against oneself or another person, where there is an intent to harm, whether carried through or merely attempted and whether the action caused injury or not.

In addition, within the content analysis, each violent act was coded into one of three categories, drawing explicitly on Morrison’s work:

- Accidental violence: unintentional, such as accidents or natural disasters.
- Aggression: the intentional destruction of inanimate objects.
- Intentional interpersonal: violence against people.

While Morrison's work is essentially qualitative and is applied to a quantitative methodology (content analysis), Sander in Germany presents a dynamic-transactional perspective of audience perceptions of violence – that is, an analytical way of thinking that seeks to bridge the gap between the behaviourist 'effects' model and a social psychology based model that allows for active involvement by the viewer (Sander, 1997). This model 'conceptualises TV stimuli and viewers as interdependent phenomena'. To test this, over 300 participants were shown clips from programmes and completed questionnaires based on their reactions. Sander showed that physical violence was the most important dimension in defining violence but other dimensions such as psychological violence were also important. The study also showed that participants' own feelings of anxiety and aggression were the two major emotional factors affecting perceptions of violence. But she accepts that there will have been other variables affecting responses that were less clearly defined, and underlines the fact:

It is little wonder that findings concerning influences of single (or a few) variables were equivocal considering how their influence can change with the introduction of other relevant but uncontrolled variables.

For example, Wied et al., in the United States, show the effect of empathetic reactions to the amount of reported distress felt by viewers watching scenes of violence, based on how they identified with the characters (Wied, Hoffman, and Roskos-Ewoldsen, 1997).

In the United States, a standard definition of violence, adopted by the Cultural Indicators Project in the 1960s, was that violence is 'the overt expression of physical force, with or without weapon, against self or other, compelling action against one's will on pain of being hurt or killed, or actually hurting or killing'. Researchers in the United States, as in the United Kingdom, have since sought to distinguish between overt violence and aggression.

The three-year National Television Violence Study (NTVS) in the United States was an extensive, and influential, review of research as well as a content analysis of violence in entertainment programmes (Anderson, Berkowitz, Donnerstein, Johnson, Linz, et al., 2003: 81). The project team defined violence as:

Any overt depiction of a credible threat of physical force or the actual use of such force intended to physically harm an animate being or group of beings.

Using their research sources, the authors identified a range of 'contextual features that influence how audiences respond to television violence' and created a table to argue that the inclusion of a particular feature would increase or decrease the risk of harmful effects from that portrayal (Table 3.1).

Table 3.1 How contextual features affect the risks associated with TV violence.

<i>Contextual features</i>	<i>Learning aggression</i>	<i>Fear</i>	<i>Desensitization</i>
Attractive perpetrator	↑		
Attractive victim		↑	
justified violence	↑		
Unjustified violence	↑	↑	
Conventional weapons	↑		
Extensive/graphic violence	↑		↑
Realistic violence	↑	↑	
Rewards	↑ ↑	↑ ↑	
Punishments			
Pain/Harm cues	↑		↑
Humour	↑		

Note: Predicted effects are based on a comprehensive review of social science research on the different contextual features of violence. Blank spaces indicate that there is no relationship or inadequate research to make a prediction.

SUMMARY OF CONTEXTUAL FEATURES:

Looking across all the contextual features of violence, a portrayal that poses the greatest risk of learning of aggression contains:

- An attractive perpetrator.
- Morally justified reasons for engaging in aggression.
- Repeated violence that seems realistic and involves a conventional weapon.
- Violence that is rewarded or goes unpunished.
- No visible harm or pain to the victim.
- A humorous context.

As a comparison, a portrayal that poses the greatest risk for desensitization contains:

- Repeated or extensive violent behaviour.
- A humorous context.

Finally a portrayal that poses the greatest risk for audience fear involves:

- Violence that is aimed at an *attractive victim*.
- Violence that seems undeserved or *unjustified*.
- Violence that is *repeated* and that seems *realistic*.
- Violence that goes *unpunished*.

Source: Federman (1998).

By 'harmful effects', the authors of the NTVS study refer to:

- Learning aggressive attitudes and behaviours.
- Desensitization to violence.
- Increased fear of becoming victimized by violence.

This last – the creation of fear – is further analysed by Potter and Smith (2000), using the NTVS sample. They use content analysis methodologies, and statistical analyses, to conclude that it is the fear effect that is more likely to be engendered by graphic portrayals of violence than either desensitization⁶ or disinhibition.⁷ However, it is difficult to understand how essentially subjective notions such as fear can be calculated from a content analysis of images.

LEVELS OF VIOLENCE

In order to measure the levels of violence on television, and in other media, content analyses have been used, although these are less frequently conducted now. In the United Kingdom the most recent such analysis was undertaken in 2002 (British Broadcasting Corporation, Broadcasting Standards Commission, and the Independent Television Commission, 2002). The data were part of a longitudinal series of nearly ten years. They found that the programme genre that contained the most depictions of violence as a proportion of its total output was film, with drama following most closely. However, television violence had increased over the ten years, with the biggest increase in the news in 2002, containing 24 per cent of all violence noted in the sample. The data collection period covered 11 September 2001, which accounted for most of this particular change. This exposes the difficulties of sampling to create an 'accurate' picture of television content output and the possible distortions that may occur in content analyses. It is a clear argument for monitoring such content over a period of time so that such peaks can be ironed out.

Firmstone reviews research on perceptions of violence in the United Kingdom, much of it commissioned by the Broadcasting Standards Commission (Firmstone, 2002). Her review showed that through the 1990s, viewers consistently judged there was 'too much' violence on television, although the proportion who said this had slowly declined from 67 per cent in 1991 to 59 per cent

in 1999 (and it remains at that same level – 59 per cent – in 2004, Ofcom, 2005). Firmstone reports that Morrison’s news editing studies (Morrison, 1992) elaborated viewers’ dilemmas, for many considered both that violence in the news (e.g. of war or conflict) should be portrayed, because it is real, and yet that, at times, it is upsetting, even shocking – often more so than fictional violence (and, in this regard, adults concurred with children’s perceptions of televised violence, finding real-life violence often more distressing than fiction).

As found elsewhere, context matters – wartime news was expected to be more violent than civilian news; audiences can prepare for documentaries and so these may be expected to contain more graphic images; events close to home were more upsetting than distant casualties and so forth. The editing methodology used by Morrison was interesting because viewers could demonstrate the subtlety of their judgements regarding particular frames or shots (see also Cumberbatch, 2002; Philo, 1993). As Firmstone also notes, there are overlaps between judgements made regarding the acceptability of factual and fictional violence, though in fictional violence viewers were concerned also about the nature of the perpetrator, the degree of realism, whether the consequences of violence are shown for the victim and the nature of the reward or punishment portrayed for the perpetrator.

The following studies reviewed here come from the United States. Signorielli (2003) conducted an analysis of a sample of nine years of peak time network programmes to update the work conducted by the NTVS and look at the portrayal of violence on television. She found little change in the levels of portrayal of violence across the sampling period, unlike the UK sample. However, she noted that there were fewer people involved with violence and they were more germane to the storyline. Although Signorielli does not make this point, this would suggest that the violence portrayed is becoming editorially more justified. She noted little change in the way in which the consequences of violence were portrayed, and questions the effect that such frequencies of depicted violent acts may have on the viewer and their attitudes towards society.

Scharrer, in a study which is indicative only because of the small sample, looked at the way in which police drama series portrayed ‘hypermasculinity’⁸ and aggression in the United States (Scharrer, 2001). She did this through content analysis, examining one week only of this television genre. The study reveals – perhaps obviously – that there is a relationship between depictions of hypermasculinity and aggression. It also shows how characters are drawn: those who might be considered the ‘bad guys’ are often compelled by emotion, while the ‘good guys’ show self-control and are often motivated by a desire to protect female characters in the plot. Such findings are interesting when one considers possible audience responses to different role models.

Based on the NTVS sample,⁹ Wilson et al. looked at levels of violence in children’s programmes (Wilson, Smith, Potter, Kunkel, Linz, Colvin, et al., 2002). They noted that children’s programming contained more depictions of violence than other genres. They also looked at the way in which the violence was depicted, and how that differed between children’s programming and programming not targeted at children. They found two key differences:

- In children's programming, the perpetrators were more likely not to be human but to be anthropomorphized.
- Perpetrators are more likely to be rewarded for their violence with material goods or praise.
- The serious consequences of violence are less likely to be shown in children's programming – the use of guns and depictions of blood and gore were also less prevalent.
- The violence is more likely to be presented with humour.

The researchers distinguished five categories of children's programmes with violence, including slapstick and superhero genres. These two they mention in particular because of their high frequency of violent incidents. Wilson et al. argue that the lack of consequences and the sanitization of violence may lead children to misunderstand the negative consequences of violent behaviour (though it should be noted that their study is not related back to children's perceptions).

THE EFFECT OF MEDIA VIOLENCE ON CHILDREN AND YOUNG PEOPLE: RESEARCH REVIEWS

Many of the research reviews examining violent media content draw on research conducted in the United States which does not operate under the same regulatory conventions for television as does the United Kingdom. Browne and Hamilton-Giachritsis (2005), based in the United Kingdom, look at such international research reviews from a public-health perspective. In their short, useful overview, highlighting the complexities of the research, they suggest there is consistent evidence that violent imagery in television, film, video/DVD, and computer games may have substantial short-term effects such as 'arousal, thoughts and emotions, increasing the likelihood of aggressive or fearful behaviour in younger children, especially in boys'. Nevertheless, they also say, as does Savage (2004), that there is only weak evidence that links media violence directly to crime.

While Browne and Hamilton-Giachritsis accept the association effect is small, it does have implications for public-health policy. They make a series of recommendations, including raising the importance of media awareness:

PUBLIC-HEALTH RECOMMENDATIONS TO REDUCE THE EFFECTS OF MEDIA VIOLENCE ON CHILDREN AND ADOLESCENTS

Parents should:

- Be made aware of the risks associated with children viewing violent imagery as it promotes aggressive attitudes, antisocial behaviour, fear, and desensitization.
- Review the nature, extent, and context of violence in media available to their children before viewing.
- Assist children's understanding of violent imagery appropriate to their developmental level.

Professionals should:

- Offer support and advice to parents who allow their children unsupervised access to inappropriate extreme violent imagery as this could be seen as a form of emotional abuse and neglect.
- Educate all young people in critical film appraisal, in terms of realism, justification, and consequences.
- Exercise greater control over access to inappropriate violent media entertainment for young people in secure institutions.
- Use violent film material in anger management programmes under guidance.

Media producers should:

- Reduce violent content and promote antiviolenence themes and publicity campaigns.
- Ensure that when violence is presented it is in context and associated with remorse, criticism, and penalty.
- Ensure that violent action is not justified or its consequences understated.

Policy-makers:

- Should monitor the nature, extent, and context of violence in all forms of media and implement appropriate guidelines, standards, and penalties.
- Should ensure that education in media awareness is a priority and a part of the school curricula.

Source: Browne and Hamilton-Giachritsis (2005).

Kuntsche (2003) surveyed over 4,000 children (mean age 13.9 years) in Switzerland and found that while the use of the media (television and electronic game-playing) were not linked to real life violence, frequency of use was linked to aggressive attitudes and 'indirect violence' (such as bullying). In other countries, many groups of professionals and advocacy groups, including the Canadian Paediatric Society (2003), the Media Awareness Network (Josephson, 1995), and the Australian Institute of Criminology (Brown, 1996), have turned their attention to the potential for risk from exposure to media violence. In 1996, the American Medical Association issued the *Physician Guide to Media Violence*, reviewing the American research literature (American Medical Association, 1996). The guide offers specific recommendations 'about reducing the deleterious effects of media violence for physicians to use themselves as well as to pass on to parents.' These include noting a patient's media use as part of their medical history, educating parents and children into the possible effects of television use and, as 'concerned citizens', advocating, among other things, heightened media literacy.

In July 2000 the American Association of Paediatrics (AAP) issued a Joint Statement on the Impact of Entertainment Violence on Children, based on reviews of the research (AAP, 2000). (See also the AAP's recommendations in this area (2001) and further suggestions for research (Hogan, 2000)). The AAP said:

- The effect of entertainment violence on children is complex and variable. Some children will be affected more than others. But while duration, intensity, and extent of the impact may vary, there are several measurable negative effects of children's exposure to violent entertainment. These effects take several forms.
- Children who see a lot of violence are more likely to view violence as an effective way of settling conflicts. Children exposed to violence are more likely to assume that acts of violence are acceptable behaviour. Viewing violence can lead to emotional desensitization towards violence in real life. It can decrease the likelihood that one will take action on behalf of a victim when violence occurs. Entertainment violence feeds a perception that the world is a violent and mean place.
- Viewing violence increases fear of becoming a victim of violence, with a resultant increase in self-protective behaviours and a mistrust of others. Viewing violence may lead to real life violence. Children exposed to violent programming at a young age have a higher tendency for violent and aggressive behaviour later in life than children who are not so exposed.

Many subsequent reviews of the literature have echoed elements of this statement or have sought to amplify segments, by concentrating on particular effects. However, the research evidence remains open to question, because of the often experimental nature of the studies on which these are based which decontextualizes the content, and because of the (generally) short-term effects that can be recorded. It is not clear how these short-term effects carry forward to become longer-term attitudes or behaviour. The AAP statement also recognizes that there are some groups of children and young people who may be more 'affected' by media violence than others. Again, it is important to note the different regulatory environment in which US television operates in comparison with the United Kingdom.

More recently, the US Federal Communications Commission (2007) considered the impact of violent television programming on children. In its report, the FCC drew extensively on the empirical research outlined above, agreeing that it shows a correlation between viewing such content and aggressive or violent behaviour. While violent content, unlike indecency, is protected under the First Amendment in the United States, the report suggests there are 'government interests' at stake which would allow for such content to be regulated (as for indecency and this includes the protection of children). It also reviewed some further studies that either develop or extend the work previously noted, discussed here.

Bushman and Huesmann (2006) undertook a meta-analysis of 431 studies that had been conducted in the United States to test whether the data are consistent in finding short-term and long-term media effects for aggressive behaviour. They considered all visual media (television, film, video-

games, music, and comic books). Their analysis shows greater short-term effects of violent media for adults than for children, in terms of aggressive behaviour, attitudes and other negative arousal levels. For children there appear to be greater long-term effects, and the researchers argue that reported exposure to violent images should be guarded against. It is important to note that these studies purporting to show such long-term effects do not carry forward these measures of effect into adulthood so a true longitudinal outcome is not known. The researchers also point out that many meta-analyses are based on publicly available data, which may in itself create a bias (see Ferguson, 2007):

In a meta-analysis, it is difficult to find unpublished studies. Studies with non-significant effects are often not published; they end up in file drawers rather than in peer-reviewed journals. If studies in file drawers had been published, the average correlation would be smaller. (Bushman and Huesmann 2006: 350)

Anderson et al. (2003) had conducted an extensive review of the American research. They argue there is 'unequivocal evidence' that media violence increases the likelihood of aggressive and violent behaviour in both immediate and long-term contexts across all media – television, films, video-games and music. They argue that, while the effects are more pronounced for milder forms of aggression, the effects on severe forms are as significant as 'other violence risk factors or medical effects deemed important by the medical community (e.g. effect of aspirin on heart attacks)'. The authors identify a number of areas that should be researched further in the United States:

- They point to recent longitudinal studies which, they say, provide converging evidence linking frequent exposure to violent media in childhood with aggression later in life. However, they accept that it will be necessary to have large-scale longitudinal studies to develop evidence for the role of exposure to violent media in childhood in extreme violent criminal behaviour.
- The authors link the level of viewing violent media with the amount of violence in the media. They argue that while 'it is clear that reducing exposure to media violence will reduce aggression and violence, it is less clear what sorts of interventions will produce a reduction in exposure'. The research literature suggests that parental mediation may be beneficial, but, they state, 'media literacy interventions by themselves are unsuccessful'.
- The authors also argue that more work needs to be undertaken on the underlying psychological processes involved in the viewing of violent media content, accepting that different characteristics (within viewers and within the content) may interact differently for different types of people.

The evolution of research in these areas, they argue, will allow appropriate policy decisions to be formulated.

Villani (2001), also in the United States, reviews media effects studies and content analyses from the 1990s, focusing primarily but not exclusively on television, and including film, music and

music videos, advertising, video-games, the computer and the Internet. She argues that the studies show that children internalize the messages from the media they consume, which are not defined in most of these studies, but might be assumed to be material not targeted at a child or youth audience. This internalization in turn, she suggests, affects how children behave. She says that exposure to ‘excessive media use, particularly where the content is violent, gender-stereotyped, sexually explicit, drug- or alcohol-influenced, or filled with human tragedy, skews the child’s world-view, increases high risk behaviours, and alters his/her capacity for successful sustained relationships’.

The implication of this view, that potentially harmful behaviours may be based on changed attitudes, is a call for media literacy and a requirement that health professionals monitor media use as part of their work. Importantly, while Villani offers a brief overview of all media content in the United States, she does not discuss how the different media interact with one another or how the audience receives them as a whole, except to say they are widely used by young people. Nor does she look at the evidence which shows that certain forms of media delivery bring different expectations.

In summary, the reviews of the research literature rest upon a body of evidence drawn from the American academic literature. These generally suggest that there may be some influence of violent media content upon young viewers but the conclusions in relation to any particular effect are not clear.

LONGITUDINAL RESEARCH

As noted above, there have been many calls for longitudinal research in this area, but only a few such studies have been conducted.

In a rare opportunity for a before and after study, Gunter, Charlton, Coles, and Panting (2000) measured levels of social behaviour among a sample of children before and after the introduction of broadcast television on the island of St Helena. The children in the post-television sample also completed a media use diary, which was merged with a content analysis of violent television content. The findings showed that the boys in the sample had watched nearly twice as much violent material as the girls over the sampling period, but there were no differences in terms of antisocial behaviour measures between the pre- and post-television samples or between viewers and non-viewers of violent content. While the researchers accept that the sample is small and that the data should be taken as indicative rather than conclusive, the effects of violent media content were not demonstrated.

In contrast, a longitudinal study predicting aggressive behaviour as a result of watching television violence was published in the United States by Huesmann, Moise, Podolski, and Eron (2003). They examined the relationship between reported viewing of violent television content at ages 6–10 (not necessarily programming aimed at that target age group) and adult aggressive behaviour fifteen years later, using interview data. Each data collection period lasted two years. They argue, from their findings, that significant childhood exposure to media violence predicts young adult aggressive behaviour for both males and females. Identification with aggressive television

characters and the perceived realism of the television violence also predict later aggression. They suggest that these relationships exist even when other factors such as socio-economic status, intellectual ability, and parenting factors are controlled for. There were some gender differences which are interesting in the study, although the overall findings applied to both males and females:

- While early television violence viewing correlated with adult physical aggression for both males and females, it correlated with adult indirect aggression only for female participants.
- Male participants who identified most closely with male aggressive television characters or who perceived such imagery as ‘true to life’ were considered most at risk for later adult aggression.
- Females who displayed aggressive tendencies were more likely to view violent television content.

The researchers argue these findings show the importance of children’s exposure to television violence, rather than that of adults. They also disagree with the suggestion that only ‘vulnerable’ children are at risk from the effects of viewing such content. Finally, Huesmann et al. point to the ‘contextual factors’ of the sort that had been delineated in the NTVS, suggesting that different types of violent scenes have different messages for viewers. The study is valuable because it provides data over time. However, it would be interesting to have more regular snapshots of behaviour and attitudes to understand better the relationships between all the factors that operate in young people’s lives as they grow to adulthood. The study has also, it should be noted, been strongly criticized by some (Cumberbatch, 2004).

A further longitudinal study, also in the United States, by Johnson, Cohen, Smailes, Kasen, and Brook (2002), assessed television viewing and aggressive behaviour over a seventeen year interval in a community sample of 707 families. The sample was interviewed four times over the period of the study. It found that:

There was a significant association between the amount of time spent watching television during adolescence and early adulthood and the likelihood of subsequent aggressive acts against others (interpersonal aggression). This association remained significant after previous aggressive behaviour, childhood neglect, family income, neighborhood violence, parental education, and psychiatric disorders were controlled statistically.

The study used self-reported viewing measures, both in terms of time spent viewing and the sort of programmes watched. Johnson used content analyses to estimate how much violence the participants would have been exposed to. It is the link between time spent viewing and subsequent behaviour that Johnson et al. find most important, drawing inferences about the incremental risk of offending or aggressive behaviour based on estimated measures of watching violent television (as defined by the findings from content analyses). In a subsequent exchange of letters with critics, Johnson et al. (2002) expand by saying:

Youths who spend a great deal of time watching television are less likely to spend time engaging in interpersonal activities that promote social interaction skills. Such youths with relatively poor social skills may tend to have difficulty resolving interpersonal conflicts in a non-aggressive manner.

Of these three studies, the first (Gunter) finds no effects, the second (Huesmann) finds effects of viewing violence but has been much criticized methodologically, and the third (Johnson) finds effects but draws stronger conclusions about the consequences of heavy television viewing in general rather than viewing violent content specifically. One is tempted to conclude that longitudinal studies, desirable though they are, are no more conclusive than short-term studies.

THE IMPORTANCE OF CONTEXT

In the United Kingdom research has shown consistently that context, by which we mean the portrayed context within the programme, is key to the way in which audiences consider content (see also Ofcom's set of contextual variables, Ofcom, 2005). If a violent scene is thought to be editorially justified and appropriate to the scene, or appropriate to the genre, then the audience is far less likely to take offence to that scene, as opinion polls and other qualitative social research show. Context is also frequently stressed in research on children and media harm, with researchers being most concerned when violent actions are portrayed as detached from their consequences, or celebrated, or perpetrated by heroes rather than victims. This is also true in the American research tradition.

In a study employing group discussions among children in the United Kingdom aged 9–13 and using age-appropriate television and film clips as prompts, Millwood Hargrave argued that children have a more textured approach to violence than many adults, looking beyond what is seen as physical action to the consequences and moral status of the action. Crucially, they refer the content to their own lives. They can be sophisticated (i.e. media literate) in the way they deconstruct images and understand the way in which certain production techniques are used to heighten or to lessen dramatic effect. Importantly (see also Buckingham, 1996), this sample found real-life events far more frightening and violent than some of the clips they were shown – the unfolding of events from 11 September 2001 where many children said, the 'most violent' content they had ever seen, particularly because of the known and real consequences. Lastly, the study found that fictional violence that approximated children's own experience was upsetting – especially scenes involving children being attacked or hurt, echoing findings from the study by the Australian Broadcasting Authority, above.

Thus, research finds that children are more upset by violence embedded within a realistic context, including a context (or with characters) that resembles their own lives (Gatfield and Millwood Hargrave, 2003).¹⁰ One of the key contextual factors found in many studies is the principle of 'justified violence' (Millwood Hargrave, 1993; Morrison, 1999, as well as the NTVS). This, it is suggested, minimizes the impact of violence for the adult as well as the child viewer. Potter and Mahood (2005) examined how people determine whether violent acts in stories are justified. They asked 475 college students in the United States to read one of three stories in which the characters (perpetrators and victims) were changed.¹¹ Respondents completed a questionnaire that

measured their reaction to the degree of justification for the violence in the story, their reactions to contextual cues, and characteristics about themselves (gender, ethnic background, and television viewing patterns). The findings suggest that the greater the empathy or identification with a character, the higher the level of justification offered.

VULNERABLE AUDIENCE SUBGROUPS

Women

Most of the research which has looked at vulnerable television audience subgroups other than children has been conducted in the United States. This review found no such recent research in the United Kingdom except that which examined the responses of women to television and film violence. In this in-depth qualitative study of women's responses to depictions of violence against women (in television and film), Schlesinger, Dobash, Dobash, and Weaver (1992) found that those who had themselves experienced violence in real life (just over half of the sample) were more sensitive to television violence than were those who had not experienced actual violence, offering more complex interpretations and being more concerned about the possible effects. The researchers suggest that audiences' vulnerability to portrayed violence depends on the level of their fears about becoming a victim of such violence themselves (e.g. rape, domestic violence, murder) (see also Cantor, 2002). A follow-up study of men, half of whom similarly had been victims of violence (though interestingly, they were less likely to categorize themselves as 'victims'), found them to be less involved with dramatized violence, showing less interest in identifying the motives of those portrayed, expressing little sympathy for the characters and ambivalence for rape scenes in the films viewed, and less questioning about whether the sex portrayed was consensual (in *Basic Instinct*, for example). The responses of gay men in the sample were an exception to this, for they showed a greater likelihood to empathize with victims.

Kahlor and Morrison (2007), also in the United States, investigate the role of television viewing among a small sample of young women (N = 96) as contributing to an acceptance of rape myths (defined here as 'false beliefs and stereotypes regarding forced or attempted sexual intercourse and the victims and perpetrators of such acts'). They suggest that content analyses of television programmes in the United States support such myths. They find a significant positive relationship between television use and rape myth acceptance and perceptions that rape accusations are false. They do not find a relationship between television use and an estimation of the prevalence of rape in US society so the hypothesis that depictions may increase fear of rape was not proven. It is unclear from the research report how, and if, different genres affected these attitudes (the study covered television entertainment, television news, and music).

Coyne and Archer (2005), in the United Kingdom, examined gender differences in the use of indirect aggression, and the effect that viewing such content may have. Indirect aggression is defined as:

a manipulative and covert way of harming others by using the social structure as a way to exclude, ostracize, and harm others...Indirect aggression can take many forms including gossiping, destroying friendships, spreading rumours, and breaking confidences. This type of

aggression is particularly effective as a way of harming females, as they place great value on relationships and social standing, the very facets of life that indirect aggression targets to harm. (Coyne and Archer 2005: 234)

They asked a sample of 347 adolescents (aged 11–14 years old) in the United Kingdom to list their five favourite television programmes (which were analysed for the amount and type of aggression they contained). Students were required to nominate fellow students who were considered to be aggressive, either directly (using physical aggression) or indirectly. Coyne and Archer found that peer-nominated indirectly aggressive girls, in particular, watch more indirect aggression on television than any other group. Peer-nominated physical aggression was predicted by other aggressive behaviours, but not by televised physical or indirect aggression (see also Coyne, Archer and Eslea, 2006).

Ostrov, Gentile, and Crick (2006) undertook a two year study of a small sample ($N = 78$) of American pre-school children and considered their media exposure, the type of content viewed and measures of aggression (as well as pro-social behaviour). They found that parental reports of media exposure are associated with relational (or indirect) aggression for girls and physical aggression for boys at school.

Other vulnerable adult groups

Zillmann and Weaver (2007) in the United States noted that, in an experiment in which men had to increase the pressure of cuffs on another person's arm, those men that scored high on measures of hostility used aggression more frequently than men scoring low on that trait. Further exposure to a violent film segment resulted in more frequent use of aggressive responses among men who scored higher in terms of physical aggression than exposure to a non-violent film segment.

Boyson and Smith (2005), also in the United States, seek to provide a conceptual framework for homicidal thinking, including building a model of traits that link to a disposition to such thinking. They conducted a two-part survey with 195 college students. It consisted of an inventory or questionnaire of homicidal thoughts as well as retrospective reports and questions about media use. They found that aggression as a trait was the strongest and most consistent predictor of homicidal thoughts. They also say the data suggest that 'media violence is most closely related to reactive thoughts, generated under conditions of negative affect and for whom attention to homicide in the mass media is most likely'. That is, the study argues for media effects but allows for different effects on different people, depending on their circumstances at the time. The study also accepts that it is not able to draw inferences from homicidal thought to homicidal behaviour.

Hoffner, Plotkin, Buchanan, Anderson, Kamigaki, Hubbs et al. (2001) used telephone interviewing in the United States to examine the 'third-person effect' (the belief that others are more affected by media messages than oneself). They found respondents were more likely to consider that television violence affected aggression in other communities and those who were more geographically distant. Such third-person effects are noted frequently in research, including among children who feel themselves less vulnerable to influences than, for example, those younger than they are (Millwood Hargrave, 2003; Office of Communications, 2005a).

Eyal and Rubin (2003), in an experimental study, examined how viewers' perceptions of characters interacted with their personal aggressive tendencies. They looked at the particular characteristics of homophily, identification and parasocial relationships.¹² Using American college students with an average age of 20, data on a variety of measures was collected. The researchers argue that their findings suggest that identification was greater among those who displayed aggression but was not significant either with homophily or with parasocial interactions. They suggest that 'aggressive characters might reinforce the aggressive dispositions of viewers'; however, the research only looked at identification with aggressive characters and not with non-aggressive characters. Why do some people choose violent media content? An American survey of young teens (average age 14 years old) found that gender (boys), sensation seeking and aggression all play a role in the choice of violent Internet content, with alienation from school and family playing a smaller role (Slater, 2003).

In the United Kingdom, Guy, Mohan, and Taylor (2003) conducted a study – using semi-structured interviews – of viewing preferences among men with a history of schizophrenia and violent crime (N = 20) and compared their findings with a group of men with schizophrenia but no history of violence (N = 20) and another group of men who were orthopaedic patients, without either history (N = 20). Their aim was to:

- Determine how much screen violence was watched, both pre- and post- hospital admissions.
- Note viewing preferences.
- Document positive and negative emotional responses to screen violence.
- Examine identification with screen characters.

They found that the group with both schizophrenia and a history of violent crime did not watch more screen violence than the other groups but they did display different emotional responses to the images, expressing greater preference for violent content, reporting more pleasure in viewing and identifying more closely with violent characters on-screen. The researchers recognize the difficulty with the size of the sample, and suggest viewing preferences should be collected as part of patients' medical assessment.

Savage (2004) reviewed the literature in the United States on criminal aggression and the link with viewing media content, including an insightful examination of the methodological constructions of media effects projects. She accepts that the data show a correlation between exposure to violent programming and aggressive behaviour although she questions just which effects may be in play. She also recognizes the methodological difficulty of examining a relationship between exposure to such content and subsequent criminal behaviour. In her view, however, the research literature thus far is not convincing of a direct link. Importantly, Savage (2004: 124) asks:

If the effect is limited to a few trait-aggressive or neglected individuals (and evidence of an intervention of this type is mounting) it may not be appropriate to focus policy on television violence, but on the causes of childhood aggression and parental neglect.

The data from the United States, both on children and other segments of the audience, suggest that there are influences on vulnerable or at-risk groups but that well-developed socialized young people do not seem to fall within this group, although there is more evidence that boys rather than girls are vulnerable to media violence – as in Johnson et al. (2002). Indeed, an interesting finding in Johnson et al.'s (2002) study was that boys are most 'vulnerable' in adolescence while women are in early adulthood. However, as the next section shows, research among children themselves suggests that they are not passive, but active, consumers of the media with well-developed understandings of the importance or relevance of what they are seeing, subject to their age and social-cognitive development.

CHILDREN'S ATTITUDES TO TELEVISION VIOLENCE

There is a far greater research literature in the United Kingdom which directly examines children's attitudes towards television violence. Most of the studies mentioned, largely from the United States, have addressed issues about television violence with children as their subject matter. Few have spoken to children themselves about their reactions to the material they see. Outside the United States, where most of the contemporary studies have come from, and especially in the United Kingdom, there is a tradition of using qualitative techniques with children as active participants (Australian Broadcasting Authority, 1994; Buckingham, 1996; Millwood Hargrave, 2003; ACMA, 2007; Broadcasting Standards Authority, 2008).

Chambers, Karet, Samson, and Sancho-Aldridge (1998) conducted research amongst groups of children to examine the role cartoon viewing plays in their lives. They found that television is seen as something which helps children to relax and unwind, and cartoons have a particular role within children's television viewing. They are always distinguished from reality, are short, easy to dip in and out of, fun, funny and exciting. For some, the link with merchandizing is seen as positive (they enjoy collecting and playing with the characters). Parents had differing views, finding cartoons less appealing – in particular, the violence in some of the material. The research also found gender differences – girls in general, and older boys, do not particularly like action cartoons. Younger girls (5–6 years old) find some of the imagery frightening and 'noisy'. Older children (8–9 years old) sometimes feel uncomfortable or uneasy if the characters are too human, or if the storylines are to do with children being in danger. This research underlines the different reactions that age, gender and even being an adult can bring to a programme genre designed for a young audience. It also stresses, once again, that fear results from similarities between children's lives and those portrayed.

Buckingham's study of the way in which children and young people aged 6–16 years old 'define and make sense of' media images that may be distressing, used in-depth qualitative techniques, interviewing participants and then re-interviewing a sub-sample in greater detail (1996). While it may be argued that the use of adult moderators can affect responses and that young people may display attitudes that they do not feel, this type of research does not seek to claim effects but reveals how children are thinking – as far as they express themselves honestly. The initial sample of 72 may be thought limited, although it is large for qualitative research, but the re-interviewing technique allows for more information to be extracted than might be forthcoming in a larger group, or in a structured experimental setting. Buckingham found that all the children

interviewed for his study admitted to having experienced some ‘negative’ response to ‘difficult’ content, which was not necessarily age-appropriate. But none of these was long lasting or severe. Importantly such responses could occur to different media and media genres, including books, melodramas, cartoons and advertisements. Thus, developing the point made about context, above, Buckingham was able to show that ‘in both fact and fiction, (negative) responses appear to derive primarily from a fear of victimization, rather than any identification with the perpetrators of violence’ and children develop ‘coping strategies’ to deal with the things they view. He also concluded that ‘there is no evidence here that children are any less upset by real-life violence as a result of watching fictional violence.’

In-depth discussions with children aged 10–15 years old about media harm in Australia revealed the classic ‘third person effect’, namely that children (like adults) do not believe that they themselves are affected by the media, but they do believe that others are influenced (Nightingale, Dickenson, and Griff, 2000). Although one might question children’s capacity to identify what harms them, children did admit to being scared of realistic images, especially those in the news about matters close to the child’s own life (see also Millwood Hargrave, 2003). Fictional images were seen as less harmful. Rather than seeing children as ‘innocent victims’, Nightingale argues that children are ‘active players’ trying to take in and deal with the inevitable changes in society and the media and, as Davies, Buckingham, and Kelley (2000) show, developing their own tastes and aesthetic judgements in the process. It was clear from these focus groups that the children were seeing material that was inappropriate for their ages. They discussed the negative consequences of violent material (especially horror or supernatural themes), including the effects of feeling scared (nightmares, sleep disorders and, often the most scary, re-enactments of the scene by a father or brother, playful or otherwise). They reacted strongly also to screen depictions of real-life risks (drugs, alcohol, unwanted pregnancy, sexual harassment, bullying). Nightingale (2000) notes further that the violent media content that many of the boys said they enjoyed was also enjoyed by their fathers, with both girls and boys agreeing that it is ‘natural’ for boys to like violence and gore. One might argue that the often-greater effect of media violence on boys than girls is because it is more socially acceptable for boys to act in a boisterous or aggressive manner.

Valkenburg, Cantor, and Peeters (2000) interviewed a sample of children in the Netherlands by telephone to examine if they thought television could create fear in children. One in three children in the sample (31 per cent) said that something on television had ‘frightened’ them in the past year, including news items. The researchers also noted that children’s fears and their coping strategies varied by age and gender. Similarly, a survey of television viewing by Australian primary school children found that over half had stopped viewing or left the room because something on television – most often violence – had upset them (girls more than boys) (Australian Broadcasting Authority, 1994). Sex/nudity was rarely reported as upsetting, though the majority did not wish to view this. News stories, especially about children or animals being hurt/killed could be upsetting, as could programmes about parents arguing/fighting. On the other hand, most children liked to watch action drama, with guns and car chases, and many liked scary programmes with monsters or ghosts.

The level and importance of ‘active’ interaction with the television screen was looked at in a study examining the relationship between perceptions of the world (in particular, perceptions of crime and violence in society) among Flemish television viewers and among video-game-players (Van Mierlo and van der Bulck, 2004). This study acts then, as an inter-media comparative study as well. However the sample is fairly small (at 322 young people aged either 15 or 18 years old) and is based on self-reporting – the results should be taken as indicative only and should be re-tested. It found that there were greater effects on the perceptions of the world among the sample of television viewers than there were among video-game-players. The authors suggest this may be due to the way in which gamers play, and the active role they have in selecting what they play which may offer a degree of abstraction and distance from the content of the game.

Peters and Blumberg (2002) review the evidence for the proposition that violence depicted in television programmes, particularly cartoons, has a negative impact on young children’s behaviour. They look at the research conducted in the United States among those aged 3–5 years. This group has relatively high levels of television viewing (up to 30 hours per week) and the authors point to content analyses that show that cartoons contain some of the highest levels of violence in television – the NTVS points out that 70 per cent of cartoon violence rarely shows negative consequences such as pain or suffering. They conclude that this gives children the impression that real-life violence also does not lead to pain. Yet, having reviewed the levels of violence in children’s television, definitions of violence and research on children’s interpretation of violent content (including the morality of these acts), the authors conclude that such a hypothesis is not supported:

- If children of pre-school age can differentiate between the appropriateness of violent cartoon actions and real life actions, as their research suggests, then cartoon violence might not have as negative an effect as some think.
- Also, the studies that have shown children reacting violently after viewing cartoon violence may actually be more situation-specific rather than a long-term effect.

Both these conclusions the authors accept as controversial. This is partly because, as Livingstone and Helsper (2008) show, the widespread assumption that more media literate viewers are less influenced by television is not supported by research evidence. What is not controversial, Peters and Blumberg argue, is that parents act as important mediators in the viewing of media violence, especially to help them better understand cartoon violence and the difference between reality and fiction (see also Austin, 1993; Davies, 1997).

The tensions – or disparities – that exist between methodologies (a cultural/active audience approach compared with an experimental/behavioural one) may be found in research into television wrestling. In the United Kingdom, an extensive qualitative study was conducted of children’s attitudes to televised wrestling (British Board of Film Classification, Independent Television Commission, and Broadcasting Standards Commission, 2001). A variety of methodologies were used – standard length group discussions (90 minutes); extended group discussions combined with observation of participants (120 minutes); individual interviews; and

paired interviews (with two friends). This research showed that while participants created 'relationships' with their favourite wrestlers, this was related to the way in which wrestling was seen, as a drama rather than 'real-life': 'each broadcast is seen as developing an underlying story, somewhat like a soap'. This is because the wrestling has stars, production values and imaginative 'storylines'. For a few participants there is uncertainty about how much of the depicted pain is real, and the researchers do suggest that depictions of these sorts of violence need to be monitored, but they do not suggest that the material has any effect other than to interest the devotees of the genre.

On the other hand, a content analysis of programmes collected for the NTVS found that there is a great deal of verbal aggression in televised professional wrestling, particularly offensive language (Tamborini, Chory-Assad, Lachlan, Westerman, and Skalski, 2005). This, the researchers argue, may lead children to think that verbal aggression which has no apparent justification is acceptable.

The contrasting methodologies to examine the same genre, and the resulting differing interpretations, argue for the importance of ensuring the use of multi-faceted research methods and of exploring what it is that the audience understands from the material they view, and the contextual environments of programmes and their genres. In the United Kingdom, these environments are both regulated and well-established.

Krcmar and Hight (2007) undertook research among very young American children (aged between 33 months and five years old). They claim to show that exposure to even slight aggressive visual stimuli (such as an 'action' character) could create an aggressive response (in this case the way in which a story was ended by the respondent). They suggest this shows that a single exposure to an action cartoon could help establish a mental model for aggression. This finding echoes the observation about video-games that Anderson et al. (2007) make, suggesting that even cartoon violence can have an influence. (For a review of the literature on cartoon violence see Kirsh, 2006.)

Using physiological measures as a means of evaluating responses to television violence, Murray, Liotti, Ingmundson, Mayberg, Pu, Zamarripa, et al. (2006) examined children's brain activity while watching such content. While the data and methodology are interesting, many of the criticisms made about experimental studies, especially those that measure physiological responses to images of violence, are applicable here. Respondents (in this case, children) are put in an artificial space with intrusive measuring systems linked to them. Nonetheless, the findings are worth noting as they suggest that there are responses that may not be vocalized or even consciously registered. The American child sample was small – the researchers measured the brain activity of just eight children (aged 8–12 years old) viewing age-appropriate televised violent and non-violent video-sequences. They found that both types of sequences activated regions of the brain associated with visual motion, visual objects/scenes and auditory listening. However, television violence activated *transiently* those brain regions involved in the regulation of emotion, arousal/attention, episodic memory encoding and retrieval, and motor programming. The researchers hypothesize that this may explain findings of behavioural effects, 'especially the finding that children who are frequent viewers of TV violence are more likely to behave aggressively'.

This, the researchers suggest, may be because aggressive ‘scripts’ are stored in long-term memory and they might act subsequently as a guide for *overt social behaviour* (see also Anderson and Bushman, 2002).

Slater, Henry, Swaim, and Cardador (2004) argue that the way in which a young person is feeling affects the relationship between their use of violent media and how aggressive they feel. To examine this, they surveyed over 2,500 students in the United States (aged 12 at the start of the project) four times over a period of two years. The measures included use of violent media content and reported levels of aggressiveness, including feelings of aggression and aggressive behaviour. Their findings support their view that there is a link between watching a greater amount of violent content than ‘normal’ and heightened feelings of aggression and that this ‘effect of violent media on aggression is more robust among students who report feelings of alienation from school and during times of increased peer victimization’. The researchers accept that those in their sample who were well-socialized did not show such associations. (The definition of normal levels of viewing is not made clear.) This study builds on the ‘downward spiral model’ hypothesized by these authors which suggests that aggressive youth seek out violent media and media violence, in turn, increases aggression (Slater, Henry, Anderson, and Swaim, 2003).

Buchanan, Gentile, Nelson, Walsh, and Hensel (2002) also looked at the link between ‘relational aggression’¹³ and exposure to violent media content. They surveyed 219 children aged 7–11 years, examining media habits, attitudes to the self-reported media they consumed and aggressive attitudes/behaviours. They argue their study shows a link between aggression and exposure to media violence based on the programmes and films that the children said they watched or computer/video-games that they played. They accept the subjective nature of the study – for example, children, when asked to judge the level of violence in content, may exaggerate or play down the violence. Importantly the researchers suggest this research may be important to ‘inform future interventions with maladjusted children’, suggesting these are a group that may be affected by certain media contents.

In the United States, Grimes and Bergen (2001) argue that the empirical evidence to support the notion that violent television programming can cause psychological abnormality among previously psychologically normal children has not been shown. They suggest, having reviewed the evidence, that there is no reason to accept there is a cause and effect relation between violent television and psychological illness among normal children, although they do think it affects psychologically abnormal children who are not able to position television in an appropriate part of their lives. The particular group they single out is those with Disruptive Behaviour Disorders (DBDs). These children they say have ‘an enhanced susceptibility to stimuli that feed already distorted interpretations of incoming social cues’. It is these children, they argue, who should receive attention in relation to the effects of media violence. In further papers, they describe psycho-physiological responses to media violence which show how such television content may affect this group negatively (Grimes, Bergen, Nichols, Vernberg, and Fonagy, 2004; Grimes, Vernberg, and Cathers, 1997).

Zimmermann and Christakis (2005) used data from the National Longitudinal Survey of Youth in the United States to look at the role of parental influences and television viewing, among other factors, in subsequent bullying behaviour. They argue that each hour of television viewed per day at the age of 4 years was associated with a significant effect for subsequent bullying behaviour.

Each of these studies supports the claim that viewing violent television content may affect aggressive attitudes or behaviour, generally in the short-term. However, all these studies are open to contention, especially as many of them are laboratory-based and are not able to be considered within a 'real' home or other viewing environment. Longitudinal data to examine how any short-term effects noted may translate into long-term changes are much needed.

SEX

LEVELS OF SEXUAL PORTRAYALS ON TELEVISION

A number of studies have examined the amount and manner of portrayals of sexual activity on television. Buckingham and Bragg undertook a comprehensive review of the international research literature in 2002. The review provides data on attitudes towards sexual material, cultural theories, content analyses and effects research (Bragg and Buckingham, 2002). It illustrates what they call 'the outline of a productive alternative to mainstream "effects" research' and they emphasize the active role of audiences in making sense of the media, in particular, content that refers to sexual matters.

The Communications Research Group had conducted content analyses of television portrayals of sexual activity for the Broadcasting Standards Commission over a period of ten years (1991–2002). Data on depictions of sexual activity from peak time programmes broadcast on the free-to-air channels were collected, as were references to sexual activity (including direct and indirect references). Although this wide-ranging capture of information about sexual activity was queried by the media and the industry as being too broad, the purpose of content analyses is to examine all the constituents of a particular type of content and to see how prevalent it is. Without knowing how much discussion about sex there is, or how much simulated sexual intercourse is depicted in a schedule, or what proportion of overall sexual activity they represent, one cannot respond to claims that television is full of images of 'sex'.

The most recent such content analysis was published in 2003 (British Broadcasting Corporation, Broadcasting Standards Commission, and Independent Television Commission, 2003; Cumberbatch, Gauntlett, and Littlejohns, 2003). The sample of programmes was drawn from peak time programming to represent programmes most likely to be viewed across the five highest rating channels; the free-to-air channels. They were also drawn from composite weeks to remove possible distortions created by particular events. Such methodological considerations make these analyses less open to the criticism that the sampled programmes are not 'representative' of the programming output.

However, sampling distortions do occur and in the 2002 survey, a small number (five) of factual programmes (out of a total sample of 802 programmes surveyed) took sex as their theme and so