

**A REVIEW OF THE EFFECTS, USES AND
INTERPRETATIONS OF COMMERCIAL MESSAGES AND
ACTIVITIES BY CHILDREN**

FINAL REPORT

6th November 2008

Laura McDermott, Gerard Hastings and Martine Stead
Institute for Social Marketing, Stirling and the Open University

Marylyn Carrigan and Fiona Harris
Open University Business School

Contents

| | <u>Page No</u> |
|--|----------------|
| EXECUTIVE SUMMARY | 1 |
| INTRODUCTION | 6 |
| REVIEW METHODS | 7 |
| PART I: THE WIDER CONTEXT | 9 |
| Children and Consumption | 9 |
| Consumer Socialisation | 12 |
| Definitions of Consumer Socialisation | 12 |
| Stages of Consumer Socialisation | 13 |
| Distinguishing Between Advertising and Other Types of Message | 15 |
| Understanding of Advertising Intent and Recognition of Bias, Exaggeration and Deception | 16 |
| Knowledge of Products and Brands | 19 |
| Shopping Skills | 22 |
| Summary of Consumer Socialisation | 24 |
| PART II: MAIN FINDINGS | 25 |
| Effects of Commercial Messages on Children | 27 |
| Commercial Messages and Children's Health | 28 |
| Commercial Messages and Body Image | 33 |
| Commercial Messages, Sexual Attitudes and Behaviour | 35 |
| Commercial Messages, Violence and Aggression | 37 |
| Commercial Messages and Gender Stereotyping | 38 |
| Commercial Messages, Race and Ethnicity | 41 |
| Commercial Messages, Materialism, Happiness and Life Satisfaction | 43 |
| Uses and Interpretations of Commercial Messages by Children | 47 |
| Decision-making Skills in Consumer-Contexts | 48 |
| Purchase Influence and Negotiation Strategies | 49 |
| Branding and the Disadvantaged | 52 |
| Commercial Messages and the Internet | 55 |
| Commercial Messages in Schools | 58 |
| BALANCING THE EVIDENCE: IMPLICATIONS FOR CHILDREN'S WELLBEING | 61 |
| REFERENCES | 65 |
| APPENDIX 1: RECORD OF SEARCHES | 78 |

EXECUTIVE SUMMARY

This review examines the effects, uses and interpretations of commercial messages by children and any implications for their wellbeing. It has been conducted to feed into a wider independent consultation on the commercial world and children's wellbeing being conducted by Professor David Buckingham.

The report provides a comprehensive account of the literature, combining research from several relevant and divergent disciplines. It addresses a very complex and controversial issue, and seeks not to advocate one point of view over another, but to carefully consider the evidence to bring us to a better understanding of how commercial messages may both harm and benefit our children. The focus on effects, uses *and* interpretations is important, as we move away from the arguably simplistic notion of the child as passive recipient to a more sophisticated perception of children as active negotiators of message meanings. Because the scope of the review is so wide ranging, it aims to provide a broad overview of key findings in each of the relevant areas rather than a detailed appraisal of individual studies.

Although the growth of new media and divergence of traditional media potentially mean that children are exposed to far more commercial messages, the majority of published research concerns television advertising. This is a limitation in the evidence base.

Children and Consumption

Commercial marketing to children and teenagers has grown considerably in recent times. This growth has led to concerns about potentially negative impacts on children and teenagers, as well as speculation about benefits to be gained. The matter is hotly contested and generally characterised by two extreme perspectives. The first contends that children are critical consumers capable of defending themselves against the potentially negative influences of the commercial world. The second argues that they are generally more susceptible to commercial influences than are adults because they lack the cognitive capacity to defend themselves against any potentially negative effects. The truth is probably somewhere in between and the somewhat static conception of children's 'vulnerability' or 'empowerment' can be better conceptualised as a dynamic and interactive process between child and marketer. Several factors might determine a child's 'success' in this relationship, although arguably a principal variable is age – or rather, the extent to which a child is sufficiently developed to recognise, appreciate, be critical of and resist commercial messages.

Consumer Socialisation

There is an extensive literature on children's consumer socialisation, stretching back over more than 30 years. While children's consumer socialisation begins at an early age and continues to develop throughout childhood, the period between the ages of 7 and 11 years is seen as a particularly important phase of development. The literature suggests that children may be influenced by advertising regardless of whether they are able to distinguish advertising from other types of message and that understanding the intent of advertising does not protect children from its influence. Children's awareness of the symbolic value of products and brands, both in terms of making judgements about other people and making connections with their own self-concepts, emerges between middle (7-8 years) and early adolescence (12-13 years). Children's shopping skills, independence and decision-making skills develop similarly with age. Consumer socialisation has been reported to be influenced by a range of factors, including children's family environment, their parents' educational level and involvement in their consumer education, peer group norms and the time children spend watching television.

Effects, Uses and Interpretations of Commercial Messages by Children

Commercial Messages and Health

There is strong evidence that *commercial messages promoting tobacco, food and alcohol* influence children's attitudes and behaviour and may have a *damaging impact on their health*. This is not to say that these messages are the only influencing factor or indeed the most significant one, but nonetheless they have an impact.

Commercial Messages and Body Image

There is some evidence to suggest that commercial messages and the mass media in general promote physical ideals that may lead children and teenagers to *feel negatively about their own bodies*, although there are methodological and other limitations with work in this area.

Commercial Messages and Sexual Attitudes

There is limited and still evolving research on the relationship between *commercial messages and sexual attitudes and behaviour*. Research on the influence of media messages generally suggests that exposure to sexual content may contribute to unrealistic expectations and confusion among young people.

Commercial Messages and Violence

Although the relationship between media in general and violence has been researched (and the findings are contested), no evidence was found specifically examining *the effects of violent content in commercial messages* on children and teenagers.

Commercial Messages, Gender and Ethnicity

Stereotypical gender portrayals persist in television advertising, and behavioural research suggests that these *can influence children's perceptions and beliefs about gender expectations*. *Ethnic minority groups* are underrepresented in advertising; again, behavioural research suggests that this can influence children's knowledge and perceptions of different racial groups. Some research also suggests that advertising and the media can be promising media for portraying non-traditional gender roles and for teaching positive multicultural concepts. Recent sociological work suggests that the commercial world can provide girls with cues and props with which they can construct their own femininity.

Commercial Messages and Materialism

Research based on the vulnerable child paradigm assumes that children lack the cognitive skills to protect themselves against commercial messages, making them vulnerable to the unintended consequences of the consumer society such as materialism. Higher levels of television viewing and exposure to advertising seem to be associated with the development of materialistic values in children, although other factors such as family and peer relationships also appear to be important in both developing and mitigating against such values. Materialistic values may be associated with dissatisfaction and low self esteem, and some suggestion that boys are more materialistic than girls. Low income youths may have higher levels of materialism than those from more affluent families. Further research is needed to establish exactly the role of commercial messages in the development of materialistic values.

Commercial Messages, Family Influence and Conflict

Children exert considerable direct and indirect influence on family purchases. Several studies suggest that advertising encourages or increases *the likelihood of parent-child conflict* as a result of requests for advertised products.

Commercial Messages and Low-income Families

There is also evidence that low income children make more advertising-induced purchase requests than high income children, increasing the conflict and strain in *low income*

families. More generally there are *pressures on low-income families* from the costs of consumption and the attraction of prestigious branded goods to avoid the stigma of poverty.

Commercial Messages and New Media

Research on how children respond to *commercial messages in new media* - the internet, mobile phones – is in its infancy. So far it tells us that children can enjoy and be entertained by these online interactions, as well as being cynical about them, but that they may also be more vulnerable to these non-traditional forms of commercial message.

Commercial Messages and Schools

Commercialism in schools has become more pervasive in recent years. Despite this, very little systematic research has been conducted regarding their effects on the wellbeing of children. The little work that has been done focuses on commercial marketing in US schools. Further UK relevant research is needed.

Learning from the commercial world

Children acquire technical and other knowledge from commercial messages which can assist in family purchase decisions.

Balancing the Evidence: Implications for Children's Wellbeing

The relationship between children and commercial marketing is complex, fluid and contentious. We know that children's capacity to negotiate commercial marketing varies enormously, most noticeably with their stage of development. We also know that this negotiation can bring both harms and benefits. On the positive side it helps prepare them for an adult life which will require them to be extensive and effective consumers. On the negative side, it can have a damaging impact on their health. In addition, there is much debate and less consensus about social consequences such as materialism and negative stereotyping. Other potential areas of harm (eg. covert marketing, gambling) have yet to be studied among children.

Commercial marketing is a vastly important dimension of modern life, and understanding and navigating it is crucial for both society and the individual. This is particularly true for children who are the future and have to cope with an increasingly pervasive and innovative commercial sector. It is not possible, and would not be desirable, to protect them from commercial marketing until they reached adulthood. Rather they need to be properly prepared for the challenge of adult consumption. However this learning should take place in

a protective environment. Controls are needed on commercial marketers, and these must take the sophisticated nature of modern marketing into account. In particular an incomplete evidence base needs to be supported by the adroit application of the precautionary principle.

INTRODUCTION

This review examines children's relationships with commercial messages. It has been prepared on behalf of the Department for Children, Schools and Families (DCSF) and the Department of Culture, Media and Sport (DCMS) to feed into a wider independent consultation being led by Professor David Buckingham on the commercial world and children's wellbeing. Specifically, the review examines evidence of how children use, interpret and are affected by commercial messages and any implications this has for their wellbeing, both positive and negative.

The report provides a comprehensive account of the literature, combining research from several relevant and divergent disciplines. This issue of children and commercialism has been studied by researchers from a range of backgrounds and theoretical standpoints, using different questions and methodological approaches. In putting together this review, it was necessary to identify these different contributions and acknowledge their relative strengths and weaknesses before accepting them into the evidence base.

It was also important to acknowledge the difficulties that researchers have faced not only due to the complexity of this issue, but also because of the great controversy that surrounds it. The contentious nature of this matter has been well documented, as have the wide-ranging perspectives of the many stakeholders including consumer groups, politicians, parents, scholars and the commercial sector itself. The continuation of these long-running debates has made it increasingly difficult to separate the rhetoric from the evidence. The purpose of this review is not to advocate one point of view over another, but to carefully consider the evidence to bring us to a better understanding of how commercial messages may both harm and benefit our children. The focus on effects, uses *and* interpretations is an important one, as we continually move away from the arguably simplistic notion of the child as passive recipient of commercial messages to a more sophisticated perception of children as active negotiators of message meanings.

While the review itself seeks to uncover evidence of how children engage with the vast array of commercial messages they come across, we are limited by the confines of what research has actually been done (and indeed, when, by whom, with whom, and how). It is also worth noting that this is *not* a review of children's interactions with the media more generally but an examination of how they engage with the *commercial* aspects of media, as well as commercial messages they encounter through non-media channels. However, we do

recognise that in some cases there is a ‘blurring’ between marketing and media effects and that, where research on the commercial dimensions of media is lacking, it has at times been useful to consider research on the role of the wider media instead. Finally, because the scope of the review is so wide ranging, it aims to provide a broad overview of key findings in each of the relevant areas rather than provide a detailed appraisal of individual studies.

The review begins by providing a general introduction to the issue of children and consumption and discusses how children are commonly depicted in the literature as either empowered or vulnerable. The literature on children’s consumer socialisation is then briefly summarised and its implications for understanding how children use, interpret and are affected by commercial messages are discussed. The review then considers the main findings on the effects, uses and interpretations of commercial messages by children. This section begins by defining the review’s key concepts including what is meant by ‘commercial messages’, as well as ‘effects’, ‘uses’ and ‘interpretations’. It then provides a short critical account of the different research paradigms before summarising findings according to ‘effects’ and ‘uses and interpretations’.

REVIEW METHODS

The search and review methods were thorough and comprehensive but not fully systematic (Higgins & Green 2008). The goal of the review was to provide a broad overview of top-level findings in key areas using seminal papers and reviews. The review was restricted to English language articles (both UK and international) and the primary source of evidence was electronic databases (Table 1).

Table 1: Databases for Searching

| Electronic Database | Types of literature |
|-----------------------------------|--|
| Advertising Education Forum (AEF) | Database of research and comment on children and media |
| Emerald | Marketing and management |
| ISI Social Science Citation Index | Social sciences |
| Medline | Medical sciences |
| PsycINFO | Psychology and social sciences |
| Sociological Abstracts | Social sciences |

As part of a preliminary literature scoping exercise, comprehensive pilot searches were undertaken on PsycINFO, Emerald and AEF database. This process enabled us to refine

the search strategy for the review and compile a final list of search terms. A full search was then undertaken on all databases using varying combinations of search terms. In addition, grey literature was gathered by searches of the resources held by relevant organisations including online databases and websites. Finally, the research team personally contacted leading academics in relevant disciplinary fields to help identify seminal papers in the different areas and to serve as a 'safety net' for our own searches.

See Appendix 1 for details of the searches undertaken, websites visited and individuals contacted.

PART I: THE WIDER CONTEXT

CHILDREN AND CONSUMPTION

Commercial marketing to children and teenagers has grown considerably in recent times (Kasser & Linn 2004). Children are of great interest to commercial marketers, not only because of their own independent purchasing power, but also because of their ability to influence the purchase choices of their parents and other family members. As the youth marketing industry grows, so too does anxiety about the apparent 'commercialisation' of children. A range of outcomes including gender stereotyping, family conflict, materialistic values, smoking, misuse of alcohol, and obesity and related dietary problems have all, in some way, been attributed to commercial marketing activity (Kasser & Linn 2004). But, as Buckingham & Bragg (in preparation) contend, it is also possible that children's involvement with the commercial sector can contribute positively to their development and wellbeing.

The matter of children's commercialisation is, not surprisingly, hotly contested and characterised by two extreme perspectives (Buckingham & Bragg, in preparation). The first contends that children are critical consumers capable of defending themselves against the potentially negative influences of the commercial world (Valkenburg 2000). The second argues that commercial messages can greatly influence the values and beliefs of children and that they are generally more susceptible to commercial influences than are adults because they lack the cognitive capacity to defend themselves against any potentially negative effects. This apparent dichotomy is reflected in research that has been undertaken on the topic; according to Buijzen and Valkenburg (2003a, p483), studies into the effect of the commercial world on children, particularly advertising, are generally based on two paradigms; "the paradigm of the empowered child and that of the vulnerable child."

Research based around the empowered child sees them as "skilled" and "savvy", capable of deconstructing commercial messages and developing brand awareness, attitudes and purchase intentions. While recognising that commercial pressures on children have increased, inherent is the view that commercial practices are part of modern childhood, and that children have much to gain by becoming skilled consumers (Piachaud 2007). Not surprisingly, this view is favoured by marketing practitioners who often depict children as commercially sophisticated. Cook (2007) suggests that this perspective provides them with 'moral cover' and 'justification' for targeting children with commercial communications.

However, it may also reflect hard experience in the market place. Marketing to children, as with any other consumer, is a complex and challenging business. Critics sometimes like to present this as a largely one-sided exercise, with a very powerful marketer manipulating, at will, a gullible and passive consumer. This view dates back to Vance Packard's *Hidden Persuaders* (Packard 1957) and runs through to the present day with books like Klein's *No Logo* (Klein 2000). However it is a perspective which sits uncomfortably with the fact that companies often get it wrong; it is estimated, for example, that 80 to 90% of new food products fail within one year of introduction (Rudolph 1995). At the very least this suggests that the power of advertising is not sufficient to guarantee success.

Marketing to children, as with any other demographic, starts with extensive and very careful research to define needs and wants. This research process then continues throughout the development and promotion of the product or service, and culminates in the monitoring of target group response. Throughout there is a feedback loop, so marketers can adjust their offerings to better meet consumer needs. Advertising messages, for instance, have to be checked with target audiences to ensure comprehension, acceptability and attractiveness. Communication is a two way process and children, like the rest of us, get actively involved in interpreting meaning and deciding how to respond. The notion that children will blithely respond to a clever message is naive – and will certainly be refuted by parents up and down the land.

In contrast, research based on the vulnerable child paradigm assumes that children lack the cognitive skills to protect themselves against commercial messages, making them vulnerable to the unintended consequences of the consumer society such as materialism, parent-child conflict and unhappiness. Much of the research in the field was conducted in the 1970s, and an ongoing debate (Friestad & Wright 2005, Buijzen & Valkenburg 2003a, Lawler & Prothero 2002) questions whether the results still hold true for children today, when as Livingstone & Helsper argue (2006, p561), *“the media environment has more generally diversified, with commercial messages becoming more pervasive through multiple channel and cross-media promotions”* (Kunkel et al 2004, McNeal 1992, Story & French 2004). This changing media and marketing environment raises several questions, including whether children in the West are becoming more susceptible to commercial messages as these messages increase in pervasiveness (eg. Buckingham 2000, Gunter & Furnham 1998), or whether they are actually becoming less vulnerable to such messages as a result of more sophisticated defences brought about by changes in child rearing and family communication styles in past decades (Gunter & Furnham 1998, McNeal 1999)?

Cook (2005) finds both constructs problematic, suggesting that high levels of public discourse and moral panic about children's consumption tends to accentuate these two extremes and makes it harder to achieve a true and accurate account of children's relationships with commercial messaging. Cook (2005) ultimately rejects the empowered/vulnerable dichotomy, arguing that children can be '*both subjects and objects, persons and symbols, active and passive...*' (p158). Indeed, it may be more accurate to recognise that children are not entirely passive, that they can understand the intent of commercial messages and actively engage with and deconstruct them - that there is truth in the idea of marketing, even when it is focussed on children, being a process of consultation and relationship building. Such a perspective avoids the blame culture that pervades this issue, with interest groups on the one hand characterising marketers as the villain of the piece and industry trying to vindicate it on the other.

However, this does not make marketing innocuous, because power still comes into play. Consultation and relationship building are fine between equals, but if a child does not understand the full costs of the offer being made or have the ability to resist it, then problems emerge. Siblings can do deals, but big brothers tend to come off better. Thus even with a model of an empowered child in the marketplace the question of undesirable impacts still remains because the concern becomes *relative* power. It does however introduce an appreciation of the complexity involved: impacts are likely to be subtle and diffuse, and may be positive as well as negative. Even when a child is cheated by a marketer she may learn the valuable lesson of *caveat emptor*.

In this way, the somewhat static conception of children's 'vulnerability' or 'empowerment' can be better conceptualised as a dynamic and interactive process between child and marketer. Several factors might determine a child's 'success' in this relationship, although arguably a principal variable is age – or rather, the extent to which a child is sufficiently developed to recognise, appreciate, be critical of and resist commercial messages. Research in this area has been undertaken under the banner of 'consumer socialisation'. The next section of the review provides a brief account of this literature and discusses its implications for the effects, uses and interpretations of commercial messages by children.

CONSUMER SOCIALISATION

The sections that follow summarise and appraise the literature on consumer socialisation. We discuss how consumer socialisation has been defined and the implications of this for the body of research that followed, most of which was conducted in the United States and was particularly prevalent in the 1970s. We then examine the stages of consumer socialisation and consider the research on children's ability to distinguish advertising from other messages, their understanding of advertising intent, their knowledge of commercial advertising and their shopping and decision-making skills. These sections provide a context for examining the evidence of the effects of commercial messages on children's wellbeing.

Definitions of Consumer Socialisation

Nairn & Fine (2008, p448) note that the goal of public policy has been to establish the 'magic age' at which children are able to understand advertisers' motives and develop their own information processing abilities. Having this capacity is seen as an important social developmental milestone by researchers and policymakers, as children learn to refine and evaluate the advertising messages they are exposed to rather than accept them at face value (Lawlor & Prothero 2002). The most widely used definition of consumer socialisation is Ward's (1974, p2) who defined it as the "*processes by which young people acquire skills, knowledge, and attitudes relevant to their functioning as consumers in the marketplace.*" This definition, McNeal (2007) has argued, has encouraged a focus on children's cognitive processes and on the role of parents in developing these, and has paid less attention to children's physical behaviour and their learning *on their own* and through *objects*. McNeal also noted a preoccupation with the impact of television advertising on children, which he attributed to the concerns of public policy. Attempting to redress the balance, McNeal (2007, p25) proposed that "*consumer development consists of the changes in an individual's level of functioning in the consumer role that result from the enduring changes in thinking and behaviour*". He argued that not only are motor skills required to perform the consumer role, but that they drive consumer development. McNeal's perspective involves viewing all activities, including the example of a baby's sleeping under a blanket, as a form of consumption, even when no current commercial transaction is involved, his point being that children's physical environment exposes them to a wide range of commercialised objects.

Stages of Consumer Socialisation

John (1999) divided consumer socialisation into three stages, based on theories of cognitive and social development (Piaget, cited in Ginsburg & Opper 1988, Selman 1980, Barenboim 1981). John (1999) recognised these stages reflect generalisations and acknowledged that children vary in their development. The three stages are:

(i) Perceptual Stage (3-7 years)

At this stage children focus on the immediate and easily discernable perceptual characteristics of consumption. Their understanding is superficial and their consumer decision-making skills “simple, expedient and egocentric” (John 1999, p187).

(ii) Analytical Stage (7-11 years)

This stage encapsulates important developments in children’s consumer socialisation, reflecting concomitant advances in their cognitive and social development. It is characterised by transformations from perceptual to symbolic thought, unidimensional to multidimensional consideration, concrete to abstract reasoning, and egocentricity to the ability to extend beyond their own perspective. Children’s consumer decision-making skills at this stage are described as being more adaptive and responsive.

(iii) Reflective Stage (11-16 years)

The reflective stage involves increased sophistication in children’s information processing and social skills and their knowledge about market-related concepts, including branding and pricing. This stage is also associated with the development of greater reflective thinking and reasoning, with a growing social awareness and a more strategic perspective as children approach adolescence.

John (1999) acknowledges that these important developments take place in a social context that includes family, peers, mass media and marketing institutions. While advertising plays an early role in the consumer socialisation of children, other consumer experiences such as shopping with parents play their part. John (1999) argues that these experiences, aided by developing cognitive abilities, allow children to interpret and organise their experiences, the outcome being a set of knowledge and skills that form their understanding of marketplace transactions.

Emphasising children's behavioural development, McNeal (2007) proposed an alternative five stages of 'consumer development': Stage 1 – *observation* (0-6 months) – progression from random to purposeful orientation to consumption objects; Stage 2 – *requesting/seeking* (6 months - 2 years) – progression from physical and linguistic dependence to gesturing and naming objects; Stage 3 – *selecting/taking* (2-4 years) – awareness of items other children have and articulation of needs and brands; Stage 4 – *co-purchase* (4-6 years) – appreciation of monetary exchange for goods and parental supervision of purchases; and Stage 5 – *independent purchase* (6 - about 8 years) – execution of purchase routine on own. These stages were identified based on studies over many years, including observation of children and parents in shopping settings in the US and China, case studies, drawing studies to find out what children knew about the marketplace and depth interviews with children and parents.

However, Nairn & Fine's (2008, p449) recent review suggests that despite the popularity of these "cognitive development milestones", the argument that "this gradually acquired competence" helps children to both understand and guard against advertising intent is being challenged, particularly as an explanation of the capabilities of children in the reflective stage between the ages of 11-16 years. Nairn & Fine (2008) report that recent studies using advertising across a range of media are reported as finding that even 11 year olds and above do not show the expected increase in resistance to advertising. They cite Livingstone & Helsper (2006) who reported in their review of 50 studies into the influence of TV advertising on food choice increasing evidence of influence with age, the strongest effects being seen in the 12-16 year range. Ekström (2006) has suggested that consumer socialisation is better viewed as a lifelong process than as a series of stages, and argues that more attention should be paid to the processes involved than simply to the content of learning at each stage. She also suggests that research has tended to focus on the influences on children's consumer socialisation and to neglect influences in the other direction: children's impact on parents' and grandparents' consumer learning, for example. Future consumer socialisation research needs also, in Ekström's view, to pay more attention to the effects of race, gender and social class.

Summary Box – Stages of Consumer Socialisation

John (1999) proposed a three-stage model of consumer socialisation, based on children's cognitive and social development. By contrast, McNeal (2007) proposed a five-stage model of consumer *development*, highlighting children's behavioural development. More recently, Ekström (2006) has argued that consumer socialisation is better viewed as a lifelong process than a series of stages, suggesting that more attention be paid to the processes involved rather than the simply the content of learning at each stage.

Distinguishing Between Advertising and Other Types of Message

Much of the literature on consumer socialisation has concentrated on children's ability to recognise and understand commercial messages. The underlying concern is children's exposure to sophisticated and sometimes misleading advertising when their cognitive and social immaturity make them vulnerable to influences that are not impartial (Moses & Baldwin 2005). Goldstein (1997) considered attempts to determine at what age children understand advertising 'misguided', arguing that the development of understanding is a continual process, that researchers' tests of understanding were too demanding even for adults and that there was no evidence that understanding advertising intent influenced people's responses to advertising. By contrast, Jarlbro (2001) argued that everyone is entitled to know when they are being exposed to commercial influence and that commercial communication might exert an effect even without a person being aware of the commercial nature of the communication. Corroboration for Jarlbro's supposition may be found in Zajonc's (1968) findings that preferences may be produced merely by repeated exposure.

In her review of 25 years of research on children's consumer socialisation, John (1999) concluded that nearly all children were able to distinguish between advertising and television programmes by five years old. Gunter & Furnham (1998) reached the same conclusion. In a different review, Bjurström (1994) reported that the earliest age at which some children were able to make the distinction was three or four years of age, most were able to do so between the ages of six to eight and that all children were fully capable of distinguishing between advertising and programmes by the age of 10.

With the growth in new forms of advertising and promotion, such as product placement, sponsored Google links, advergames and so forth, distinguishing between commercial and

non-commercial content and identifying persuasive intent may become more difficult (Moore & Rideout 2007). Future research may need to move beyond assessing children's ability to differentiate traditional forms of advertising and programming.

As many writers have pointed out (John 1999, Bjurström 1994, Moses & Baldwin 2005), being able to distinguish between advertising and other types of message does not mean that children fully understand the intent of advertising or recognise its possible bias, exaggeration or deception. We consider next the literature that has examined children's understanding of advertising and its potential distortion.

Summary Box – Distinguishing Between Advertising and Other Types of Message

Much of the literature on consumer socialisation has concentrated on questions relating to children's ability to recognise and understand commercial messages, owing to concerns about children's vulnerability to sophisticated and sometimes misleading advertising. The age at which most children have been reported to be able to distinguish advertising from other types of message ranges from 5-8 years. However, being able to identify advertising does not mean that children understand its intent and possible distortion.

Understanding of Advertising Intent and Recognition of Bias, Exaggeration and Deception

A meta-analysis of research on children's understanding of advertising intent by Martin (1997) noted that discrepant findings – such as variations in reports of the age at which children understand advertising intent – may often be attributed to methodological and other differences between studies, such as how children's understanding of advertising intent is measured, the way an advertisement is shown, whether or not child participants have prior experience of the advertised product, the types of intent assessed, and the level of television advertising at the time the research was conducted.

The majority of studies have used verbal measures of understanding, either interview or questionnaire. Fewer studies have explored understanding using non-verbal measures, such as pointing at pictures, a method which Martin (1997) suggests may be easier and more appropriate as children's understanding may exceed their ability to express it. However, one weakness of observational studies is that changes in a child's attention when a programme switches to an advertisement cannot be assumed to indicate an ability to distinguish

between the two. Jarlbro (2001) notes that advertising advocates have tended to finance observational studies rather than questionnaire surveys as these allow children to demonstrate understanding at an earlier age than verbal measures.

Advertisements have been presented to children in studies in three different ways: no advertisement, advertisement in isolation and advertisement mixed in with television programming. Presenting advertisements mixed in with television programming better enabled children to demonstrate their understanding because presenting advertisements in isolation could cause confusion (Martin 1997). Differences in children's perceptions of the credibility of advertisements might be influenced by prior experience with an advertised product, but this is not assessed in all studies (Bjurström 1994).

Interpretations of advertising intent have also differed between studies. Most early studies treated persuasive intent as synonymous with selling (Martin 1997). However, studies conducted after the mid-1980s have tended to set more stringent criteria: (i) the ability to adopt a perspective other than one's own; (ii) recognition that the source intends to persuade; (iii) recognition that messages designed to persuade are not objective; and (iv) awareness that such messages need to be approached differently from informational messages (de Bens & Vandenbruaene 1992, p44, cited in Bjurström 1994). Two types of attribution intent have also been classified: assistive and persuasive (Robertson & Rossiter 1974). As many as five types of intent were listed by Blosser & Roberts (1985): intent to inform, to teach, to entertain, to sell and to persuade, although these have not been widely adopted in the literature.

Acknowledging the variations in the way understanding of advertising intent has been defined, John (1999) concluded that children are typically able to understand advertising intent by age seven or eight, before which time they see advertising as a form of entertainment or source of unquestioned information. She furthermore determined that children were able to recognise bias and deception in advertising by age eight. This recognition was reported to develop further in adolescence, along with insight into the reasons for it and increasing scepticism towards advertising, albeit John acknowledged that older children might still find many advertisements "*entertaining, interesting and socially relevant*" (p191). Bjurström (1994) similarly concluded that most children were not able to explain verbally the purpose of advertising until age seven or eight. The stage at which children develop an appreciation of advertising intent and its possible distortion is also likely to be influenced by family environment, parents' educational level and involvement in their

children's consumer education, peer group norms, and the time children spend watching television (John 1999, Bjurström 1994).

However, these developments in children do not necessarily serve as cognitive defences against advertising. Goldstein (1997) was unable to find any evidence that understanding advertising intent moderated or negated the effects of advertising. Although Robertson & Rossiter (1974) claimed that children with a greater understanding of advertising's persuasive intent tended to believe and like the advertising less and were less likely to want the advertised products, a number of methodological limitations undermine confidence in their conclusions. Their research was conducted with a particular sample (boys aged between 6 and 11 years from Catholic schools) and may not be widely generalisable. Furthermore, despite reporting that children's perception of persuasive intent was "very much related to age and parental education", they used parental education as a surrogate for verbal ability to check that the effects were not affected by articulation differences, thus confounding their results.

John (1999) speculated that, as with adults, some products may just be too enticing or, alternatively, children may not access their knowledge about advertising intent during their exposure to it. Furthermore, Nairn & Fine (2008) argue that contemporary advertising formats communicate subtle affective associations, as opposed to functional messages, allowing them to achieve implicit persuasion and evade children's knowledge of persuasive intent. Implicit and explicit attitudes appear to affect people's behaviour, but in different ways, and tend not to be strongly associated with each other, although this is not always the case. Put simply, implicit processes are thought to be activated automatically, without effort or intention; explicit processes require more effort and are intentional. Nairn & Fine (2008) report recent research that has shown how advertising messages can influence implicit attitudes towards products. For example, Gibson (2008) paired Coke and Pepsi logos with positive or negative images and words, and brought about implicit attitude change in participants who initially had no strong preference for either brand, while their explicit attitudes remained unchanged. However, implicit attitude change in response to advertising may affect explicit consumers attitudes, and Nairn & Fine (2008, p457) cite the Berridge & Winkielman (2003) study where volunteers "exposed to subliminal presentations of happy faces before being offered a fruit flavoured drink rated it tastier, drank more of it, and were willing to pay more for it, compared with volunteers exposed to angry faces." Drawing on studies using psychological tests such as the Implicit Association Test, and studies using social stimuli, Nairn & Fine (2008) conclude that recent psychological and neuroscientific

evidence, suggests that pre-adolescent and adolescent children are ill-equipped to withstand implicit persuasion in advertising.

Less is known about children's knowledge of advertising tactics and appeals, but this is reported to develop much later (John 1999) increasing between 11 and 14 years of age (Bousch et al 1994). Less attention has also been paid to children's perceptions of advertisements targeted at adults, rather than those aimed at children (Bjurström 1994).

Summary Box - Understanding of Advertising Intent and Recognition of Bias, Exaggeration and Deception

Variations in reports of the age at which children understand advertising intent have been attributed to methodological differences between studies. The majority of studies have used verbal measures of understanding, either interview or questionnaire. Fewer studies have used non-verbal measures, such as pointing at pictures to demonstrate their understanding. Children are typically able to demonstrate verbally their understanding of advertising intent by the age of seven or eight. However, this does not appear to serve as a cognitive defence against advertising and recent psychological and neuroscientific evidence suggests that pre-adolescent and adolescent children are ill-equipped to withstand implicit persuasion in advertising.

Knowledge of Products and Brands

Product and brand knowledge among children today is significant (Achenreiner & John 2003); children as young as two can recognise familiar packages, logos and characters on products such as toys and clothing (Derscheid et al 1996). Haynes et al (1993) reported that three year olds recognise licensed characters rather than brand logos, albeit the research was based on mothers' perceptions. Children can recall and name multiple brands in child-oriented product categories by middle childhood (Macklin 1996, Ward et al 1977), and by age nine are as familiar with brands and associated slogans as their parents (Dotson & Hyatt 2000). These developments in brand awareness allow children to begin to discern similarities and differences among brands; young consumers also begin to understand the symbolic meaning and status accorded to certain types of products and brands names (Achenreiner & John 2003, John 1999). Young children learn brand names from a wide variety of sources, including their parents and friends, television, radio, videos, books, packages and shops (McNeal 2007). Studies show that preschool is when children begin developing a preference

for particular brands, for example a branded item over a generic alternative. This escalates through primary school, and by the time they reach early adolescence, children are expressing strong preferences for one brand over another, based on relatively sophisticated understanding of their brand concepts and images (Achenreiner 1997).

In a study in the UK, where children have the highest television viewing and thus greatest exposure to advertising in Europe (Livingstone 1999, cited by Pine & Nash 2003), Pine & Nash (2003) reported preference for branded over non-branded products, among preschool children (aged 4-5 years), especially girls. The study adopted an experimental scenario in which children assumed the role of expert advisor to the researchers and the methodology used pointing to pictures rather than verbal report, albeit they acknowledged that girls' earlier verbal development might have enabled them to read the brand names on the pictured products. In an earlier study, Pine & Nash (2002) examined the effects of television advertising on 3–6 year olds in the UK compared with 6 year olds in Sweden (where television advertising to under 12s is prohibited), drawing on analysis of television advertisements aired in the six weeks prior to structured interviews with parents or children in the UK and items requested in letters to Father Christmas by children in the UK and Sweden. Although the correlational data did not allow causal relationships to be established, the study found that the more television children watched, the more items and branded toys they requested from Father Christmas. Children who watched television on their own also requested more items in their letters to Father Christmas. Children in Sweden made fewer requests than their counterparts in the UK. However, there was no significant correlation between the toys requested by children and the most advertised toys in the preceding six week period. Indeed nearly 90% of the toys advertised during this period were not mentioned in the children's letters to Father Christmas, leading the researchers to conclude that children under seven had poor recall for particular brand names.

John (1999) reported that 'structural knowledge' about product categorisation develops around age 8-10, before which children are attuned only to visual attributes such as shape, size or colour, rather than the underlying, functional attributes of product categories. Likewise, children's 'symbolic knowledge' about the meanings and prestige of particular products or brands is reported to develop from middle to late childhood, with children increasingly expressing strong brand preferences and exhibiting growing sophistication in their understanding of branding (Achenreiner 1995).

Children start to draw inferences about other people on the basis of the products they use by the age of about seven (Belk et al 1982, Mayer & Belk 1982) and on the basis of the brands

they use around the age of 11-12 (Achenreiner 1995, Belk et al 1984). Connections between brands and children's self-concepts develop between middle childhood (7-8 years of age) and early adolescence (12-13 years of age), with older children discerning personality and symbolisation of group members in brands (Chaplin & John 2005). Peer influence was found to have the strongest effect on adolescents' brand sensitivity to clothing among 12-17 years in a Canadian study by Beaudoin & Lachance (2006).

In their study of 8, 12 and 16 year olds, Achenreiner & John (2003) found that children of different ages relate to brand names in different ways. At an early age, brands function as perceptual cues; conceptual brand meanings enter into the picture around age 8, and are incorporated into a child's judgement and thinking a few years later. By 12, they are able to think of brands on a conceptual or symbolic level, and are also likely to incorporate these meanings into brand-related judgements (Achenreiner & John 2003, p216), and be driven by "a deeper sense of what the brand means and what it says about them." They suggest that further research is needed to elicit whether this brand awareness and brand meaning development leads to more materialistic values, as this would provide a sounder "basis for discussions about the impact of marketing to children" (Achenreiner & John 2003, p218). They also suggest that research should pay more attention to understanding what brand names mean to children, and how this influences the use of brand names in making consumer judgements.

Later work by Chaplin & John (2005) suggested that "*self-brand connections increase with age*", developing between middle childhood and early adolescence, and "accompanied by increases in the depths of the connections made" (Chaplin & John 2005, p127). Younger children make a limited number of self-brand connections, primarily based upon concrete associations such as owning; as they move towards adolescence, brands are viewed as being connected to one's self-concept and as having personalities and symbolising group membership. Chaplin & John (2005) studied middle class, American children, and recognised that further research is needed to establish how self-brand connections develop in children across different socio-economic, ethnic and age groups as well as to explore whether some children are more brand aware because they are simply ahead of their peers in conceptual or social development, or because they experience more brand exposure through interactions with siblings, peers or parents.

Nairn et al (2008) cite recent work that suggests children's experience and understanding of brands is shaped by "new media" such as the internet, as well as more traditional forms (Kenway & Bullen 2001), and that new media may shape the way which children think and

learn (Greenfield 2006). They also highlight the importance of consumer culture theory (Arnould & Thompson 2005), which emphasises that consumption is continually shaped by ongoing interactions within the dynamic socio-cultural context of everyday life (Nairn et al 2008), and suggest this as an alternative way of framing research into children's relationships with brands. Their study examined the role that brand symbolism plays in children's everyday social interactions, and resonates with earlier studies (Achenreiner & John 2003, Chaplin & John 2005). Brands for the 7-11 year olds studied were potential sources of entertainment and fun, with little discrimination between their perceived forms. Whether brands were 'cool' or not was more emotionally charged, and in addition to the symbolic status of brands, children were also concerned with a brand's material quality and value for money.

Summary Box - Knowledge of Products and Brands

Brand awareness, knowledge and preferences develop from a young age. Children start to draw inferences about other people on the basis of the products they use by around age seven and on the basis of the brands they use by around age 11-12. Further research is needed to elicit whether this brand awareness and brand meaning development leads to more materialistic values. Recent work suggests that children's experience and understanding of brands are now also shaped by "new media" such as the internet. An alternative way of framing research into children's relationships with brands is consumer culture theory, which emphasises that consumption is continually shaped by ongoing interactions within the dynamic socio-cultural context of everyday life.

Shopping Skills

Children's shopping skills is an area that has been under-researched and is in need of updating. In this section, we review the limited academic research that has been conducted on the topic.

Substantial developments in children's shopping knowledge and skills occur between preschool and 6-8 years of age (John 1999). At five years old, children view shops as there to satisfy their personal needs. By seven, they see shops as also being necessary and by nine they appreciate that shops fulfil their owners' needs as well as those of their customers (McNeal 1964).

Children in John's (1999) perceptual stage of consumer socialisation (3-7 years) understand the sequence of events involved in making a purchase. Their understanding of the process develops in the analytical stage (7-11 years), resulting in a more sophisticated understanding of the marketplace, more complex knowledge about concepts such as advertising and brands, and a new perspective that goes beyond their own feelings and motives. John (1999) suggests reasoning proceeds at a more abstract level, laying the foundation for a greater understanding of information about abstract concepts such as the motives of advertisers, and the notion of contingencies, for example, that the sweet taste of chocolate is an appealing attribute, but not one that one would want in soup..

Children's consumer competence was examined in a study by Turner & Brandt (1978) using a behavioural measurement in a simulated market. This involved giving children aged 4-10 years token money and testing their ability to choose the best buy from: (i) candy bars and raisins, one item of which could be purchased with a single coin or three pieces if they saved until they had earned a second coin; (ii) a box containing small individually wrapped candies compared with one large single piece of candy; and (iii) different sizes and shapes of packages. Turner and Brandt found that children's abilities to compare and evaluate the value of a product before making a purchase not only improved with age, but also with experience in managing money at home and being involved in family consumer decision-making.

By the age of eight or nine children have a rudimentary knowledge of pricing; they are able to identify pricing information and know that it can differ between products and shops (McNeal & McDaniel 1981). Their conceptualisation of value progresses from depending on perceptual features such as size at preschool age, through to production costs at age 10 and to considerations of quality and buyers' preferences at age 13 (Fox & Kehret-Ward 1990).

More recent research (Meyer & Anderson 2000, Kamaruddin & Mokhlis 2003) finds that, as children grow older, they demonstrate greater independence in their shopping and tend to be accompanied more by their friends than their parents when they shop. Shopping with friends develops as a key leisure activity among pre-adolescent girls. Chin (2001) describes, from an anthropological perspective, how children use shopping expressively as a "sphere of creative play" and a way of connecting with their family and friends.

Summary Box - Shopping Skills

Substantial developments in children's shopping knowledge and skills occur between preschool and 6-8 years of age. Children's abilities to compare and evaluate the value of a product before making a purchase not only improved with age, but also with experience in managing money at home and being involved in family consumer decision-making. Children's knowledge of pricing and value also increase with age, as does their independence in shopping.

Summary of Consumer Socialisation

There is an extensive literature on children's consumer socialisation, stretching back over more than 30 years. Considerable variation in the methodology, measurement and context of the research was noted. Nevertheless, the following general conclusions were drawn. While children's consumer socialisation begins at an early age and continues to develop throughout childhood, the period between the ages of 7 and 11 years is seen as a particularly important phase of development. The literature suggests that children may be influenced by advertising regardless of whether they are able to distinguish advertising from other types of message and that understanding the intent of advertising does not protect children from its influence. Children's awareness of the symbolic value of products and brands, both in terms of making judgements about other people and making connections with their own self-concepts, emerges between middle (7-8 years) and early adolescence (12-13 years). Children's shopping skills, independence and decision-making skills develop similarly with age. Consumer socialisation has been reported to be influenced by a range of factors, including children's family environment, their parents' educational level and involvement in their consumer education, peer group norms and the time children spend watching television.

PART II: MAIN FINDINGS

This section of the review summarises findings on the effects, uses and interpretations of commercial messages by children. Before doing so, it is important to clarify how each of these terms has been defined in the review:

- Children includes anyone up to the age of 18. Though the definition of 'child' often refers only to the period between birth and puberty, this wider definition is used to include also older children and teenagers whose relationships with commercial messages have also been studied and warrant close scrutiny.
- Commercial messages are commercially sponsored marketing messages, including traditional forms such as television and print advertising through to emerging marketing techniques such as online promotions and 'stealth' marketing.
- Effects are changes in a child's knowledge, attitudes or behaviour as a consequence of being exposed to a commercial message.
- Uses are the ways in which children utilise commercial messages to serve a particular function.
- Interpretations are children's understanding of the meaning or significance of commercial messages or goods and services.

As outlined in the introduction, many disciplines have made a contribution to study in this area. In the past research from psychology and marketing tended to dominate, but the area has benefited more recently from contributions from other disciplines including sociology, anthropology and media/cultural studies.

From these contributions two dominant approaches have emerged. The first derives from behaviourist psychology and studies directly the *effects* of commercial messages on children. The underlying assumption of this approach is that children are directly influenced by commercial messages and that these effects – typically changes in knowledge, attitudes or behaviour – can be directly measured and quantified using techniques like experiments and surveys. Though these specific methods themselves vary, the main benefit of these designs is that they allow researchers to examine correlations between advertising and response variables – and, although less often, direct causal relationships – within controlled conditions. However, they are criticised by some for their lack of ecological validity because very often the settings, materials and measures bear little resemblance to what happens in real life. In addition, they often examine only short term effects under very specific

conditions. Many of the survey designs that have also been employed are designed only to establish correlations or relationships between variables of interest; they stop short of telling us anything about causality.

In contrast, the interpretive approach focuses more on how children *experience* commercial messages and what role these messages play in their lives, while accounting for the various social, political and cultural forces that influence this interaction. This approach is popular among such fields as media and cultural studies, sociology, anthropology and some branches of consumer behaviour. Researchers adopting this approach conceptualise children in a more active mode, actively selecting and processing messages according to their own experience and knowledge (Borch 2000). More child-centred methods are favoured such as qualitative interviews and observational research which can explore and seek to understand how children respond to and use commercial messages; indeed, advocates of this approach reject the notion of effects as “*simplistic and theoretically inadequate*” (Buckingham et al 2007, p23). However, this kind of research too has its limitations. Researchers do not have the same degree of control over other influencing variables and much of this work is dependent on the self-report of participating children and the interpretations and judgements of individual researchers. In addition, the research is often based on very small sample sizes limiting the ability to generalise findings to the wider population.

Reflecting this nuanced picture when reviewing such a divided evidence base is extremely challenging. It would be impossible and unrealistic to conceive of the perfect study capable of answering the question of how children engage with commercial messages unambiguously. In absence of the ideal study we must consider the work that has been done, the questions it has asked and the methods it has used, and consider its strengths and weaknesses and how this affects the reliability of the findings. Although these different methodologies do not compensate for one another, they each have a valuable contribution to make to our understanding of how children relate to commercial communications.

In terms of structuring findings, we have opted to organise the material by grouping the research according to whether it has (generally) focused on ‘effects’ or on ‘uses and interpretations’. This was not a straightforward task and much of the evidence does not fit neatly within one category or the other. In terms of coverage and detail, for each topic we have sought to provide a brief overview of the evidence including reference to contributing disciplines, the recency and geographical origin of the research, dominant methodologies and (if relevant) by acknowledging whether there is generally consensus or conflict. We have

done this by referring as much as possible to seminal studies and reviews. The empirical detail is deliberately limited and, as time and resources did not permit the systematic evaluation of the methodological quality of all included studies, we have sought largely to include the best evidence available on each given topic. Throughout each individual section we will also report any differences in findings attributable to age, gender, race/ethnicity and socioeconomic status where they have been reported in the literature.

The findings are now summarised under 'effects' and 'uses and interpretations'. A final section then attempts to pull these conflicting views together, drawing a balance between harm on the one hand and benefits on the other.

EFFECTS OF COMMERCIAL MESSAGES ON CHILDREN

This section summarises findings on the *effects* of commercial messages on children. Much of this work originated in the 1970s and 1980s in North America in response to growing concerns about the (potentially negative) impact of television advertising on children. Psychologists, marketers and public health researchers have made the biggest contribution in this area.

In particular, a vast body of literature has accumulated looking at how commercial messages affect the health of children and young people. Research has focused particularly on products such as tobacco and alcohol which are known to be harmful – so much so that selling them to children is forbidden. In these cases, researchers have examined the direct effects of marketers doing what they *intend* to do (that is, sell their products) but to the wrong people or to too great an extent. The recent rise in childhood obesity has brought the marketing of energy dense foods under the same sort of scrutiny. Researchers have also addressed concerns about the *inadvertent* impact of commercial communications on children. Areas of interest range from the portrayal of gender and race/ethnicity in advertising and its impact on stereotypical attitudes, beliefs and behaviours to the effects of 'body ideals' in advertising on children and teenagers' self perceptions.

Before looking at the evidence, we must accept that it is limited in several ways. As much of the effects research was conducted a long time ago and in the US, its relevance and applicability to children in the UK today may be limited. In addition, many of the studies examined in this section have relied on experimental designs which, as noted earlier, have

limitations. Further, although we sought out research looking at a range of marketing channels, much of the research is confined to studies of television advertising; wider forms of marketing messages are neglected.

Findings are now presented as follows:

- Commercial Messages and Children's Health
- Commercial Messages and Body Image
- Commercial Messages, Sexual Attitudes and Behaviour
- Commercial Messages, Violence & Aggression
- Commercial Messages and Gender Stereotyping
- Commercial Messages, Race & Ethnicity
- Commercial Messages and Materialism, Happiness and Life Satisfaction

Commercial Messages and Children's Health

A significant amount of research has accumulated on the impact of commercial messages on the health of children and young people. This work, principally undertaken by public health researchers, psychologists and marketers, dates back to the late 1970s and early 1980s when concerns about the effects of tobacco advertising on children were first investigated.

Commercial Messages and Tobacco

A recent review by the Tobacco Consortium at the Center for Child Health Research of the American Academy of Pediatrics sought to determine whether there was evidence of a causal link between exposure to tobacco promotion and initiation of tobacco use by children (DiFranza et al 2006). Relevant empirical research was examined against a standard set of six criteria used by epidemiologists for determining causality – for any disease epidemic. The authors found evidence that children are exposed to tobacco promotions before starting smoking; exposure increased the risk of starting smoking and there is a dose-response relationship. The exposure and increased risk relationship is robust, there are realistic and theory-based methods by which promotion can influence initiation and there is nothing else which can account for the results apart from causality (ibid). Using the epidemiological criteria, the authors demonstrate that *“promotion changes many children's attitudes about tobacco use from negative to positive and increases their susceptibility and intentions to use*

tobacco, thereby increasing their likelihood of initiating or of progressing from minimal experimentation to regular use" (ibid, p.e1243).

Further review-level evidence is provided in the recently published monograph by the National Cancer Institute on the evidence of the role the media plays in promoting and/or reducing tobacco use (Davis et al 2008). It also finds that, "*as a whole, the evidence base indicates a causal relationship between tobacco advertising and increased levels of tobacco initiation and continued consumption*" (ibid, p211). In an earlier rigorous systematic review (see Higgins & Green, 2008, for a definition of systematic review methodology) by the Cochrane Collaboration of longitudinal studies measuring the impact of tobacco advertising and promotion on adolescent smoking behaviours, the same relationship is noted, with the authors concluding that "*tobacco advertising and promotion increases the likelihood that adolescents will start to smoke*" (Lovato et al 2003, p10). In terms of relative effects, the authors concede that *isolating* the effects of commercial messages is difficult because they are 'culturally embedded' and 'hard to quantify'. One study (Biener & Siegel 2000) showed that, even when controlling for a range of variables known to influence smoking uptake, adolescents who were highly receptive to tobacco marketing in 1993 were more than twice as likely to become an established smoker by 1997 compared with those who had low receptivity.

Smoking continues to be a leading cause of ill health and premature death in the UK (Peto et al 2006). In response to accumulating evidence about the effects of tobacco promotions, the UK's *Tobacco Advertising and Promotions Act 2002* prohibited tobacco advertising on billboards, in cinemas, newspaper and magazines. Direct mailing, on-pack promotions, brandsharing and events sponsorship are also been banned under the Act. Although this recent legislation has reduced the amount of 'traditional' commercial messages that young people are exposed to in the UK, they are still vulnerable to A5-sized advertising and elaborate displays at point of sale¹, attractive packaging and evocative brand imagery, plus tobacco products' ubiquitous distribution.

This commercial imagery generated by tobacco industry is supplemented by depictions of smoking in the entertainment media and pro-smoking imagery from children and young people's 'social milieu' (Hastings & Angus 2008). In their recent review examining the trends in smoking prevalence and initiation in the UK, and the different forms of pro-smoking

¹ Controlling advertising and the display of tobacco products in retail environments is under consultation as part of the Department of Health's 2008 *Consultation on the Future of Tobacco Control* in England, Northern Ireland and Wales. The Scottish Government's 2008-09 Health Bill will restrict the display of tobacco products in shops and introduce a tobacco sales registration scheme.

imagery (including commercial imagery) and the evidence for how it can affect behaviours and attitudes among young people, Hastings and Angus conclude that *“tobacco marketing in all its forms is a central influence on the initiation and continuance of youth smoking. In particular, evocative tobacco brands appeal to young people”* (2008, p18).

Commercial Messages and Food

The first ever systematic review to examine the current research evidence on the extent and nature of food promotion to children and the effect, if any, that this promotion has on their food knowledge, preferences and behaviour was commissioned by the UK’s Food Standards Agency (FSA) (Hastings et al 2003). The review rigorously appraised the methodological quality of included research and carefully distinguished between studies capable of establishing correlation versus causality before drawing conclusions about the evidence (see Hastings et al 2003 for a full discussion). The review found that children enjoy and engage with food promotion and that it is having an effect, particularly on their preferences, purchase behaviour and consumption and this effect is independent of other factors and that effects are not restricted to brand switching. There was little evidence to show whether the influence of food promotion on is greater or lesser than that of other factors, although in the only study which compared the size of the effect the effect was small relative to price (French et al 2001).

Given the number of stakeholders involved, as Livingstone & Helsper (2006) point out, the question of advertising’s role in the food choice of children is a “heavily contested one”. A rival review was commissioned by the UK’s Advertising Association (to update Young et al.’s 1996 review for the Ministry of Agriculture, Fisheries and Food). It concluded that, *“food advertising does not dictate children’s dietary patterns but it does have a role to play in food choice at the level of the brand. In addition, television programming offers a generous range of images about food and can shape food choices. Healthy and unhealthy eating with different kinds of foods are represented in all media in a host of different ways”* (Young 2003a, p2; see Young 2003b). A number of academic analyses of the two reviews were conducted, but the general consensus was to accept the findings of Hastings et al’s review. Policy options could then be considered.

Since April 2007 a ban on advertising of high fat, salt and sugar (HFSS) food and drink to children on television has been phased in with the complete ban of all HFSS advertising on children’s television channels from January 2009. An Ofcom review of the effectiveness of the restrictions using data from the first half of 2008 is pending this autumn (Ofcom 2008). Globally, review-level evidence supports Hastings et al’s findings; the USA’s Institute of

Medicine of the National Academies' systematic review of food marketing to children and youth found that food and beverage marketing was putting children's long-term health at risk and they could only avoid diet-related chronic diseases if they reduced their intake of the high proportion of food and beverage products marketed to them (McGinnis et al 2006). Specifically, it concluded that "*that television advertising influences children to prefer and request high-calorie and low-nutrient foods and beverages*" and "*food and beverage advertising on television has some influence on the dietary intake of children and youth*" (ibid p8) although effects for older children (12-18 years) was weaker or insignificant. Livingstone & Helsper (2006) highlight that the majority of studies reviewed on this topic were conducted in the 1970s and 80s and call for an update in the empirical research base especially given that the media channels and overlapping promotions for commercial messages are increasing diversifying.

Commercial Messages and Alcohol

Young people are exposed to many different types of commercial messages by the alcohol industry including mass media advertising, delivered via television, radio, newspapers, billboards, posters, the internet, alongside alcohol promotions including give-aways and branded or logoed items. The industry uses increasingly innovative approaches to branding, using marketing opportunities via branded or sponsored events and new products. A comprehensive review of reviews and studies funded by the European Commission on the impact of commercial communication on youth drinking concluded that "*young people are particularly vulnerable to alcohol and to alcohol advertising, which is commonly targeted to them; ... [that] alcohol advertisements are related to young people's expectancies about alcohol and their desire to consume alcohol; ... [and that] alcohol advertisements increase the likelihood of young people starting to drink, the amount they drink, and the amount they drink on any one occasion*" (Anderson 2007, p10-11).

Two recent reviews of academic literature on the impact of the marketing of alcohol on young people are based on longitudinal studies located by systematic literature searches (Anderson et al 2008, Smith & Foxcroft 2007). In general, because the longitudinal study designs controlled for potential confounders, including peer or parental drinking, any correlation between marketing and young people's drinking indicates a causative relationship. The time dimension in longitudinal studies "makes them a particularly powerful way of untangling cause and effect" (Anderson et al 2008, p18). Anderson and colleagues (2008) reviewed eleven studies with young people aged between 10 and 21 years (at baseline), including the seven studies included in the earlier Smith and Foxcroft review. Ten of the eleven studies concluded that exposure to marketing had an impact on subsequent alcohol use, including

initiation of drinking and heavier drinking amongst existing drinkers, with a dose response relationship found in eight studies that reported such exposure and analysis. For example, in a study by Robinson et al (1998), each one hour increase of television viewing per day was associated with a 9% increased risk of starting to drink alcohol within the next 18 months, while in a US study (Snyder et al 2006), for each additional advertisement seen by 15-26 year olds, the number of drinks consumed increased by 1%. There was variation in the strength of association, and the degree to which potential confounders were controlled for. The eleventh study, which tested the impact of billboards placed near schools failed to detect an impact on alcohol use, but found an impact on intentions to use. Anderson et al's review (2008) concludes that alcohol advertising and promotion increases the likelihood that adolescents will start to use alcohol, and to drink more if they are already using alcohol.

Commercial Messages and Health Promotion Among Children

On the flip side, counter-advertising and promotion has been undertaken by the public sector to educate children and young people about the dangers of tobacco and alcohol and to dissuade them from other unhealthy or risky behaviours and promote healthy choices. These kinds of messages address a whole range of topics including dietary health, physical activity, safe sex and illicit drug use. In the case of the tobacco and alcohol, industry itself has sponsored youth smoking prevention and responsible drinking campaigns.

Several studies have compared the effectiveness of tobacco industry-funded youth smoking prevention campaigns with public health campaigns. For example, a study by Farrelly and colleagues found that anti-tobacco attitudes among a sample of 12-17 years olds did *not* increase following exposure to an industry-sponsored youth smoking prevention campaign (Farrelly et al 2002). In fact, the advertising appeared to increase young people's intention to smoke. A more recent study by Wakefield (2006) similarly associated increased exposure to an industry-sponsored campaign with lower recall of anti-tobacco advertising and increased smoking intentions. The evidence suggests that industry-sponsored campaigns may actually cause young people to become more favourably inclined towards smoking, perhaps because they use ineffective message strategies.

Equivalent work on alcohol is less well developed and studies on the effectiveness of industry-sponsored responsible drinking adverts are limited. However, review work published in the early 1990s concluded that such adverts have little impact on youth drinking behaviour (DeJong et al 1992). This differs with the findings of a more recent study (Smith et al 2006) that reported that the main message taken from industry-sponsored advertising was pro-drinking and that source preferences were favourable among a sample of 16-18 year olds.

Summary Box - Commercial Messages and Children's Health

A significant amount of research exists on the effects of commercial messages on the health of children and teenagers. Tobacco, food and alcohol have provided the focus for much of this work and there is sufficient evidence in all three cases that commercial messages may be having a detrimental impact. This is not to say that these messages are the only influencing factor or indeed the most significant one, but their contribution to related health problems should be acknowledged. On the flip side, advertising and other marketing channels have been used to promote healthy behaviours but there is limited evidence that industry-sponsored messages can be effective; in fact some evidence suggests they may even have a counter-productive effect.

Commercial Messages and Body Image

Another issue that has been subject to considerable research and scrutiny is how portrayals of beauty and physical ideals impact on children and teenagers' feelings about themselves.

Work in this area dates back to the late 1970s and much of it has been undertaken by psychologists with contributions from researchers in the health and communications fields. Experiments have been the dominant research design employed to investigate mostly short-term effects on a range of psychological outcomes such as 'body dissatisfaction' (negative thoughts or feelings about one's own body), mood, self-esteem and other factors associated with disordered eating. In a typical experiment, researchers expose participants to images of the 'body ideal' taken from magazines or other media and measure relevant outcomes immediately before and after exposure. Advertising has been studied as well as television, film and editorial content in newspapers and magazines. Disappointingly, only a limited amount of study has been undertaken with teenagers despite the fact that adolescence is a time when disordered eating occurs and media exposure is high (Durkin & Paxton 2002). The focus has also very much been on females, though more recently researchers have examined how portrayals of the male 'muscular' ideal have influenced young boys and men.

The studies undertaken with teenage girls provide mixed results. A few studies have reported no effect, including research undertaken by Champion and Furnham in the late 1990s. This experimental study sought to examine whether acute exposure to images of thin, stereotypically attractive bodies increased body image dissatisfaction among 200 12-16 year

old girls compared with exposure to images of neutral or overweight individuals (Champion & Furnham 1999). The study reported no statistically significant differential effects on children of any age.

Other studies have reported changes in body dissatisfaction following exposure to 'body ideals' (eg. Shaw 1995 in Durkin & Paxton 2002). A recent meta-analysis of 25 controlled experimental studies of the impact of exposure to media images epitomising the thin ideal on young girls and women revealed a moderate effect of exposure on measures of body dissatisfaction (Groesz et al 2002). The analysis demonstrated that females' perceptions of their own bodies were significantly more negative following exposure to mass media images featuring the 'thin ideal', compared to exposure to images of average or over-sized individuals. Effects were described as 'small but consistent' and were more pronounced among females with a history of troubled eating and those who were generally less satisfied with their bodies. Disappointingly the studies examined by the meta-analysis used predominantly adult samples (only five used teenage samples) but an age effect was still identified. The mean effect size of media images on body dissatisfaction was 'somewhat greater' for girls aged under 19 years. Although the exact role of age as a moderator is still largely undetermined, there is some evidence that even very young girls can be susceptible to the influence of 'thin ideals', though older teenagers are believed to be the most susceptible.

In recent years, concerns have increased about the potential impact on young boy's and men's consciousness of their own body image as a result of frequent exposure to images of the 'muscular ideal' in men's magazines and on television (Bissell 2007). Research that has examined this phenomena suggests that exposure to these kinds of images can influence boys' thoughts and feelings about their own physical appearance (Perse 2007).

Scholars have speculated why mass media and advertising messages in particular might influence children and teenagers in this way. One theory is that advertising reinforces an unhealthy preoccupation with physical attractiveness and encourages girls to compare their own physical size and shape with the images portrayed in the mass media (Bissell 2007). Though it is tempting to hold the mass media responsible for glorifying idealistic standards of physical beauty, some scholars argue that the truth is more complicated (Derenne & Beresin 2006). Holstrom (2004), for example, notes that methodological shortcomings may have theoretical significance. The process of exposing children and teenagers to a comparatively small number of images and measuring short-term changes in body image dissatisfaction may not be capable of revealing marketing and media effects which take place over time

(Champion & Furnham 1999). Further, there is a need to understand how young girls and boys respond to specific types of content within the wider context of their naturalistic, long-term exposure to media and marketing messages.

Summary Box – Commercial Messages and Body Image

In general, much of the research supports the view that commercial messages and the mass media in general promote physical ideals that may result in negative thoughts and feelings among children and teenagers about their own bodies. However, there are important methodological concerns as much of the work in this area has depended on experimental designs that measure only short term effects. There is therefore a need for more naturalistic studies of exposure and response to images of body ideals over the longer term. In addition, work with teenagers and younger children is limited, and further research is needed to explore developmental and other individual differences in response.

Commercial Messages, Sexual Attitudes and Behaviour

Outside of health, scholars have also examined other areas where the content of commercial messages may pose some form of harm to children and teenagers. One area of growing concern relates to children and teenagers' exposure to sexual content in the media, particularly new media sources like the internet and how this may influence their sexual attitudes and behaviour (Sommer & Döring 2007). Research in this field is embryonic and the work that has been done has largely been led by researchers in the health, psychology and communications fields.

A recent systematic review looked for evidence of the effects of the mass media on teenage sexual attitudes and behaviour (Escobar-Chaves et al 2005). The review examined a range of media channels including more traditional media like television and radio, as well as music and film and emerging digital media such as the internet and video games. Disappointingly, given the increasing use of sexual appeals in advertising (Brown et al 1990), advertising was one of the least researched areas. Escobar-Chaves et al (2005) highlight the apparent pervasiveness of sexual visual content in advertising for products that might appeal to children and teenagers including, for example, soft drinks advertising featuring celebrities like Britney Spears, and advertisements for male body products such as Lynx deodorant. A recent report by the American Psychological Association on the sexualisation of girls

described how females are “*frequently, consistently and increasingly presented in sexualised ways in advertising*” (APA 2007, p12).

The Escobar-Chaves et al (2005) review identified only twelve studies that actually measured *effects* and none provided any data on commercial messages. Several studies that have examined the effects of the media more generally suggest that teenagers do learn about sex from media sources (Brown et al 2005). The APA report also highlights concern that regular exposure to sexualised images of girls in the media can influence girls’ perceptions about gender and sex roles (APA 2007). It cites research which demonstrates that girls who are more engaged with mainstream media are also more likely to endorse sexual stereotypes that depict women as sexual objects. Moreover, findings from research into possible influences on *adult* sexual attitudes and behaviour highlight the potential for concern.

Children’s limited sexual experience might inhibit their ability to ascertain whether a sexual scenario used for commercial purposes is reflective of what happens in the real world, and this might consequently lead to them developing unrealistic expectations about sex (Sommer & Döring 2007). In addition, some age differences have also been observed in research with the media more generally. For example, younger teenagers have been found to be more embarrassed or confused by sexual media content than older teenagers (Cantor et al 2003 and Silverman-Watkins 1983, both cited in Brown et al 2005). Sexual maturity may also play a role. A recent study by Brown et al (2005) found that earlier maturing girls were more interested in seeing sexual content in films, on television and in magazines and in listening to sexual content in music than later maturing girls, regardless of age or race. These girls were also more likely than later maturing girls to interpret the messages they see in the media as approving of teenagers having sex.

Escobar-Chaves et al (2005) call for further research that focuses not simply on teenagers as ‘victims’, but as active users of the media who may even obtain some benefit from it. Sommer & Döring (2007) go further by suggesting ways in which sexual content in the media may be beneficial and supportive to the development of children and teenagers. Examples include recognition that sex is not a taboo topic but one which can be openly discussed and debated, and the notion that there is pleasure in sexual activity. However, they rightly acknowledge that whether these outcomes are ‘positive’ or not is highly subjective and likely to be viewed differently by different people.

Summary Box – Commercial Messages, Sexual Attitudes and Behaviour

There is little research on the relationship between commercial messages and sexual attitudes and behaviour among children and teenagers. Studies looking at the effects of sexual content in the media more generally suggest that children's attitudes are influenced by sexualised content in various ways. Content analysis work has examined the extent and nature of sexual imagery in advertising but there is little data on how this influences the beliefs, attitudes and behaviour of children and teenagers.

Commercial Messages, Violence and Aggression

A sizeable body of research has examined the violent or aggressive content of the media and its effects on children. This matter is extremely contested and as it has recently been comprehensively reviewed by researchers in the UK (see Buckingham et al 2007) only a very brief account will follow here.

While the role of violent content in the media has been subject to considerable scrutiny, violence in advertising and other commercial messaging has received notably less attention (Paradise 2007). Here the focus has been on content analyses of television advertising (during sports or children's programming) rather than on examining effects. This work, which originates principally from the US, reveals a high occurrence of violent or aggressive portrayals in children's advertising, especially when compared with general audience advertising. One study in particular reported that nearly 40% of children's television advertising featured some form of aggressive behaviour, defined as "behavior that is physically harmful to a person, humanoid, or thing, or psychologically harmful, such as verbal derogation" (Larson 2003). A study by the Federal Trade Commission in the US examined the marketing of violent entertainment products to youth (Grier 2001). The study focused on whether the film, music and electronic games industries promoted age-restricted products to under age children and whether this advertising is designed to attract children. The report found that the industries had routinely promoted restricted products to those aged under 17 years, but it did not provide any evidence on what kind of impact this was having.

Other research has examined the effects of violent content in other media including television programming, films and video games. Research looking at how children respond to violent or aggressive portrayals in television programming suggests that it can result in

feelings of fear and desensitisation to violence (Paradise 2007). By far, the bulk of research on violence in the media has focused on video games. This work is highly polarised by psychological researchers on the one hand (emanating largely from the US) who argue that this content has harmful effects and media/cultural studies researchers (mostly from Europe) on the other who defend video games suggesting they can bring children many benefits (Buckingham et al 2007). The effects research has been subject to considerable criticism not least because the circumstances under which children 'play' video games in an experimental setting differs hugely from real life (Goldstein 2001 in Buckingham et al 2007). Researchers from media and cultural studies have adopted qualitative or ethnographic methods of enquiry and, as such, have not investigated questions of effects (Buckingham et al 2007). The focus of this work has tended to be more on exploring the potential benefits of playing video games. Though these studies have high ecological validity, they are often undertaken with very small samples and rely on the researchers' own interpretations.

A recent review of the impact of the media on children examined all of the evidence and concluded that there was insufficient evidence that video game violence had a direct causal effect on aggression (Buckingham et al 2007). The same review remained equally unconvinced by evidence of the observed benefits of game playing, including the development of cognitive skills, educational attainment and other improvements in learning and motivation.

Summary Box – Commercial Messages, Violence and Aggression

There are no data on the effects of violent content in commercial messages on children and teenagers. Research with other media has tended to focus largely on video games effects, both positive and negative. Though some of the research suggests that playing video games can lead to desensitisation and aggressive behaviours, these findings have been hotly contested on methodological grounds largely because they are based on experimental studies that measure effects in very artificial settings that bear little resemblance to children's exposure and involvement with video games in real life.

Commercial Messages and Gender Stereotyping

Research examining the interplay between commercial messaging and gender was popular during the 1970s and has continued to interest researchers through to the current day. Most

of the research in this field has been undertaken by researchers with an interest in psychology, communications/broadcasting and child development.

Content analyses have provided a popular method of examining how gender is portrayed in the media, television advertising and programming in particular; other forms of media have been virtually ignored. Studies that have examined gender content in advertising have looked at various aspects of content and production including the presence of male or female characters, their voices, use of language, use of products advertised, and actions and behaviours more generally. Most of these studies have used cross-sectional designs, though there have been some longitudinal analyses including recent work by Maher & Childs (2003).

Overall, the research shows that boys and girls are often depicted performing very stereotypical gendered behaviours which, as Mayes & Valentine (1979) explain, are “*a collection of traditional norms (sex-typed attributes) that differentiate typical feminine behaviour patterns from typical masculine behaviour patterns...*” (p41). An influential study by Goffman in the mid 1970s found that women were often portrayed in advertising in subservient or family-oriented roles (Goffman 1976). More recent studies have highlighted the common portrayal of young boys misbehaving in advertising (eg. Larson 2001, Smith 1994) and young girls shown to be shopping (Smith 1994). Smith’s study also highlighted a tendency for boys to be portrayed in advertising in an out-of-home setting, while advertising featuring girls often used the home as the setting, hinting towards traditional gender roles (Smith 1994). Longitudinal research by Maher & Childs (2003) examined the gender-related content of children’s advertising over a 27 year period and reported that, although there has been an increase in the number of female roles in advertising, male dominance was still evident.

Concerns about the very stereotypical portrayals of male and female behaviour in advertising have led researchers to move beyond content analyses and study exactly how these portrayals influence gender-related beliefs, perceptions and behaviours among children. A lot of this work has focused on toys and play, and outcomes of interest include children’s perceptions of gender roles, toy preferences and the perceived gender ‘appropriateness’ of different toys. Several studies have demonstrated an association between gender portrayals in advertising and children’s expectations about appropriate gender behaviours (eg. Klinger et al 2001). Pike & Jennings (2005) argue that this provides evidence not only that children are conscious of gendered ‘roles’ in advertising but that these portrayals influence their beliefs about the appropriateness of playing with certain kinds of toys commonly associated in advertising with either boys or girls. Further, they argue that this can subsequently affect

children's play preferences and that consistent exposure may even influence their expectations of how men and women ought to behave. Similarly, Maher & Childs (2003) argue that gender stereotyping in children's advertising can shape their notions of appropriate gender behaviour more generally.

Some research has even examined the effects of *counter-stereotypical* gender roles; the idea here being that representations of boys and girls engaging in non-traditional behaviours might challenge conventional beliefs about gender. For example, in an experimental study by Pike & Jennings (2005), a sample of elementary school children in the US were exposed to advertisements that had been digitally manipulated to convey the notion that both boys and girls can play with the same toys. The study found that the gender of the model in the advertising shown to children had an effect on which gender they perceived ought to play with given toys. Children who observed the counter-stereotypical advertising were more likely to perceive that both boys *and* girls could play with the toys.

More recent sociological work sheds further light on the complex relationship between consumer culture, gender and childhood. Russell & Tyler (2002) adopted a very different approach to that of the gender research described above. They explored young girls' experiences of consumer culture and gender acquisition by undertaking a case study of the retail chain 'Girl Heaven'. The study considered both the benefits and pressures of feminine culture practices within this very specific context using a three-pronged methodology. The researchers first gathered information about the brand and its ethos. They then undertook participant observation in-store in order to 'get a feel' for Girl Heaven with particular emphasis on representations of femininity. In tandem with this observational work, Russell & Tyler undertook a 'textual' analysis of how femininity is conveyed within the wider marketing literature as well as on the company website and around the store itself. Interviews were also undertaken with the company's visionaries and other members of staff. Thirdly, and lastly, Russell & Tyler accompanied a small sample of 10-11 year old girls on a visit to the store and interviewed them afterwards in order to gain insights into their experiences of Girl Heaven.

Russell & Tyler refer to Girl Heaven both as "somewhere femininity is encouraged to celebrate itself" while simultaneously "epitomising the commercial appropriation of childhood femininity" (p619). From their analysis, they deduce that Girl Heaven, with its use of "glitter... pink lettering and iconography (hearts and stars), as well as rows of sparkly costumes and make-up" (p629), may encourage a focus on body consciousness, beauty and aesthetics among young girls. Further, they speculate that the young girls in their study did appear to

make use of Girl Heaven and its 'props' for purposes related to the cultivation of their feminine identity – though, knowingly so – and that the girls were compelled to rely more heavily on these kinds of props ie. ones that help them 'pursue both an externally-imposed feminine aesthetic and a notion of femininity itself as an aesthetic phenomenon' (p634) than any other kind. Discouragingly, the authors observe that the commercial view seems to be that even young girls can be self-conscious about their own bodies and that the social and cultural reference points they have for developing their own identity are narrow, supporting Butler's (1993) argument that femininity norms are often 'aesthetic' and 'corporeal'.

Summary Box – Commercial Messages and Gender Stereotyping

Content analyses of gender portrayals in television advertising in particular tell us that boys and girls are commonly portrayed in very stereotypical roles and that this trend has persisted over time. Behavioural research suggests that these portrayals can influence children's perceptions and beliefs about gender expectations and the gender appropriateness of playing with particular toys. Encouragingly, a small body of research also suggests that non-traditional portrayals could be effective in overcoming some of these stereotypes and encouraging children not to be constrained by gender roles (especially in their play behaviour). Research on the effects of gender portrayals in other types of commercial messages has not been undertaken.

Recent sociological work takes a more sophisticated view of gender and consumption, supporting the view that the commercial world can provide young girls with cues about gender and femininity and props with which they can develop and construct their own femininity.

Commercial Messages, Race and Ethnicity

The representation of racial and ethnic groups in advertising and the ways they are portrayed has provided a topic of study for researchers principally from the advertising and communications field and in the US. Again content analyses studies have been used and often the focus is on television programming rather than advertising specifically. Again, other commercial channels and media are significantly under-researched.

Content-analyses studies have noted consistent patterns in the representation of minority groups, revealing a trend to under-represent African, Asian and Hispanic Americans in

advertising to general audiences (Graves 1999). Additionally, these groups are often 'stereotyped' in advertising because they are linked with a narrow range of goods and services and are portrayed in very limited settings. Caucasians, on the other hand, feature in advertising for a wider range of products and are featured in a host of different settings.

Only a few studies have actually examined the *effects* of racial and ethnic-specific content in advertising on children and young people. This research suggests that children gain knowledge about race and ethnicity in the portrayals they see in advertising and, given the limited nature of the portrayals of ethnic minorities, this raises concern that these portrayals may convey to children and youth the relative lack of power and importance of these groups in wider society (Graves 1999). There is also evidence that African American children demonstrate preferences for and are more positively influenced by advertising featuring children of their own race (Barry & Hansen 1973), and that white children respond positively to positive portrayals of different racial/ethnic groups. Berry (2003) suggests that ethnically diverse and culturally balanced portrayals can help children appreciate and respect individuals from different ethnic backgrounds.

This suggests that television programming and advertising can influence children's racial attitudes and perceptions – however further work is required to examine what further influence this might have on children's interactions with other children of the same or different racial and ethnic backgrounds (Graves 1999).

Summary Box – Commercial Messages, Race and Ethnicity

Research has examined the representation and portrayals of ethnic minority groups in television advertising and programming. Much of this work was conducted in the US and research on other forms of media and marketing are very limited. Content analyses suggest that ethnic minorities are underrepresented in advertising. Behavioural research suggests that this can influence children's knowledge and perceptions of different racial groups. There is also some evidence that advertising and the media more generally can be a promising medium for teaching positive multicultural concepts.

Commercial Messages, Materialism, Happiness and Life Satisfaction

Concerns over the rising level of materialism in children and adults are increasing among parents, policy makers and academics (Chaplin & John 2007) and marketers, sociologists and psychologists have undertaken research to examine these concerns more closely (Nairn et al 2007). Materialism has been defined and measured in different ways, although it can generally be described as a preoccupation with money and material belongings (eg. Belk 1985). As noted by Buijzen & Valkenburg (2003b) in their review of materialism, many researchers have operationalised the concept of materialism in line with Ward & Wackman's approach (1971).

Despite the concerns noted above, relatively little is known about how materialistic values develop in childhood and adolescence, although materialistic values are said to be correlated with factors such as "ineffective family communication patterns, greater peer communication and higher levels of television viewing" (Chaplin & John 2007, p480). Research from the early 70s and 80s has shown a dramatic shift towards materialistic life goals among senior school children (Easterlin & Crimmins 1991). That children value the possession of material goods from an early age is evident from Goldberg & Gorn's study (1978) of 4-5 year old boys which found the majority of respondents would rather play with a child (even if they were not very nice) who had a new toy they had seen advertised, than one who did not. As children get older (8-12 years), their greater understanding of the social significance of goods, consumption symbolism and interpersonal relationships means the desire for material goods becomes more nuanced, with material goods becoming aligned with social status, happiness and personal fulfilment (Achenreiner & John 2003, Siegel et al 2001, John 1999). Marketing activities that target "tweens", which increase exposure to brands and fuel the desire for material goods are also implicated (Chaplin & John 2007, Quart 2003, Schor 2004). Baker & Gentry (1996) found that the younger children value ownership in terms of quantity, whereas older children placed value on material possessions based on their ability to elevate one's status above others or to fit into the expectations of a social group. This fits with the research discussed earlier that explores children's symbolic use of brands.

Several authors suggest that advertising stimulates materialistic values in children, arguing that advertising arouses desires for products that would not otherwise be salient, and propagates ideology that possessions are important and that desirable qualities can be obtained only by acquiring material possessions (Pollay 1986, Wulfemeyer & Mueller 1992).

Early evidence to support this belief has been equivocal; however, Buijzen & Valkenburg's (2003b) study of Dutch children and parents did find that exposure to advertising stimulated materialistic values, and that children who frequently watched television commercials held stronger materialistic values than their peers who less often watched commercials. Through structural equation modelling using mostly correlational (and some experimental) studies for causal paths, they found that this relationship was just as strong for younger as for older children, linking with theories of materialism, which assume that both younger and older children are sensitive to the desire-provoking messages in television advertising. Similarly, a recent UK study examined the relationship between amount of television viewed and level of materialism among a sample of children aged 9-13 (Nairn et al 2007). The authors noted a significant positive relationship between media use and materialism, which was consistent across various subgroups. Further research is required to establish causality.

In Skafte's (1989) study, 11-16 year olds perceived a 'wealthy' stranger in a picture to be more intelligent, more academically accomplished and as making friends more easily. Dittmar & Pepper's (1994) study of British adolescents found they viewed affluent individuals as more intelligent, hardworking and successful, but also less warm. In contrast, Chan's (2006) study of Chinese teenagers presented more mixed feelings towards the possession of material goods, suggesting cultural differences exist. She identified that respondents were highly brand conscious, could recall a large number of brands, and used branded clothing and accessories to differentiate the economic wealth of a person. They associated an absence of branded goods with people who are more academically focused, and perceived owning branded goods as linked to being happy and having friends, but recognised that this was not the only route to happiness. A person with lots of branded goods was viewed as likely to be arrogant, boastful, lacking in self esteem and wasteful, while one with fewer branded goods was considered to be nicer and more grounded.

Goldberg et al's study (2003) devised a youth materialism scale (YMS) that found that boys were more materialistic than girls, and that youths with the highest levels of materialism tended to be drawn from families with lower incomes. Highly materialistic youths were found to be those most susceptible to advertising and promotion, and most interested in new products. They tended to shop more and save less, and wielded more purchase influence, both directly and indirectly, with their parents, who viewed them as more expert with regard to products. These youths also expected their parents to spend more money on them at Christmas and for their birthdays, but no relationship between a youth's level of materialism, and their level of happiness was reported. Thus it appears that while materialism matters a

great deal to American youths, many other issues of growing up dominate in determining their level of happiness (Goldberg et al 2003).

The influence of communication outside the family has also been found to be influential: materialism is higher in children who more frequently communicate with their peers (Churchill & Moschis 1979) and are more susceptible to their influence (Achenreiner 1997). The causal direction remains unclear: exposure to peers and television might encourage materialism, or materialism might encourage a search for information about valued goods from peers and television advertising. In Banerjee & Dittmar's (2008) exploration of the relationships between peer culture pressure, peer rejection and materialism, there was some evidence that rejection by peers could create a sense of insecurity which fostered materialistic values, but it was also plausible that children who were already materialistic might perceive greater peer pressure and rejection – in other words, the relationships are complex. The small amount of research which has examined levels of materialism among children has linked higher materialism in children to materialistic parents (Goldberg et al 2003); disrupted families (Rindfleisch et al 1997, Roberts et al 2005), less affluent households (Goldberg et al 2003), and greater susceptibility to influence from peers and commercial messages (Achenreiner 1997, Goldberg et al 2003).

Studies of consumption symbolism (eg. Belk et al 1984) have identified children's increasing understanding of the social significance of goods. Between preschool and second grade in the U.S.A., children begin to make inferences about people based on the products they use. These consumption-based stereotypes around brand names gain strength as children get to late childhood (Chaplin & John 2007, Achenreiner 1997), by which time children have a keenly developed sense of the social meaning and prestige associated with certain products and brands (John 1999). Not only do these items confer status upon their owners, but they begin to symbolize group identity and a sense of belonging to certain groups.

As children enter into adolescence, and sometimes experience a decline in self esteem, a new appreciation of material goods emerges, which provides a strong motivation for acquiring possessions that enhance their self esteem, thereby fuelling materialistic tendencies (Chaplin & John 2007). By late adolescence (16-18) self esteem improves, and the need for coping strategies to overcome low self esteem (such as branded consumption) declines as they place more emphasis on activities and achievements than material goods for self-definition (Belk 1988, McCarthy & Hoge 1982).

Research suggests that environmental factors such as family communication, peer communication and television exposure mitigate the extent to which adolescents exhibit the adoption of materialistic values.

Materialism and Age

Chaplin & John (2007) argue that despite all the contentions around age differences and materialism, there is little academic research to provide evidence. Their study of 8-18 year olds posited that there is a strong connection between self esteem and materialism (Kasser 2002), and that age-related patterns in self esteem give rise to age differences in materialism. They suggest that materialism increases from middle childhood to early adolescence, and then decreases from early to late adolescence. Their findings also suggest that over time, children who experience chronically high (low) levels of self esteem, are more likely to express lower (higher) levels of materialism. Their results indicate that simple actions to raise self esteem among young consumers may have a dramatic impact on expressions of materialism. Chaplin & John (2007) argue that while factors such as family environment, parenting style, peer interaction and media exposure are correlated with materialism in children, many of these factors influence materialism by affecting a child's level of self esteem. Children with unsupportive parents, poor family communication and peers who exert too much influence over them are likely to suffer low self esteem. This may make them vulnerable and lead them to search for something that makes them feel better (Wicklund & Gollwitzer 1982), and so material goods may be a way for them to enhance poor self images.

Happiness and Life Satisfaction

A much broader issue is whether the promotion of consumption as a route to happiness (and its implications for wellbeing more generally) has any overall effect on children.

It is hypothesised that greater exposure to commercial messages causes children to subject their parents to purchase requests more often. If they do not get what they request, they may become disappointed (Buijzen & Valkenburg 2003b). However this only receives marginal empirical support. It has also been suggested that when children watch commercial images of an idealised world, the discrepancy between their own and the images may cause life dissatisfaction, but this too lacks empirical support (see Martin & Kennedy 1993). It has been suggested that high levels of materialism are associated with lower commitment to education and with greater anxiety, lower happiness and poorer self-esteem (Banerjee & Dittmar 2008, Kasser 2005). While the relationship between materialism and life satisfaction has been established among adults, this has not been extensively investigated among children. There

may be a relationship between advertising exposure and materialism among children, but when investigated by Buizjen & Valkenburg (2003), a relationship between materialism and life dissatisfaction was not found. However, their structural equation modelling did show advertising exposure led to an increased number of purchase requests, and that led to an increased level of disappointment (when requests were not always granted), which negatively affected children's satisfaction about themselves and the environment.

Summary Box – Commercial Messages, Materialism, Happiness and Life

Satisfaction

There exists a significant body of work on the manifestations of children's orientation towards materialistic values and consumer culture. Relatively little is known about how materialistic values develop in childhood and adolescence, although they are said to be correlated with a range of factors including higher levels of television viewing and exposure to advertising. Susceptibility to peer influence and peer rejection may be associated with materialism, although the relationships are likely to be multi-directional and complex. Materialistic values may be associated with dissatisfaction and low self esteem, although the acquisition of material goods can also boost esteem. Further research is needed to establish exactly the role of commercial messages in the development of materialistic values as the existing evidence base is equivocal.

USES AND INTERPRETATIONS OF COMMERCIAL MESSAGES BY CHILDREN

This section summarises findings relating to how children use and interpret commercial messages. Researchers from a range of disciplinary backgrounds have made contributions to this area including consumer behaviourists, sociologists, anthropologists and researchers from media, culture and communications. This includes a greater contribution from researchers in the UK, where researchers have often used qualitative and social research techniques to explore the more meaningful side of how children respond to and engage with commercial messages.

Decision-making Skills in Consumer-Contexts

As children grow up they cease to focus solely on product features and start to seek out sources of information about performance and functional attributes together with price (Ward et al 1977). Children also increasingly consider cost-benefit trade-offs in their information searching from the analytical (7-11 years) and reflective (11-16) stages of consumer socialisation (John 1999).

With increasing age children make use of a greater range of information sources and their reliance on particular sources varies according to the situation (Moschis & Moore 1979, Ward et al 1977), preferring friends for products which required peer acceptance such as clothing (Meyer & Anderson 2000). Parents tend to be consulted about expensive items for which product performance is a concern (Moschis & Moore 1979). Parents also play a more important role during information gathering than in the evaluation of a product. By contrast mass media features as only a minor source of information (Moschis & Moore 1979). However, gender differences in the impact of television were reported in a study of 8-16 year olds, with boys being more influenced by television and girls by their peers and parents (Dotson & Hyatt 2005). In a questionnaire study in the USA, parental influence on adolescent's (12-18 years) clothing choices from catalogues was reported to decrease with age, with girls being directly influenced more than boys by their friends and boys being more influenced than girls by what they thought their siblings would think (Simpson & Douglas 1998).

The family environment also influences children's reliance on different information sources. Moore & Moschis (1978, cited in Moschis 1985) reported that children from families that encouraged children to think independently (termed pluralistic) used a wider range of sources and gave greater weight to their parents' opinions than did children from other family environments. Children from protective families that emphasised obedience and social harmony tended to be more influenced by peers and also by television advertising, albeit not as much. In families with low levels of communication (termed laissez-faire), children made use of few sources of information, being less likely to defer to either parents or peers.

Summary Box - Decision-making Skills in Consumer-Contexts

As children grow older, they rely less on product features, make use of a wider range of information sources and the influences upon them change. Family environments also play an important part in the development of children's shopping skills.

Purchase Influence and Negotiation Strategies

The influence of children has been shown by some studies to vary inversely with the expense and importance of the product (Shoham et al 2004, Foxman et al 1989). However John (1999) identified that children exert considerable influence on family purchases, most overtly by directly asking for a range of products that include cereals, sweets, toys and sporting goods for their own use, and suggests children also exert some influence on family decision making revolving around items such as cars, holidays, computers and furnishings. This may include initiating the purchase, collecting information on alternatives, or suggesting retailers. Past research (e.g. Moschis & Mitchell 1986, Ward et al 1977) suggests older children exert more influence than younger children, and have the most influence over child-relevant purchases, and have the least influence over consumer durables and expensive items (eg. Belch et al 1985, Foxman et al 1989). It has also been suggested that children have the greatest influence in the early stages of family decision making (Belch et al 1985) and that children from higher income families exert more influence (Nelson 1978). More recent work (Hamilton & Catterall 2006) suggests that children in low income families also exert influence over family purchase decisions, although strategies may differ.

McNeal (1999) suggests the number of parents who ask their children's opinions about products they are going to buy for the whole family has steadily increased over the years as children have become more "shopping savvy" (Tinson & Nancarrow 2007, p161). Children and adolescents have an important role to play in the consumption activities of the family (Hall et al 1995, Palan & Wilkes 1997, Boden 2006), and with a high number of mothers working, either full or part time, more consumer/household related tasks, including shopping for the family (with the accompanying exposure to commercial messages), has fallen to children. Thus, today children can be expected to influence not only their own purchases and consumption, but also those of their parents to a greater extent than previous generations. Through their commercial exposure, children sometimes possess knowledge about purchasing and consumption that their parents lack; this generation gap can result in a situation where children share their experience and knowledge with parents (reverse socialisation), ie adults learn about consumption from their children, and this in turn influences their consumption. Ekström's (2007) study of 36 Swedish families found that children had often introduced or made their parents aware of new trends or products (eg. clothes, sports), contributed information and "expert power" (particularly regarding technically complicated products) in relation to purchases, and afterwards helping to install or use purchases. The proliferation of products and services in the marketplace has made

consumer choice more difficult. Ekström (2007) argues that if children have the commercial knowledge, they sometimes serve as important contributors to alleviate their parents from complex and time consuming decision making processes, as well as playing a role in diffusion of innovations to parents.

Mid/late teenagers have been identified as engaging in a 'consultancy' role, and Lee & Beatty (2002) indicate that adolescents (12-19 years) are often central to family purchase decisions, and have as much power as parents. Thomson et al (2007) identified a number of sophisticated, complex and well devised influence behaviours by teenage children seeking to influence family purchasing decisions, most importantly the use of knowledge and information, drawn from various sources, the most significant being personal and peer experiences and the Internet. Generally the more knowledge a child had, the more influence they had over a purchase. Demonstrating this knowledge was more effective than merely asking for something, and parents welcomed their input, considering their knowledge and information as beneficial. Rather than discussing in manipulative and negative terms, child influence behaviour in this study was perceived as positive by parents. Ekström (2007) does note that children often transfer knowledge from their school to their parents. Given that sponsoring of school material is common, parents are therefore indirectly exposed to sponsored school material through their children. The impact of sponsored school material on children, and also on their parents, has not yet been sufficiently researched (Ekström 2007).

However, children are known to attribute more influence to themselves than their parents. Tinson & Nancarrow (2007) found that in reality tweenagers were less influential in the final stage of decision making than they aspired to be.

Some research has found that advertising causes parent-child conflict (Atkin 1980, Goldberg & Gorn 1978). But Buijzen & Valkenburg (2003a) argue that while it is possible that advertising exposure directly influences parent-child conflict, it is more plausible that the advertising-conflict relation is mediated by children's purchasing requests, i.e. advertising will lead to more requests for advertised products, and that leads to an increased chance of parent-child conflict. Research evidence does show that advertising exposure does lead to an increased number of purchase requests (eg. Buijzen & Valkenburg 2003a, 2000) that enhance parent-child conflict (eg. Buijzen & Valkenburg 2003a, Robertson et al 1989).

Age appears to moderate the relation between advertising and child-parent conflict (Buijzen & Valkenburg 2003a); younger children come into more conflict with their parents about

advertised goods than do older children (Isler et al 1987, Valkenburg & Cantor 2000). This may be linked to the findings that younger children make more advertising induced purchase requests (Buijzen & Valkenburg 2003a), showing younger children's greater susceptibility to advertising effects, as well as increasing the chance of parent-child conflict (Robertson & Rossiter 1974, Ward & Wackman 1972). It may also be due to younger children having more difficulty delaying gratification than older children (Metcalf & Mischel 1999), or that as children get older, they apply more sophisticated persuasion techniques (eg. flattery), leading to less parent-child conflict than the persuasion strategies (eg. whining) of younger children (Atkin 1978, Mangleburg 1990, Williams & Burns 2000).

The effect of advertising on parent-child conflict has been shown to be stronger for boys than girls (Buijzen & Valkenburg 2003a, Atkin 1975), as boys tend to be more persistent and less sophisticated than girls in their requests, possibly increasing parent-child conflict.

While there is as yet no evidence that socioeconomic status is related to advertising-induced materialism and unhappiness, there is evidence that low-income children make more advertising induced purchase requests than do high-income children, and this could increase parent-child conflict levels in low income families (Young 1990). One explanation given is that low income children watch more television, which may stimulate their advertising induced purchase request behaviour (Moore & Moschis 1981), or that parents of low income children discuss advertising effects less with their children than high income parents (Gunter & Furnham 1998, Robertson 1979). This may put low-income children at a disadvantage to protect themselves against commercial influences (Donohue & Meyer 1984). Buijzen & Valkenburg (2003a) found the relationship between purchase requests and parent-child conflict was stronger in low income families than in high-income families, whereby a request made by a child of a low income family more easily results in parent-child conflict than a request made by a child in a high income family.

Buijzen & Valkenburg (2003a) cite early studies that show family communication around consumer matters and commercial content does increase a child's defences against advertising and mitigates advertising-induced materialism and purchase requests (Moschis & Churchill 1978, Moschis & Moore 1982). Their later study (Buijzen & Valkenburg 2003b) also found that the effect of advertising on materialism was significantly weaker for children in families that often discussed consumer and advertising matters. This supports earlier work that found instructive or evaluative parental mediation (ie. teaching children consumer skills) can mitigate, channel or counteract undesirable media effects such as discouraging

advertising-induced request behaviour (Buijzen & Valkenburg 2003a, Donohue & Mayer 1984, Moschis & Churchill 1978).

Summary Box – Purchase Influence and Negotiation Strategies

Research has shown that children exert considerable influence on family purchases, most overtly by directly asking for products as well as seeking to influence family decision making more subtly. Children's requests for products are associated with increased parent-child conflict, particularly with younger children, and, according to some research, with boys. There is also evidence that low-income children make more advertising induced purchase requests than do high-income children, which may increase conflict levels in low income families. Child influence on family purchasing and consumption can also be a positive phenomenon, taking the form of help and advice to parents.

Branding and the Disadvantaged

For parents living in poverty, commercial pressures intensify the problems of managing on a very low budget and studies on young people and social exclusion have recognised the pressures on families from the costs of consumption (Croghan et al 2006), linked to the importance of style to young people's identities in relation to social inclusion. Elliott & Leonard (2004) suggest peer pressure exerts a powerful influence over children's behaviour (Pilgrim & Lawrence 2001, McNeal 1987), and is "just as likely to be experienced for 'public luxuries' such as branded fashion items" (Childers & Rao 1992). In their study of 8-12 year olds from low income families, Elliot & Leonard (2004) found that the majority of children desired branded trainers, particularly Nike, rather than unbranded versions, and perceived those who wear branded trainers in a more positive light, and as not likely to be poor. Croghan et al (2006) investigated young people's constructions of style 'success' and 'failure', and found style to be a crucial marker of identity and wealth; money, style and social worth were inextricably linked and signalled, to some extent, by brands. Their questionnaire found that almost half of the items young people reported recently purchasing had a brand name or a logo, most often associated with clothing, mobile phones, computer games and electronic media. In the interviews young people referred to style items in terms of specific brands, and this was often geographically specific, i.e. different brands held different status in different areas. Young people also reported being harassed for not belonging to the dominant style group (ie. wearing certain brands), and used markers of style and

consumerism to circumvent schools' intention to mask style and social differences; being accepted in their social groups was tied to very specific label choices that demonstrated both affluence and style.

Cheap versions (eg. counterfeit, discount store purchases) were seen as a sign of style error. Style choice was both label and shop specific; authenticity of the source and label was necessary for style success, and paying full price was important to display the self-confidence associated with having the means to finance that style. This could also mean the difference between being popular and being socially ostracised or bullied (Croghan et al 2006). Style success also conferred certain rights; stylish people could be academically successful without being ostracised, while style 'failures' who were academically successful, tended to be called derogatory names.

These findings echo those of Elliott & Leonard (2004), Piacentini & Mailer (2004) and Hamilton & Catterall (2006) who also found that children associated popularity and social acceptance with the wearers of branded clothing, and that the demonstration of wealth that elite brands conferred also had a halo effect of enhancing the wearers attractiveness and intelligence. While some children in Croghan et al's (2006) study did recognise that it was "what's on the inside that counts", branded clothing was seen as a defence mechanism against bullying or ridicule. Croghan et al (2006) argue that the emphasis placed on conspicuous consumption, grounded in authentic brand labels and expensive shopping outlets, can only increase the marginalisation of young people in impoverished households. The symbolic meaning of branded clothing appears to be that of a fashionable and popular person; owning branded clothing seems to be used symbolically to disguise poverty and take on a new status, that of a wealthier child (Elliott & Leonard 2004, Hamilton & Catterall 2006).

One might expect children's influence in poor families to be low, given the very limited opportunities for discretionary spending, and previous research does show that children tend to exert more influence in higher income families (Jenkins 1979, Nelson 1979). However, Hamilton & Catterall (2006) found that children in poor families exert considerable influence on family consumption, to the extent that consumption is often organised around their needs. Peer pressure and the fear of social difference affected almost all families in their study of low income families in Northern Ireland. Teenagers can judge one another based on the brands they wear (Quart 2003) and children in poor families tend to believe that if someone is wearing expensive looking brand names they could not be poor (Elliott & Leonard 2004). As such, many families in the Hamilton & Catterall study (2006, p1039) felt pressurised into ensuring that their children had access to "socially acceptable clothing". The purchase of

branded clothing represented the parents' attempts to protect the children from the effects of potential stigmatisation such as bullying. As in other studies (Croghan et al 2006, Piacentini & Mailer 2004) teenagers in the study admitted that their peers would tease them if they did not wear the "right" clothes, and the strength of their children's influence encouraged parents to stretch resources to ensure that their children were not excluded from the consumption activities available to their peers. Some parents felt that peer pressure to wear the "right" branded clothing may be so strong as to encourage deviant behaviour, such as stealing, in order to access brand name clothing. Families were able to opt out of purchasing brand name clothing if the children were too young to be aware of brand names, and if there were no older siblings to highlight the issue. While parents in the study would have preferred to allocate resources to areas that would benefit the whole household, the purchase of branded clothing highlighted the emphasis placed on visible consumption of this kind by their children to avoid the stigma of poverty. Some parents felt forced to turn to credit in order to obtain brand name clothing, while others would reduce expenditure on food and themselves. Piacentini & Mailer (2004) also found that buying branded clothing was a demonstration that you were not poor, although they also found that the use of clothing to indicate affluence was less important to those wealthier children in their study who, because of their affluence, held greater economic and cultural capital.

Some recent research from the anthropology field challenges some of these findings. In an in-depth study with disadvantaged African-American children, Chin (2001) observed a tendency to favour practicality and altruism (eg. purchasing products that could be shared with siblings) over preferences for brands and status. Chin comments on the irony that poor consumers are depicted as being both deficient because they do not strive to consume enough and dangerous because they strive to have too much, and notes that poor black children have to master the skills needed to spend money wisely – skills which seem less prevalent among middle class consumers mired in debt.

Hamilton & Catterall's study (2006) demonstrates that the process of children's influence on family purchasing of branded goods does not necessarily result from direct over persuasion strategies, but may stem from love and a parent's desire to avoid the stigma of poverty. Elliott & Leonard (2004) suggest that successful brand-building strategies, particularly those that focus upon symbolic meanings, may be having undesirable and unintended consequences on children's consumption attitudes and behaviour. Piacentini & Mailer (2004) pose the question that while there is a link between branded/non-branded clothing and self-concept, it was difficult to define whether children define themselves and then choose their

clothes based on that definition, or whether their clothes and consumption provide them with a definition of who they are. This is an area of potential future study.

A recent study by Foley et al (2007) examined mobile phones as a form of fashion accessory for young women in contemporary culture, and the possible value of such branded items as a source of identity and self-worth. While the phones are used by teenagers to define themselves symbolically as sophisticated and successful, emulating the media images portrayed by phone marketers and the media, the study also found that mobile phones provide young women in public spaces with a sense of security, confirm their right to be there, and improve the quality of their experiences in these places. Foley et al (2007) argue that the consumption of mobile phones could potentially help adolescent girls to achieve a stronger sense of self worth, acted as a useful tool for friendship and peer group accessibility, and provided benefits beyond addictive consumption and commodified fashionable leisure.

Summary Box – Branding and the Disadvantaged

Research on young people and social exclusion has demonstrated the pressures on low-income families to hide their disadvantage – and the associated stigma - behind expensive branded goods. Research with children suggests this tactic, although it obviously exacerbates economic hardship, is effective: stylish consumption does protect against bullying and isolation. Early studies suggested that children in low income families have less influence over purchase decisions, but recent research challenges this, suggesting that parents in these households may actually be more anxious to cater to their children's needs. More positively, anthropological research suggests that the straitened circumstances that come with a low income may make children more astute in handling money.

Commercial Messages and the Internet

The media environment has radically transformed in recent years enabling many new marketing techniques to be used to reach the child consumer (Austin & Reed 1999). The most rapid area of growth of advertising to children has been in online advertising (Piachaud 2007). This new method is likely to prove highly profitable for commercial firms as children and teenagers adopt new media with immense enthusiasm (Montgomery 2000).

Despite this growth, research on children's interactions with online commercial messages is only just emerging largely due to efforts from researchers in the media and communications fields. Although much has been made about several apparent 'dangers' of the internet in particular (including risks from online predators above all), very little attention has been paid to the commercial content of the web and its implications for the wellbeing of children and teenagers (Livingstone 2003). This inattention is disappointing considering that the commercial sector has embraced the internet and the unique opportunities it provides for marketing to children and teenagers especially. Unlike with television, there are no restrictions on the amount of marketing messages to which children are exposed on the internet, and commercial messages appear twice as often on child-oriented websites than on sites aimed at a more general audience, according to one analysis (Moore & Rideout 2007).

Montgomery (1996) identifies the internet as a very valuable commodity for marketers, arguing that children find it especially appealing because of its highly interactive and stimulating nature. The internet offers marketers many creative and innovative ways of promoting their products and services to children, including banner advertising (brand names appearing as sponsored links on website), 'pop-ups' (adverts that appear when certain web sites open a new web browser) and 'advergames' (a combination of advertising and computer games) (Montgomery 2000, Moore & Rideout 2007). In addition, branding is a principal theme and on many websites, the brand (not the product) is the focal point, thus enabling marketers to cultivate loyalty (Montgomery 2000).

The Internet also provides marketers with an opportunity to tailor commercial content to different age groups and tastes and engage in 'one-to-one' marketing (Montgomery 1996). For this cause, marketers make use of tools such as online games and surveys to elicit personal information from children that can then be used for marketing purposes (Montgomery 2000). Furthermore, the internet facilitates the use of 'viral' approaches to brand communication, through tactics such as encouraging children to send emails or containing brand-related greetings, or to recruit friends to join a particular site (Moore & Rideout 2007). An illustration of how commercial marketers are actively exploiting these opportunities emerged at a recent European Commission conference which included presentations illustrating several current innovations in youth-oriented marketing in hyperspace. The presentations can be accessed online at http://ec.europa.eu/health/ph_determinants/life_style/Tobacco/help/ev_20081009_en.htm.

Interestingly, the conference also included a case study of the Home Office Frank campaign: an excellent example of social marketing exploiting the potential of new media. The recency

of this phenomenon means that little is known about how child recipients perceive and react to such peer-initiated communications.

All of the above has raised concerns about possible deception and manipulation because the conventional boundaries between editorial content and commercially sponsored messages become very blurred (Livingstone 2003, Montgomery 2000), particularly where commercial messages are embedded within entertainment and game contexts in which children's 'defences' against advertising may be lower (Moore & Rideout 2007) Though several studies have analysed the content of online commercial content directed towards children (eg. Moore & Rideout 2007), few studies have gone further and looked at the ways in which children actually respond to this kind of content. In a recent UK review of the risks posed to children by new technology, Byron (2008) briefly addressed the matter of online commercial messages. From six studies reviewed, she noted that young people appear to be able to ignore online advertising and that they show "*considerable cynicism*" about it and are critical of mainstream advertising (p52). Nonetheless, she also found evidence that children tend to believe content on websites that include advertising and may be confused by the "*blurring of advertising and content*". Children aged between nine and 19 years were also found to be confused about the trustworthiness of online commercial content. In conclusion, Byron noted that "the internet has increased children's exposure to commercial content and findings are mixed about how they interpret this, although we know from brain development research that pre-adolescent children are not equipped with the skills to interpret some material" (ibid).

Another recent UK study highlights potential areas for concern. Fielder et al (2007), in research undertaken for the National Consumer Council, explored 'commercialism' on the internet by examining 40 websites known to be popular with children and interviewing children and parents on the issue. Several areas further of worthy investigation emerged, echoing Byron's findings. There was some evidence of attempts by marketers to solicit information from children as well children's apparent vulnerability to 'free' or 'special' offers. Children were also at times reportedly confused by online purchasing procedures and in cases where both free and paid-for goods appeared on the same web page. Marketers were also found to be using 'hidden persuasive techniques' that made it hard for children to identify commercial messages and certain forms of advertising were said by children to be more difficult to recognise including videos that featured promoted products or 'advergemes'. As Austin & Reed (1999) argue, children may be media savvy but they can be confused by hazy distinctions between entertainment and advertising. The deliberate blurring of the two can make it very difficult for children to discern to what they are being exposed.

A recent experimental study examined children's use of 'advergimes' in more depth (Mallinckrodt & Mizerski 2007). According to Mallinckrodt & Mizerski, marketers describe advergimes as a form of 'immersive advertising', suggesting that they may be more persuasive than traditional advertising because they engage children with "*rich and often animated imagery of a brand and capture their attention for extended period of times*" (Edwards 2003, in Mallinckrodt & Mizerski 2007, p.88). In their experiment with nearly 300 children aged 5-8, they children to a Kellogg's 'Froot Loop' cereal advergime that claimed it was better for children than fresh fruit. Children in the treatment condition who were exposed to the claim in the advergime failed to believe that Froot Loops were healthier than fruit, although older children in the sample (aged 7-8) reported significantly higher preferences for Froot Loops over other cereals and food types. This suggests that playing the advergime may influence brand and category preference, however, as noted, differences were only seen among older children. No support was found for the hypothesis that the advergime would generate more purchase requests for Froot Loops. Nearly three quarters (72%) of children in both the treatment and control groups responded that they would request their family buy the brand and no age effects were observed in this case. Over half of children (54%) recognised that the advergime intended for them to ask someone to buy Froot Loops, and just under half (47%) said it wanted them to eat them. The study's findings did not support the view that a child's knowledge of the advergime persuasive intentions would influence their brand and category preferences after playing an advergime.

Summary Box – Commercial Messages and the Internet

New media such as the internet pose particular problems because commercial content is less regulated and less clearly differentiated from non-commercial content, particularly when embedded in games and entertainment. Although some research has analysed the extent and nature of commercial content in new media, little research to date has examined how children interact with and are affected by it. Some studies suggest that children can enjoy and be entertained by these interactions, while at the same time being sceptical about them. However, they also suggest that children can be more vulnerable to and confused by this type of content compared with more traditional advertising forms.

Commercial Messages in Schools

Since the 1980s we have seen a huge influx of commercial marketing in schools (Richards et al 1998). Much of the research in this area stems from North America and focuses largely on

the extent and nature of school-based commercial practices and public opinion regarding its appropriateness. There is currently a wide range of corporate involvement in the education systems of many countries including the United States and Great Britain. This involvement manifests itself in various forms including in-school films, branded curricular materials, posters and leaflets on display around the school, and the sale of food and drinks in corporate-owned vending machines (Richards et al 1998).

The commercialism of public schools has been prompted largely by funding needs including donated equipment and services (Richards et al 1998) however politicians, teachers and parents are among those that have expressed concern about the infiltration of schools by the commercial sector. Some have noted concern about the integrity of education being compromised in some way. For example, Harrison (2007) asks how business interests can be involved in children's education without undermining its integrity, while Molnar (2005) simply states that "*marketing in schools is destructive pedagogically*" (p9). Other concerns that have been raised include the sharing of control with people outwith the education system; the fact that commercial messages in schools are effectively seen to be endorsed by the school and thus perceived to be more credible, and; the notion that in-school marketing contributes to the 'din' of commercialism aimed at children (Richards et al 1998).

Though there have been several studies examining exactly what kind of marketing is taking place in schools (eg. the Molnar annual reviews from the US), children's knowledge of and involvement with commercial activities at school has only been studied in a very limited capacity (Buckingham 2008). The scarce research that exists focuses almost exclusively on 'Channel One' (Palmer 2007). 'Channel One' is a 10 minute newscast that also contains several minutes of commercially sponsored messages directed towards middle and high school children in the United States (Brand & Greenberg 1994). In return for broadcasting the programme, participating schools receive a variety of telecommunications equipment such as television sets and video players.

Brand & Greenberg (1994) examined response to Channel One among a sample of over 800 US school students. The study found that evaluations of Channel One-advertised products were more favourable among students that had viewed Channel One programming than those who did not see it. Viewers also expressed stronger consumption-oriented values than non-viewers and that one fifth of viewers indicated liking for the adverts and featured products. The evidence regarding whether Channel One advertising produced specific consumer behaviours was not clear. The study found no evidence that viewers were

discussing the Channel One advertising they had seen with friends or parent to a greater extent than non-viewers and there was no evidence for increased purchase behaviour.

MacIndoe (1999) argues that the involvement of the commercial sector can bring legitimate benefits to pupils and schools but that the corporate offerings must contain a strong educational element and conform to guidelines in order to maintain credibility. MacIndoe describes the case of 'Schoolcards™', commercially-sponsored postcards containing educational, social and cultural messages of interest to school children, in addition to advertising messages, that are distributed among school pupils in the south of England. During a six-week trial involving twenty schools, researchers assessed the effectiveness of the cards as a communication tool among pupils aged 11-16 years. Questionnaires were sent to pupils in every age group to test their views of the cards in general and to measure brand and information recall. Pupils reportedly enjoyed and used the cards and viewed them as a source of 'entertainment, distraction and useful information' (p225). Pupils also reportedly valued the opportunity to access information of a personal concern in private – by referring to the information provided by the cards. Nearly a quarter of children surveyed (23%) claimed that the cards encouraged them to do something different such as finding a pen pal, and that the cards encouraged them to start thinking about important issues like racism and the environment.

Staff members that were interviewed as part of the study were also fairly positive about the introduction of Schoolcards™ because they addressed issues relevant to young people, provided them with useful information and, as such, could only be seen as a positive addition to schools. MacIndoe (1999) concludes her account by recognising the delicacy of the issue and arguing that, if handled sensitively, commercial firms can make a positive contribute to the public education system.

Summary Box – Commercial Messages in Schools

Commercialism in schools has become more pervasive in recent years. Despite this, very little systematic research has been conducted regarding their effects on the wellbeing of children. The little work that has been done focuses on commercial marketing in US schools. Further UK relevant research is needed.

BALANCING THE EVIDENCE: IMPLICATIONS FOR CHILDREN'S WELLBEING

The evidence on how children use, interpret and are affected by commercial messages is complex, incomplete in some areas, and sometimes contentious (see Summary Box overleaf). A key reason for the contentiousness is that research into the relationship between commercial communications and children, as we noted at the beginning of this report, tends to be dichotomised: the child is seen either as a passive and vulnerable victim of advertising, or an active and empowered participant in the improving cut and thrust of commercial interaction. The former conception is supported by public health and safety campaigners who see children as needing protection from potential exploitation. The latter view is popular with commercial marketers who are resistant to regulation and informed by the real challenges of selling their products to any age group.

Recent research from anthropology and sociology however suggests that this binary and conflicting framework is misleading. In reality both perspectives have validity: we just need to recognise the complexities of both children and marketing.

Children clearly do have a degree of vulnerability: the more so the younger they are. The fact that, for instance, tobacco, alcohol and fast food advertising can encourage them to make unhealthy and even illegal consumption decisions is obviously problematic. Furthermore these effects can work both directly and indirectly through peers and parents, and be exacerbated by – and exacerbate – disadvantage. Commercial communications can also trigger conflict in the family, whether through the strident pestering of small children or the more sophisticated persuasion of teenagers.

By the same token children are not on their own in their dealings with commercial communications, and parents in particular can greatly mitigate harmful effects. Commercial communications can also take on a positive role if bedded in this supportive broader context, introducing children to new ideas, challenging stereotypes and socialising them into the world of consumption. It is even possible that in disadvantaged communities, hardship may strengthen and temper the consumption socialisation process, although there is also evidence that marketing can contribute to feelings of marginalisation and stigma among low income children. Furthermore there is evidence for 'reverse socialisation', where children

help their parents through the consumption process – taking on family shopping tasks for instance, or advising on innovative and technologically driven products and services.

Marketing is also a complex and nuanced phenomenon. It is not just a tool with which business persuades us to buy its products: it is the mechanism by which we all satisfy our consumption needs - needs which are fundamental to the human condition. Marketers have to tread carefully, use subtle and rewarding techniques and above all actually satisfy our needs if they are going to survive, let alone flourish. Increasingly the marketing process, therefore, has been characterised as one of relationship building, rather than a simple sales function intent on generating ad hoc transactions. The consumer is not a passive or static target, but a partner in the value creation process.

It is apparent that children as well as adults are enthusiastic participants in this active process of consumption, and marketing communications are just one input to their decision making. In sociological terms they do have 'agency' (the ability to think and act for themselves) and that agency needs recognition and stimulus to flourish.

Thus it is clear that both research perspectives add to our understanding of the relationship children have with commercial communications: young people are both vulnerable and empowered. Indeed the split between the two conceptions is, at least to some extent, perceptual: the 'effects school' accepts, for instance, that children may use the media to construct their own gender identities; and uses and interpretations literature has uncovered effects like pestering. This confluence is in fact unsurprising; structuration theory (Giddens²), which emerged from sociology in the 1980s, deliberately pulls together the two ideas of structure and agency, recognising that neither has precedence. Any human action is a product of both individual will and the social context in which it is exercised.

The literature, then, does present a coherent picture, and useful lessons therefore emerge from the review:

- Marketing is a complex and changing phenomenon that is aimed at engaging with consumers – including children – in the most effective ways.

² Giddens, Anthony: *The Constitution of Society: Outline of the Theory of Structuration*, University of California Press; Reprint edition (January 1, 1986) [ISBN 0-520-05728-7](https://www.amazon.co.uk/dp/0520057287)

The tools or 'marketing inputs' that are used to achieve this, such as television advertising, have been the focus of most research, but the outputs are equally important. In particular the resulting marketing relationships, which are typically epitomised in the brand, need further study. As with all relationships the questions are nuanced and multifaceted:

- What is the balance of power between the participants?
 - What positives and negatives result?
 - Is unreasonable pressure being brought to bear?
 - Are there unintended consequences (good or bad)?
 - How does this relationship fit in with other relationships, both now and in the future?
 - How does it change over time? Do negative consequences now, have important benefits later?
- Those involved in the education, care and health of children can learn important lessons from commercial marketing. Social marketing is a growing field, but this review suggests that there is ample opportunity for it to grow in sophistication and subtlety through the study of commercial marketing. One very obvious example of this is branding. The commercial sector invests great resource and sustained effort in developing brands: Coke has been developed and honed for a hundred years, Nike for the best part of fifty. We know these brands engage and influence children – but little effort has been made by the social, education and health sectors to develop their own potentially influential brands.
 - Commercial communications in new media are burgeoning; there is an urgent need to research children's involvement with them.
 - Learning from commerce will not be aided by naïve conceptions of how commercial marketing works. Children, even when very young, cannot be seen as passive recipients of commercial messaging who will obligingly do as the marketer wants. They are active participants in the process, with their own demands, views and qualities. They may well need some level of protection, but their agency also needs to be acknowledged if valuable learning opportunities are going to be preserved and social marketing efforts made realistic.

- Children and marketers do not operate in a vacuum. In particular the family has a crucial role to play in helping young people to negotiate with commercial marketing. Parents and siblings can be a useful catalyst for the benefits that can result, whether this is in explaining the partiality of the advertiser to a five year old, or in helping a dissatisfied teenager to get recompense after an unscrupulous transaction. Efforts should be made to support and strengthen these aspects of family life.
- Finally, regulation will continue to play an important role in harmonising the relationship children have with commercial communications. This needs on the one hand to be sensitively conceived to facilitate an obvious protective role, but also to recognise that children, particularly adolescents, have agency, can engage critically with commerce and can benefit from the experience. One obvious implication of this is that children should be enabled and encouraged to get directly involved in the framing and deployment of marketing regulation.

REFERENCES

- Achenreiner GB (1995). Children's reliance on brand name heuristics: A developmental investigation. Unpublished dissertation, Department of Marketing and Logistics Management, University of Minnesota, Minneapolis, MN 55455. Cited in John DR (1999).
- Achenreiner GB (1997). Materialistic values and susceptibility to influence in children. In Brucks M and MacInnis DJ (eds), *Advances in Consumer Research*, **24**: 82-88. Provo, UT: Association for Consumer Research.
- Achenreiner GB and John DR (2003). The meaning of brand names to children: A developmental investigation. *Journal of Consumer Psychology*, **13**(3): 205-219.
- Anderson P (2007). *The Impact of Alcohol Advertising. ELSA Project Report on the Evidence to Strengthen Regulation to Protect Young People*. Utrecht: National Foundation for Alcohol Prevention (STAP). Available at: http://ec.europa.eu/health/ph_projects/2004/action3/docs/2004_3_16_frep_a4_en.pdf [accessed 9th September 2008].
- Anderson P, de Bruijn A, Angus K, Gordon R and Hastings G (2008, under review). Impact of Alcohol Advertising and Media Exposure on Adolescent Alcohol Use: A Systematic Review of Longitudinal Studies. *Alcohol and Alcoholism*.
- APA (American Psychological Association) Task Force on the Sexualization of Girls (2007). *Report of the APA Task Force on the Sexualization of Girls*. Washington, DC: American Psychological Association. Available at: <http://www.apa.org/pi/wpo/sexualization.html>.
- Arnould EJ and Thompson CJ (2005). Consumer culture theory (CCT): Twenty years of research. *Journal of Consumer Research*, **31**: 868-882.
- Atkin CK (1975). *Effects of television advertising: first year experimental evidence, Report No.1*. East Lansing: Michigan State University, Department of Communication.
- Atkin CK (1978). Observation of parent-child interaction in supermarket decision making. *Journal of Marketing*, **42**: 41-45.
- Atkin CK (1980). Effects of television on children. In Palmer EL and Dorr A (eds), *Children and the faces of television: teaching, violence, selling*. New York: Academic Press, pp287-305.
- Austin MJ and Reed ML (1999). Targeting children online: Internet advertising ethics issues. *Journal of Consumer Marketing*, **16**(6): 590-602.
- Baker SM and Gentry JW (1996). Kids as collectors: a phenomenological study of first and fifth graders. In Corfman KP and Lynch JG (eds), *Advances in Consumer Research*, **23**: 132-137. Provo, UT: Association for Consumer Research.
- Banerjee R and Dittmar H (2008). Individual differences in children's materialism: The role of peer relations. *Personality and Social Psychology Bulletin*, **34**(1): 17-31.
- Barenboim C (1981). The development of person perception in childhood and adolescence: From behavioural comparisons to psychological constructs to psychological comparisons. *Child Development*, **52**(March): 129-144.

- Barry TE and Hansen RW (1973). How race affects children's TV commercials. *Journal of Advertising Research*, **13**: 63-67.
- Beaudoin P and Lachance MJ (2006). Determinants of adolescents' brand sensitivity to clothing. *Family and Consumer Sciences Research Journal*, **34**(4): 312-331.
- Belch G, Belch MA and Ceresino G (1985). Parental and teenage child influences in family decision making. *Journal of Business Research*, **13**: 163-176.
- Belk RW (1985). Materialism: Trait aspects of living in the material world. *Journal of Consumer Research*, **12**: 265-280.
- Belk RW (1988). Possessions and the extended self. *Journal of Consumer Research*, **15**: 139-168.
- Belk RW, Bahn KD and Mayer RN (1982). Developmental recognition of consumption symbolism. *Journal of Consumer Research*, **9**(June): 4-17.
- Belk RW, Mayer RN and Driscoll A (1984). Children's recognition of consumption symbolism in children's products. *Journal of Consumer Research*, **10**(March): 386-397.
- Berridge KC and Winkielman P (2003). What is an unconscious emotion: The case for unconscious 'liking'. *Cognition and Emotion*, **17**: 181-211.
- Berry GL (2003). Developing children and multicultural attitudes: The systemic psychosocial influences of television portrayals in a multi-media society. *Journal of Youth Adolescence*, **24**: 519-533.
- Biener L and Siegel M (2000). Tobacco marketing and adolescent smoking: More support for a causal inference. *American Journal of Public Health*, **90**: 407-411.
- Bissell KL (2007). Body image and advertising. In Arnett JJ (ed), *Encyclopedia of Children, Adolescents and Media 1*. Thousand Oaks, California: Sage Publications, Inc, pp19-21.
- Bjurström E (1994). *Children and television advertising. A critical study of international research concerning the effects of TV-commercials on children*. The National Swedish Board for Consumer Policies. October.
- Blosser BJ and Roberts DF (1985). Age differences in children's perceptions of message intent. *Communication Research*, **12**(October): 455-484.
- Boden S (2006). 'Another Day, Another Demand': How Parents and Children Negotiate Consumption Matters. *Sociological Research Online*, **11**(2).
- Borch A (2000). Children and advertising on the internet. *Presented at the 1st European Consumer Congress Donostia-San Sebastián, 29th - 31st March 2000*.
- Bousch DM, Friedstad M and Rose GM (1994). Adolescent skepticism toward TV advertising and knowledge of advertiser tactics. *Journal of Consumer Research*, **21**(June): 165-175.
- Brand JE and Greenberg BS (1994). Commercials in the classroom: The impact of channel one advertising. *Journal of Advertising Research*, **34**(1): 18-27.
- Brown JD, Childers KW and Waszak CS (1990). Television and adolescent sexuality. *Journal of Adolescent Health Care*, **11**(1), 62-70.

Brown JD, Halpern CT and L'Engle KL (2005). Mass media as a sexual super peer for early maturing girls. *Journal of Adolescent Health*, **36**: 420-427.

Buckingham D (2000). *After the death of childhood: growing up in the age of electronic media*. Cambridge, UK: Polity Press.

Buckingham D, Whiteman N, Willett R and Burn A (2007). *The Impact of the Media on Children and Young People with a particular focus on computer games and the internet Prepared for the Byron Review on Children and New Technology*. Commissioned by the Department for Children, Schools and Families. London: Centre for the Study of Children, Youth and Media, Institute of Education, University of London, December.

Buckingham D and Bragg S (in preparation). Children and consumer culture. In Montgomery H and Kellett M (eds), *Children and Young People's Worlds*.

Buijzen M and Valkenburg PM (2000). The impact of television advertising on children's Christmas wishes. *Journal of Broadcasting and Electronic Media*, **44**: 456-470.

Buijzen M and Valkenburg PM (2003a). The unintended effects of television advertising: A parent-child survey. *Communication Research*, **30**: 483-503.

Buijzen M and Valkenburg PM (2003b). The effects of television advertising on materialism, parent-child conflict, and unhappiness: A review of research. *Applied Developmental Psychology*, **24**: 437-456.

Butler J (1993). *Bodies that Matter: On the Discursive Limits of 'Sex'*. London: Routledge.

Byron T (2008). *Safer Children in a Digital World - The Report of the Byron Review*. Department for Children, Schools and Families and the Department for Culture, Media and Sport.

Champion H and Furnham A (1999). The effect of the media on body satisfaction in adolescent girls. *European Eating Disorders Review*, **7**: 213-228.

Chan K (2006). Young consumers and perception of brands in Hong Kong: A qualitative study. *Journal of Product and Brand Management*, **15**(7): 416-426.

Chaplin LN and John DR (2005). The development of self-brand connections in children and adolescents. *Journal of Consumer Research*, **32**(June): 119-129.

Chaplin LN and John DR (2007). Growing up in a material world: age difference in materialism in children and adolescents. *Journal of Consumer Research*, **34**: 480-493.

Childers T and Rao A (1992). The influence of familial and peer-based reference groups on consumer decisions. *Journal of Consumer Research*, **19**: 198-211.

Chin E (2001). *Purchasing Power: Black Kids and American Consumer Culture*. University of Minnesota Press.

Churchill GA Jr and Moschis GP (1979). Television and interpersonal influences on adolescent consumer learning. *Journal of Consumer Research*, **6**: 23-35.

Higgins JPT and Green S (eds) (2008). *Cochrane Handbook for Systematic Reviews of Interventions Version 5.0.0* [updated February 2008]. Oxford: The Cochrane Collaboration.

- Cook DT (2005). The dichotomous child in and of commercial culture. *Childhood*, **12**: 155-159.
- Cook DT (2007). The disempowering empowerment of children's consumer "choice". *Society and Business Review*, **2**(1): 37-52.
- Croghan R, Griffin C, Hunter J and Phoenix A (2006). Style failure: consumption, identity and social exclusion. *Journal of Youth Studies*, **9**(4): 463-478.
- Davis RM, Gilpin EA, Loken B, Viswanath K and Wakefield MA (eds) (2008). *The Role of the Media in Promoting and Reducing Tobacco Use*. NCI Tobacco Control Monograph Series No. 19. Bethesda, MD: US Department of Health and Human Services, National Institutes of Health, National Cancer Institute. NIH Pub. No. 07-6242, June.
- DeJong W, Atkin CK and Wallack L (1992). A critical analysis of "moderation" advertising sponsored by the beer industry: Are "responsible drinking" commercials done responsibly? *The Millbank Quarterly*, **70**: 661-678.
- Derenne JL and Beresin EV (2006). Body image, media, and eating disorders. *Academic Psychiatry*, **30**(June): 257-261.
- Derscheid LE, Kwon YH and Fang SR (1996). Preschoolers' socialization as consumers of clothing and recognition of symbolism. *Perceptual and Motor Skills*, **82**(June): 1171-1181.
- DiFranza JR, Wellman RJ, Sargent JD, Weitzman M, Hipple BJ and Winickoff JP for the Tobacco Consortium, Center for Child Health Research of the American Academy of Pediatrics (2006). Tobacco promotion and the initiation of tobacco use: assessing the evidence for causality. *Pediatrics*, **117**(6): e1237-1248.
- Dittmar H and Pepper L (1994). To have is to be: Materialism and person perception in working-class and middle-class British adolescents. *Journal of Economic Psychology*, **15**: 233-251.
- Donohue TR and Meyer TP (1984). Children's influence strategies: structure, sex differences, and bilateral mother-child influence. *Child Development*, **59**: 1303-1313.
- Dotson MJ and Hyatt EM (2000). A comparison of parents' and children's knowledge of brands and advertising slogans in the United States: implications for consumer socialization. *Journal of Marketing Communications*, **6**: 219-230.
- Dotson MJ and Hyatt EM (2005). Major influence factors in children's consumer socialization. *Journal of Consumer Marketing*, **22**(1), 35-42.
- Durkin SJ and Paxton SJ (2002). Predictors of vulnerability to reduce body image satisfaction and psychological wellbeing in response to exposure to idealized female media images in adolescent girls. *Journal of Psychosomatic Research*, **53**(5): 995-1005.
- Easterlin R and Crimmins E (1991). Private materialism, personal self-fulfilment, family life and public interest: the nature, effects and causes of recent changes in the values of American youth. *Public Opinion Quarterly*, **55**: 499-533.
- Ekström K (2006). Consumer socialization revisited. *Research in Consumer Behavior*, **10**: 71-98.

- Ekström K (2007). Parental consumer learning or 'keeping up with the children'. *Journal of Consumer Behaviour*, **6**: 203-217.
- Elliott R and Leonard C (2004). Peer pressure and poverty: exploring fashion brands and consumption symbolism among children of the 'British poor'. *Journal of Consumer Behaviour*, **3**(4): 347-359.
- Escobar-Chaves SL, Tortolero SR, Markham CM, Low BJ, Eitel P and Thickstun P (2005). Impact of the media on adolescent sexual attitudes and behaviors. *Pediatrics*, **116**(1): 303-326.
- Farrelly MC, Healton CG, Davis KC, Messeri P, Hersey JC and Haviland ML (2002). Getting to the truth: Evaluating national tobacco countermarketing campaigns. *American Journal of Public Health*, **92**(6): 901-907.
- Fielder A, Gardner W, Nairn A and Pitt J (2007). *Fair Game? Assessing commercial activity on children's favourite websites and online environments*. London: National Consumer Council.
- Foley C, Holzman C and Wearing S (2007). Moving beyond conspicuous leisure consumption: adolescent women, mobile phones and public space. *Leisure Studies*, **26**(2): 179-192.
- Fox KFA and Kehret-Ward T (1990). Naïve theories of price: A developmental model. *Psychology and Marketing*, **7**(4): 311-329.
- Foxman ER, Tansuhaj PS and Ekström KM (1989). Family members' perceptions of adolescents influence in family decision making. *Journal of Consumer Research*, **15**: 482-491.
- French SA, Jeffery RW, Story M, Breitlow KK, Baxter JS, Hannan P and Snyder MP (2001). Pricing and promotion effects on low-fat vending snack purchases: The CHIPS Study. *American Journal of Public Health*, **91**(1): 112-117.
- Friestad M and Wright P (2005). The next generation: research in consumer socialisation. In Hansen F, Rasmussen J, Martensen A and Tufté B (eds), *Children: consumption, advertising and media*. Fredericksberg, Denmark: Samfundslitteratur Press, 125-148.
- Gibson B (2008). Can evaluative conditioning change attitudes toward mature brands? New evidence from the Implicit Association Test. *Journal of Consumer Research*, **35** (June), 178-188
- Ginsburg HP and Opper S (1988). *Piaget's Theory of Intellectual Development*. Englewood Cliffs, NJ: Prentice-Hall.
- Goffman E (1976). *Gender Advertisements*. Cambridge, MA: Harvard University Press.
- Goldberg ME and Gorn GJ (1978). Some unintended consequences of TV advertising to children. *Journal of Consumer Research*, **5**: 22-29.
- Goldberg ME, Gorn GJ, Peracchio LA and Bamossy G (2003). Understanding materialism among youth. *Journal of Consumer Psychology*, **13**(3): 278-288.

Goldstein J (1997). *Advertising, Children and Adolescents*. World Federation of Advertisers. Available at: <http://www.aeforum.org/aeforum.nsf/3a43337cee520adf80256c5100355ea7/6140292a1c6121d68025679f00539f63?OpenDocument&Highlight=0,children,advertising> [accessed 1st October 2008].

Graves SB (1999). Television and prejudice reduction: When does television as a vicarious experience make a difference? *Journal of Social Issues*, **55**(4): 707-725.

Greenfield S (2006). *Education, Science and Technology*. Proceedings of the House of Lords, 20th April, Column 1219-1223.

Grier SA (2001). The Federal Trade Commission's report on the marketing of violent entertainment to youths: Developing policy-tuned research. *Journal of Public Policy and Marketing*, **20**(1): 123-132.

Groesz L, Levine MP and Murnen SK (2002). The effect of experimental presentation of thin media images on body satisfaction: A meta-analytic review. *International Journal of Eating Disorders*, **31**: 1-16.

Gunter B and Furnham A (1998). *Children as Consumers. A Psychological Analysis of the Young People's Market*. London, UK: Routledge Kegan Paul.

Hall J, Shaw M, Johnson M and Oppenheim P (1995). Influence of children on family consumer decision making. *European Advances in Consumer Research*, **2**: 45-53.

Hamilton K and Catterall M (2006). Consuming love in poor families: children's influence on consumption decisions. *Journal of Marketing Management*, **22**: 1031-1052.

Harrison F (2007). Marketing to children and parents through schools - can adverts add value to education in schools? *Advertising and Marketing in Children*, **1**(2): 141-145.

Hastings G and Angus K (2008). *Forever Cool: the Influence of Smoking Imagery on Young People*. London: British Medical Association Board of Science.

Hastings GB, Stead M, McDermott L, Forsyth A, MacKintosh AM, Rayner M, Godfrey G, Caraher M and Angus K (2003). *Review of Research on the Effects of Food Promotion to Children – Final Report and Appendices*. Prepared for the Food Standards Agency, UK. Available at: <http://www.food.gov.uk/healthiereating/advertisingtochildren/promotion/readreview> [accessed 11th September 2008].

Haynes J, Burts DC, Dukes A and Cloud R (1993). Consumer socialisation of preschoolers and kindergartners as related to clothing consumption. *Psychology and Marketing*, **10**(March/April): 151-166.

Holmstrom A (2004). The effects of the media on body image: A meta-analysis. *Journal of Broadcasting and Electronic Media*, **48**: 1.

Isler L, Popper ET and Ward S (1987). Children's purchase requests and parental responses: results from a diary study. *Journal of Advertising Research*, **27**(5): 29-39.

Jarlbrog G (2001). *Children and television advertising. The players, the arguments and the research during the period 1994-2000*. Swedish Consumer Agency.

Jenkins RL (1979). The influence of children in family-decision making: parents perceptions. In Wilkie WL (ed), *Advances in Consumer Research*, **6**: 413-418. Ann Arbor, MI: Association for Consumer Research.

John DR (1999). Consumer socialization of children: A retrospective look at twenty-five years of research. *Journal of Consumer Research*, **26**(3): 183-213.

Kamaruddin AR and Mokhlis S (2003). Consumer socialization, social structural factors and decision-making styles: a case study of adolescents in Malaysia. *International Journal of Consumer Studies*, **27**(2): 145-156.

Kasser T (2002). *The High Price of Materialism*. Cambridge, MA: MIT Press.

Kasser T (2005). Frugality, generosity, and materialism in children and adolescents. In Moore KA & Lippman LH (eds), *What do children need to flourish?: Conceptualizing and measuring indicators of positive development*. New York: Springer Science & Business Media, pp 357-374.

Kasser T and Linn S (2004). Public attitudes towards the youth marketing industry and its impact on children. Available at: <http://www.commercialfreechildhood.org/articles/home.htm>

Kenway J and Bullen E (2001). *Consuming children: education-entertainment-advertising*. Buckingham, UK: Open University Press.

Klein N (2000). *No Logo: Taking Aim at the Brand Bullies*. Knopf Canada.

Klinger LJ, Hamilton JA and Cantrell PJ (2001). Children's perceptions of aggressive and gender-specific content in toy commercials. *Social Behavior and Personality*, **29**(1): 11-20.

Kunkel D, Wilcox B, Cantor J, Palmer E, Linn S and Dowrick P (2004). *Report of the APA taskforce on advertising and children: Psychological issues in the increasing commercialization of childhood*. Washington DC: American Psychological Association.

Larson MS (2001). Interactions, activities and gender in children's television commercials: A content analysis. *Journal of Broadcasting and Electronic Media*, **45**: 41-56.

Larson MS (2003). Gender, race, and aggression in television commercials that feature children. *Sex Roles: A Journal of Research*, **48**(1-2): 67-76.

Lawlor M and Prothero A (2002). The established and potential mediating variables in the child's understanding of advertising intent: towards a research agenda. *Journal of Marketing Management*, **18**: 481-499.

Lee KCC and Beatty SE (2002). Family structure and influence in family decision making. *Journal of Consumer Marketing*, **19**(1): 1181-1198.

Livingstone S (2003). Children's use of the internet: Reflections on the emerging research agenda. *New Media and Society*, **5**(2): 147-166.

Livingstone S and Helsper EJ (2006). Does advertising literacy mediate the effects of advertising on children? A critical examination of two linked research literatures in relation to obesity and food choice. *Journal of Communication*, **56**: 560-584.

Lovato C, Linn G, Stead LF and Best A (2003). Impact of tobacco advertising and promotion on increasing adolescent smoking behaviours. *Cochrane Database of Systematic Reviews*, Issue 4. Art. No.: CD003439. DOI: 10.1002/14651858.CD003439.

MacIndoe G (1999). A case study of SchoolCards™: Innovative communication with teenagers in secondary schools. *Advertising and Marketing to Children*, September/October: 219-228.

Macklin MC (1996). Preschoolers learning of brand names from visual cues. *Journal of Consumer Research*, **23**: 251-261.

Maher JK and Childs NM (2003). A longitudinal content analysis of gender roles in children's television advertisements: A 27 year review. *Journal of Current Issues and Research in Advertising*, **25**(1): 71-81.

Mallinckrodt V and Mizerski D (2007). The effects of playing an advergame on young children's perceptions, preferences, and requests. *Journal of Advertising*, **36**(2): 87-100.

Mangleburg TF (1990). Children's influence in purchase decisions: a review and critique. *Advances in Consumer Research*, **17**: 813-825.

Martin MC (1997). Children's understanding of the intent of advertising: A meta-analysis. *Journal of Public Policy and Marketing*, **16**(2): 205-216.

Martin MC and Kennedy PF (1993). Advertising and social consequences for female preadolescents and adolescents. *Psychology and Marketing*, **10**: 513-530.

Mayer RN and Belk R (1982). Acquisition of consumption stereotypes by children. *Journal of Consumer Affairs*, **16**(Winter): 307-321.

Mayes SL and Valentine KB (1979). Sex role stereotyping in Saturday morning cartoon shows. *Journal of Broadcasting*, **23**(1): 41-50.

McCarthy JD and Hoge DR (1982). Analysis of age effects in longitudinal studies of adolescent self-esteem. *Developmental Psychology*, **18**: 372-379.

McGinnis JM, Gootman JA and Kraak VI (eds) (2006). *Food marketing to children and youth: threat or opportunity?* Committee on Food Marketing and the Diets of Children and Youth, Food and Nutrition Board, Board on Children, Youth, and Families. Washington, DC: National Academies.

McNeal JU (1964). *Children as Consumers*. Austin: Bureau of Business Research, University of Texas at Austin.

McNeal JU (1987). *Children as Consumers: Insights and Implications*. Lexington MA: Lexington Books.

McNeal JU (1992). *Kids as Customers: A Handbook of Marketing to Children*. New York: Lexington.

McNeal JU (1999). *The Kids Market: Myths and Realities*. New York: Paramount Market.

McNeal JU (2007). *On Becoming a Consumer*. Oxford, UK: Butterworth-Heinemann.

McNeal JU and McDaniel W (1981). Children's perceptions of retail stores: An exploratory study. *Akron Business and Economics Review*, **12**(Fall): 39-42.

- Metcalfe J and Mischel W (1999). A hot/cool system analysis of delay of gratification: dynamics of willpower. *Psychological Review*, **106**: 3-19.
- Meyer DJC and Anderson HC (2000). Preadolescents and apparel purchasing: Conformity to parents and peers in the consumer socialization process. *Journal of Social Behavior and Personality*, **15**(2): 243-257.
- Molnar A (2005). *School Commercialism*. New York: Routledge.
- Montgomery KC (1996). Children in the digital age. *The American Prospect*, **27**(July-August).
- Montgomery KC (2000). Children's media culture in the new millennium: Mapping the digital landscape. *The Future of Children*, **10**(2): 145-167.
- Moore RL and Moschis GR (1981). The role of family communication in consumer learning. *Journal of Communications*, **31**: 42-51.
- Moore ES and Rideout VJ (2007). The online marketing of food to children: is it just fun and games? *Journal of Public Policy & Marketing*, **26**(Fall): 202-220.
- Moschis GP (1985). The role of family communication in consumer socialization of children and adolescents. *Journal of Consumer Research*, **11**(March): 898-913.
- Moschis GP and Moore RL (1979). Decision making among the young: A socialization perspective. *Journal of Consumer Research*, **6**(September): 101-112.
- Moschis GR and Churchill GA Jr (1978). Consumer socialization: a theoretical and empirical analysis. *Journal of Marketing Research*, **15**: 599-609.
- Moschis GR and Mitchell LG (1986). Television advertising and interpersonal influences on teenager's participation in family consumer decisions. In Lutz RJ (ed), *Advances in Consumer Research*, **13**: 181-186. Utah: Association for Consumer Research.
- Moschis GR and Moore RL (1982). A longitudinal study of television advertising effects. *Journal of Consumer Research*, **9**: 279-287.
- Moses LJ and Baldwin DA (2005). What can the study of cognitive development reveal about children's ability to appreciate and cope with advertising? *Journal of Public Policy & Marketing*, **24**(2): 186-201.
- Nairn A and Fine C (2008). Who's messing with my mind? The implications of dual process models for the ethics of advertising to children. *International Journal of Advertising*, **27**(3):447-470.
- Nairn A and Ormond J, with Bottomley P (2007). *Watching, Wanting and Wellbeing: Exploring the Links*. London: National Consumer Council.
- Nairn A, Griffin C and Wicks PG (2008). Children's use of brand symbolism: a consumer culture theory approach. *European Journal of Marketing*, **42**(5/6): 627-640.
- Nelson JE (1979). Children as information sources in family decision to eat out. In Wilkie WL (ed), *Advances in Consumer Research*, **6**: 419-423. Ann Arbor, MI: Association for Consumer Research.

Ofcom (2008). *Update on impact of restrictions on food and drink advertising to children*. Published online February 14th. Available at: <http://www.ofcom.org.uk/research/tv/reports/update/> [accessed 11th September 2008].

Packard V (1957). *The Hidden Persuaders*. London: Penguin Books Ltd.

Palan KM and Wilkes RE (1997). Adolescent-parent interaction in family decision making. *Journal of Consumer Research*, **24**: 159-169.

Palmer EL (2007). Commercial television and radio in schools. In Arnett JJ (ed), *Encyclopedia of Children, Adolescents and Media 1*. Thousand Oaks, California: Sage Publications, Inc, pp196-198.

Paradise A (2007). Advertising and aggression. In Arnett JJ (ed), *Encyclopedia of Children, Adolescents and Media 1*. Thousand Oaks, California: Sage Publications, Inc, pp77-78.

Perse E (2007). Advertising, effects on adolescents. In Arnett JJ (ed), *Encyclopedia of Children, Adolescents and Media 1*. Thousand Oaks, California: Sage Publications, Inc, pp23-25.

Peto R, Lopez A, Boreham J, Thun M (2006). Mortality from Smoking In Developed Countries (1950-2000). Accessed online at: <http://www.ctsu.ox.ac.uk/~tobacco> [accessed 26 September 2008]

Piacentini MG and Mailer G (2004). Symbolic consumption in teenagers clothing choices. *Journal of Consumer Behaviour*, **3**(3): 251-262

Piachaud D (2007). *Freedom to be a child: Commercial pressures on children*. London: Centre for Analysis of Social Exclusion, London School of Economics.

Pike JJ and Jennings NA (2005). The effects of commercials on children's perceptions of gender appropriate toy use. *Sex Roles: A Journal of Research*, **52**(1-2): 83-91.

Pilgrim L and Lawrence D (2001). Pester power is a destructive concept. *International Journal of Advertising and Marketing to Children*, **3**(1): 11-22.

Pine KJ and Nash A (2002). Dear Santa: The effects of television advertising on young children. *International Journal of Behavioral Development*, **26**(6): 529-539.

Pine KJ and Nash A (2003). Barbie or Betty? Preschool children's preference for branded products and evidence for gender-linked differences. *Developmental and Behavioral Pediatrics*, **24**(4): 219-224.

Pollay RW (1986). The distorted mirror: reflections on the unintended consequences of advertising. *Journal of Marketing*, **50**(2): 18-36.

Quart A (2003). *The buying and selling of teenagers*. Cambridge, MA: Perseus.

Rindfleisch A, Burroughs JE and Denton F (1997). Family structure, materialism and compulsive consumption. *Journal of Consumer Research*, **23**: 312-325.

Richards JI, Wartella EA, Morton C and Thompson L (1998). The growing commercialization of schools: Issues and practices. *Annals - American Academy of Political and Social Science*, **557**: 148-163.

- Roberts JA, Tanner JF and Manolis C (2005). Materialism and the family structure-stress relation. *Journal of Consumer Psychology*, **15**(2): 183-190.
- Robertson TS (1979). Parental mediation of television advertising effects. *Journal of Communication*, **1**: 12-25.
- Robertson TS and Rossiter JR (1974). Children and commercial persuasion: An attribution theory analysis. *Journal of Consumer Research*, **1**(June): 13-20.
- Robertson TS, Ward S, Gatignon H and Klees DM (1989). Advertising and children: a cross cultural study. *Communication Research*, **16**: 459-485.
- Robinson TN, Chen HL and Killen JD (1998). Television and music video exposure and risk of adolescent alcohol use. *Pediatrics*, **102**: e54-59.
- Rudolph MJ (1995). The food product development process. *British Food Journal*, **97**(3): 3-11
- Russell R and Tyler M (2002). Thank Heaven for little girls: 'Girl Heaven' and the commercial context of feminine childhood. *Sociology*, **36**(3): 619-637.
- Schor J (2004). *Born to buy*. New York: Scribener.
- Selman RL (1980). *The Growth of Interpersonal Understanding*. New York: Academic Press.
- Shoham A, Rose GM and Bakir A (2004). The effect of family communication patterns on mothers' and fathers' perceived influence on family decisions. *Advances in Consumer Research*, **31**: 692-693.
- Siegel DL, Coffey TJ and Livingston G (2001). *The Great Tween Buying Machine*. Ithaca, NY: Paramount Market.
- Simpson LD and Douglas SU (1998). Adolescents' purchasing role structure when shopping by catalog for Clothing. *Clothing and Textiles Research Journal*, **16**(2): 98-104.
- Skafta D (1989). The effect of perceived wealth and poverty on adolescents' character judgments. *The Journal of Social Psychology*, **129**: 93-99.
- Smith LA and Foxcroft DR (2007). *The effect of alcohol and advertising and marketing on drinking behaviour in young people: a systematic review*. AERC Report No. 40. Published online. Available at: http://www.aerc.org.uk/documents/pdfs/finalReports/AERC_FinalReport_0040.pdf [accessed 9th September 2008].
- Smith SW, Atkin CK and Roznowski J (2006). Are "drink responsibly" alcohol campaigns strategically ambiguous? *Health Communication*, **20**(1): 1-11.
- Smith LJ (1994). A content analysis of gender differences in children's advertising. *Journal of Broadcasting and Electronic Media*, **38**: 323-337.
- Snyder LB, Fleming-Milici F, Slater M, Sun H and Strizhakova Y (2006). Effects of alcohol advertising exposure on drinking among youth. *Archives of Pediatrics & Adolescent Medicine*, **160**: 18-24.

Sommer D and Döring N (2007). Sexuality in advertising. In Arnett JJ (ed), *Encyclopedia of Children, Adolescents and Media 1*. Thousand Oaks, California: Sage Publications, Inc, pp51-55.

Story M and French S (2004). Food advertising and marketing directed at children and adolescents in the US. *International Journal of Behavioral Nutrition and Physical Activity*, **1**(3) (17 pages). Available at: <http://www.ijbnpa.org/content/1/1/3>.

Thomson ES, Laing AW and McKee L (2007). Family purchase decision making: Exploring child influence behaviour. *Journal of Consumer Behaviour*, **6**: 182-202.

Tinson J and Nancarrow C (2007). "GROw"ing up: tweenagers' involvement in family decision making. *Journal of Consumer Marketing*, **24**(3): 160-170.

Turner J and Brandt J (1978). Development and validation of a simulated market to test children for selected consumer skills. *Journal of Consumer Affairs*, **12**(Winter): 266-276.

Valkenburg PM (2000). Media and youth consumerism. *Journal of Adolescent Health*, **27S**: 52-56.

Valkenburg PM and Cantor J (2000). Children's likes and dislikes in entertainment programs. In Zillmann D and Vorderer P (eds), *Entertainment: the psychology of its appeal*. Hillsdale, NJ: Lawrence Erlbaum, pp135-152.

Wakefield M, Terry-McElrath Y, Emery S, Saffer H, Chaloupka FJ, Szczypka G, Flay B, O'Malley PM and Johnston LD (2006). Effect of televised, tobacco company-funded smoking prevention advertising on youth smoking-related beliefs, intentions, and behavior. *American Journal of Public Health*, **96**(12): 2154-2160.

Ward S (1974). Consumer socialization. *Journal of Consumer Research*, **1**(September): 1-14.

Ward S and Wackman D (1971). Family and media influences on adolescent consumer learning. *American Behavioral Scientist*, **14**(3): 415-427.

Ward S and Wackman DB (1972). Children's purchase influence attempts and parental yielding. *Journal of Marketing Research*, **9**: 316-319.

Ward S, Wackman DB and Wartella E (1977). *How Children Learn to Buy: The Development of Consumer Processing Skills*. Beverly Hills, CA: Sage.

Wicklund R and Gollwitzer P (1982). *Symbolic Self-Completion*. Hillsdale NJ: Lawrence Erlbaum.

Williams LA and Burns AC (2000). Exploring the dimensionality of children's direct influence attempts. *Advances in Consumer Research*, **27**: 64-71.

Wulfemeyer KT and Mueller B (1992). Channel One and commercials in classrooms: Advertising content aimed at students. *Journalism Quarterly*, **69**: 724-742.

Young B (1990). *Television advertising and children*. New York: Oxford University Press.

Young B (2003a). *Advertising and Food Choice in Children. A Review of the Literature. Summary*. August 2003. London: Food Advertising Unit, The Advertising Association. Available at: http://www.adassoc.org.uk/fau/summary_ofliteraturereview_2003.pdf [accessed 11th September 2008].

Young B (2003b). *Advertising and Food Choice in Children. A Review of the Literature*. August 2003. London: Food Advertising Unit, The Advertising Association. Available at: http://www.adassoc.org.uk/fau/brian_youngliteraturereview.pdf [accessed 29th October 2008]

Zajonc RB (1968). Attitudinal effects of mere exposures. *Journal of Personality and Social Psychology*, **9**(2, Pt2): 1-27.

APPENDIX 1

RECORD OF SEARCHES

1. Advertising Education Forum Database

child* AND commerc*
 child* AND commercial influence
 child* AND commercial influence(s)
 child* AND commercial message
 child* AND commercial messages
 child* AND commercial activit*
 child* AND marketing
 child* AND marketing AND wellbeing
 child* AND advert*
 child* AND advert* AND wellbeing
 child* AND sales promotion
 child* AND sponsorship
 child* AND PR
 child* AND public relations
 child* AND press release
 child* AND press releases
 child* AND television
 child* AND television AND wellbeing
 child* AND TV
 child* AND TV AND wellbeing
 child* AND digital media
 child* AND media
 child* AND media AND wellbeing
 child* AND cinema
 child* AND film
 child* AND dvd
 child* AND communication
 child* AND communication AND wellbeing
 child* AND mass media
 child* AND mass media AND wellbeing
 child* AND computer game
 child* AND video game
 child* AND mobile phone
 child* AND internet
 child* AND internet AND wellbeing
 child* AND internet AND welfare
 child* AND internet AND health
 media literacy
 consumer socialization
 cognitive development
 cognitive learning
 consumer learning
 social development
 symbolic consumption
 materialism

2. PsycINFO

child* AND commerc* (in AB)
 child* AND commerc* AND wellbeing (in AB)
 child* AND commercial influence (in AB)
 child* AND commercial message (in AB)
 child* AND commercial activit* (in AB)
 child AND media (in AB)
 child* AND media AND wellbeing (in AB)
 child* and advert* (in AB) (in AB)
 child* AND advert* AND wellbeing (in AB)
 child* AND marketing (in AB)
 child* AND marketing AND wellbeing (in AB)
 child* AND sales promotion (in AB)
 child* AND sales promotions (in AB)
 child* AND sponsorship (in AB)
 child* AND PR (in AB)
 child* AND public relations (in AB)
 child* AND press release (in AB)
 child* AND cinema (in AB)
 child* AND mass media (in AB)
 child* AND mass media AND wellbeing (in AB)
 child* AND dvd (in AB)
 child* AND digital media (in AB)
 child* AND mobile phone (in AB)
 child* AND computer game (in AB)
 child* AND video game (in AB)
 child* AND internet (in AB)
 child* AND internet AND wellbeing (in AB)
 child* AND internet AND welfare (in AB)
 child* AND internet AND health (in AB)
 socialization (in AB)
 consumer socialization (in AB)
 consumer socialisation (in AB)
 consumer learning (in AB)
 consumer development (in AB)
 symbolic consumption (in AB)
 consumption symbolism (in AB)
 cognitive development (in AB)
 cognitive development AND wellbeing (in AB)
 cognitive development AND socialization (in AB)
 cognitive development AND marketing (in AB)
 cognitive development AND advertising (in AB)
 social development (in AB)
 social development AND marketing (in AB)
 social development AND advert* (in AB)
 social learning AND marketing (in AB)
 social learning AND advert* (in AB)
 media literacy (in AB)
 media litera*(in AB)
 media education (in AB)
 materialism (in AB)
 materialism AND children (in AB)
 media, society AND child development (in AB)
 internet addiction (in AB)

gambling AND youth (in AB)

Review Searches in PsycINFO

Limits: English language, human subjects, all journals (as publication type)

((child* OR teen* OR youth OR adolesc*) AND (TV advertising OR television advertising) AND (review OR meta-analysis OR meta analysis OR meta-analyses OR meta analyses)) = 20

((child* OR teen* OR youth OR adolesc*) AND (mass media OR media) AND (eating disorders OR body image) AND (review OR meta-analysis OR meta analysis OR meta-analyses OR meta analyses)) = 20

((child* OR teen* OR youth OR adolesc*) AND (video game OR computer game) AND AND (violence OR aggression) AND (review OR meta-analysis)) = 11

((child* OR teen* OR youth OR adolesc*) AND (materialism OR consumerism) (review OR meta-analysis)) = 7

((child* OR teen* OR youth OR adolesc*) AND (internet OR "digital media" OR "mobile phone") AND (review OR meta-analysis)) = 108

3. Emerald

child* AND commerc* (in AB)

child* AND commercial influence (in AB)

child* AND commercial message (in AB)

child* AND commercial activit* (in AB)

child* AND marketing (in AB)

child* AND advert* (in AB)

child* AND media (in AB)

child* AND wellbeing (in AB)

consumer socialization (in AB)

child* AND internet (in AB)

child* AND sponsorship (in AB)

child* AND digital media (in AB)

child* AND materialism (in AB)

youth AND commerc* (in AB)

youth AND marketing AND wellbeing (in AB)

teen* AND commerc* (in AB)

teen* AND marketing AND wellbeing (in AB)

child* AND video game (in AB)

youth AND video game (in AB)

youth AND video game AND wellbeing (in AB)

4. Medline

child* OR teen OR youth AND commerc* (in AB)
 child* OR teen OR youth AND commerc* AND harm (in AB)
 child* OR teen OR youth AND commerc* AND development (in AB)
 child* OR teen OR youth AND commerc* AND wellbeing (in AB)
 child* OR teen OR youth AND commerc* AND welfare (in AB)
 child* OR teen OR youth AND commerc* AND effects (in AB)
 child* OR teen OR youth AND commerc* AND uses (in AB)
 child* OR teen OR youth AND commerc* AND interpretations (in AB)
 child* OR teen OR youth AND sponsorship (in AB)
 child* OR teen OR youth AND commercial influence (in AB)
 child* OR teen OR youth AND commercial message (in AB)
 child* OR teen OR youth AND commercial activit* (in AB)
 child* OR teen OR youth AND commercial world (in AB)
 child* OR teen OR youth AND marketing (in AB)
 child* OR teen OR youth AND marketing AND wellbeing (in AB)
 child* OR teen OR youth AND marketing AND welfare (in AB)
 child* OR teen OR youth AND marketing AND harm (in AB)
 child* OR teen OR youth AND marketing AND development (in AB)
 child* OR teen OR youth AND advert* (in AB)
 child* OR teen OR youth AND advert* AND wellbeing (in AB)
 child* OR teen OR youth AND advert* AND welfare (in AB)
 child* OR teen OR youth AND advert* (in AB)
 child* OR teen OR youth AND media AND wellbeing (in AB)
 child* OR teen OR youth AND digital media (in AB)
 child* OR teen OR youth AND internet (in AB)
 child* OR teen OR youth AND internet AND wellbeing (in AB)
 child* OR teen* OR youth AND mass media (in AB)
 child* OR teen* OR youth AND mass media AND wellbeing (in AB)
 child* OR teen* OR youth AND video game (in AB)
 child* OR teen* OR youth AND computer game (in AB)
 child* OR teen OR youth AND materialism (in AB)
 child* OR teen OR youth AND commerc* AND materialism (in AB)

5. Web of Science – Social Sciences Citation Index & Arts and Humanities Citation Index

TS=((child* OR teen* OR youth OR adolesc*) AND media AND wellbeing)
 TS=((child* OR teen* OR youth OR adolesc*) AND marketing)
 TS=((child* OR teen* OR youth OR adolesc*) AND commerc*)
 TS=((child* OR teen* OR youth OR adolesc*) AND commerc* AND wellbeing)
 TS=((child* OR teen* OR youth OR adolesc*) AND commerc* AND harm)
 TS=((child* OR teen* OR youth OR adolesc*) AND commerc* AND development)
 TS=((child* OR teen* OR youth OR adolesc*) AND commerc* AND welfare)
 TS=((child* OR teen* OR youth OR adolesc*) AND commerc* AND effect)
 TS=((child* OR teen* OR youth OR adolesc*) AND commerc* AND use)
 TS=((child* OR teen* OR youth OR adolesc*) AND commerc* AND use AND wellbeing)
 TS=((child* OR teen* OR youth OR adolesc*) AND commerc* AND use AND welfare)
 TS=((child* OR teen* OR youth OR adolesc*) AND video game)
 TS=((child* OR teen* OR youth OR adolesc*) AND video game AND wellbeing)
 TS=((child* OR teen* OR youth OR adolesc*) AND video game AND effects)
 TS=((child* OR teen* OR youth OR adolesc*) AND computer game AND effects)
 TS=((child* OR teen* OR youth OR adolesc*) AND internet)
 TS=((child* OR teen* OR youth OR adolesc*) AND internet AND wellbeing)

TS=((child* OR teen* OR youth OR adolesc*) AND internet AND effect)
 TS=((child* OR teen* OR youth OR adolesc*) AND commerc* AND materialism)
 TS=((child* OR teen* OR youth OR adolesc*) AND consumerism)
 TS=((child* OR teen* OR youth OR adolesc*) AND mass media)
 TS=((child* OR teen* OR youth OR adolesc*) AND mass media AND wellbeing)
 TS=((child* OR teen* OR youth OR adolesc*) AND mass media AND effect)
 TS=((child* OR teen* OR youth OR adolesc*) AND digital media)
 TS=((child* OR teen* OR youth OR adolesc*) AND (("mobile phone" OR "mobile phones" OR cellphone*) OR SMS OR ("text message" OR "text messages" OR "text messaging"))
 TS=((child* OR teen* OR youth OR adolesc*) AND (("mobile phone" OR "mobile phones" OR cellphone*) OR SMS OR ("text message" OR "text messages" OR "text messaging")) AND wellbeing)

Review Searches in Web of Science:

TS=((child* OR teen* OR youth or adolesc*) AND (TV advertising OR television advertising) AND (review OR meta-analysis OR meta analysis OR meta-analyses OR meta analyses)) = 7

TS=((child* OR teen* OR youth or adolesc*) AND (mass media OR media) AND (eating disorders OR body image) AND (review OR meta-analysis OR meta analysis OR meta-analyses OR meta analyses)) = 6

TS=((child* OR teen* OR youth or adolesc*) AND (mass media OR media OR video game OR videogame OR video games OR computer game OR computer game) AND (eating disorders OR body image) AND (violence OR aggression) AND (review OR meta-analysis OR meta analysis OR meta-analyses OR meta analyses)) = 31

TS=((child* OR teen* OR youth or adolesc*) AND (materialism OR consumerism) (review OR meta-analysis OR meta analysis OR meta-analyses OR meta analyses)) = 1

TS=((child* OR teen* OR youth or adolesc*) AND (internet) AND (wellbeing OR welfare OR effect OR effects OR use OR uses or interpretation OR interpretations) AND (review OR meta-analysis OR meta analysis OR meta-analyses OR meta analyses)) = 32

TS=((child* OR teen* OR youth or adolesc*) AND (internet OR mobile phone OR mobile phones OR cell phone OR cellphone OR text message OR text messaging OR digital media) AND (review OR meta-analysis OR meta analysis OR meta-analyses OR meta analyses)) = 51

TS=((child* OR teen* OR youth or adolesc*) AND (stereotype OR stereotypes OR stereotyping) AND (review OR meta-analysis OR meta analysis OR meta-analyses OR meta analyses)) = 32

6. Sociological Abstracts

TI=(teen* OR adolescen* OR youth* OR child*) and TI=commercial
 AB=(teen* OR adolescen* OR youth* OR child*) and AB=commercial
 TI=(teen* OR adolescen* OR youth* OR child*) and TI=sponsorship
 AB=(teen* OR adolescen* OR youth* OR child*) and AB=sponsorship
 TI=(teen* OR adolescen* OR youth* OR child*) and TI=marketing
 AB=(teen* OR adolescen* OR youth* OR child*) and AB=marketing
 TI=(teen* OR adolescen* OR youth* OR child*) and TI=advert*
 AB=(teen* OR adolescen* OR youth* OR child*) and AB=advert*
 TI=(teen* OR adolescen* OR youth* OR child*) and TI=("digital media")

AB=(teen* OR adolescen* OR youth* OR child*) and AB=("digital media")
 TI=(teen* OR adolescen* OR youth* OR child*) and TI=("mass media")
 AB=(teen* OR adolescen* OR youth* OR child*) and AB=("mass media")
 TI=(teen* OR adolescen* OR youth* OR child*) and TI=(("computer game") OR ("computer games"))
 AB=(teen* OR adolescen* OR youth* OR child*) and AB=(("computer game") OR ("computer games"))
 TI=(teen* OR adolescen* OR youth* OR child*) and TI=(("video game") OR ("video games") OR videogame*)
 AB=(teen* OR adolescen* OR youth* OR child*) and AB=(("video game") OR ("video games") OR videogame*)
 TI=(teen* OR adolescen* OR youth* OR child*) and TI=internet
 AB=(teen* OR adolescen* OR youth* OR child*) and AB=internet
 TI=(teen* OR adolescen* OR youth* OR child*) and TI=(("mobile phone" OR "mobile phones" OR cellphone*) OR SMS OR ("text message" OR "text messages" OR "text messaging"))
 AB=(teen* OR adolescen* OR youth* OR child*) and AB=(("mobile phone" OR "mobile phones" OR cellphone*) OR SMS OR ("text message" OR "text messages" OR "text messaging"))
 TI=(teen* OR adolescen* OR youth* OR child*) and TI=(materialism OR consumerism)
 AB=(teen* OR adolescen* OR youth* OR child*) and AB=(materialism OR consumerism)

Review Searches in Sociological Abstracts

TS=((child* OR teen* OR youth or adolesc*) AND (TV advertising OR television advertising) AND (review OR meta-analysis OR meta analysis OR meta-analyses OR meta analyses)) = 7

TS=((child* OR teen* OR youth or adolesc*) AND (mass media OR media) AND (eating disorders OR body image) AND (review OR meta-analysis OR meta analysis OR meta-analyses OR meta analyses)) = 6

TS=((child* OR teen* OR youth or adolesc*) AND (mass media OR media OR video game OR videogame OR video games OR computer game OR computer game) AND (violence OR aggression) AND (review OR meta-analysis OR meta analysis OR meta-analyses OR meta analyses)) = 31

TS=((child* OR teen* OR youth or adolesc*) AND (materialism OR consumerism) (review OR meta-analysis OR meta analysis OR meta-analyses OR meta analyses)) = 1

TS=((child* OR teen* OR youth or adolesc*) AND (internet) AND (wellbeing OR welfare OR effect OR effects OR use OR uses OR interpretation OR interpretations) AND (review OR meta-analysis OR meta analysis OR meta-analyses OR meta analyses)) = 32

7. Index to Theses (Universities of Great Britain and Ireland)

(ti contains child*) AND (ti contains advert*) OR (ti contains marketing) OR (ti contains commercial) 19

(any field contains (adolescen* OR youth* OR teen*)) AND (any field contains (advert* OR marketing OR commercial*)) 45

8. Centre for Reviews and Dissemination

(teen* OR adolescen* OR youth* OR child*) AND (advert* OR marketing OR commercial*)
74

(teen* OR adolescen* OR youth* OR child*) AND (sponsor* OR game* OR telephone* OR mobile*) 196

(teen* OR adolescen* OR youth* OR child*) AND (“digital media” OR “new media” OR “mass media”)
26

9. Named Author Searches

ISI Web of Knowledge Author Search “Calvert SL OR Calvert S OR Kline S OR Kunkel D OR Montgomery KC OR Montgomery K OR Seiter E OR Shade LR OR Regan Shade L OR Wartella E OR Wartella EA”

Google.com search for the above authors’ homepages/publications lists.

10. Named Journals Searches

Searched online archives of:
Journal of Children and Media
Journal of Broadcasting and Electronic Media

Searched online special issues of:
Journal of Public Policy & Marketing 24(2) 2007 *Special Section on Marketing and Advertising to Children*
Journal of Public Policy & Marketing 27(1) 2007 *Special Section on Public Policy and Covert Marketing*
Society and Business Review 2(1) 2007 *Special issue: Child and teen consumption*

Searched *Child and Teen Consumption 2008* conference session programme

11. Websites

<http://www.commercialfreechildhood.org/articles/home.htm>

<http://www.cam-ascor.nl>

<http://www.ofcom.org.uk/>

<http://www.medialiteracy.org.uk>

<http://www.mediasmart.org.uk/index-2.html>

<http://www.warc.com>

<http://www.ncc.org.uk/>

<http://www.childnet-int.org/>

<http://www.dfes.gov.uk/publications/>

<http://bookshop.europa.eu>