Children and commercial communications: A literature review

June 2011
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ABSTRACT

The literature review looks in-depth at children’s development, considering child psychology, recent developments in neuroscience, sociological studies, and social competence. It continues by assessing children’s understanding of advertising. Most of this research has been centred on television advertising, with some gaps found in the literature that considers children’s response to advertising through digital media, magazines and comics, radio, cinema, and outdoor advertising. The review concludes that whilst it is the case that children can recognise advertising at a young age, 4 or 5, it is not until they reach middle childhood (age 8-12) that children understand advertising, and it is not until they reach adolescence, age 12 plus, that children can understand the commercial intent of advertising. The review defines the meaning of ‘commercial intent’. It further concludes that while there is less literature that has looked at non-broadcast advertising, it may be the case that some attempts to market to children using these media are less obvious, particularly online. This has prompted some academics to raise concerns about ‘stealth marketing’ and ‘covert marketing strategies’.

KEY WORDS

child and adolescent development; social competence; children’s understanding of advertising and marketing; digital advertising and marketing; children’s understanding of commercial intent.
ACKNOWLEDGEMENTS

Thank you to my colleagues, Dr Julie Tinson, Senior Lecturer in Marketing, University of Stirling; Dr Elizabeth Thompson, Lecturer in Management, University of Aberdeen Business School; Dr Brian Young, Research Fellow, School of Psychology, University of Exeter; and Dr Colleen McLaughlin, Deputy Head of Faculty, Faculty of Education, University of Cambridge, for their help and advice on latest research and literature; and to Karen Fraser, James Charlton, Josh McBain, and Emma Taylor at Credos for their enthusiastic support and for providing key reports.
DEFINITION OF TERMS

Several terms are used by academics referred to in this literature review. Here, we present their definitions and the interpretation given to their meaning. These terms are discussed in more detail in the review.

‘Persuasive Intent’ and ‘Commercial Intent’ of advertising

The two terms are used in the academic research to define children’s understanding of advertising.

Livingstone and Helsper (2006, p. 562) define this understanding as ‘children can articulate a critical understanding of advertising and of the intentions of its producers (Martin, 1997; Peterson & Lewis, 1988; Peterson, et al., 1984), even becoming sceptical or distrustful of advertising (Boush, 2001; Dorr, 1986; van Evra, 1998).’

Oates, Blades and Gunter (2001) at Sheffield University carried out an extensive literature review, and empirical research to find out when children can understand the ‘persuasive intent’ of advertising. None of the 6-year-olds, only a quarter of the 8-year-olds, and a third of the 10-year-olds discussed advertising in terms of persuasion. The authors concluded that although children remember television advertisements, their purpose is not fully understood, even by many 10-year-olds.

Bjurstrom (1994) is often cited in research into children’s understanding of advertising, and indeed his research was instrumental in the Swedish government’s decision to ban television advertising to children under 12. Bjurstrom has concluded that ‘it is only around or after the age of 12 that we can be more certain that most children have developed a fuller understanding of the purpose or objective of advertising’ (1994, p. 42).

It is important to point out, however, that Bjurstrom himself argues that some children do understand the commercial or persuasive intent of advertising before this age. Similarly, Young (2010) points out that the ability to recognise persuasive intent might be driven by the ability of the child to articulate their feelings, and this is confirmed by Martin (1997) who carried out a meta-analysis of research that suggested there was a socio-economic effect that impacted upon children’s understanding of advertising.

‘Stealth Marketing’ and ‘Covert Marketing’

These terms are used by academics to describe practices that are not overtly advertising or marketing, but instead seek to attract consumers through other means. Martin & Smith (2008,
p. 45) have defined this as ‘fail(ing) to disclose or reveal the true relationship with the company producing or sponsoring the marketing message.’ Also expressing concern at this practice has been: Beder, 1998; Calvert, 2008; Harris et al., 2009; Palmer & Carpenter, 2006; Rotfield, 2008; Shimp, 2008; Walsh & Dowling, 2010.

‘Middle Childhood’ and ‘Adolescence’

‘Middle childhood’
Middle childhood is the developmental age 8 – 12 (Dunn, 2004; Erikson, 1968) and is sometimes referred to as ‘tweens’ or ‘tweenagers’ in marketing terms.

‘Adolescence’
Adolescence is often referred to as the onset of puberty - that is, the age group 11-13 (France, 2004; Griffin, 1993; Young, 2010). However, in terms of child development, the concept of ‘adolescence’ is applied to the age group 10 - early 20s (Coleman & Hendry, 1999; Kehily, 2007; Smith, Cowie & Blades, 2003). ‘Early adolescence’ is commonly applied to 10-14 years; ‘middle adolescence’ is applied to 15-18 years; ‘late adolescence’ 19-25 years.

‘HFSS’
‘HFSS’ means food and drink products high in fat, salt or sugar, according to the nutrient profiling scheme developed by the FSA.

Collection of material online

‘Online listening’, ‘Scraping’ and ‘Mining’
These terms refer to the professional monitoring, by market research agencies, of social networking sites, blogs and other online communications to find out what is being said about a client’s product or service. Research companies offer to harvest online conversations and collect personal details from social-networking sites, résumé sites and online forums where people might discuss their lives. There is currently much debate about this practice (see Campbell, 2011 and Angwin & Stecklow, 2010)
BACKGROUND

The Advertising Association (AA) represents all sides of the advertising and promotional industries in the UK - advertisers, agencies, media, and research services. Its role is to promote and protect advertising by communicating its benefits to the economy and to society, and it seeks the optimal regulatory environment for the industry. Its goal is to help maintain an industry that is responsible, understood, and appreciated. The advertising industry contributed £15.6bn to the UK economy in 2008, and is the third largest of the UK’s creative industries (Advertising Association, 2011).

Credos, the advertising industry’s think-tank, collects and disseminates understanding, and generates and interprets information and insight. Part of its role is to forecast political and industry trends, pre-empting rather than merely reacting, and to encompass the increasingly diversified multi-platform advertising business. Focusing on the overall impact of marketing communications as well as sector-specific issues, its aim is to provide commercially applicable economic, social and communications insight, intelligence and wisdom.

Marketing to children featured in both the Conservative and Liberal Democratic pre-election manifestos, and Prime Minister David Cameron now chairs a ‘childhood and family’s taskforce’. When launching the taskforce in June, Deputy Prime Minister Nick Clegg announced ‘we are committed to cracking down on irresponsible advertising and marketing. If we are really going to restore and protect the innocence of childhood, action here is absolutely key’. Children are now probably better protected than before in the UK, but while regulation and best practice have increased, consumer research published by Credos in November 2010 shows a lack of consumer trust in advertising. An ongoing debate in the industry focuses on the age at which children are able to understand advertising. This has led Credos to pose the question: *Do we know enough about children and young people’s development to self-regulate effectively?*. To answer this question, Credos has asked Dr Barbie Clarke, Family Kids and Youth, to carry out a literature review that looks at the latest research both into children’s development and cognitive ability, and at children’s understanding of advertising.

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1 For an explanation of the definitions applied please refer to ‘Definitions’ page v.
CLASSIC STUDIES ON CHILD DEVELOPMENT FROM PSYCHOLOGY AND PSYCHOANALYSIS TELL US THAT EARLY ATTACHMENT – ‘ATTACHMENT THEORY’ – IS IMPORTANT FOR THE ABILITY OF A CHILD TO DEVELOP HEALTHY RELATIONSHIPS, A SENSE OF SELF-ESTEEM, AND RESILIENCE. WITHOUT THE EARLY FOUNDATIONS, AND ONGOING SUPPORT FROM CARERS, CHILDREN ARE LESS LIKELY TO FORM FRIENDSHIPS, DEVELOP ABSTRACT AND CRITICAL REASONING, AND ARE MORE SUSCEPTIBLE TO ALL KINDS OF INFLUENCES. WHILE MOST CHILDREN ACHIEVE A HEALTHY SENSE OF CRITICAL JUDGEMENT, IT IS ESTIMATED THAT 20 PER CENT OF CHILDREN AND YOUNG PEOPLE MIGHT DEVELOP MENTAL HEALTH PROBLEMS2 (BMA, 2006; PARRY-LANGDON, 2008). IT IS THEREFORE ADVISABLE, WHEN CONSIDERING THE EFFECTS OF ADVERTISING AND MARKETING ON CHILDREN, TO BE AWARE OF MORE VULNERABLE CHILDREN.

PARENTAL AND ADULT INVOLVEMENT IS OF COURSE IMPORTANT, BUT NOT ALL PARENTS ARE ABLE, OR HAVE THE INCLINATION, TO BECOME INVOLVED IN CRITICALLY ANALYSING THE MEDIA CONTENT THAT CHILDREN IN THEIR CARE ABSORB. THIS IS NOT NECESSARILY NEGLIGENCE; IT MAY BE PROMPTED BY EXHAUSTION, STRESS, ILLNESS, OR MENTAL HEALTH ISSUES. AND IT CAN MANIFEST ITSELF IN DIFFERENT WAYS – OVER INDULGENCE, A DENIAL OF THE MESSAGES CHILDREN ARE HEARING AND SEEING, A SENSE THAT CHILDREN MIGHT BE MORE MANAGEABLE IF GIVEN WHAT THEY DESIRE. ONE IN FOUR CHILDREN LIVE IN A SINGLE PARENT FAMILY (ONS, 2010) AND RESEARCH INDICATES THAT SUCH CHILDREN ARE LIKELY TO SUFFER FROM LOWER SELF ESTEEM, HAVE GREATER MENTAL HEALTH PROBLEMS, AND DO LESS WELL AT SCHOOL (HANSEN, JOSHI & DEX, 2010; PARRY-LANGDON, 2008; WEITOFF ET AL., 2003; SHEPHERD, 2009).

MANY PARENTS MAY NOT SEE THE MEDIA MESSAGES THEIR CHILDREN ARE ABSORBING. THEY DO NOT NECESSARILY HAVE THE TIME TO SIT DOWN WITH THEIR CHILDREN TO WATCH TELEVISION, READ MAGAZINES, LISTEN TO MUSIC, OR TO GO ON THE INTERNET. RESEARCH SHOWS THAT CHILDREN DO NOT REACH AN AGE OF SOCIAL COMPETENCE - THAT IS, THE ABILITY TO READ EMOTIONS AND THOUGHTS IN OTHERS, OR CRITICALLY ENGAGE IN WHAT THEY ARE HEARING AND SEEING - UNTIL THEY REACH ADOLESCENCE, AGE 12 AND OVER (SEE PART 3 CHILDREN’S SOCIAL COMPETENCE PAGE 9). THIS HAS IMPLICATIONS FOR SELF-REGULATION. THE ARGUMENT CENTRES ON WHETHER CHILDREN CAN RECOGNISE COMMERCIAL INTENT. THE LITERATURE INDICATES THAT THIS MIGHT ORIGINA LLY HAVE BEEN OVER-ESTIMATED, TAKING SIMPLE MEASURES OF WHETHER A CHILD RECOGNISED THE DIFFERENCE BETWEEN ADVERTISING AND PROGRAMMES (ON TV). MORE RECENT RESEARCH CONFIRMS EARLY PSYCHOLOGICAL DEVELOPMENT STUDIES THAT INDICATE CHILDREN CANNOT THINK IN AN ABSTRACT WAY, CRITICALLY ENGAGE AND QUESTION, AND SEE THE PSYCHOLOGICAL REASONING BEHIND WHAT THEY ARE BEING TOLD, UNTIL THEY REACH ADOLESCENCE (SEE PART 3 CHILDREN’S SOCIAL COMPETENCE PAGE 19).

ALTHOUGH LITTLE RESEARCH HAS BEEN DONE ON CHILDREN’S UNDERSTANDING OF ADVERTISING IN NON-broadcast media, and especially using digital media, there is some evidence to show that less straightforward, more covert means are used to attract children, not directly selling but

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2 See appendix 5 for full explanation.
engaging children with brands at quite an early age, before they have the critical judgment to understand that the intention is to sell the product.

These methods have been described in the literature as ‘covert marketing strategies’, and ‘stealth marketing’, and naturally raise concerns about the role of advertisers in recognising children’s best interests and wellbeing (see Part 4 Children as Consumers page 23).

While we conclude that not all children are vulnerable to the effects of advertising, we suggest that self regulation should take into account potentially less resilient children, and should especially examine some of the methods being used through digital marketing, where there may in some instances be a merging of marketing techniques and advertising (see Part 4 Children as Consumers page 23).
INTRODUCTION

“There is no trust more sacred than the one the world holds with children. There is no duty more important than ensuring that their rights are respected (and) that their welfare is protected…”

Kofi Annan

This literature review considers the question Do we know enough about child development to self-regulate effectively? It has drawn on the fields of psychology, sociology, biology, education and health in its assessment of child development, competence, and the understanding of advertising. It has reviewed over 70 peer-reviewed academic papers, some 30 books and journals, and over 15 reports, testimonials and articles. Non-academic books referring to children as consumers were not reviewed in this exercise, although the views of consumer groups have been referred to where relevant.

The literature review is divided into four sections. The first looks at the common definition of childhood, and the rights of the child. The second section is a review of the current thinking on child development. It includes the classic studies of developmental stages including Piaget and Vygotsky, and it also considers more recent findings from the field of neuroscience. The third section considers the research on the attainment of social competence, and looks at the way children are viewed as competent in psychosocial studies, and the law. The fourth and final section looks at children as consumers, examining the evidence from the literature that assesses the impact of advertising on children, and their understanding of it, as well as the age at which children are able to understand its ‘persuasive intent’. It also looks at the evidence from non-broadcast advertising and children, on which there is far less literature. In many ways it might be this area, less supervised by parents, which could cause concern. This final section looks at marketing as well as advertising because the two are closely associated, and has led academics looking at the field to describe some activity on-line and in-print as ‘stealth marketing’.

The findings from the literature review indicate that although children can recognise advertising at an early age, they are unable to make judgements about advertising and marketing until they reach middle childhood, that is 8-12, and it is not until they reach adolescence, that is 12 plus, that they are able fully to understand commercial intent.
PART 1: CHILDHOOD – WHAT IS IT?

The notion of childhood

The concept of childhood has been a source of debate over many years. In the eighteenth century the Romantic view was that childhood was a happy state, and that children were born pure and innocent, shaped by the experiences they had (see Jean-Jacques Rousseau’s *Emile: or On Education* (1762)). While this Romantic construction remained at the beginning of the nineteenth century amongst the wealthy middle class, the Industrial Revolution meant that poorer working class children were expected to work from an early age, as young as 5. Moreover, it was not until the 1840s that children under 10 were banned from employment by the 1842 Mines Act, and half-time working for school-aged children was introduced in the 1844 Factory Act. Working children became less common when compulsory schooling was introduced in 1880 (Kellet, et al., 2004). The establishment of compulsory schooling for all in the twentieth century provided a useful means to observe and monitor children at different ages, and the establishment of IQ tests that effectively ‘labelled’ children.

By the twentieth century the study of the child and child development had been established, and after the First World War in particular, children were recognised as being important for the future of the nation. Cunningham (2006) points out that there is little agreement, even in the twentieth century, about when childhood begins – whether this is at birth or after infancy – nor when it ends: ‘At puberty? When we leave school? When we leave home? When we cease to be financially dependent on our parents?’ (p14).

What is clear is that children do not exist in a vacuum, and their lives are complex (Greig et al., 2007). Their experiences will differ according to the families they live in, the care they are given, and the culture they are brought up in. Some children are more vulnerable than others. Family circumstances largely dictate this, and it is these children who, as responsible adults, we need to protect. The general estimate is that twenty per cent of children experience mental health problems at some point (BMA, 2006)3, so we might assume that 1 in 5 children are not as resilient as the rest of the child and adolescent population.

The Rights of the Child

It is now accepted that the development of children should be viewed from both a developmental psychological view, and a social view. The United Nations Convention of the Rights of the Child (UNICEF, 1989) was adopted by all countries except Somalia and the US. This acknowledges that children have a voice, are entitled to be heard and have a sense of autonomy irrespective of their perceived level of competence, or their age.

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3 See appendix 5.
The 1989 and 2004 Children Acts passed in England and Wales, and the parallel legislation in Scotland and Northern Ireland, gave children legal rights on how they are treated and a voice in decisions about welfare services they might receive. Despite this, the position of power that an adult inevitably holds over a child is one that must be carefully weighed when we consider how we communicate with children. The last ten years has seen a substantial body of literature from psychology and sociology, to geography and anthropology, arguing for greater involvement of young people in decisions that affect them (see for example: Alderson, 2008; Hill et al., 2004; Morrow, 1999; Powell and Smith, 2009; Shier, 2001; Stafford et al., 2003). Underpinning this thinking is a dominant ‘new social studies of childhood’ discourse (Prout, 2005), which positions children as beings in their own right rather than simply mini-adults in the making.

This shift in global theory and thought has now begun to manifest itself in the practical implementation of government policy on the ground. In the UK, for example, the Children’s Act 2004 specifically requires the Children’s Commissioner to consult with children (Section 2:4) and the principle of child participation is an integral seam within education, health and social care policy.
PART 2: UNDERSTANDING CHILD DEVELOPMENT

Child developmental theories

A brief look at the main psychological theories that drive child psychology is helpful before we look more closely at child development. We take as our model the description of theory by Greig et al. (2007).

Physiological approaches

The physiological theory focuses on behaviour driven by biological factors. While this was an early means of looking at psychology, the rise of psychoanalysis in the early twentieth century meant that this became less fashionable. However, with the increasing interest from the scientific community into how the body and the brain function, and the relationship between the two, the physiological approach has become once again recognised as an important element in understanding development. There are three main fields that are of interest to physiologists: brain function, biochemistry and heredity. Neuroscience is particularly relevant to understanding what children and adolescents can understand, and we deal with this a little later in a separate section.

Psychodynamic approaches

Beginning with the psychoanalytical theories of Freud (1856-1939), and augmented by Adler (1870-1937), Jung (1875-1961), Bowlby (1907-1990) and others (see Figure 2), the theory is based on the notion that behaviour is driven by the dynamic unconscious (Grieg et al., 2007), much of which is established in early infant and child experiences. While difficult to prove scientifically, such theories still have a big influence on the therapeutic world, and are used in many settings such as schools, prisons, and the armed forces. A general emphasis on early attachment, strong and loving care from the main care-giver, and the strength and maturity of parental care, as emphasised by Bowlby (1979) and known as attachment theory, has been shown consistently to affect a child’s wellbeing and resilience. Much of this is born out in recent scientific studies that use neuroscience as their base, well illustrated in Sue Gerhardt’s book Why Love Matters (2004).


**Behaviourist approaches**

The argument that lies at the root of this theory is that behaviour is influenced through *learning* how to respond to certain stimuli. It does not consider the unconscious, but instead the way in which the environment influences our behaviour. Pavlov (1849-1936) was probably the earliest behaviourist, establishing through his well known experiments with dogs that behaviour is learned. Cognitive Behavioural Therapy (CBT) is used today to treat many mental health and behavioural problems, and is favoured by government\(^4\) because it is seen to be effective in helping patients achieve a more balanced view of their lives, and is faster and quicker (and more cost effective) than the longer-term psychotherapeutic models.

**Humanistic approaches**

Humanistic psychology, as Greig et al. (2007) point out, emerged in the 1950s in response to both behaviourism and psychoanalysis. Instead of looking at what might go wrong, that is mental disorder or illness, humanistic psychology looks at what creates a healthy and happy person by exploring the positive aspects which help produce this. Carl Rogers (1902-1987) and Abraham Maslow (1908-1970) are particularly associated with humanistic psychology. Rogers argued that people are born with an in-built ability to actualise their potential. His ‘person-centred’ psychotherapeutic approach is based on the core conditions of unconditional positive regard, empathy and congruence. Maslow is best known for his ‘Hierarchy of Needs’ (1954) –

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\(^4\) The Government announced on 2 February 2011 that it would be spending £400 million to help treat people with depression and anxiety.
see Figure 2. To achieve ‘actualisation’ Maslow argued that we must first achieve the bottom layer, rising up to the top, achieving our true potential.

This approach has been adopted by the American psychologist Martin Seligman (2011), who uses Maslow’s term ‘Positive Psychology’. Some schools in the UK (famously Wellington Public School), and other state secondary schools have begun to teach a programme of positive psychology through Seligman’s ‘Penn Resiliency Programme’ (2008). All children in schools are now taught SEAL (Social and Emotional Learning) which encourages them to discuss feelings and events that might have distressed them.

Figure 2: 2 ways of looking at Maslow's Hierarchy of Needs (1954) to achieve self-actualization

Cognitive approaches

This can be defined as ‘ways in which children come to think about, know about and understand the world around them’ (Grieg et al., 2007:28). There are two main cognitive theorists, the Swiss psychologist, Piaget (1896-1980), and the Russian psychologist, Vygotsky (1896-1934). Piaget has been the main influence on child developmental psychology and provided a clearly defined, linear picture of stages of development which, he argued, all children pass through. His theory was that children grow gradually from a state of incompetence, or immaturity, to competence - that is mature, logical thought. He believed that each stage was distinctive, and achieved at a certain age by all children. In other words, children pass through the same developmental stages as they get older. For a brief outline of Piaget’s theory of intellectual development see Figure 3.

A criticism of Piaget’s work has been that it took no account of socio-cultural differences. Essentially, it did not view children as being influenced by the social or cultural world in which they live (Woodhead, 1999). While open to criticism, and not necessarily regarded today as the
definitive way of looking at child development, Piaget did acknowledge that children play an active role in his or her own cognitive development (Woodhead et al., 2000).

Figure 3: Piaget’s stages of intellectual development (adapted from Understanding Children’s Development. Smith, P, Cowie, H. and Blades, M., 2003 Ch. 12, p 392).

<table>
<thead>
<tr>
<th>Stage</th>
<th>Approximate Age (years)</th>
<th>Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sensori-motor</td>
<td>0-2</td>
<td>Infant knows about the world through actions and sensory information. Learns to differentiate themselves from the environment; begins to understand causality in time and space; and develop the capacity to form internal mental representations.</td>
</tr>
<tr>
<td>Pre-operational</td>
<td>2-7</td>
<td>Through the symbolic use of language and intuitive problem-solving the child begins to understand about the classification of objects. But thinking is characterised by egocentrism, children focus on just one aspect of a task and lack operations like compensation and reversibility. By the end of this stage children can take another’s perspective and can understand the conservation of number.</td>
</tr>
<tr>
<td>Concrete-operational</td>
<td>7-12</td>
<td>Children understand conservation of mass, length, weight and volume, and can more easily take the perspective of others; can classify and order, as well as organise objects into series. The child is still tied to the immediate experience, but within these limitations can perform logical mental operations.</td>
</tr>
<tr>
<td>Formal operational</td>
<td>12+</td>
<td>Abstract reasoning begins. Children can now manipulate ideas; can speculate about the possible; can reason deductively, and formulate and test hypotheses.</td>
</tr>
</tbody>
</table>

However, it is important to emphasise that in many ways, Piaget’s beliefs about cognitive development continue to influence the way in which we regard children today. As Kellett et al. (2004) point out, Piaget did not merely want to know whether children were able to answer questions, he wanted to know and to explore the extent that children understood the situation they were in. It is significant that many academics who have looked at children’s understanding of advertising have used the Piagetian model to explain children development (see for example Young, 2010; Calvert, 2009).

Neuroscience

The study of brain–behaviour relationships has become truly scientific through such procedures as Functional Magnetic Resonance Imaging (fMRI), positron emission tomography
(PET), computerised tomography (CT or CAT scanning), and regional cerebral blood flow (rCBF) (see Greig, et al., 2007).

It is estimated that by age 6, the brain has reached 95 per cent of its adult size. It is the frontal part of the brain - involved in judgment, organisation, planning, and the ability to develop strategic thinking - known as ‘the grey matter’, that continues to thicken throughout childhood as the brain cells develop extra connections. This process of thickening of the grey matter peaks at about age 11 in girls and age 12 in boys, roughly corresponding with puberty. After this peak in adolescence, the process of ‘pruning’ or elimination returns; ‘pruning’ can be thought of as a process of ‘use it or lose it’.

Emotional deprivation in infancy was highlighted by media coverage of Romanian orphans who were unable to function in a way that reflected their chronological age. Chugani et al. (2001) have demonstrated that these orphans, left in their cots all day with almost no human contact, had a virtual black hole where their orbital frontal cortex should be. Neuroscience has shown us that such neglect or abuse has a profound effect on the way in which the brain develops, and confirms the psychoanalytical viewpoint that strong, caring early relationships with the mother or primary care-giver is essential to strong emotional health and intellectual and cognitive development (for example Freud, Jung, Bowlby, Erikson).

A Summary of Child Development

The Early Years – 0-6

A child undergoes huge change in the first six years of life. From being entirely dependent on adults to meet their every need at birth, by five a child can perform many tasks independently of adults. They are likely to express desires and opinions, create imaginary games, communicate and interact with others, and may even be able to write their name. They are likely to have moved from the family-centric world of home and family to one where other adults and other children exist - for example, a nursery school or reception class of Primary School. For many years the prevailing view among developmental psychologists was that young children were essentially incompetent. However, research in the 1970s and 1980s (e.g. Bell, 1979; Hodapp and Goldfield, 1983; Sameroff, 1975) showed that an infant could be a sophisticated communicator, particularly if children had an adult with whom they were able to interact. Dunn (1993) points out that from her observational studies of young children, it is clear that children can understand social rules and expectations by the age of three, far younger than Piaget estimated. Work by Judy Dunn (1993) and in Reggio Emilia, Italy (which is well known for its pre-school work – see Clark, 2004), has examined this, but this does not necessarily mean that children in this age group can understand all that is communicated to them.

Middle Childhood 7 – 12
Child psychologists and therapists have had different notions about what happens in middle childhood, but all agree that it is a time of comparative calm, and a time for children to learn about themselves and the world, before the onset of adolescence. Piaget (1976) describes this time as the ‘concrete operational period’, a time when children begin to think logically for themselves, making judgements about his or her experience in a quantified way, such learning about rules and social conventions. Freud (1956) described this period as the ‘latency period’, a time when the sex drive was repressed, to return with vengeance at puberty. Many therapists later did not agree entirely with Freud’s thoughts on this. Erikson (1968) in contrast called the period ‘the era of industry’, a time when social interaction begins to occur outside the home, with teachers and with peers, and when children focus on learning and finding out about many different activities. It is a time when children learn vast amounts, develop their interests, and begin to find their place in the world.

**Adolescence 12-18**

Variously described as ‘adolescents’, ‘young people’, ‘youth’, the age group 12-18 has long been of interest to both policy makers and academics because of its apparent ‘problematic’ nature (France, 2004; Griffin, 1993). It is also of great interest to marketers and advertisers as it can be viewed as a time of huge change and growing independence (Ekstrom, 2010; Marshall, 2010; Tinson and Nancarrow, 2010; Young, 2010). It is therefore a period of transition, moving from childhood to adulthood, and linear in that it encompasses physical and psychological development as well as cultural changes. It is interesting to note that in terms of policy, the term ‘youth’ does not exist; the Children’s Act (1989) refers to all young people under the age of 18 as children. It is also interesting to note what children in the UK can do at different ages. For example, a young person can marry or join the army (with parental consent) at 16, but they cannot vote, buy fireworks, get a tattoo, or have their own credit card until they are 18 (see Appendix 1 for full list of age at which young people in the UK can lawfully be responsible).

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5 See definition of adolescence for terms used by academics, page v.
Having looked closely at the literature from child psychology and developmental stages, it is worth looking at what is meant by 'social competence' when considering children’s understanding of advertising.

Social competence is an ability to take another’s perspective concerning a situation and to learn from past experience and apply that learning to the ever-changing social landscape. The ability to respond flexibly and appropriately defines a person’s ability to handle the social challenges that are presented to us all.

(Semrud-Clikeman, 2007, p.1).

The law and criminal responsibility

The age at which children are considered socially competent differs, and judgements are difficult to make as all children are different. We learnt earlier of the importance of early attachment and the difference this can make to a child’s sense of wellbeing and resilience. There is also a great discrepancy in the age at which children are, for instance, judged to be responsible for their criminal actions.

In India, Bangladesh, Nigeria, Pakistan, South Africa, Sudan, Tanzania and Thailand, the age of responsibility is set at 7 years. Children in England, Wales and Northern Ireland can be prosecuted for a criminal act at 10, the lowest in Europe. In Scotland the age was 8, but has been raised to 12. In Spain the age of prosecution is 16, in Belgium 18 and in Norway the age of criminal responsibility is 15 (see Appendix 2 for International Chart of Age of Criminal Responsibility). There is also ambiguity in the way in which ‘competence’ is assessed (see Figure 4).

Figure 4: Crown Prosecution Service Guidance on ‘Competence’

<table>
<thead>
<tr>
<th>Crown Prosecution Service Guidance on ‘Competence’</th>
</tr>
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<tbody>
<tr>
<td>Children</td>
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</table>

Children of any age can be called to give evidence; their competence depends upon their understanding not their age. As far as competency is concerned the same test is applied to child witnesses as for adult witnesses. There is no additional, non-statutory, test to be applied for children based upon previous attitudes towards the ability of children to give evidence. The principles are encompassed in and governed by statute.

Legal guidance on using children as witnesses from The Crown Prosecution Service.
The ‘Gillick Competence’\textsuperscript{6} ruling (1985) made it clear that it is not just chronological age which determines competence, but that a child should have a sufficient level of intelligence and understanding to understand fully what is asked of them, and to make choices that are in their own interest. Essentially the ruling was:

\textit{...whether or not a child is capable of giving the necessary consent will depend on the child’s maturity and understanding and the nature of the consent required. The child must be capable of making a reasonable assessment of the advantages and disadvantages of the treatment proposed, so the consent, if given, can be properly and fairly described as true consent.}

Mr Justice Woolf, High Court Ruling, 1985 (NSPCC, 1985).

In this literature review, we have explored the importance of attachment (Bowlby, 1979) and its effect on mental health. It is recognised that social competence relies a great deal on the way in which an infant has a close bond with mother, and later with friends (Greenberg et al., 1993). Research has shown that social competence is linked to mental and physical health (Spitzberg, 2003). In the USA it has also been shown that around one-fifth of the population experience feelings of loneliness, anxiety and shyness, and it is estimated that 10 per cent of the population has difficulty with social interaction skills (Segrin & Flora, 2000).\textsuperscript{7}

\textbf{Social competence – are children particularly suggestible?}

This is a crucial area to consider when examining whether we understand enough about child development to regulate advertising optimally. A number of researchers have analysed the subject and there has been a particular focus on children’s reliability as witnesses in a legal setting (Green & Hill, 2005). It has been found for example that children are more likely to engage with incorrect information if it has been supplied by an adult than by another child (Ceci et al., 1987). It has also been found however that children do not necessarily make less reliable informants than adults; there is little difference between children and adults in terms of memory recall and loss (Spencer & Flin, 1991).

\textbf{Social competence – language}

An important element for social competence is the ability to have a conversation and use language in an appropriate way. One of the indications of autism for example is that a child lacks a facility with language. As Vygotsky (1986) pointed out, it is parents and teachers who

\textsuperscript{6} Gillick competency and Fraser guidelines refer to a legal case which looked specifically at whether doctors should be able to give contraceptive advice or treatment to under 16-year-olds without parental consent. But since then, they have been more widely used to help assess whether a child has the maturity to make their own decisions and to understand the implications of those decisions.

\textsuperscript{7} It is worth noting that the UK and the USA came bottom of the league of children’s wellbeing in developed countries (UNICEF, 2007).
provide the ‘social scaffolding’ for a child to learn. We know from studies in child development that very young children are unable to see themselves as separate from the ‘other’; the world revolves around them and their needs. This ability to feel ‘separate’ appears, in most children, around the age of 5, when children in the UK are in the first year of school. Maturity in childhood is the ability to recognise that not everyone sees things in the same way; this is a skill that is learned, and it is thought that the skill to see the world from another’s perspective begins around 10 years, and continues to develop throughout adolescence (Semrud-Clikeman, 2007).

Ambiguity in language is another area that has been looked at closely (Greig, Taylor & MacKay, 2007; Pan & Snow, 1999; Scott, 2000; Smith, Cowie & Blades, 2003), and children do indeed sometimes find it difficult to make a distinction between metaphor and what is meant (Holditch, 1992; Steiner, 1993). An example of this might be a class teacher asking a young child to say ‘present’ when she reads the register. A child new to the school might find this very confusing – what have ‘presents’ got to do with it? Another example is a child overhearing a parent saying ‘I think I’ve got cold feet about moving’ and the child offering to bring some warm socks. On the other hand, we can look at the language that children from age 8 or 9 use online and in text messaging, and understand how inventive and private their language can be, often requiring interpretation (Clarke, 2009; Kasesniemi, 2001).

Changes in perception as children grow older

It is important to understand this if we are to assess children’s understanding of advertising. In early childhood, up to the age of 7, we have learnt that children’s thought process is likely to be mostly concrete; they describe what it is they see and do not necessarily think about psychological meaning. Between the ages of 3 and 5 children become aware that their friends behave in different ways, and have certain traits, so by 5 children are able to describe their friends, e.g. ‘she’s clever’, or ‘he’s good at painting’. By 5 to 6 children can begin to think about certain psychological traits, in that they might assess a friend as ‘happy’ or ‘sad’ in certain situations, but they tend not to use these descriptors as a means of describing personality over time, and this is an ability that does not begin to evolve until middle childhood (Shaffer, 2005). Between the ages of 7 and 16 children use concrete descriptors less, and begin to use psychological descriptors to describe their family and friends. Barenboim (1981) has done considerable work on this, and discovered that although a 10 year old can make psychological judgements (‘psychological constructs phase’) about a friend’s personality traits e.g. ‘she’s very artistic’, it is not until between 12 and 16 that young people can begin to make abstract comparisons of their friends’ psychological dimensions (‘psychological comparisons phase’). By 14–16 young people begin to view others as unique individuals with distinctive personality traits (Damon and Hart, 1988), and can make judgements about their friends’ circumstances that might prompt them to act out of character, for example family upset or illness. It is only at this age that young people can really begin to ‘know’ another person, seeing the other person’s point of view, and make judgements about how they might feel and act.
It could be argued therefore that in terms of understanding advertising, it is only at the stage of adolescence that we can feel confident that children have the ability to make judgements, to assess the ‘other’, and to understand that there are complexities in communication, both from friends and from messages they receive through the media.
PART 4: CHILDREN AS CONSUMERS

Children's Role in the Economy

Tinson and Nancarrow (2010) argue that child and adolescent consumption has become increasingly important and that there are several factors that help children deal with the consumer world, including the media, schools, the family, and peers. It is interesting to note that much of the debate around the Rights of the Child have centred on child labour, especially in developing countries. However, studies have shown that many children in the UK have worked before they leave school (Hobbs and McKechnie, 1997; Leonard, 1999), and that children's involvement in work increases as they get older. Research has also highlighted the role of young child 'carers' - that is, children who are responsible for looking after other family members (Grady, 2001).

David Buckingham, author of the government report on the 'Impact of the Commercial World on Children’s Wellbeing' (2009), has argued that children have spending power and therefore marketers see them as a rich and influential market because they can influence the purchasing habits of family members (Buckingham, 2000). Children and young people have long been viewed by marketers as a lucrative market, and one that wields considerable spending power. Kuhn and Eischen (1997) have shown that children are involved in simple purchases, as well as planned purchases, and both Kuhn and Eischen and Roedder-John (1999), referred to later, argue that it is the child who is the primary instigator and decision maker of purchases within the family. However, Tinson and Nancarrow (2007) have pointed out that this might be an over-exaggerated claim, and whilst children do have an influence, they are not the final decision makers. Research has shown that children frequently make independent purchases by the age of 8 (Marshall, 1997; McNeal & Yeh, 1993). It is estimated that currently children in the UK aged 8-15 receive £5.89 in pocket money each week, although this is a drop on the previous year when the average was £6.24, and this has been put down to the downturn in the economy that is having a direct effect on children's income (Halifax Pocket Money Survey, 2010).

A report for Tesco Bank (Kilbey, 2010) interviewed parents of 4-15 year olds in March 2010, and found that 7 out of 10 parents expect their children to help around the house in exchange for money; chores range from tidying their own rooms to mowing the lawn. The report found that around 38 per cent of children regularly save the money they receive, with 35 per cent having a savings account and 58 per cent keeping their money in a piggy bank. The report claims that children in London appear to receive the most pocket money, at an average of £7.81 a week, followed by those in Swansea and Glasgow at £6.68 and £6.46 respectively. At the other end of the scale, children in Wrexham receive only £2.50, while those in Chelmsford get £3.40 and children in Worcester receive around £3.50.
The report also found that boys typically receive more money than girls. They are more than twice as likely as girls to receive between £16 and £20 a week, but they are also more likely to spend it within days. The majority of parents surveyed (65 per cent) said they have had the financial equivalent of the "birds and bees" conversation with their offspring, discussing where money comes from and the importance of saving.

The effects of television viewing on children and adolescents

Before examining the age at which children understand advertising, it is worth looking at their understanding of television. Just as there are concerns today amongst adults about children's and adolescents' use of digital technology (Byron, 2008), it should be remembered that there were similar misgivings when television was widely adopted. Bronfenbrenner (1970) for example argued that television was a threat:

The primary danger of television lies not so much in the behaviour it produces – although there is danger there – as in the behaviour that it prevents: the talks, games, the family festivities and arguments through which much of the child’s learning takes place and through which his character is formed. Turning on the television can turn off the process that transforms children into people.


More recent research, however, has challenged some of the earlier misgivings. Television viewing by children tends to be seasonal; occurring far more in winter than in summer (McHale, et al., 2001). Research shows that if TV viewing is not excessive there are unlikely to be any harmful effects; children spend as much time socialising with friends, and have no cognitive or academic deficiencies (Huston et al., 1999; Liebert & Sprafkin, 1988). It has also been shown that children are able to learn much from TV viewing, particularly educational programmes (Anderson, et al., 2001).

The term ‘television literacy’ has been coined by Shaffer (2005 p. 387) to describe children’s ability to process programme content. It has been found that before age 8 or 9 children do not necessarily understand all content; they process what they view in a ‘piecemeal’ way, and are unable to follow a causal link between beginning, middle and end. They are particularly attracted to ‘zooms, fast-paced action, loud music, and children’s (or cartoon characters) voices’, and do not recognise that characters are fictional, believing that they retain their roles in real life (Wright, et al, 1994:). It has further been found that while 8 year olds may understand that a TV programme is fictional, they still view what they see as an accurate portrayal of everyday events (Wright, et al., 1995). Understanding of TV programming appears to grow steadily in middle childhood and continues through adolescence, corresponding with children’s growing awareness of others’ psychological state (see page 21, ‘Changes in perception as children grow older’).
The effect of violence in TV programmes on children is something that has concerned researchers for many years, and similar concerns are expressed about computer games. Boyatzis, et al., (1995) found that watching Power Rangers on TV, a programme designed for children, had a profound effect on boys aged 5-7, causing them to act out aggressive behaviour afterwards. It is interesting to note that there was less effect on girls, but the researchers speculated that this might be because girls were less likely to identify with the Rangers than boys. Many other studies of a similar nature have confirmed that the viewing of violent content on TV by children and adolescents appears to incite violent behaviour (Bushman & Huesmann, 2001; Green, 1998; Huesmann et al., 2003).

Research has shown that if parents are able to sit with their children and comment on the content, pointing out for instance that violent characters are strongly disapproved of, and pointing out more constructive ways they could have behaved, children gain a much better understanding of the content they are viewing (Liebert & Sprafkin, 1980).

We have examined children’s social understanding and the way that their thought processes work at different ages, so it is perhaps not surprising that children are believed to evaluate content on television in different ways at different ages. Children have distinct viewing preferences that develop as they grow older (see Appendix 3).

Commercial messages – at what age can they understand?

It is argued that young children, up to age 7 or 8, ask for items they have seen advertised because they regard such advertising targeted to them as ‘public service announcements’ that are intended to inform and help (Liebert & Sprafkin, 1988). It has been shown that by age 9-11 most children understand that advertising is about persuasion and selling, and that by age 13-14 adolescents8 will have acquired a healthy scepticism about the product claims they hear from advertising (Shaffer, 2005; Linn, de Benedictis & Delucchi 1982; Robertson & Rossiter, 1974). However, it has also been shown that adolescents can be persuaded by advertising if a celebrity is seen to endorse the product, or if the messages are deceptive and misleading (Cialdini, 2001; Huston, et al, 1992). It has been shown consistently in the literature that Piaget’s model of child development9 follows children’s understanding of commercial messages (Bandyopadhyay, Kindra & Sharp, 2001; Livingstone & Helsper, 2006; Young, 2010; Valkenburg & Cantor, 2002).

Children and advertising – at what age can they understand?

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8 See definition of adolescence page v.
9 See explanation of Piaget’s development stages page 14
It is estimated that in the UK children are exposed to about 18,000 commercials a year (Carvel, 2000; Oates, Blades & Gunter, 2001), and it has been suggested that children in the UK see more advertising compared with children in other European countries (Carvel, 2000; Layard & Dunn, 2009). The concept of children’s advertising was introduced in the 1950s around the ABC Channel in America and Disney’s ‘The Mickey Mouse Club’, and included Mattel, Hasbro, Fisher Price, and Kellogg’s. Early research on children’s understanding of advertising at this time focused on whether children could recall the commercial, and the brand (Andronikidis & Lambrianidou, 2010).

There have been many views expressed since this time about the extent to which children can actually understand advertising, and there is debate around the age at which they understand. Brian Young (1986; 1990) has argued that children must possess ‘advertising literacy’ to fully understand what advertising is. In other words, children need to understand that behind advertising lies a message to promote a product, and that the function of the advertisement is to do just that. The age at which children fully understand this is much contested. Some argue that if a child can make a distinction between advertising and programmes on TV, as illustrated by Donohue, et al, (1980) and Macklin (1987) they therefore understand the intent of advertising. As Oates, et al, (2001) point out however, there is sometimes confusion between children’s ability to make a distinction between the programmes they are watching and the advertisements. Levin, et al, (1982) established some time ago that children can identify television programmes from advertising, but Butter, et al., (1981) have shown that children cannot explain the difference between the two. Evidently there is generally great confusion, and as Andronikidis and Lambrianidou (2010) point out, the fact that children can distinguish advertising from programming or other content does not necessarily mean that they also understand its persuasive role.

Part of the controversy rests with the way in which research into children’s understanding of advertising has been carried out. Much of it has relied on questions, and as we pointed out earlier, children’s ability to verbalise their thoughts and feelings take some years to be established. Using more sophisticated and child-orientated research methods such as visual materials that can act as recognition cues and observation has helped to give a greater accuracy to the way in which the question is investigated. It is interesting to note, however, that not all the research makes a link between children’s developmental stage and age of social competence with their understanding of advertising. While some research has shown that children cannot understand advertising until age 7 or 8 (Chan, 2000), others such as Edling (1999) have argued that understanding is not possible until 12 years of age. As Livingstone and Helsper (2006, p 562) point out, research shows that while children at 7 or 8 (Piaget’s Concrete Operational Stage) have learnt that advertising is distinct from information, it is only from around 12 years (Piaget’s formal operational stage) that children can ‘articulate a critical understanding of advertising and of the intentions of its producers’.

It is significant that most recent research has indicated that the age at which children understand advertising has been over-estimated (Boush, 2001; Kunkel & Wilcox, 2001; Martin,
1997; Owen et al., 2007; Oates et al., 2001; Oates et al., 2003; van Evra, 1998), and that real understanding does not emerge until early adolescence. Mallalieu et al. (2005) found that children younger than 11 years had high levels of susceptibility to advertising, meaning that they were unable to make reasoned judgements about what the purpose of the advertising was. If we reflect on developmental stages, and the age at which children reach ‘social competence’, this fits in with these findings. It is only at adolescence that most children are able to make rational judgements, understand abstract ideas, and question what it is they are being told. Roedder-John (1999) made an important and relevant review of the consumer socialisation literature, and concluded that the ability to process messages analytically is a fundamental precursor to understanding the persuasive intent of advertising. Roedder-John built on Piaget’s theory and constructed a three-tier conceptual model of consumer socialisation, from the perceptual stage (3-7), through the analytical stage (7-11), and reaching the reflective stage (11-16). It is not until the reflective stage, 11-16, that Roedder-John argues children reach a mature understanding of products, marketing and advertising (see Table 1 for Roedder-John’s Conceptual Model).
Table 1: CONSUMER SOCIALIZATION STAGES adapted from Roedder-John, 1999, page 186.

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Perceptual stage, 3–7 years</th>
<th>Analytical stage, 7–11 years</th>
<th>Reflective stage, 11–16 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge structures:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Orientation</td>
<td>Concrete</td>
<td>Abstract</td>
<td>Abstract</td>
</tr>
<tr>
<td>Focus</td>
<td>Perceptual features</td>
<td>Functional/underlying features</td>
<td>Functional/underlying features</td>
</tr>
<tr>
<td>Complexity</td>
<td>Unidimensional Simple</td>
<td>Two or more dimensions Contingent (“if–then”)</td>
<td>Multidimensional Contingent (“if–then”)</td>
</tr>
<tr>
<td>Perspective</td>
<td>Egocentric (own perspective)</td>
<td>Dual perspectives (own + others)</td>
<td>Dual perspectives in social context</td>
</tr>
<tr>
<td>Decision-making and influence strategies:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Orientation</td>
<td>Expedient</td>
<td>Thoughtful</td>
<td>Strategic</td>
</tr>
<tr>
<td>Focus</td>
<td>Perceptual features Salient features</td>
<td>Functional/underlying features Relevant features</td>
<td>Functional/underlying features Relevant features</td>
</tr>
<tr>
<td>Complexity</td>
<td>Single attributes Limited repertoire of strategies</td>
<td>Two or more attributes Expanded repertoire of strategies</td>
<td>Multiple attributes Complete repertoire of strategies</td>
</tr>
<tr>
<td>Adaptivity</td>
<td>Emerging</td>
<td>Moderate</td>
<td>Fully developed</td>
</tr>
<tr>
<td>Perspective</td>
<td>Egocentric</td>
<td>Dual perspectives</td>
<td>Dual perspectives in social context</td>
</tr>
</tbody>
</table>

More recently, Valkenburg and Cantor (2002) have developed another conceptual model that considers how children become consumers. They believe that in the first stage, birth to 2 years, toddlers and infants begin to assert desires and preferences but are not yet established consumers. During the second stage, 2-5, children tend to nag and negotiate, throw tantrums, and frequently ask for - and even demand - certain products. Their focus at this age is the attractiveness of the product, and they believe that the function of advertising is to tell them about the product rather than any inherent persuasive intent. Valkenburg and Cantor argue that this makes them very vulnerable to advertising at this age. The third stage, 5-8, sees children reach more effective negotiation, and they begin to make a distinction between what is real and what is imaginary. They have longer attention spans, and they are likely to make their first...
purchases at this age without their parents. The final stage, 8-12 years, shows an ability to assess products, judge the competition, and - as we saw earlier (page 11, social competence) - they begin to be able to understand other’s emotions and are likely to be influenced by their peers. Another study argued that ‘pester power’ appeared to be rife in the 4-6 year old age group, with children using nagging, crying and whining to persuade their parent to buy them products that they had seen advertised (Weiss and Sachs, 1991).

These theories are reflected in a recent substantial qualitative study on children’s understanding of TV advertising carried out with 168 6-11 year olds, using a grounded theory approach. Andronikidis and Lambrianidou (2010) conclude that the subject of children’s understanding of advertising is complex and requires much more than simply identifying possible degrees of understanding. Like other researchers (Chan, 2000; Oates et al., 2003) they found it was not until 10-11 that children fully understood the role of TV advertising but they also found that only a minority of children in this older age group recognised the persuasive intent of television advertising. Equally, the term ‘sponsorship’, and its meaning was only fully understood by a few of the older children aged 10-11. All the children in the research, however, believed that if there were no advertisements, people would not know which products are available in the market. Also, the majority of children stated that during the advertisements they can have a break that they could not have during the programme. They also believed that movies without advertisements would be boring, and therefore advertisements are essential.

Sonia Livingstone and her colleagues’ review of children and their understanding of food advertising was conducted for Ofcom and was used as the basis for their recommendations on the restriction of food and drink advertising to children. Livingstone (2004; 2006) reviewed a total of 49 reports, and estimated the age of understanding ‘intention to persuade’ was a little earlier (8 years) but that it was not until 11 or 12 that children can articulate a critical understanding of advertising.

- Before the age of 4 or 5, children regard advertising as simply entertainment.
- Between 4 and 7, they begin to be able to distinguish advertising from programmes.
- By the age of 8, the majority has generally grasped the intention to persuade.
- After 11 or 12 they can articulate a critical understanding of advertising.

(Livingstone & Helsper, 2006)

Livingstone & Helsper argue, however, that much of children’s understanding of advertising is dependent on levels of media literacy rather than merely on age. They write:

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10 A grounded theory approach does not have a pre-determined theory attached to it but allows the theory to emerge from the data gathered rather than vice versa. It is regarded as an inductive process, allowing the researcher to regard other factors in the subject’s world other than just what they tell the researcher (Cohen, Manion & Morrison (2007)).
Our hypothesis is that, because younger children have lower media (or advertising) literacy, they are more likely to be persuaded by advertising that is based on celebrities, jingles, colourful images, and attractive physical features of a product. Older children, especially teenagers, whose media literacy is greater, are more likely to be persuaded by advertising strategies based on argumentation, especially those that contain high-quality arguments and responses to counterarguments. (Livingstone & Helsper, 2006, p. 576).

From this extensive review of the literature it could be argued therefore that it is not until 12-14 that all children begin to understand advertising fully - that is, understand the ‘commercial intent’ of advertising - and it is clear that, depending on circumstances, some children are able to understand this earlier. It is also clear from the literature that there is still some debate around the notion of children’s understanding of the ‘commercial intent’ of advertising. We continue now to examine other research that has been carried out on different types of advertising.

**Children’s understanding of television advertising**

Most research that has been carried out on children’s understanding of advertising has focused on television advertising. Lemish (2007) argues that commercials on TV are ‘a very difficult genre for children to understand, since they intentionally blur distinctions between real and imaginary and, as well, employ a range of audio-visual means to sell children products’ (page 51). The research carried out on children’s understanding of television advertising suggests that children are able to identify commercial breaks as young as 3 years old through identifying symbols such as a logo, a sign or a sound effect that are associated with the product. However, it is argued that children cannot distinguish between the product and their attitude to the product, and they are not aware of any sense that the commercial is trying to ‘sell’ to them. They retain a trust in what the commercial is telling them until quite a late age, at least 12 years old (Hansen, et al., 2002; Lemish, 1997; Valkenburg and Cantor, 2002).

**Restrictions on advertising to children**

**Advertising to children**

Rules on television advertising to children are harmonised at European level through the Audiovisual Media Services Directive, and have been the subject of much debate in the various revisions of the Directive. The Directive allows Member States to impose stricter rules in their own countries, and these vary from a complete ban on television advertising to children under 12 years in Sweden, because of a firm belief that children do not understand its aims (Bjurstrom, 1994), to France and UK, where advertising to children is permitted in accordance with extensive rules set out in the CAP and BCAP Codes.
‘HFSS’ food advertising

In November 2006, following an extended period of analysis and consultation, Ofcom announced a ban on the scheduling of advertising for food and drink with high levels of fat, salt and sugar (‘HFSS’) during children’s airtime and around programmes with a disproportionately high child (under 16) audience. ‘HFSS’ advertising continued to be allowed at other times. Ofcom’s principal aim was to reduce the exposure of children to ‘HFSS’ advertising, but in a proportionate way, as its research demonstrated that television advertising only had a very ‘modest’ effect on children’s food preferences and that the influence of family and friends was greater (Ofcom 2004 and 2005).

Ofcom introduced its ban on television advertising in April 2007 for ‘HFSS’ food and beverage products which would particularly appeal to children, ruling that they must not be shown in or around programmes for those under the age of 10. From the beginning of January 2008, a total ban came into force for advertising such products during programmes aimed at or which appeal to under-16s. In addition, cartoon characters and celebrities of direct appeal to primary school children may not be used in advertising ‘HFSS’ food and beverages to primary school children.

Ofcom issued an update on their final statement in November 2006, which was challenged by the advertising industry in relation to the last-minute decision to extend the scheduling restrictions to include programmes of particular appeal to under-16s. The industry argued that this was unjustified and disproportionate in light of the academic consensus that children over 12 understood about advertising. Ofcom’s update included the following statement:

4.7 Several respondents stated that research suggests that older children have a greater understanding of the persuasive intent of advertising. Some advertisers and broadcasters noted that Ofcom itself had concluded that teenagers were fully media literate and were able to recognise the commercial intent of advertising messages after the age of 12. Advertising representatives said that although Prof. Livingstone’s views, upon which Ofcom had relied, were that the greater media literacy of older children was not a sufficient defence against the influence of advertising, her views ran counter to an academic consensus that teenagers were often more sophisticated, discerning and discriminating than many adults and that their media literacy greatly reduced the influence of adverts. Accordingly, the presumption should be that older children were sufficiently media literate not to need further protection from scheduling restrictions.

(Ofcom, 2007, p.13)
There has been some concern expressed by consumer groups that children are likely to view television advertising for ‘HFSS’ products at other times, and it is interesting to note children’s viewing over the last few years (see Figure 5).

Figure 5: Split in children’s viewing by type of airtime: children’s vs. adult airtime (Ofcom, 2010:20)

The viewing figures above do not reflect the now widely available ‘catch up’ TV available on multichannel (Sky, Virgin etc.), i-player now available on the internet, and technology such as the iPad. It is worth noting that Ofcom does not regulate internet TV, nor does it include it in its quarterly reports of TV penetration.

The advertising industry took the decision to change the CAP Code to include broadly similar rules for non-broadcast food and beverage advertising, though the distinction between “HFSS” and “non-HFSS” foods was not included in the CAP Code because (a) the FSA’s nutritional profiling guidelines had been developed for TV only, and (b) the food and advertising industries disputed the criteria used by the FSA to develop the NP profiling model. CAP’s rules therefore apply to all foods except fruit and vegetables. They also stipulate that all non-broadcast advertising for food and soft drinks should not encourage under-16s to be unhealthy, should not encourage excessive consumption, and should not use celebrities popular with children to target pre-school or primary-age children.

Campaign groups\textsuperscript{11} have maintained that restrictions on advertising food and beverage products to children through non-broadcast media in the UK are currently not as strict as TV broadcast regulations. The introduction of the CAP rules led to various groups including The National Union of Teachers and the British Heart Foundation to highlight ‘inconsistencies’ with

\textsuperscript{11} Including the National Union of Teachers, the British Heart Foundation, National Heart Forum, National Consumer Council, National Children’s Bureau, National Federation of Women’s Institutes, Diabetes UK, Which?, Sustain and Netmums.
the rules governing TV advertising (BBC, 2007). The groups objected that the rules failed ‘to restrict the volume or frequency of food advertising to children’ and failed to ‘differentiate between healthy and unhealthy foods’. The response from CAP was that ‘all of the limited evidence that exists for the effect of advertising of food to children relates to TV and not to other media’, and that ‘it was appropriate for broadcasters to face tougher rules because of the greater influence of TV.’

**Online privacy**

In the US, the Children’s Online Privacy Protection Act (COPPA) passed in 1998 and implemented in 2000 placed rules on child protection online. In particular it stipulated that children under 13 could not be approached directly and asked for their personal details online. Parents would have to be asked first for their permission for their child to join an online site.

As an externality of this legislation, most member communities and social networking sites simply decided that their membership would only consist of children 13+, to protect the personal data of those under 13.

In the UK, the same data collection principles are in place, through ICO guidance and the CAP Code. It is interesting to note, however, that children as young as 9 or 10 in the UK are now joining Facebook, a site that is for 13 years olds and over. Children are aware that they have to claim their age as at least 13 (some think it is 16) in order to join (Clarke, 2009).

This literature review has found a gap in the literature, with little work done on the effects of non-broadcast advertising to children. What research has been done indicates that such advertising might be of some concern, simply because it could be less apparent that it is advertising, and children could mis-interpret the messages (Calvert, 2008; Harris et al., 2009; Martin & Smith, 2008; Palmer & Carpenter, 2006; Rotfield, 2008; Shimp, 2008; Walsh & Dowling, 2010). We go on therefore to look at research that has considered advertising and marketing activity on-line and in print. We look at both advertising and marketing because it is sometimes difficult to differentiate between the two, leading to claims by some academics that children are being subject to ‘stealth marketing’.

**Effects of digital media on children and young people**

Concern is frequently expressed about the adoption of digital media by young people (Byron, 2008), and some of these concerns reflect those voiced when widespread TV usage became common in the 1960s and 1970s. While it is important to point out that there are dangers for

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13 www.cap.org.uk
14 See explanation of ‘stealth marketing’ in definition of terms, page v.
children online, it is likely to be those children who are vulnerable in the outside world who are also vulnerable in the online world (Clarke, 2009). Research has shown that children benefit from communicating with each other through social media: they are likely to widen their circle of friends, stay in touch with friends who have moved away, and share emotional feelings that are a comfort and support (Clarke, 2009). Early research showed that far from becoming isolated and reclusive, children are able have a greater social life than was possible before (Colwell, Grady & Rhiati, 1995; Crook, 1992; Roberts et al., 1999).

Exposure to inappropriate material on the internet is an area of concern. Children are seeing pornography and violent images, and it can be upsetting for them (Livingstone and Haddon, 2009). What is clear, however, is that many parents do not fully understand digital technology, nor the way in which children are interacting with the media, and this is an area where there needs to be support, information and recommendations for parents (Byron, 2008). It is also important that parents inform their children about privacy settings, only accepting people they know to their social networking sites (SNSs), and being careful about not giving information about their address or mobile phone numbers. Most children are aware of this, but with young children adopting SNSs, it is an area that needs highlighting (Clarke, 2009).

**Other form of advertising and marketing to children**

It has been pointed out already that most of the research that has been conducted on children’s understanding of advertising has focused on television advertising. In recent years, however, with the growth of digital technology and its use amongst children, there is a growing trend to market to and advertise to children using mobile phones, iPads, game platforms, and other digital devices, and such advertising might be seen by and be attractive to children. Forms of advertising can include banner ads, pop-ups, map ads, and ‘advergames’. Calvert describes these as ‘stealth advertising’ (Calvert, 2008, p. 208) (see Appendix 3 for Calvert’s assessment of ‘stealth advertising’).

Online ‘listening’, ‘scraping’ and ‘mining’ are legitimate tools to collect data from users, but there is debate in the research industry about the ethics of this, especially in relation to children. The bodies representing the research industry (MRS and ESOMAR) stipulate that permission must be sought from a parent or guardian before information can be collected from a child under 16 (see Campbell, 2011).

Advertising on digital media tends to involve the child far more closely in the product and the message than viewing material on TV, hearing it on the radio, or seeing it in print (Calvert, 2008). Calvert argues that the interactive nature of digital exchanges means that children can be engaged on a deeper level with a product, entering an undoubtedly entertaining but nevertheless seductive world in which the product appears to ‘come alive’ and interact with the child. To view this interaction separately and with detachment takes, as we have seen, some

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15 See definitions page v.
sophistication and a level of abstract thinking that may not be available to children until they reach around 11 or 12 years.

Research carried out at the University of Sydney, Australia by Kelly et al. (2008) found that children can be immersed in brand-related information and activities for extended periods online, and that internet food marketing used a range of techniques to encourage increased brand familiarity and exposure. They argue that the ‘relatively unregulated’ marketing environment and increasing use of the internet by children point to the potential increase in food marketing via this medium, and call for further research to investigate the impact of internet food marketing on children’s food preferences and consumption, and regulatory options to protect children. It should be noted that food advertising is a very small part of online ad spend, and that these concerns are more focused on other marketing techniques, for example on company websites. Since this report was written, the ASA’s remit has been extended to marketing communications on company-owned websites and social media.

While much concern about advertising and marketing to children has focused on food and drink advertising, and research in both the UK (Livingstone, 2004; 2006), and the US (Livingstone, 2006) has been influential and pointed out the heightened awareness of children to ‘HFSS’ products, the research was not able to make a direct causal link between food and beverage advertising and childhood obesity, partly because ethically such research could not be conducted if it created as a result obesity levels in the participants. It is important to note, however, that as food and beverage advertising to children has been driven off TV, there has been marketing activity using digital media that does engage children with the product (notably websites that involve games and competitions, albeit with an emphasis on sport and exercise), and there is a big gap in research that investigates the effects of such digital marketing on young children.

Magazines

Children’s magazines (for children under 12) continue to be popular, but there is concern expressed amongst some academics (see for example Kraak & Pelletier, 1998; Jones & Reid, 2010) that they can be a source of hidden brand promotions disguised as editorials, comics, games and puzzles. Described as ‘covert marketing strategies’ by the Danish Consumer Ombudsman Guidelines (2005), it is claimed that such promotions are not clearly distinguishable as marketing, and it is interesting to note that ten marketing academics at a conference in New Zealand could not agree on whether pages from children’s magazines were indeed advertisements or product placements (Jones & Reid, 2010; Acharya et al., 2005).

Very little research has been carried out that assesses marketing content within children’s magazines. Jones and Reid (2010) conducted a content analysis of possible food promotions in seven top-selling Australian children’s magazines published in 2005. In addition to regular food advertisements, the number of advertisements for premiums, editorials, puzzles or games, competitions and branded non-food promotions by food companies was recorded. In their
literature review Jones and Reis could only find two other analyses that looked at marketing and advertising content in children’s magazines - one in Australia by Acharya et al. (2006), and one in the UK by Cowburn and Boxer (2007). The Acharya research indicated that food items were rarely featured, a finding criticised by Jones and Reis as representing ‘a gross underestimate and that, in the relevant issue of Disney Adventures alone, there were actually more than ten full pages – plus a large pull-out poster – promoting food products, amounting to one-tenth of the magazine.’ (Jones & Reis, 2010, p.394). The issue it seems was that the researchers were making a distinction between ‘advertisements’, ‘blend of commercial/editorial’ and ‘non-commercial’, and using a page as the unit of analysis which, Jones and Reis argue, was misleading because many pages featured multiple products in multiple categories. The analysis of food advertising in UK children’s magazines by Cowburn and Boxer (2007) concluded that there were far fewer food products advertised compared to other products, but that the majority of food advertisements were for ‘HFSS’ foods and notably directed readers to the company website.

Self-regulation

So far we have focused on child psychology and psychologists, but it is worth mentioning that sociological studies have also played a part in our understanding of children’s lives. Sociologists of childhood have criticised child psychologists for being concerned only with age-related competencies, at the cost of not understanding what it really means to be a child, from a child’s point of view (Hogan, 2005). Criticisms centre on the psychological emphasis on developmental age, while disregarding the circumstances of an individual child’s life. As we know from ethnographic studies (Clarke, 2009), children live in very different circumstances, with different parenting experiences, and different attachments. Some children are resilient, and can articulate what they are seeing and understanding from a relatively young age. Others do not have the capacity or ability to do this, and it is the more vulnerable children who need protecting. We cannot assume that all children are cared for, resilient, and able to communicate with their parents. In an ideal world this is what should be happening, but there may need to be checks and balances for those children who are more vulnerable. The question is: who holds the responsibility for this? Is it regulators, the industry, the commercial world, or parents?

It could be argued that if some marketing techniques are described as ‘stealth marketing’, self-regulation needs to be further developed for non-broadcast media. The World Health Organization (WHO, 2006) convened a panel of experts in Oslo in 2006 which stated that for ‘the purpose of substantially reducing the volume and impact of commercial promotion of food and beverages to children, self-regulation is not sufficient; it is however a valuable supplementary strategy to ensure promotions are legal, truthful, decent.’ In response to discussions at EU level and at the WHO, eleven global food companies announced an EU Pledge in December 2007 to stop marketing ‘HFSS’ food to under 12s.16

16 http://www.eu-pledge.eu/
Much of the literature that has looked at the marketing and advertising of food and drink to children also considers the issue of self-regulation. Harris et al. (2009, p.217) argue that to be plausible, industry should meet the following conditions:

a) The expected outcomes should be defined in advance by, or at least in consultation with, public health organizations;
b) These outcomes must be linked to the food consumption of children;
c) Benchmarks must be created against which industry performance is measured;
d) Objective assessment must be done by credible non-industry researchers who are not financed by the industry to test the fidelity of industry actions and their impacts on children;
e) Pledges should have global scope and not be confined to practices in a single country; and
f) Research must be comprehensive enough to test whether the industry moves its child marketing finances to other, and perhaps even more cost-effective, forms of marketing.

However, Harris et al. (2009) point out that while restrictions in individual countries within Europe might be effective, children are likely to be exposed to TV viewing from other countries through multi-channel TV, some of which do not impose any bans or limited bans. They call for international agreements that have consistent ruling: ‘Advergaming on Web sites, product placements in video games and movies, and commercial messages spread through social networking and information exchange Web portals such as My Space and YouTube, make local, state, and provincial, and even national regulation a difficult challenge. International agreements will be a necessity’ (Harris et al., p. 220).
CONCLUSIONS

There is ambivalence about the role of children in today’s society. On the one hand, there is a growing recognition of children’s rights, and children are now viewed as agents in their own right, with strong opinions that should be heard. On the other hand, there is a sense that children should be protected from the commercial world, and an argument that until they are developmentally able to understand the subtleties of commercial messages, they should not be exposed to content that might mislead them. The age at which children can or cannot understand the nature of the commercial world is also debated, but the most recent studies indicate that the age at which children can fully understand advertising might have been overestimated. There is a clear distinction to be made between understanding advertising, and understanding the intent of advertising. However, this ambivalence does not just apply to advertising and marketing. If we look at the world of the judiciary, we can see that children in England can be held criminally responsible at 10 years, the lowest in Europe, and yet the age is 15 in Norway and 18 in Belgium. In the UK young people can get married and join the army at 16 (with parental permission), but they cannot independently have their own credit card, buy fireworks, or get a tattoo until they are 18.

We have seen from the literature review on developmental stages that there are many theories about child development, but it is accepted that young children do not have the ability to view information in an abstract way, nor do they begin to think rationally until they reach age 8 at least. We also know that children do not attain social competence - that is, the ability to accurately send and receive emotional messages, have the ability to learn, take another’s perspective, manage behaviour, and work co-operatively with others - until around 10 years, and significantly they continue to develop this ability throughout adolescence; essentially, it cannot be stated with certainty that all children are socially competent at 10 years old. We can also see that there is a general consensus, largely established in recent years, that while children may be able to recognise the difference between TV programmes and advertising at an early age, even at 4 or 5, they do not fully understand the ‘commercial intent’ of advertising until they reach around 11 or 12 years. An example of this confusion can be found in Andronikidis and Lambrianidou (2010)’s recent research, carried out with 6-11 year olds. Children in the 6-8 year old category were particularly confused, some believing for example that actors play live in the ads, switching between channels, and only getting a break when the programmes were on, and others believing that it was the people working for the product being advertised, rather than actors, who appeared in the commercials, therefore giving them an air of authority.

The issue centres on whether children can understand ‘commercial intent’17 - whether they fully understand what the function of advertising is. The literature indicates that this does not appear to be the case until children reach at least 12 years, although the literature also indicates that

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17 See page v for definition of ‘commercial intent’.
this differs according to children’s social competence (Young, 2010), media literacy (Livingstone & Helsper, 2006), and social class (Martin, 1997). A comprehensive study on consumer socialisation was carried out by Roedder-John (1999) who concluded that it is not until 12 years that children can fully understand the intention of advertising.

There is, however, a very strong case for children seeing advertising. Young (2010) points out that advertising is not only ubiquitous, but it can also be entertaining and imaginative. In addition, Tinson and Nancarrow (2010) point out that there are many factors that help children deal with the consumer world, including the media, schools, the family and peers. The literature has shown that children mostly view advertising as positive: they see it as entertaining, a chance for a break (for a drink, to visit the bathroom), and as a way of keeping them informed about products that are available. Young (2010) points out though that the ability to recognise commercial intent might be driven not so much by age and developmental stage, but by the ability of the child to articulate their feelings - what he calls a ‘questioning style’ (p119). This theory is confirmed by a meta-analysis of research carried out by Martin (1997) that suggested there was a socio-economic effect that played in children’s understanding of advertising; the more middle class the child, the greater their understanding. Although this is a valid theory, it must not be assumed that only middle class children are not affected by advertising. It should therefore be the average age of a child that is taken into consideration in formulating advertising rules.

Most of the literature that has looked at children’s understanding of advertising had centred on TV advertising, and there is little or no literature that looks at radio, cinema, magazines or the internet. What research has been carried out on both the internet and magazines notes that some advertising through these media can appear to be more ‘covert’: appealing to children’s sense of fun through games and characters; engaging children through advertorials; often directing them to websites that are brand-driven; immersing them in products (many of which include food and beverages); and encouraging viral marketing, all without necessarily appearing to sell to them directly. There is also concern about the use of cookies for the targeting of advertisements that are relevant to consumers. This technique does not delve into personal information as cookies are effectively anonymous tags, but some have concerns about this as many children, and adults, are unaware of their browser habits being used in this way. It should be noted that the advertising industry has developed self-regulatory principles which will, when implemented, require that companies should not create segments that are specifically designed to target children under 13 using behavioural advertising techniques.

Some academics conclude that there is a ‘blurring of techniques’ targeting children that is emerging, one that mixes advertising, marketing and promotional material. These techniques have, perhaps understandably, sounded alarm bells amongst academics who are tracking such practices, many of whom specialise in the internet and digital technology and have carried out research in the area of children’s use of technology (e.g. Calvert, 2009; Tufte and Rasmussen, 2010). They are describing such techniques as ‘Covert Marketing’ and ‘Stealth Advertising’, and this may prove to be the area of greatest concern when considering self-regulation.
## APPENDICES

### Appendix 1: Age at which young people in the UK can lawfully carry out different tasks

<table>
<thead>
<tr>
<th>Age</th>
<th>The law says …</th>
<th>(source: <a href="http://www.lawstuff.org.uk/">http://www.lawstuff.org.uk/</a>)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 13</td>
<td>COPPA</td>
<td>View a 12A category film without being accompanied by an adult if aged 12 or older.</td>
</tr>
<tr>
<td>14</td>
<td>Work under 14 is restricted to the following activities, (and time children are allowed to work is strictly limited):</td>
<td></td>
</tr>
<tr>
<td></td>
<td>▪ to take part in sport, advertising, modelling, plays, films, television or other entertainment. The employer must apply for a licence from the local authority</td>
<td></td>
</tr>
<tr>
<td></td>
<td>▪ to do odd jobs for a parent, relative or neighbour</td>
<td></td>
</tr>
<tr>
<td></td>
<td>▪ to do babysitting</td>
<td></td>
</tr>
<tr>
<td></td>
<td>▪ Some local authorities also allow children under 14 to do paper rounds</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Ride a horse on a road without wearing protective head gear from the age of 14.</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>View a 15 category film at the cinema from the age of 15. Rent or buy a 15 category DVD.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Join the army, with parental consent.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Get married, with parental consent.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Leave school.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Buy Aerosol paint.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Buy a pet.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Drink alcohol (but not buy) in a pub if with someone over 18.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Smoke in public places, but not purchase cigarettes.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Drive a moped.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Buy a National Lottery ticket and take part in some forms of private or non-commercial gaming or betting.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Apply for own passport without parental consent.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Give consent to all sexual activity (heterosexual and homosexual) involving other males and females aged 16 years and older. Anyone who is in a position of trust (i.e. a person who is caring for you, such as a teacher) and who is 18 years or over will commit an offence if he or she engages in any sexual activity with a person below the age of 18.</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Buy a firearm or ammunition from the age of 17. It is possible to possess an air weapon under the age of 18 only if supervised by someone aged 21 or older, or if using it at a rifle club or shooting gallery. It is an offence to possess an unregistered firearm. Hold a license to drive a car, a motorbike, a small vehicle or an agricultural tractor. Donate blood</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>Become a Member of Parliament.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Join the Police Force.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Get married, or enter a civil partnership, without parental consent.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Serve on a jury.</td>
<td></td>
</tr>
</tbody>
</table>
Vote.
Buy an air weapon and ammunition from the age of 18.
Hold a license to drive a medium sized goods vehicle.
View an 18 category film at the cinema from the age of 18. Buy or rent a video given a certificate for viewing by adults only.
Enter a betting shop and place a bet, and work in one. Enter places where gaming takes place.
Sign a written contract.
Make a will (If you are in the armed forces or in the navy, you can make a will when you are under 18).
Change gender.
Leave home, without parental consent.
Become responsible for debts, have a credit card.
Buy Fireworks.
Buy a knife.
Purchase cigarettes.
Get a tattoo.

Appendix 2: The Age of Criminal Responsibility by Country (source: UNICEF)

The following are the minimum ages at which children may be charged with a criminal offence.

<table>
<thead>
<tr>
<th>Country</th>
<th>Age</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mexico</td>
<td>6–12</td>
<td>Most states 11 or 12 years; age 11 for federal crimes.</td>
</tr>
<tr>
<td>United States</td>
<td>6–12</td>
<td>Age determined by each state; the minimum age is 6 (North Carolina), however, only 15 states have set minimum ages which range from 6 to 12 years. States without statutory minimum ages rely on common law, which means that 7 is the minimum age in most states; for federal crimes the age has been set at 10.</td>
</tr>
<tr>
<td>India</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>Myanmar</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>Nigeria</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>Pakistan</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>Singapore</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>Sudan</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>Tanzania</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>Thailand</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>Indonesia</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Kenya</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Country</td>
<td>Age</td>
<td>Notes</td>
</tr>
<tr>
<td>-------------------------</td>
<td>-----</td>
<td>-------</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>Ethiopia</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>Iran</td>
<td>9–15</td>
<td>Age 9 for girls, 15 for boys</td>
</tr>
<tr>
<td>Australia</td>
<td>10</td>
<td>Presumption of incapacity of committing crime: 14.</td>
</tr>
<tr>
<td>England and Wales</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Northern Ireland (UK)</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Nepal</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>South Africa</td>
<td>10</td>
<td>The Child Justice Act 75 of 2008 came into effect 1 April 2010.</td>
</tr>
<tr>
<td>Switzerland</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Turkey</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>Scotland (UK)</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>Canada</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>Ireland</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>Israel</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>Japan</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>Morocco</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>Netherlands</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>South Korea</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>Uganda</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>Algeria</td>
<td>13</td>
<td></td>
</tr>
<tr>
<td>France</td>
<td>13</td>
<td></td>
</tr>
<tr>
<td>Austria</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>China</td>
<td>14</td>
<td>Absolute minimum for acts that constitute the following crimes: homicide, wounding resulting in death, rape, robbery, arson, explosion, planting of toxic substances and trafficking in dangerous drugs. The minimum age for other crimes are 16. In Hong Kong, the minimum age is 10 and in Macau, 16</td>
</tr>
</tbody>
</table>

Country  Age  Notes
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Estonia  14  Children in New Zealand can be charged with murder or manslaughter from age 10, several very serious offenses from the age 12, and all other offences from the age of 14.
<table>
<thead>
<tr>
<th>Country</th>
<th>Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ukraine</td>
<td>14</td>
</tr>
<tr>
<td>Vietnam</td>
<td>14</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>15</td>
</tr>
<tr>
<td>Denmark</td>
<td>14</td>
</tr>
<tr>
<td>Egypt</td>
<td>15</td>
</tr>
<tr>
<td>Finland</td>
<td>15</td>
</tr>
<tr>
<td>Iceland</td>
<td>15</td>
</tr>
<tr>
<td>Norway</td>
<td>15</td>
</tr>
<tr>
<td>Philippines</td>
<td>15</td>
</tr>
<tr>
<td>Sweden</td>
<td>15</td>
</tr>
<tr>
<td>Uzbekistan</td>
<td>15</td>
</tr>
<tr>
<td>Portugal</td>
<td>16</td>
</tr>
<tr>
<td>Poland</td>
<td>17</td>
</tr>
<tr>
<td>Argentina</td>
<td>18</td>
</tr>
<tr>
<td>Belgium</td>
<td>18</td>
</tr>
<tr>
<td>Brazil</td>
<td>18</td>
</tr>
<tr>
<td>Colombia</td>
<td>18</td>
</tr>
<tr>
<td>International Criminal Court</td>
<td>18</td>
</tr>
<tr>
<td>Peru</td>
<td>18</td>
</tr>
<tr>
<td>DR Congo</td>
<td>18</td>
</tr>
</tbody>
</table>

The child in conflict with the law may be held liable if he or she is more than 15 years of age if he or she acted with discernment.

Currently being studied the possibility of lowering the age of criminal responsibility to 14. Until 18, children are kept in juvenile correction centres.

Official age of criminal responsibility; from age 12, children's actions are subject to juvenile legal proceedings.

Appendix 3: Children’s Viewing Preferences

<table>
<thead>
<tr>
<th>Age / Stage</th>
<th>Viewing Preferences</th>
<th>Examples and Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Babies and Toddlers 0-2</td>
<td>Peppy music, sounds effects, animation, lively pacing that is not overwhelming, humour and noises of laughter, female and children’s voices. React to content that looks and makes sense to them: short</td>
<td>Teletubbies, In the Night Garden Research carried out in Australia, Germany, Israel, Norway, the UK, the USA found evidence of popularity of the Teletubbies Babies and toddlers displayed high levels of engagement including singing, dancing, pointing, imitating behaviour, speaking back to</td>
</tr>
<tr>
<td>Age Group</td>
<td>Preferences and Characteristics</td>
<td></td>
</tr>
<tr>
<td>-----------</td>
<td>---------------------------------</td>
<td></td>
</tr>
<tr>
<td>Pre-school 3-5</td>
<td>Become more interested in comprehensible narratives and in diverse magazine-like formats with segments of animation, puppets, documentaries, and drama. Sesame Street and similar.</td>
<td></td>
</tr>
<tr>
<td>6-7</td>
<td>Start developing preference for more fast-pace programmes and more complicated content – separating themselves from ‘safe’ preschool / educational content. Individual preferences may develop for specific animation series, e.g. a Disney film or ‘family’ comedy or soap opera. Gender differences become obvious at this age with boys outgrowing quieter educational programmes sooner than girls. Boys can be attracted to action orientated animations featuring action heroes, sport, and fantasy. Girls prefer programmes with story lines about human relationships, friendships, and feelings that take place in non-aggressive settings.</td>
<td></td>
</tr>
<tr>
<td>8-12 Middle childhood</td>
<td>Gradually move away from children’s channels to family comedy, drama, quiz shows, reality TV, sport, music channels, movies that are aimed at a wide and diverse audience – shared interest is the common denominator. Similar gender divides in terms of preference for types of programmes.</td>
<td></td>
</tr>
<tr>
<td>12+</td>
<td>Begin to experiment with entire range of television genres including programmes that are specifically not intended for them such as those with sexually explicit content or violent content. Regardless of gender mostly avoid programmes that involve political debate or current affairs because language is inaccessible to them. New programmes not attractive although will watch if particularly violent or unusual or stimulating scenes.</td>
<td></td>
</tr>
</tbody>
</table>

Source: Adapted from Lemish, D (2007) pages 45-47


<table>
<thead>
<tr>
<th>Marketing Technique</th>
<th>Definition</th>
<th>Used on Television</th>
<th>Used on Internet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Repetition of the message</td>
<td>Repeating the same commercial message over and over.</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Branded characters</td>
<td>Popular animated characters used to sell products ranging from cereal to vacations.</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>-------------------------</td>
<td>----------------------------------------------------------------------------------</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Attention-getting production features</td>
<td>Audio-visual production features such as action, sound effects, and music.</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Animation</td>
<td>Visually drawn moving images.</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Celebrity endorsements</td>
<td>Popular actors, athletes, and musicians are either depicted on the product itself or are shown using and approving of the product.</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Premiums</td>
<td>Small toys or products that are offered with product purchase; for example, a toy in a Happy Meal or screen savers for filling out an online survey.</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Product placement</td>
<td>Placing a product within program content so it does not seem to be an advertisement; for example, E.T. eating the candy Reese's Pieces.</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Advergames</td>
<td>Online video games with subtle or overt commercial messages.</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Viral marketing</td>
<td>The &quot;buzz&quot; about a product that is spread by word of mouth.</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Tracking software and spyware</td>
<td>Software that makes it possible to collect data about time spent on a website.</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Online interactive agents</td>
<td>A virtual form of stealth advertising where robots are programmed to converse with visitors to a website to maintain and increase interest in the site and its products.</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Integrated marketing strategies</td>
<td>Marketing products across different media; for example, the toy in a cereal box is also a product placement in a film.</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Video news releases</td>
<td>Circulated stories to news media about a product that are broadcast as a news release.</td>
<td>x</td>
<td>x</td>
</tr>
</tbody>
</table>

Appendix 5: Summary of BMA Report on Child and Adolescent Mental Health
Child and Adolescent Mental Health – a guideline for professionals - British Medical Association June 2006

Section 1 - Prevalence and risk factors of child and adolescent mental health

There is evidence to suggest that the prevalence of childhood mental health problems is gradually increasing.\(^{18}\) Studies suggest that 20 per cent of children and adolescents have

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mental health problems at some point, and one in ten have a clinically recognisable mental health disorder. A prevalence of 10 per cent of one to 15 year olds would equate to approximately 1.1 million children under the age of 18 who would benefit from specialist services. Up to 45,000 young people suffer from a severe mental health disorder at any one time.

The ONS survey carried out in Great Britain in 2004 covered children aged five to 16, and found that 11 per cent of boys had a mental health disorder, compared with 8 per cent of girls. Conduct and hyperkinetic disorders are much more likely in boys than girls, although girls are slightly more liable to suffer from emotional disorders. Older children and young people were found to be more prone to a mental health disorder than younger children. 1.9 per cent of all children had more than one disorder (ie one in five children with a disorder). The sample size for the study was 12,294.

Table 1. Prevalence of mental health disorders in boys and girls in 2004

<table>
<thead>
<tr>
<th>Age</th>
<th>Boys (%)</th>
<th>Girls (%)</th>
<th>All 5-16 year olds (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5-10 year olds</td>
<td>11-16 year olds</td>
<td>5-10 year olds</td>
</tr>
<tr>
<td>Conduct disorder</td>
<td>6.9 2.8</td>
<td>8.1 5.1</td>
<td>7.5 5.8</td>
</tr>
<tr>
<td>Hyperkinetic disorder</td>
<td>2.7 0.4</td>
<td>2.4 0.4</td>
<td>1.5 1.5</td>
</tr>
<tr>
<td>Emotional disorder</td>
<td>2.2 2.5</td>
<td>4.0 6.1</td>
<td>3.8 3.8</td>
</tr>
<tr>
<td>Less common disorders</td>
<td>2.2 0.4</td>
<td>1.6 1.1</td>
<td>1.4 1.3</td>
</tr>
<tr>
<td>Any disorder</td>
<td>10.2 5.1</td>
<td>12.6 10.3</td>
<td>9.6 9.6</td>
</tr>
</tbody>
</table>

The ONS survey found that 54 per cent of children with an emotional disorder were girls and that 62 per cent were aged 11-16. Children with an emotional disorder were more likely to come from a single parent family (31 %, compared to 15 % for children with no emotional disorder), and 54 per cent lived in households with incomes under £300 per week. The survey also found that children with an emotional disorder were more likely to suffer poor physical

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There are a large number of risk factors that increase the vulnerability of children and young people. These factors include health (23%, compared to 5% of children with no disorder). There were no significant differences between ethnic groups. The majority of children (86%) with hyperkinetic disorder were boys, and almost all were white (97%). They were more likely to live in households with low income (52% lived in households with less than £300 per week), and have parents with no educational qualifications (36% compared to 21% of children with no disorder).\textsuperscript{21}

As these figures suggest, research has shown that different factors affect the prevalence of mental health problems in children and young people, with the socio-economic situation playing a major part.\textsuperscript{22} The findings of the 2004 ONS survey were compared to a previous survey conducted in 1999, which showed very similar results. The 2004 survey is discussed here. It found that the prevalence of mental health problems was higher among children in families where neither parent worked (20%) compared to those in which both parents worked (8%), and one parent worked (9%). Sixteen per cent of children from families with a weekly household income of under £100 suffered from mental health problems, compared to 5 per cent with a weekly household income of more than £600.\textsuperscript{2} Using the National Statistics Socio-economic Class (NS-SEC), it was shown that 13 per cent of children with parents from semi-routine and 15 per cent of those with parents from routine occupational groups suffered from a disorder, compared to 4 per cent of children with parents in higher professional groups.

The link between childhood mental health problems and familial affluence is again highlighted by type of accommodation. Children living in rented accommodation, either social sector (17%) or private sector (14%), were twice as likely to suffer from a mental health problem than those in owned accommodation (7%).\textsuperscript{23} Similarly, there is evidence to show that homelessness can lead to poor mental health and lower educational attainment.\textsuperscript{24}

Educational qualifications of the parent, especially the mother, have a strong impact on prevalence of mental health problems. The ONS survey showed a rate of 17 per cent among children whose parent had no educational qualification, as opposed to 4 per cent among those with parents educated to degree level.\textsuperscript{25}

Family make-up can also impact on the mental health of children and young people. Prevalence rates of mental health problems were higher in children from single parent families (16%) compared to married couple families (7%). Nearly one fifth (18%) of boys living in single parent families suffered from a mental health problem, as opposed to 13 per cent of girls. Reconstituted families, ie those where stepchildren are present, also increased the prevalence of mental health problem: 14 per cent compared to 9 per cent without stepchildren.

There are a large number of risk factors that increase the vulnerability of children and young people.

\begin{itemize}
\item \textsuperscript{23} See Note 4 above
\item \textsuperscript{24} BMA (2003) Housing and health: building for the future. London: BMA
\item \textsuperscript{25} Seen Note 4 above
\end{itemize}
people to mental health problems. As outlined above, deprivation presents an important risk. Other factors that increase risk include poor educational and employment opportunities, enduring poor physical health, poor peer and family relationships, witnessing domestic violence and having a parent suffering from mental ill health or misusing substances. Children who have been physically and sexually abused are at particular risk. Asylum seeker and refugee children have been shown to have consistently higher levels of mental health problems, including post-traumatic stress, anxiety and depression.

Looked after children (ie those brought up in local authority care) are particularly at risk of poor mental health. An ONS report, The mental health of young people looked after by local authorities in England (2003) found that in England, 45 per cent of looked after five to 17 year olds had a mental health disorder, compared to 10 per cent from private households.26 In Wales, 49 per cent of five to 17 year olds in care had some form of mental health disorder,27 and in Scotland, the figure was 45 per cent.28 Young people in the youth justice system are another group among whom there is a high incidence of mental health problems.29

The ONS survey found no differences between metropolitan and non-metropolitan areas in England. However, closer examination identify variations between areas of wealth and deprivation, as would be expected. There is no significant variation between England, Scotland and Wales.

ONS analysis of the survey data on prevalence of mental health problems among children from black and minority ethnic (BME) groups was difficult. The sample sizes for these groups in the survey were small, and there were also language barriers where English was not a first language. The survey found that Indian children had a low reported rate of mental health problems (3 % compared with 7-10 % for other groups), and that all non-white groups had a low rate of hyperkinetic disorder.30 Other evidence shows that BME groups are more likely to suffer inequalities in accessing, using and achieving positive outcomes in mental healthcare.31

The ONS surveys do not extend to Northern Ireland, and there has been little in the way of examination of the prevalence of mental health problems there. However, Northern Ireland has a higher proportion of children (27 % of the population are under 18, compared to 22 % in England), and higher levels of socio-economic deprivation. It has also been subjected to 30 years of civil conflict, and there is a higher prevalence of adult mental health problems than in

29 See Appendix 2
30 See Note 9 above
the rest of the UK. It is, therefore, probable that the prevalence of childhood problems will be as
great, if not greater than, the rest of Britain.32

Section 2 - Type of problems faced

Many children will suffer symptoms to a certain extent. For example, most children will feel low,
moody or sad at some point; this does not mean that they suffer from depression. To be
classified as a disorder, symptoms must be sufficiently severe to, in most cases, impair a
child's normal functioning and cause distress.33

The categories broadly follow those used by the ONS in its 2004 survey, Mental health of
children and young people in Great Britain, 2004, which are based on the World Health
Organisation International Classification of Diseases (ICD34 - See appendix 1) The Royal
College of Psychiatrists, the charities Mind and the Mental Health Foundation, and Williams &
Kerfoot (ed) Child and adolescent mental health services (2005) All provide more information
about different types of child and adolescent mental health problems.

Emotional disorders

Emotional disorders are the most common mental health problems in children, and include
anxieties, phobias and depression.

Anxieties and phobias are related to fear, which can be generalised, or specific to a situation or
object; for example school or separation from a parent. For a problem to be classified as a
disorder, behaviour needs to present as an exaggeration of normal developmental trends.
Depression: it is estimated that 1 per cent of children and 3 per cent of adolescents suffer from
depression in any one year.35 Symptoms include sadness, irritability and loss of interest in
activities. Associated features include changes in appetite, sleep disturbance and tiredness,
difficulty concentrating, feelings of guilt, worthlessness, and suicidal thoughts. Depression can
be treated through talking treatments, although it should be noted that these treatments are
currently of limited availability in Child and Adolescent Mental Health Services (CAMHS).36

Self-harm and suicide

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32 Review of Mental Health and Learning Disability (Northern Ireland) (2005) Vision of a comprehensive child and
adolescent mental health service. Consultation document November 2005
33 Office for National Statistics (2005) 'Mental health in children and young people in Great Britain, 2004'. London:
HMSO.
34 Royal College of Psychiatrists (2004) 'Mental health and growing up (3e). Factsheets for parents, teachers and
young people'. London: Gaskell. (see http://www.rcpsych.ac.uk/mentalhealthinformation/mentalhealthandgrowingup.aspx)
35 World Health Organisation (1996) 'Multiaxial classification of child and adolescent psychiatric disorders. The ICD-
Self-harm and suicide can be a symptom of underlying unhappiness or emotional disorder. Self-harm can include self-cutting, burning, hair-pulling or self-poisoning. It may be linked to suicidal thoughts, and is a way of coping with problems, a means of taking control, or a form of release from painful feelings.37 NICE has produced clinical guidance on treating those who self-harm.38 Research suggests that the incidence of self-harm is increasing among young people. A survey of school children in England in 2002 found that 6.9 per cent of young people had committed an act of self-harm, and it was more common in girls (11.2 %) than boys (3.2 %).39 The average age of onset of self-harm is 12 years.40 A two-year national inquiry carried out by the Camelon Foundation and Mental Health Foundation found that self-harm is an issue that is poorly understood, even among professionals and school staff, and treatment is often inappropriate; for example focusing on the self-harm rather than the underlying causes. The report of the inquiry, Truth hurts (2006), calls for more comprehensive and targeted research into the issue, and sets out an agenda for change.

Suicide rates are very low in children, but start to increase from the age of 11.41 Boys and young men aged 15-24 are most at risk, but there has been a decrease in the number of suicides in this group in the last few years.42 Attempted suicide is more frequent: as many as 2-3 per cent of girls attempt suicide at some point in their teenage years43. Depression, serious mental health problems and the misuse of drugs are all factors related to suicide attempts. Young people who have already tried to kill themselves, or know someone who has tried to kill themselves are also at greater risk of attempting suicide.44

Eating disorders

During adolescence, young people’s bodies are changing, and they can become more susceptible to external influence such as peer pressure and the media. This can lead to greater awareness of physical appearance. Some young people find it hard to cope with the experience of growing up. These factors can lead to concerns about weight, which in some cases can become problematic. Eating disorders include anorexia nervosa, where the person eats very little, effectively starving themselves, and bulimia nervosa which involves bingeing on

37  Mind ‘Children and young people and mental health’. see  www.mind.org.uk and
43  Mind ‘Children and young people and mental health’
food followed by induced vomiting or use of laxatives. The average age of onset of anorexia is 15, and of bulimia, 18.\textsuperscript{45}

Both conditions can cause severe weight loss, which can lead to other medical conditions including osteoporosis and cardiovascular problems.\textsuperscript{46} If left untreated, the disorders can result in death, either from the weight loss or from suicide. NICE has produced clinical guidelines on treating those with eating disorders.\textsuperscript{47} The BMA publication, Eating disorders, body image and the media (2000), provides greater detail about both conditions, and discusses the role of modern society in the onset of these disorders.

**Conduct disorders**

All children will occasionally be badly behaved and disobedient. If bad behaviour continues for several months (six months, according to the ICD 10)\textsuperscript{48} or beyond the normal age period for misbehaviour, or if it is out of the ordinary and seriously breaks accepted rules, there may be a more acute problem, known as a conduct disorder. Conduct disorders affect a child’s development and ability to lead a normal life, and can cause them distress. Typical behaviour includes unusually frequent and severe temper tantrums beyond the age that this is normally seen, severe and persistent disobedience, defiant provocative behaviour, excessive levels of fighting and bullying, cruelty to others or animals, running away from home and some criminal behaviour.\textsuperscript{49} According to the 2004 ONS survey, children with conduct disorders were more likely to be boys (69 %) and 55 per cent were aged 11-16.\textsuperscript{50}

**Hyperkinetic disorders**

Hyperkinetic disorder is the official term in the UK for describing children who are consistently over-active and inattentive. Attention-deficit hyperactivity disorder (ADHD) and attention deficit disorder (ADD) are also commonly used terms.\textsuperscript{51}

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\textsuperscript{45} Mind ‘Children and young people and mental health’, see www.mind.org.uk
Signs of hyperkinetic disorder include restlessness and over-activity, inattentiveness and difficulty concentrating, acting impulsively, and disruptive and destructive behaviour. Many young children occasionally behave in this way. But to be diagnosed with hyperkinetic disorder, a child must display both impaired attention and over-activity in more than one situation, such as at home and at school. 52 Children with hyperkinetic disorder may find it difficult to interact with other children, and their inability to concentrate and restlessness at school impacts on their education, and can be extremely disruptive to other pupils. Their behaviour can also put significant strains on family life. These problems can persist into adult life; approximately two fifths of children with hyperkinetic disorder will still have some symptoms at age 18.53 Most children do however settle down by the time they reach their mid-teens, especially if they receive appropriate treatment. 54

Autistic spectrum disorders

The term ‘autistic spectrum disorder’ (ASD) describes a range of lifelong developmental disorders, which can come under the definition of learning disabilities, and are characterised by difficulties in social interaction, communication and imagination. They may appear indifferent or aloof, insensitive to others’ needs and have difficulty cooperating with other people. They may have language problems, both understanding and speaking, as well as non-verbal communication. They can have problems with interpersonal play and imaginative activities, preferring instead familiar routines, resisting change.

There is a spectrum or range of disorders, from those with severe learning disabilities, some of whom may never speak, to those with average or above average intelligence, such as sufferers of Asperger syndrome. Some may be particularly talented in a specific area, such as drawing or mathematics.

Psychotic disorders

Psychotic disorders cover a range of conditions where a person suffers from symptoms such as delusions and hallucinations. These include schizophrenia and bipolar affective disorder (commonly known as manic depression). The causes of psychotic illnesses are not properly understood; they can sometimes be genetic and in schizophrenia and bipolar affective disorder, abnormalities in the chemistry of the brain are thought to be involved. The use of mind-altering substances, such as drugs, alcohol, glue and aerosols, can also lead to, and be a symptom of psychotic disorders. For more discussion on the links between substance misuse and mental health. The incidence of psychotic illnesses increases in early adulthood.

53 Mental Health Foundation at: www.mhf.org.uk
Treatment varies depending on the condition. Medication, sometimes taken over a long period, is usually an important part of treatment. Patients may need to be hospitalised, and talking treatments and support are often also useful.55

Others

There are many more mental health disorders, but this report (BMA 2006) is not intended to include all of them. Examples include tic disorders, stammering and pica (persistent eating of non-nutritional substances, eg soil, paint). The Royal College of Psychiatrists and the Mental Health Foundation both provide information on these and other mental health disorders.

Co-morbidity

The ONS survey found that one in five of children diagnosed with a disorder had more than one disorder, the most common combinations being conduct and emotional disorder and conduct and hyperkinetic disorder. The majority (72 %) of children with multiple disorders were male, reflecting the high proportion of children with conduct disorder in this group. Children suffering from more than one disorder were at greater risk of suffering more serious problems. Sixty-three per cent of those with multiple disorders were behind in their intellectual development, compared to 49 per cent of those with a single disorder, and children with multiple disorders accounted for approximately one third of those using specialist mental health services.56

Alcohol and substance misuse

Alcohol and substance misuse can sometimes be linked to mental health problems, and a significant proportion of young people take alcohol and drugs. The use of alcohol and drugs can both exacerbate and trigger mental health problems: those with mental health problems may be at greater risk of misusing drugs, and the misuse of drugs can cause mental health problems. For example, alcohol can be attractive to those suffering from depression because it increases confidence and may produce a feeling of wellbeing, drowning out problems in the short-term. It is, however, also a depressive, and can worsen the symptoms of depression, such as increasing risk of suicidal thoughts and behaviour.57 A survey of 11-15 year olds in England in 2004 found that while the prevalence of drinking among young people had not changed greatly in recent years (23 % had drunk in the previous week in 2004; 25 % in 2003),

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55 See note 22 above and Mental Health Foundation at: www.mhf.org.uk
57 SANE (2005) Alcohol, drugs and mental illness see: www.sane.org.uk/public_html/About_Mental_illness/Alcohol_Drugs.shtm#alcohol
the amount consumed by those who do drink has increased: 10.7 units per week in 2004, compared to 5.3 units in 1990 and 9.9 units in 1998.58

Young people may be particularly at risk of problems resulting from substance misuse as their brains are still developing59. For example, some research suggests that young people who use a significant amount of cannabis are more likely to have mental health problems, and develop mental illnesses later in life.60 In 2004, 11 per cent of 11-15 year olds had taken cannabis in the last year. Prevalence increased with age, with 26 per cent of 15 year olds having taken it. The survey also found that 4 per cent of 11-15 year olds had taken Class A drugs in the previous year, a figure that has remained constant since 2001.61 Some CAMHS work with drug dependency teams, but this is not universal.62

Appendix 6 – About the Author

Dr Barbie Clarke

Barbie founded Family Kids and Youth with a team of researchers eight years ago. An international youth researcher for over 20 years, she was formerly Director of the Family division of GfK NOP, and has worked with children and families in many countries. She completed her PhD in child and adolescent psychosocial development at the University of Cambridge, Faculty of Education, where her published research has looked at early adolescents’ (10-14 year olds) use of digital media. A BACP trained child therapist, she has worked with young offenders and in secondary schools.

Barbie is a trained ethnographer and has a MPhil in research methodology from the University of Cambridge. She has conducted many literature reviews, and at Cambridge worked with Professor John Gray and Professor Maurice Galton on the adolescent mental health review for the Nuffield Foundation. This has been published in peer-reviewed journals and is about to be published in a book. She is currently carrying out a literature review at Cambridge with Dr Colleen McLaughlin and Dr Carol Holiday on the effectiveness of counselling for children and

59 See note 25 above
62 YoungMinds at www.youngminds.org.uk/substancemisuse/index.php
adolescents. Barbie supervises students on the Masters course at Cambridge, and occasionally lectures on research methodology.

Barbie regularly gives papers at international conferences, writes articles, and has appeared on TV and radio commenting on youth research. Barbie is spokesperson for the MRS on children’s research, chaired the Children’s Conference in January, and spoke at the MRS annual conference in London at the end of March. She gave a paper at ESOMAR on young children’s use of digital media last September alongside Marc Goodchild from the BBC, and spoke at and chaired the MRS kids and youth conference in November. Barbie is writing a paper with Catriona Ferris from Unilever on cultural differences amongst families in BRIC countries which will be presented at the ESOMAR Congress in Amsterdam in September. She is LEA Governor of a Primary School, and sits on the BBC Children’s Editorial Advisory Board.

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