

INFLUENCES OF MEDIATED VIOLENCE

A BRIEF RESEARCH SUMMARY

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THE CLEARINGHOUSE IS LOCATED AT NORDICOM

Nordicom is an organ of co-operation between the Nordic countries – Denmark, Finland, Iceland, Norway and Sweden. The overriding goal and purpose is to make the media and communication efforts undertaken in the Nordic countries known, both throughout and far beyond our part of the world.

Nordicom uses a variety of channels – newsletters, journals, books, databases – to reach researchers, students, decisionmakers, media practitioners, journalists, teachers and interested members of the general public.

Nordicom works to establish and strengthen links between the Nordic research community and colleagues in all parts of the world, both by means of unilateral flows and by linking individual researchers, research groups and institutions.

Nordicom also documents media trends in the Nordic countries. The joint Nordic information addresses users in Europe and further afield. The production of comparative media statistics forms the core of this service.

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The International Clearinghouse on Children, Youth and Media

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In 1997, the Nordic Information Centre for Media and Communication Research (Nordicom), Göteborg University Sweden, began establishment of the International Clearinghouse on Children, Youth and Media. The overall point of departure for the Clearinghouse's efforts with respect to children, youth and media is the UN Convention on the Rights of the Child.

The aim of the Clearinghouse is to increase awareness and knowledge about children, youth and media, thereby providing a basis for relevant policy-making, contributing to a constructive public debate, and enhancing children's and young people's media literacy and media competence. Moreover, it is hoped that the Clearinghouse's work will stimulate further research on children, youth and media.

The International Clearinghouse on Children, Youth and Media informs various groups of users – researchers, policy-makers, media professionals, voluntary organisations, teachers, students and interested individuals – about

- research on children, young people and media, with special attention to media violence,
- research and practices regarding media education and children's/young people's participation in the media, and
- measures, activities and research concerning children's and young people's media environment.

Fundamental to the work of the Clearinghouse is the creation of a global *network*. The Clearinghouse publishes a *yearbook* and a *newsletter*. Several *bibliographies* and a worldwide *register of organisations* concerned with children and media have been compiled. This and other information is available on the Clearinghouse's *web site*:

www.nordicom.gu.se/clearinghouse

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Foreword

Twenty years ago the General Assembly of the United Nations adopted the Convention on the Rights of the Child. Practically every country in the world has since ratified it. Articles 13 and 17 stipulate that children have the right to access information, the right to freedom of expression, the right to participate in the media, and the right to protection from harmful media contents.

When the Convention was adopted in 1989, neither internet nor mobile telephones – not even computers – were readily available to ordinary people. But that was then. Although there are media, digital and information divides in the world, more and more people have access to an enormous array of knowledge and diversions of many kinds – on television, on the internet, and in mobile telephones. Our perceptions of time and space, of the bounds between private and public, central and peripheral, have changed. Fragmentation, diversification and individualization are characteristics that are frequently in the focus of studies on media culture.

An interactive and mobile media society has grown up alongside the traditional mass media society. Media use is less a matter of exposure or consumption, but more and more an activity. Passive media consumers are becoming active media producers. Young people around the world have already opted into the new regime and they have a command of the media on hand today that far surpasses the knowledge and skills the rest of us have managed to develop. Much of the content that is accessible via, for example, the web and mobile telephones remains terra incognita to many adults.

Access to a variety of media, telephony and online services is increasingly recognized as a vital factor for political, economic, social and cultural development. At the same time television, internet, computer games, etc. arouse fears as to the influence they may have on young people.

Many parents, teachers and policy-makers are concerned about the negative influence they believe media exert on children and adolescents. Such concerns have been voiced as long as mass media have existed, but the concern has grown in pace with developments in media technology. There

is particular concern about what we call harm and offence in media content – violent and pornographic fiction and non-fiction, but also offensive advertisements, stereotypes, hate-mongering messages, and so forth. Interactive media such as the internet also imply invitations to risky behaviour in real life in connection with media use.

Different parties turn to Nordicom and the Clearinghouse on Children, Youth and Media with questions on the influences of especially mediated violence. From time to time the Clearinghouse has highlighted the main conclusions that can be drawn from research regarding such issues. In this publication, Dr. Cecilia von Feilitzen, Scientific Co-ordinator at the Clearinghouse, has attempted to classify research findings into a more concise form than is perhaps common. There are different types of mediated violence and different types of influences. We hope that this publication will answer some of the questions so often asked by various groups in society.

Göteborg in June 2009

Ulla Carlsson
Director

Introduction

The subject of children's and adolescents' relations to media has been on the agenda as long as media – books, press, recorded music, film, radio, television, etc. – have existed. With each new medium come both hopes and fears. In the public debate, the hopes have been for better opportunities for information/education, culture/entertainment and social relations – even peace – between persons, groups, cultures and countries. The fears have concerned the possible injurious influences of media contents as well as of using the medium *per se*.

Considering the possible offensive and harmful influences of *film* and *television*, two long-standing media, many kinds of risks have been under intensive discussion. However, it is no exaggeration to say that the issue given most attention both in the public debate and in the research, especially regarding children and young people, is the consequences of watching media violence.

With regard to digital *video/computer games* as well, violent content is one concern in the forefront. However, the hopes and fears – and the direction of research – have not been altogether the same for all media, but depend on the contents and character of the medium, as well as on the role of the media user. Therefore, apprehensions about *the internet* and *mobile phones* are partly different.

This booklet deals with research on media violence and will have little to say about research on other possible offensive or harmful influences – or the plentiful research on the media's potentially positive and desired influences. The booklet also limits itself to the screen media – film and television, digital games, and the internet (mobile phones included) dealt with in different sections – because at present, the risks of these media are the most debated issues in relation to young people.

At this point, it must also be stressed that research on children, young people and media has been much more exuberant and has a longer tradition in richer countries, such as Australia and New Zealand, Europe (mostly Northern and Western Europe), Japan and other well-to-do countries in Asia, as well as North America, while in other countries such research is

often less common and sometimes non-existent. The knowledge we have about the influences of media violence originates, thus, from relatively few countries with specific media situations – and research findings cannot be automatically generalized across borders. Consequently, in most countries there is a great need for research on children and media in the changing local and global media landscape. Such research should be carried out both on the countries' own social and cultural terms and through more international comparative investigations.

Film and Television

On the concepts of media violence and aggression

The representations of media violence in film and television most often referred to in the public debate as well as in research are depictions of visible, manifest, physical violence, and the threat of such violence, intended to kill, hurt or inflict physical suffering on the victim(s), i.e., fights, shootings, murders, etc.

However, there is no commonly accepted research definition of media violence. Some elements that vary across different investigations are: Whether media violence is used against oneself or other persons – or also includes violence used against (and by) animals, society and/or objects; whether the perpetrator has the intention to harm – or whether all actions with violent consequences should be included (which also means accidents); whether the violence is physical – or also includes verbal and psychological violence; whether the violence also includes anti-social behaviour (e.g., fraud); whether the violence is against the victim's will or interest – or whether violence includes all actions intended to kill, hurt or inflict suffering.

Because research on physical media violence predominates, we know in the media violence context little of other forms of symbolic violence – such as mental and structural oppression, and power relations – that are also represented in the media output. Furthermore, the research has been largely concentrated on depictions of violence in entertainment, fiction and drama as opposed to representation of violence in the news and other factual contents. The reason has been that we must know about reality, but if fictional violence is injurious it ought to be reduced.

Traditionally, research on film and TV violence has centred on its influences on children's and young people's *aggression* or *violent behaviour*, where aggression can be said to be a more comprehensive concept. This is because 'violence' implies behaviour, but in addition to behaviour 'aggression' also implies aggressive feelings, ideas, values and norms. This has not always been made explicit in the research.

Here it should be mentioned that the definitions of aggression have not always been explicit in other senses either. Originally aggression (from the Latin *aggressio*) means 'attack'. Consequently, certain kinds of aggression may be constructive, for example attacking societal evils or defending oneself against oppression. What is implied in the media research – and in the public debate – seems, in fact, to be destructive aggression, for example, attacking and oppressing in order to establish, maintain or strengthen a superior position, but this has not always been made clear. Furthermore, researchers have primarily measured *physical* aggression in audiences, which may entail more often finding aggression among boys or young people belonging to the working class. Girls and persons belonging to the middle or upper classes may partly express their aggression in other ways, for instance, verbally, through silence or individual exclusion, through competition, achievement or self-assertion at the expense of others – manifestations of aggression that research measures have less often taken into consideration.

The media perspective – different kinds of influences of film and TV violence

Research on film and television violence has been conducted since the 1920s, and three to four thousand studies on influences of violent contents in these media are said to exist in the U.S. alone. Thus, we can base our conclusions concerning the influences of film and TV violence on many studies starting from different theories and using different methods, but with findings pointing in the same direction.

Many feel that the research findings on media violence are contradictory. This may be because they want a simple yes or no answer to the question of whether media violence leads to increased aggression or violence in society – however, research shows that the situation is more complex. It may also depend on the fact that different research studies have different perspectives and questions as starting points – as well as different methods – and therefore elucidate different parts of the problems. Moreover, no one study can cover 'the whole reality'. In addition, different viewers have different impressions of media violence depending on their specific experiences and the context and position in which they find themselves, which is why media violence has different kinds of influences. However, the perspectives and findings can also be said to complement one another, just like pieces in a puzzle.

Traditional studies on the effects of film and TV violence on children and young people can be said to have 'a media perspective', that is, they specifically ask: 'What is media violence doing to the individual?'. In brief, this line of research has generated the following results:¹

Imitation

There is considerable empirical research showing that portrayals of violent actions in film and television can lead to *imitation*, particularly among younger children. Most people who are around small children also notice that children often copy what they see on television or in films. But even if media contents often influence especially younger children to say, do or play something of what they have seen (or heard or read), these impulses are generally short term and diminish as the child gets older. And even if imitation often has a modelling function, that is, is a process by which children learn things (imitation and play are fundamental factors in the socialization process, i.e., children imitate adults to learn how to behave), it does not mean that children have already internalized or incorporated ideas, values and norms from the media that have led to an *intentional* aggressive action.

At times, imitation also helps in working through one's impressions; younger children may sometimes need to free themselves from strong media impressions via body language. It is, thus, necessary to consider what aspects of imitation are undesirable – and what aspects might be important for the child in his/her everyday life and social context.

Young people and adults, too, can copy 'tips' and instructions concerning how violence can be committed – they can use these tips in a crisis situation if they feel they need that knowledge. These tips or instructions need not be of use immediately, but can be stored as ideas, 'scripts' or 'schemas' for how to act in a violent situation later on. However, the research does not show that the media are the sole cause of the need for such knowledge, nor of the crisis situation in which the need is felt. (See also under 'Working through problems, understanding, knowledge' p. 19f).

Aggression

The numerous studies focused on *aggression* as a consequence of viewing film and TV violence do not support the notion that media violence is the *decisive* cause of violence (and violent crimes) in society. On the other hand, most studies do not indicate that media violence is of no importance at all.

Media contents seldom have a *direct* or *sole* influence on our *actions*. Studies have shown that we definitely get *mental* impressions – conceptions, feelings, etc. – from the media. But these are mixed with all the other conceptions, norms, values, feelings and experiences we have already acquired and are acquiring from our own practice and from our family, school, peers, etc. Our own experiences, as well as impressions from other persons, are generally of greater importance than impressions from the media. It is this melting pot of collected impressions that increases or decreases our propensity to act in a certain way.

The majority of studies on media violence and aggression in the U.S., as well as some studies in other countries, show that media violence – in an indirect and most often reinforcing way, in interaction with more significant impressions, both in the short and in the long run – *contributes* to increased aggression for certain individuals under certain circumstances. The longitudinal studies carried out during recent decades, in which the same individuals have been followed for several years, indicate, in sum, that viewing media violence seems to statistically explain 5-10 per cent² of children's and young people's increased aggression over time, whereas 90-95 per cent of that aggression is due to other factors. These 'other' factors include the child's personality and earlier aggression; insecure, tangled or oppressive circumstances in the family, school and peer groups; socio-cultural background; unfavourable societal conditions, etc. Included here are also factors such as youth unemployment, alcohol and drugs, access to weapons, ethnic segregation, adults' diminished control, and a consumer-oriented society that stimulates theft and other economic crimes for which violence can be a means.

Several participants in the public debate are 'dissatisfied' with these findings and wish instead to make the media the sole scapegoat. Others wave the findings away and mean the opposite – that media violence is of no importance. But 5-10 per cent is not a negligible result.³ The fact that many factors interact is also true of most areas in life. The impact of violent representations in the media is, thus, a phenomenon not to be disregarded.

Some studies also point to a *reciprocal* relation between viewing film and TV violence and aggression, that is, a circle or spiral effect. This implies *both* that children and young people who already are aggressive are attracted by media violence *and* that viewing media violence reinforces their aggression.

At the same time, research supports the notion that children who have good relations with their parents, peers, etc., who do not live in a violent environment or a violent society, who have secure social conditions, who

like school, and are not frustrated or aggressive for some other reason, will most likely not become more aggressive through exposure to media violence.

More research is, therefore, needed with groups at risk. A few such studies are mentioned below (see under 'Working through problems, understanding, knowledge' p. 19f). Another growing body of at-risk research focuses on the negative role of media violence for children and adolescents with ADHD (Attention-Deficit/Hyperactivity Disorder), AS (Asperger Syndrome) and DBD (Disruptive Behaviour Disorders).

Different kinds of violence

As mentioned earlier, it is essential that each country perform its own research – the findings cannot be generalized too hastily.

For example, previous Japanese research has not found that TV violence contributes to aggression, despite the fact that such violent representations are extensive in Japan, as well. One reason for this discrepancy may be the different culture in society at large, another the fact that TV violence in Japan is often depicted in other ways than in Western media.⁴

Research in the U.S. shows that those depictions of violence that with greater probability contribute to aggression include:⁵

- an attractive perpetrator
- violence that stands out as justified (that is, the viewer finds it in order when, for instance, the hero commits violence to settle accounts with the villain)
- use of weapons
- extensive/graphic violence
- violence that stands out as realistic
- violence that is glorified or rewarded or not punished
- violence in which seriously painful or harmful consequences are not shown
- violence portrayed in a humorous way.

Previous comparative content analyses in the U.S. and Japan have shown that in Japanese TV violence the heroes are often subjected to more violence than the villains, why the viewer is less likely to perceive this media

violence as justified. Likewise, violence on Japanese television does not as often go unpunished, and the victim's suffering – the consequences of the violence – is more often depicted, in fact, it may even be glorified.

It should be mentioned here, however, that a few examples of more recent Japanese research on violent *digital games* indicate increased aggression in some players⁶ (see under 'Aggression' in the section 'Video and Computer Games' p. 30f).

One British study reveals that some of the above-mentioned kinds of violence in Western media, e.g., violence that stands out as justified, are not experienced as violence by adult viewers; they do not find such scenes violent because they are within the scope of what is customary. What constitutes violence for the adult audience is instead an act that breaks a recognized code of behaviour, for instance, that stands out as 'unfair' or 'undeserved'.⁷

How the viewer *experiences* media violence, however, is not in all respects the same as the *influences* of media violence. As mentioned, it is, among other things, media violence that stands out as 'fair' or 'justified' that increases the likelihood of aggression among certain viewers.

Media violence that the viewer perceives as 'unfair' may instead lead to uneasiness or dissociation. And, again, one's own experience plays a role: Women who themselves had been subjected to real violence at home, interpreted and lived through a soap opera depicting such family violence on television differently: They found the media violence more violent and upsetting than did women who had not been subjected to violence in their homes.⁸

Fear and uneasiness

Although in most children, young people and adults media violence does not contribute to aggression or convey useful tips about how violence can be committed, there are several other important types of influences of media violence that we should be aware of.

One such influence is *fear* (or uneasiness, discomfort, becoming upset). Many children and young people like to be a little afraid, in a way that is exciting, when they watch fictive films and programmes. And some young people consciously seek out horror films in order to feel the horror. However, several studies have shown that entertainment violence can also give rise to fear that is stronger than what one was seeking. Murders, shooting,

fights, knives, mysterious environments, monsters, masks, darkness, horrid sounds, etc., can have an unexpectedly frightening effect. Children also often feel deep displeasure or horror when children or animals are hurt on the screen. The fear can, namely, be reinforced if, among other things, one identifies with the victim of the violence, if one feels that the violence is not justified, if the violence is graphic, or if it is experienced as realistic (both in fiction and factual films/programmes). Most children and young people say that they at some time, or several times, have been frightened or horror-struck by entertainment violence, not seldom for an extended period.

It is essential to stress in this context that many parents/adults take this kind of fear lightly – but all fear must be worked through. Repeated fear that is not treated but hidden away inside will sooner or later manifest itself in some way, for instance, as uncertainty, anxiety, depression – or aggression.

Violence in news and factual programmes can also be frightening. We are all scared now and then by depictions of real violence. This is necessary; we have to be shocked sometimes by such representations of violence. Fear is a biological gift, something positive, a means of survival, of protecting ourselves and counteracting dangers and societal evils. But it is obviously undesirable if our anxiety becomes so strong that our inclination to act is blocked.

Research from some countries shows that children, when asked about what has frightened them in the media, *more often* mention violence in fictive films and programmes. This is related, among other things, to the fact that we become more frightened if the violence is associated with our own experience and if it offers possibilities for identification. For children, the news does not offer possibilities of identification as often as fiction does. Much of what is shown on the news and other factual material is at a geographical, cultural and psychological distance from the child's everyday life. But *when* children identify with or experience a violent situation in news/factual programmes, *when* they feel that this can happen here or to me – then media violence about reality is *more* frightening. So even if entertainment violence more often gives rise to fear, depictions of real violence, when they are frightening, frighten more *intensively*. This is because you cannot brush away (portrayals of) actual violence, persuade yourself that it is only make-believe, as you can entertainment violence. (See also under 'The media perspective – risks of harmful influences of violence on the internet' in the section 'The Internet' p. 45ff.)

Conceptions of violence in reality

There are also indications that media violence provides erroneous *conceptions of real violence*. However, there is less research on this kind of influence of media violence.

For example, certain practical experience within school health services indicates that children may believe bodies are stronger than they actually are and that this understanding is based on what they have seen in action films. For this reason, children cannot foresee or understand how serious the consequences of kicks and blows can be.⁹

Furthermore, research results indicate that too much TV viewing can give audiences exaggerated ideas about the amount and type of violence in society.¹⁰ Thus, media violence can convey or reinforce ideas that there are more violent persons and more violence out there than is actually the case. Such erroneous conceptions, in turn, can give rise to fear within the viewer of personal encounters with violence – when riding the underground, walking in parks, and so on – as well as to adopt a pessimistic view that one cannot trust other persons.

Not only fictive violence but also news violence can influence people's conceptions of violence in reality. Press and TV news often exaggerate how violent the violence is. There are also examples in the research of how erroneous ideas about violence in society – underpinned by the media – have led to moral panic in the audience and calls for more law and order.

Conceptions, fear, tips about violence – as concurrent influences

Several different theories have been presented concerning how human aggression *generally* arises. The research on *imitation* and *aggression* as a consequence of viewing *film and TV violence* has often emanated from various kinds of social learning theories (e.g., that we learn attitudes and behaviours from media violence via observation; or that media violence activates similar aggressive thoughts, norms, values and actions within us; or that it contributes to cognitive 'schemas' or 'scripts' for how we can or should act in a violent situation).¹¹ Some researchers also mean that the likelihood of such learning is greater if we are already frustrated.

Moreover, it is likely that among a minority of individuals it is precisely the combination of *erroneous conceptions of real violence*, *fear of encoun-*

tering violence, the experience of threat in one's surroundings and ideas about how one can commit violence – phenomena that media violence has contributed to – that can pave the way for destructive *aggression* in crisis situations.

Habituation

A further kind of influence that some studies have dealt with is emotional and cognitive *habituation*, that is, decreased excitement, decreased fear, and lowered inhibitions in response to violence. Certain U.S. studies indicate that media violence can make us more desensitized to or unconcerned about real violence. Studies from, for instance, Europe and Australia have not shown this, but the inquiries about this type of influence are quite few.

However, studies show clearly that we become habituated to media violence itself. Young people even say so themselves. A great deal of viewing of media violence leads, accordingly, to decreased excitement in response to or decreased fear of media violence, such that the level of tolerance increases. Some people then seek other kinds of, and stronger, excitement and violence from the media. And because the media are competing for audiences, they spice films, programmes, etc., with more violence.

Constructive actions?

It is highly likely that certain media violence also has positive influences. Dramatized and realistically depicted media violence *ought to*, e.g., give the audience insight into the real causes and consequences of violence and power in society, thereby contributing to *realistic conceptions, democratic norms and values*, and *constructive actions*. There are also, as mentioned, situations when *fear* – and even *aggression* – can be something constructive, for example, if it helps us avoid real dangers or dissociate ourselves from, and fight against, abuse of power. However, no research focused on this issue has been found.

The user perspective – different uses of film and TV violence

Some research does not proceed from the perspective of media *influence* – as does most research hitherto mentioned – by asking ‘what media violence is doing to the individual’ (*the media perspective*), but has instead the

child's, the young person's or the adult's perspective as a *user or agent* as its starting point (*the user perspective*). The question is then, simply stated: 'What are children, young people, etc., doing with the media violence?' Such research builds on the fact that different individuals generally experience excitement, violence, horror and power – and other media contents – very differently, need it to different extents and give it different meanings depending on their experience and context. It is important to understand the fascination that many persons (but by no means everyone) feel for media violence. Some violent portrayals of today also have their roots in historical myths, folk tales and ancient drama.

Let us give some examples of what empirical research on media violence from a user perspective has arrived at.

Excitement

Several studies show that, for some people, media violence means *excitement* (or a little fear or 'wishful fear' – excitement and fear are extremes along the same continuum). Violence, hatred and death – and power, glory and money – are, just as love is, phenomena essential to human beings and therefore exciting. They often have a dramatic value in themselves, something that appeals to different audiences' preferences and needs. The reason for watching violent action films or horror films can be as simple as, for instance, feeling that everyday life is boring and wanting a kick or stimulation. Some people are also more excitement seeking than others. For certain persons, excitement can instead serve to divert or calm their own uneasiness and somewhat relieve feelings of dissatisfaction or powerlessness.

As mentioned, however, not everyone is attracted by film and TV violence. In a Russian study with 14- to 17-year-olds, for example, less than a third said they liked the violent films they had seen during the month before the survey.¹²

Identity seeking, group belonging

The signs and symbols of popular culture are also important constituents of children's and young people's everyday practice and learning processes – in play and identity work, development of lifestyles, group belonging and social action. Media violence, as well, can sometimes and in different ways play a role for *identity seeking* and *the feeling of group belonging*.

Among other things, interviews with 15- to 16-year-olds show that watching certain selected violence and horror genres can be a way of measuring toughness, a test of manliness in the gang, as well as one of several expressions of a lifestyle that unites the group and a counter-cultural protest action against an adult world that, from the young people's viewpoint, is oppressing or indifferent. This is more likely to be true of young people whose identity is not strengthened in school and whose low marks are a sign of competence and creativity that are being wasted.¹³

Other examples of the meanings of media violence for identity seeking and group belonging are the following: Viewing horror films has been shown to fit into the socialization of gender roles. Young men have an opportunity to show that they are not scared – something expected of men – whereas girls can express their fear, lean against the boys to get protection, and admire them for their bravery – something expected of women.¹⁴ And among teenage boys, the competent interpreters of action films – those who are acquainted with the conventions and narrative structures of the films – maintain or create, through continuous commentary while viewing, their positions and relations in the group.¹⁵

Working through problems, understanding, knowledge

As previously mentioned, many studies show that people who are already aggressive have a tendency to be attracted to media violence. This may also be true of certain children who, e.g., have experienced violence at home, in war, or in other contexts. One of several possible explanations is that some persons use media portrayals in an attempt to *work through and understand* their situation, as well as factors that have contributed to the aggressive environment, or the fact that they feel anxiety, are oppressed, frustrated or aggressive.

The motives for using media violence can be more or less unconscious. Research from Argentina suggests, for instance, that children who experience family conflict, or other social or individual conflicts, seek out and integrate violent elements from television to compensate for these conflicts and for their subjectively felt insufficiency. This may mean that these children feel a kind of temporary relief – even though the relief does not solve their conflicts in the long run. It is equally likely that viewing media violence also reinforces their aggression.¹⁶

The research also fails to support the idea that catharsis (from the Greek *katharsis*, i.e., 'purification') is a decisive influence of media violence, in the sense that one generally becomes released from one's earlier aggression by means of the symbolic vicarious experiences of media violence.

The motives for watching media violence can be more conscious and intentional, as well. Two Scandinavian studies with juvenile delinquents show that these young people, depending on their group belonging and lifestyle, seek out particular violent genres and view these specific programmes or films repeatedly.¹⁷ It is not the case that chiefly the films or programmes make these young people violent – as mentioned previously, other factors are more decisive for aggression and crime – but their life situations imply the desire to *learn special actions* in order to master a possible violent situation in the future, for example, if they are threatened by another gang. Thus, for them, this is a question of competence development and survival, just as when other people, e.g., read books for their work or relax to soft music after a stressful day. These two studies also give examples of how people can copy instructions from violent depictions in the media (cf. under 'Imitation' p. 11).

Summary of research findings on influences and uses of film and TV violence

Looking beyond direct and simple causal relations between media violence and aggression among viewers, it is clear that we all get impressions from and are influenced by film and TV violence – but in different ways based on our varying motives, intentions, wishes and life conditions. From the above-mentioned examples of undesired influences – imitation, aggression, fear, erroneous conceptions and habituation – it is also evident that we all, in one way or another, are negatively influenced by media violence.

Clearly, research on media violence has not only dealt with different kinds of influences – as mentioned, it also starts from different theoretical perspectives. Like other research within the social sciences and the humanities, the perspectives have their origin in, among other things, the basic philosophical question of a human being's free will. To what extent are we products of the environment – of parents, school, peers, media, religion, culture and social structure – and to what extent do we choose and act independently? Although most people agree that the truth lies somewhere in between, some put more emphasis on the structural perspective and

others on the agency perspective. The same applies to researchers. As mentioned, some choose to study how we are *influenced* by media violence in interaction with the rest of the environment (the media perspective). Others focus instead on how we – based on our different motives and interests in different contexts – *choose, use* and *interpret* media violence in order to orient ourselves in our surroundings and try to improve our situation (the user perspective).

The media and user perspectives, however, are not contradictory. They simply have different locations on the theoretical map. Nor are the findings from the studies contradictory. The same individual can appreciate and construct meaning from media violence while also getting less desirable impressions from it. The fact that we both are influenced by and seek to influence the environment is true of most contexts.

Other film and TV contents contributing to aggression?

There are also other research perspectives on film and TV violence. For example, some researchers have asked whether it is necessarily the violence in the programmes or films that contributes to aggression among some viewers.

The theory of emotional arousal, supported by empirical studies with adults, points to the possibility that any film and TV content that is exciting or inspires strong feelings reinforces the mood the viewer takes to the viewing situation (aggression, depression, erotic disposition, and so on). The viewing may, thus, in the short run mean more intensive action corresponding to that very mood.¹⁸

Another assumption, which has empirical support, is that sustained viewing of very fast pace programmes contributes to aggressive and uneasy behaviour (hyperactivity) among young children.¹⁹

Furthermore, one hypothesis is that large parts of the entertainment and fiction output as a whole, as well as advertising, contribute to increased expectations of a more glamorous lifestyle – expectations that cannot be fulfilled for all groups due to their relative deprivation in society. The result may be frustration, which in its turn can contribute to aggression. Such a possible media influence is reinforced by societal development based on

steadily increasing expectations, that is, a development that emphasizes increased production, increased consumption, achievement, and individual competition, in spite of the fact that different groups have different economic, social and cultural possibilities of realizing such goals.

The perspective of the culture at large

Another perspective within media violence research starts neither from the influence of depictions of manifest, physical violence (or other specific media contents) (the media perspective) nor from the individual as an agent (the user perspective), but focuses instead on the culture and media output at large. Such studies concern, among other things, values and myths, power and dominance relations, and different kinds of structural, latent or mental violence in the culture, as well as the representations and consequences of these cultural expressions.

To take one of many examples: Latently embedded in violent representations in U.S. TV drama is a victimizing pecking order that includes those who commit the violence and those who are subjected to it. At the top, among the assailants, there are white male adults; at the bottom among the victims are women, people belonging to ethnic minority groups and to the working class, poor people, elderly people, children and adolescents.²⁰ Thus, the dramatized commission of violence actually seems to reflect the societal power hierarchy. Moreover, the groups who are victims in this violent narrative largely correspond to the groups who, according to content analyses all over the world, are underrepresented in the media output (while men, the middle and upper classes, and the ethnic majority are overrepresented). A common interpretation in much of the research is that underrepresented groups, who are also mostly portrayed in prejudiced and stereotyped manners, are generally ascribed a lower value in society. Thus, the fact that children, for instance, are greatly underrepresented in the media output can be regarded as the media expressing and exerting a form of symbolic violence against or cultural oppression of children.

Another example of this cultural research perspective is international, comparative content analyses showing that violent portrayals, and with these also norms and values, are different in different cultures (cf. American and Japanese media violence under 'Different kinds of violence' p. 13f).

The political economy perspective

However, cultural or symbolic violence does not only have different meanings in different nations and epochs, and different ways of glorifying and condemning violence do not only depend on different cultures, but also on economy, technology, politics and power groupings in society. Still another perspective in media violence research is focused on precisely this, namely, how media violence and the values and power relations that are expressed in the culture are dependent on the media institutions' ownership situation, policies, economy and technology, which are in turn closely integrated with the economy, power and politics in society at large. Political economic factors in society and the media, thus, are regarded as decisive for what is conveyed and not conveyed in the media output – and ultimately also for the influences of media contents, including media violence.

For instance, empirical analyses show that national foreign politics and trade, as well as the media industry's anchorage in other companies that produce weapons, space technology, telecommunications, cars, food, etc., have an influence on what we can view, hear and read about. The companies that advertise in and sponsor the media also affect what is transmitted, as they encourage contents that attract the largest audience. Furthermore, increasingly often, television series are produced with accompanying toys, other gadgets, clothes, etc., and the same media content can be found on television, in films, computer games, comics, on the internet, and so on. Or TV series are built around, and therefore market, extra-television products (e.g., a special alcohol brand). The entertainment industry, including media violence, has an important economic function for society as a whole.

With ever more TV channels, digital games, internet sites, etc., the violent elements in the total media output are increasing. This is not only because violent depictions are accumulating with the establishment of new media, but also because of technological development, media competition, media globalization and the 1980s' so-called de-regulation of the media. A large part of the media market is dominated by a few trans-national conglomerates that convey the same media contents to larger and larger audiences around the world. With media contents flowing across borders, the possibilities for single countries to regulate the media have diminished. Moreover, the media contents become more and more easily available due to greater numbers of apparatuses in the homes and due to digital media convergence (the fact that games, newspapers, magazines, books, radio, music, film and television also exist on the internet to an increasing extent).

At the same time, research studies have shown that people on average prefer to watch TV programmes without violence. Most children and young people are not partial to violence in programmes and films either,²¹ and it is not in the first place the violence that makes young people fascinated with video/computer games.²² Several studies from around the world have also shown that people as a rule prefer to watch home-produced drama programmes, that is, soap operas and other fiction produced in their own country or native language. However, in most countries such domestically dramatized alternatives are few or completely lacking, because they are expensive to produce and do not generate sufficient revenues through sales to other countries. The opposite is the case especially in the U.S., which dominates world exports. A hybrid is format television, where the format (e.g., the design of reality shows) is purchased, but then filled with domestic characters and interiors.

Consequently, it is not primarily popularity with viewers that is the driving force behind media violence, but economic and global forces, including marketing. Media products that are to be sold to as many cultures as possible need a dramatic ingredient that does not require adaptation, but that 'speaks action' in any language. That ingredient is often violence.²³

Video and Computer Games

Background

Video and computer games have become a gigantic industry. The birth of electronic or digital games is said to have been in the late 1950s. However, it was during the 1990s that the video and computer game industry became the fastest growing and most profitable children's entertainment business. Already at the end of the millennium, such digital entertainment won shares of the U.S. toy market larger than the Hollywood box-office gross and ten times the amount spent on the production of children's television.²⁴ While the U.S. and U.K. are the biggest *computer* game producers, Japan leads the world in the *video* game industry.

During the 2000s, the rate of growth of digital games has further intensified, and nowadays playing also engages many adolescents and adults, although school-aged boys are the most active players. Forecasts of the international turnover of this business point at enormous figures (different press articles suggest 45 to 55 billion U.S. dollars in 2009), but it is difficult to find exact joint estimations covering all kinds of digital games in the world.

Video and computer games, or digital games, can be played on many platforms – via a console connected to a television (a console that nowadays often includes online capabilities), via DVDs or downloads on the computer, online via the internet, and via mobile phones and certain other handheld devices. While offline games on the computer (or a mobile phone, etc.) are often designed as a single-player activity, game playing via the TV console is primarily intended for more than one player. Online games on the internet, in their turn, often engage hundreds or thousands of simultaneous players from all over the world. (For example, *World of Warcraft* had, according to its website, 11.5 million subscribers in December 2008.) Multiplayer games are also arranged via local area networks (LAN) where gamers connect their computers to each other. Furthermore, e-sport (electronic sport, digital game contests) with international championships has developed both as a leisure activity and as a professional field, sometimes involving valuable prizes. In certain countries, for example South Korea and Germany, such tournaments are shown on television.

The game player's roles

The digital games are not only an extension of moving images on film and television – but also of play. The role of the *film and television viewer* is mainly to *receive* (and sometimes *consume*) contents in primarily asymmetrical one-way communication processes, although the viewer actively selects, interprets and recollects the contents in different contexts, often talks about them with other people, etc. Even if the TV viewer is at times also allowed to phone in, send text messages, chat on a TV series' website, etc., for voting, reflecting on the story, changing the story, and the like, such activities are not the rule in relation to TV programmes and films. And when viewers are allowed to 'participate', they do so on the terms of the media company.

Digital games, however, form a more (but not wholly) *interactive* medium in the sense that the player can steer, in several respects, the course and outcome of the game. And certain games, such as role-playing games online, can be said to allow *participation*, in that the player more or less creates the personality and actions of his/her avatar and contributes more profoundly to the narrative of the game.

Optimists in the public debate therefore believe that video and computer games constitute an educational revolution and a different kind of socialization. The games are regarded as a fabulous gateway to the future, training children and youth to cope with virtual reality – training that provides them with a greater sense of agency and control over the changing digital environment, that even empowers them in their lives.

Pessimists, however, remark that use of these games often leads to addiction, and that the contents of many of them are overwhelmingly violent, sexist and racist.

Some general comments on the research on digital games

Naturally, research on digital games is much more recent than research on film and television. This means that whereas studies on film and television violence number in thousands, studies on digital game violence number in hundreds, perhaps fewer than a hundred if we single out those asking whether aggression could be a consequence of playing violent video/computer games.

The concepts of 'violence' and 'aggression' have been defined similarly in relation to both digital games and film and television (see under 'On the concepts of media violence and aggression' in the section 'Film and Television' p. 9f). And, just as with film and TV violence, the game studies have also used different theories and questions as their starting points, have focused on different games and age groups, used different methods, etc., which is why many studies are not comparable. Moreover, because games have developed technologically and because violent and other elements have become more detailed, graphic and 'realistic' over time, some of the earlier studies are not valid for today's situation.

When talking about research on video/computer games, we must also state that it is not possible to simply generalize findings on the influences of film and TV violence to those of violent digital games, as the contents, formats and narratives of the games mostly deviate from film and TV contents, and as the role of the player is not only to 'receive' or 'consume'. Game playing has, as mentioned, more features of interactivity and play and perhaps also implies another kind of identification, not least when playing from a first-person perspective.

There is also great variation in digital games (action, strategy, adventure, role playing, sports, simulators, pedagogical, play, puzzle, etc.), and content analyses show that by no means all video/computer games contain violent representations, or that many contain very few violent elements. However, several of the digital games that children and young people, above all boys and men, prefer belong to the genres of 'action/combat', 'sports/racing', 'strategy' and 'adventure' – genres that more often contain representations of violence. Of these, the 'action/combat' genre contains most violent elements, which often target figures representing human beings (as opposed to machines, monsters, and the like). Salient sub-genres within the 'action/combat' genre are 'first person games/shooters', where the represented violence is perpetrated from the perspective of the player, and 'fighting games', where the game violence is seen from a third person perspective.

Important lines of research on digital games focus on games for specific learning purposes in, e.g., school situations, as well as the possible contribution of games to cognitive development, perceptual motor skills, and social interaction. Digital games have been tested for therapeutic purposes, as well. Of these potential beneficial outcomes, a certain agreement exists among researchers that playing digital games can help to improve perceptual-motor skills and reaction time, as well as promote relief in connection with some diseases.

In relation to concerns, on the other hand, the research has focused on possible player acceptance of violence as a useful means to solve conflicts, desensitization to violence, and, mainly, aggression. Fewer studies have dealt with gender stereotypes, racism, political and religious propaganda in games, and relationships between gaming and isolation, obesity and other health issues (such as epileptic fits and cramps). Addiction as a result of excessive gaming (regardless of type of game) has also attracted researchers' attention. However, the growing amount of advertising/marketing in the games (e.g., product placements) has only to a certain degree been the object of research.

Some notes on research methods

If we were to single out studies on the consequences of viewing and dealing with violent depictions and elements in computer games, the relevant studies, reviews of studies, and so-called meta-analyses mostly concern the short-term influences. Many of the short-term studies have been criticized because they are laboratory experiments, which means that subjects – for ethical reasons often college students – are invited to use a special game for a short while in connection with tests of different kinds and that all this takes place in an artificial, controlled milieu. Conclusions about causal relations can be drawn – but are they valid for everyday life, for life outside the laboratory?

Other studies are surveys of different kinds – outside the laboratory, involving interviews, questionnaires, and the like – that can establish possible *correlations* between playing violent digital games and aggression. But such studies do not provide a sufficient basis for drawing conclusions about *causal* relations. Moreover, in these studies *the kind of* violent games played is often not studied in detail.

Other studies are more ethnographic in style, which implies talking with children and adolescents and observing their playing. This approach gives an understanding of young people's motives for and interpretations of playing in different contexts. But even if these research designs also generate knowledge about what game elements the young people subjectively *experience* as offensive to them (e.g., what upsets them), they cannot reveal all kinds of possible harmful *influences* (e.g., increased aggression, racism, gender stereotyping, etc.).

Only a pocketful of investigations have used a causal approach in a realistic environment, e.g., field experiments or longitudinal studies. And the few studies seeking to track the long-term influences of playing violent games are 'short-term longitudinal' in design, covering weeks or months, not years.

Naturally, the weaknesses and strengths of the above-mentioned and other methods are also inherent in much of the research on influences of film and TV violence, as well as in the research on beneficial influences of digital games, film, television, etc. The reason for noting methodological shortcomings here, besides the other disparities between the game studies mentioned previously, is to give the reader an understanding of why findings to date on the consequences of playing violent digital games are very meagre and fluctuating.

In several respects, the current state of the research on digital games with violent elements can be said to resemble the state of the research on possible influences of films and television programmes with violent representations before the early 1970s. For almost half a century, the research findings on possible aggression after viewing film and TV violence were also highly contradictory, despite the fact that many more studies had been performed then than have been conducted on digital games and aggression to date.

The media perspective – different kinds of influences of digital game violence

Like film and TV violence, the research findings on digital game violence represent both a media perspective and a user perspective (see 'The user perspective – different uses of film and TV violence' in the section 'Film and Television' p. 17f). We will begin with the media perspective.

Imitation

Some studies show that small children have a tendency to imitate violent actions in digital games in their subsequent play.²⁵ As mentioned, small children often imitate what they have experienced, both in real life and via the media (cf. the reasoning under 'Imitation' in the section 'Film and Television' p. 11).

Aggression

Furthermore, surveys including both children and adults have found 'positive' correlations between heavy playing of violent digital games, on the one hand, and aggressive attitudes and behaviour, on the other – without being able to prove which factor comes first.²⁶ That is, we do not know whether persons who are more aggressive seek out violent games, or whether the games have contributed to their aggression – or whether there is a third factor that explains both violent game playing and aggressive tendencies within the player.

Research on *causal* relationships, which asks whether playing digital games with violent elements really *contributes* to increased aggression, has yielded different results. Thus, there is disagreement within the research community on how to interpret the findings, and several scholars maintain that there is not sufficient evidence on which to base any safe conclusions.

Thus, some studies performed in the U.S. and Japan, often starting from social learning/social cognitive theory, indicate that digital game violence can contribute to increased aggression in the form of aggressive thoughts, emotions, attitudes and behaviour, particularly after repeated playing.²⁷ One study with three independent samples (12- to 15-year-olds and 13- to 18-year-olds in Japan, and 9- to 12-year-olds in the U.S.) found that habitual playing of violent games early in the school year predicted physical aggression 3 to 6 months later (even after statistically controlling for influences of gender and previous physical aggressiveness). Furthermore, those who played video games including violence a great deal became relatively more physically aggressive. In addition, it seemed that the influence was larger among the younger children than among the older adolescents in the study.²⁸

At the same time, other studies fail to support or contradict findings showing that playing violent video/computer games contributes to aggression. Still other studies show increased aggressive thoughts, feelings and behaviour while playing, but these phenomena do not linger and are not transferred to people or things outside the game.²⁹

Some researchers stress that, just as with film and TV violence, even if playing violent digital games does contribute to aggression, there are many other factors at work that play a greater role. Thus, according to these researchers, digital games with violent elements reinforce aggression when other important circumstances contributing to aggression are also at work.

There is, as well, uncertainty as to how large the possible influence of game violence is. Some find it to be less than for film and television.

Other researchers, not to mention debaters, however, stress the notion that digital games might provide more effective training in desensitization and aggression than watching film and TV violence, because games involve play that is pleasurable and enjoyable – combined with interactivity, individual practice, repetition, engagement, and rewards for one's own violent game actions. And not only are the violent game actions rewarded, in first person shooter games they are also represented as justified and seldom punished, which are content factors in film and TV violence that more likely contribute to aggression (cf. under 'Different kinds of violence' in the section 'Film and Television' p. 13f).

Although the body of research on game violence and later aggression within the player is still too fragmentary to suggest a highly probable causal link between playing violent games and violent behaviour in children and adolescents, a majority of 12- to 15-year-olds in the U.K. agreed with the following statements in a study carried out in 2007: 'Violence in games affects people's behaviour outside the game' (67%), and 'Violence in games has more impact on people's behaviour than violence in television or films' (54%).³⁰ The research report suggests that the children might have been affected by public concern such as it is outlined in the media.

Fear and uneasiness

Apart from imitation and aggression, a few studies on digital games have dealt with fear. According to a Danish study, children say they can become scared and have nightmares after playing digital games, but that movies and fiction on television and in film are more anxiety-provoking. The researchers connect this finding with the type of identification. In the games, the characters do not react emotionally in the way they do in film and TV series, where the viewer feels and experiences along with the movie's or series' characters' development, which is why identification with film and TV violence is thought to be stronger.³¹

Other related influences

A few findings suggest that the violent elements in digital games contribute to desensitization against real violence. However, more research is needed if we are to draw such a conclusion.

A few other findings suggest that, among heavy players of digital games with violent elements, gaming contributes to negative perceptions of the world outside the game (as more aggressive, frightening, dangerous and anxiety-provoking). But additional research is needed in this area as well.

Excessive gaming

Though not directly related to violent representations in games, it is worth mentioning that there is some agreement among researchers concerning one type of harm related to digital games – and that is the consequences of excessive gaming. Very intensive gamers, who constitute a minority of all players, report that they to varying degrees neglect sleep, eating, family, hygiene, study, work, and other leisure activities. There are also findings indicating that excessive gamers meet with friends in real life less often than do those who do not play as much. Certain researchers, however, avoid the term ‘addiction’ or ‘dependence’ here, as such a phenomenon ought to be defined accurately;³² they speak instead of, e.g., ‘problematic usage’ of digital games.

Note that, in this context, some (especially online) games are designed to take time. Such games cannot be played a little now and then, as the player, among other things, plays together with others in a social unit (guild, clan, etc.) for several hours at a time.³³

However, as mentioned, there are also findings indicating that heavy gaming is associated with aggression (although a causal correlation has not been proved).³⁴

The user perspective – different kinds of uses of game violence

Regarding findings from studies adopting a user perspective, empirical data show that what digital game players themselves find most motivating about the playing is not the violence itself, but *the challenge*, i.e., learning to master and advance in the levels of the game, overcoming difficult situations, solving problems, and competing. Essential is also the emotional excitement and immersion that the games give rise to (it is fun, exciting, a relief from everyday routines and demands, etc.). When playing with others, social motives are also important. Playing certain games in certain ways may also be an essential marker of one’s social and cultural group

belonging and lifestyle. However, *the violent elements* in the games have been shown to be a relatively motivating factor as well, primarily for boys.³⁵

Other researchers taking a user perspective have started from the hypothesis that the essence of digital games is precisely their relation to children's play, pleasure and fantasy. Child players report that the fictive violence they engage in is just for fun and does not entail any desire or inclination to hurt (or kill) on their part.³⁶

There are also speculations that playing games might serve as a vent for inner aggression, or at least help satisfy desires that are not allowed to turn into behaviour in everyday life. For instance, one interpretation of young men's interest in video/computer games is that young boys live in a subordinate and powerless societal situation. Thus, playing violent electronic games may signify exercising resistance, giving expression to one's masculinity, creating power and gaining control – on a symbolic level.

Summary of research findings on influences and uses of game violence

In sum, although there is some research indicating a probable causal link between playing violent digital games and subsequent aggression among players, on the whole the research findings are inconclusive.

And even if, to date, some researchers have said that other risk and protective factors do not seem to intermediate between playing violent games and increased aggression among players, it is nevertheless probable that in the broad perspective different game players are influenced differently, because they use and interpret the games in different ways in different contexts. With regard to viewing film and TV with violent representations, personality, gender, social and ethnic affiliations, situational factors, relations with peers, school, family, community, etc., play a role, and these factors – together with different types of media violence – are connected in complex patterns.

Furthermore, there is research indicating that persons who watch a great deal of television violence also tend to be heavy players of violent video games.³⁷ Thus, it is important to carry out more research on the use of different kinds of media contents *in combination*. It is likely that certain individuals are more predisposed to risk than others are when it comes to

digital games as well, something that research might reveal if considering the overall profile of media use, lifestyle, etc. One hypothesis is that digital game violence can be problematic for some children and young people (and adults) under certain circumstances, but that digital game violence does not exert harmful influences on all or the majority of players – and that it is certainly not the sole cause of aggression. Thus, it is reasonable to assume that playing digital games with violent representations will most likely not be injurious if the amount of play is moderate and if one lives in a positive environment with good relations to family, peers and school, etc. It is also likely that parents' insight into playing, and mediation of it (co-using, talking, restricting, and generally serving as a model), are factors that reduce the possible harmful influences of playing on children and adolescents. A few findings also show that certain kinds of media literacy education programmes in the schools can be of value in this respect. Just as in the case of film and TV violence, there is a need for more research on groups of young people at risk.

The Internet

Turning to the internet, it should be emphasized at the outset how few studies exist that focus on the possible influences of representations of violence on the net. The research to date that is relevant in this context has tended to take a more holistic approach, studying opportunities and benefits of the internet vs. *risks* of harmful influences and the internet user's *experiences* of harm – but not harmful influences *per se*. Thus, in the studies, violence as pictured on the internet is regarded as one of a multitude of risks.

Background

Although developed in the early 1960s to protect military communication from external interference, it was when a new generation of software – the World Wide Web (www) browsers – was launched that internet use started to explode in homes and workplaces at the beginning of the 1990s.³⁸ Nevertheless, the digital divide between countries in the world – in terms of access to and use of the internet – is still enormous.³⁹

The hopes and concerns about the internet – that is, about www – are many. Optimists point out that the internet offers gateways to a better societal, civil and personal life regarding health, security, education, culture, pleasure, self-improvement, social contacts, and careers, reducing inequalities between population groups, and increasing democracy and participation among citizens – thereby bringing about economic growth. There are also hopes of, among other things, 'reducing poverty', 'resolving terrorism' and 'achieving sustainable world markets'.⁴⁰

Others wonder whether the internet leads to user addiction and isolation from offline contacts, and it is a fact that many children and adults have come across offensive material, phenomena and persons on the net that they do not want to be acquainted with, subjected to, or meet.

User roles and communication forms related to the internet

The fact that hopes and fears regarding the internet (www) are partly different from those regarding other media has to do with the fact that the internet is not only one (mass) medium alongside the other conventional media mentioned previously.⁴¹ Even if such a media definition of the internet seemed helpful in the childhood of www, the net now encompasses so many practices that it is more suitable to regard it as a virtual space, or a platform, for an almost limitless quantity of diversiform (mass) media and (inter)personal or social media, as well as their intermediary forms.

These different mass and (inter)personal/social media, in their turn, allow the internet user to take on many more roles than the film, television or game user can, and also different roles on different occasions. S/he can be a *receiver* or *consumer* when, e.g., using the conventional (mass) media – books, press, radio, recorded music, television, films – that are adapting to and assimilating their formats and distribution on the net. The user is often also a receiver when visiting websites and portals set up by authorities, institutions, organizations, companies, groups, individuals, etc. On the other hand, the user can be a *producer* or *creator* as well as a *sender* of mediated communication, for instance, when e-mailing, instant messaging, chatting, social networking on sites such as MySpace, FaceBook, etc., writing blogs, uploading contents (his/her own pictures, video clips, low-budget films, music, etc.) or when starting, e.g., alternative, independent radio stations or net papers that are sometimes tied to resistance movements. And between these two extremes – the reception and sender roles – the user can be *interacting* or *participating* to different extents, e.g., in games and in communities owned, maintained and copyrighted by someone else.

Thus, there is a whole gamut of different roles, from the traditional more 'passive' user role in the conventional, asymmetrical, one-way (mass)mediated communication process to the more 'active' role in the reciprocal, symmetrical, two-way (inter)personal or social mediated communication process.

Furthermore, mass mediated and, especially, (inter)personally or socially mediated communication on the internet can also turn into face-to-face communication in real life, when meeting friends or strangers whom one first or previously met on the net. Given this, the internet is related to *all main forms of communication*.

A partly similar way of looking at the user's different roles on the internet is with respect to the concepts of Web 1.0 and Web 2.0. The term Web 2.0 was coined in 2004 to describe how people are increasingly contributing their own content on the internet (Web 2.0), so-called user-generated contents, rather than simply downloading what is already there (Web 1.0). Web 2.0 could be thought of as declaring 'we are the media', in the sense that the former audience, not a few people in the back room, decides what is important. Some characteristics of Web 2.0 (compared to 1.0) are that it offers *services*, not packaged software; that it trusts *users as co-developers*; that it harnesses *collective intelligence*; and that it strives through its customer service and algorithmic data management to *reach out to the entire web* (even to all small sites), that is, to the edges and not just the centre, to the long tail and not just the head.⁴²

Thus, Web 2.0 stands for participation, for websites onto which the user can upload things, for social networking, for blogs, wikis, photo-sharing, video clips, and the like. However, this should not only be regarded as a more democratic web, because it is also controlled by powerful business interests.⁴³ Media on the traditional Web 1.0 also sometimes offered the user moments of participation and interaction (e.g., chatting about certain TV programmes, fan sites on TV series) – but when all is said and done, this was within a framework conditioned by the medium, not by the user.

Subjectively experienced benefits of the internet

If we combine all kinds of contents, communication forms and user roles related to the internet, the enormity of the field of benefits becomes clear. In countries where the net is widespread and the personal costs are not shooting up due to broadband or fixed fees, more and more people, especially adolescents, are coming to regard the internet as their best source of knowledge and information, compared to traditional media and personal contacts. (However, among teenagers, 'information' on the internet, besides information for schoolwork, is often not what many adults mean by information, but often information related to entertainment and everyday practical things.) In these countries, the internet is also regarded by many teenagers as the second best source of entertainment, fun and pleasure (only surpassed by friends), which includes listening to and downloading music, watching and downloading video clips, movies, TV programmes, computer programs, playing games, and communicating with like-minded

individuals. Especially among children and youth, the internet is used intensely for social networking – mainly with friends, both old and new ones and also distant ones through, e.g., message systems and SNS (social networking sites) – explaining why communication and socializing in real life and on the internet become intertwined. That is, the borders of virtual and real life are becoming blurred (you yourself 'are' on the internet, you 'are' the avatar, etc.), something that also adds new dimensions to young people's identity experiments and identity formation. In addition, the internet has many practical functions in ordinary users' everyday life, such as fast information, shopping, etc. Actually, more than half of 17-year-olds in Stockholm in 2006 said that they found the internet addictive.⁴⁴

In countries with television access, television is the medium that traditionally has had the most subjectively experienced benefits for children and young people. However, in countries where internet access is widely spread, the internet has become a clear competitor. It has also been nestling down to 2- to 5-year-olds.

In addition, during many internet activities, it is possible to do something else at the same time. Several research reports tell about advanced multi-tasking among young people, which can involve using the internet, television and mobile phone, and sometimes doing homework, simultaneously.

Risks – in combination with user roles and communication forms

As alluded to above, the fact that all main forms of communication are related to the internet, in combination with the many different user roles, also means a greater spectrum of possible offensive and/or injurious influences of the internet than of conventional media. For children and young people, these harms may be aggravated by the fact, supported by several studies, that many parents have little idea of what their children, especially their teenagers, are actually doing on the internet.

If we consider the traditional media, it is reasonable to believe that more or less similar desirable and undesirable experiences and influences may stem from using these media on the internet as from using them on their old platforms (the TV or radio set, the DVD player, the printed newspaper or book, the CD, etc.).

However, with regard to websites, communities, newsgroups, chat rooms, etc., not all their originators reveal their identity – or the site, group, etc., may disappear and emerge again in another guise reachable via another link. Particularly on these anonymously offered but nevertheless often easily accessible sites and groups, the internet user may intentionally find, or non-intentionally come across, contents that are less common or non-existent in the conventional media – e.g., severe violence, violent pornography, child pornography, racism, hatred, etc. This may entail risks of influences other than those related to identifiable media, producers and senders.

Additional risks of harm are connected with the (inter)personally or socially mediated communication that often addresses specific others – e.g., bullying, threats, violations of privacy and personal integrity, economic crimes, etc., which are often feasible due to the sender's anonymity.

Risks of harm may be even graver in subsequent face-to-face communication in real life.

So alongside the internet's capacity to offer greater freedom of expression and freedom of participation, its inherent capacity to offer anonymity means that certain individuals and groups can more easily violate society's basic legal prohibition of certain material and behaviour than they could using conventional media.⁴⁵ Or the contents and behaviour may belong to grey (immoral, unethical) areas that other, identifiable senders and producers would not stand for.

The internet in a state of flux

Concerns about the internet are partly culturally determined, e.g., by the experiences, ideologies and values found in a certain society. For example, for many Israeli parents 'internet safety' means 'political safety' – they may be more concerned about the internet being used by terrorists than by paedophiles contacting their children.⁴⁶

Concerns about the internet also change over time. It seems, for instance, that apprehensions related to children and young people in many countries largely regard pornography and violence on the net. However, a certain shift is also noticeable. At the beginning, many people feared their child could be lured away and abused by an adult stranger. More recently, however, concerns about cyber-bullying and harassment of child victims by same-age perpetrators have been added to the list.

Thus far, the great variety of media on the internet, and their converging and diverging contents, have been *in a continuous state of change*. New kinds of internet media, contents, uses, opportunities and risks have appeared that did not exist, or were largely unknown, only a few years ago. In all likelihood, new phenomena that we cannot imagine today will develop on the net in the years to come. There are also predictions: Some guess that in a few years a quarter of all entertainment will consist of 'circular entertainment', that is, entertainment that has been created, edited and shared within a circle of peers rather than entertainment produced by the traditional media.⁴⁷ And some more radical predictions claim that ordinary media will not exist at all in the not too distant future.⁴⁸

Expressed concerns about the internet

With the reservation that the hopes and fears concerning the internet's opportunities and risks have appeared during a relatively short period of time, the following list contains some concerns expressed in the public debate, based on existing contents, instances and occurrences on the internet. The examples are not clear-cut and sometimes they overlap. Moreover, the list is not complete:

Concerns for pornography

- sexual contents (for adults, deemed not suitable for children)
- pornography (soft-core, hard-core)
- violent pornography
- child pornography
- non-desired personal sexual contacts
- child grooming⁴⁹ with sexual motives
- paedophilia and other sexual exploitation, abuse and assault in real life

Concerns for physical and mental violence

- obscene language
- depictions of severe violence (both fictive and true-to-life, e.g., torture, executions)
- recipes for weaponry
- violence sects
- cyber-bullying
- 'happy slapping' (where a victim is filmed while being assaulted and the film is uploaded on the internet)

- stalking (obsessive following)
- other kinds of harassments or violations of personal integrity (e.g., posting insulting or humiliating pictures of others on the net)
- violent exploitation, abuse and assault in real life

Concerns for ideologies and values

- biased information/misinformation
- discrimination of all kinds (e.g., of gender, ethnic and religious minority groups, nations)
- expressions of xenophobia, racism, hatred
- expressions of non-desirable political propaganda/ideologies
- terrorism
- expressions of non-desirable religious ideologies
- racist, political or religious exploitation, abuse and assault in real life

Concerns for non-desirable lifestyles

- representations of and incitements to unhealthy body treatment (e.g., anorexia, bulimia, self-harm)
- recipes for drugs
- excessive gambling
- incitements to crime
- incitements to suicide
- problematic user-generated contents

Concerns for marketing and economy

- excessive marketing
- new forms of individually adapted marketing
- new forms of non-discernible marketing
- economic frauds and thefts
- virtual thefts
- violation of copyrights and intellectual property rights
- illegal file-sharing and downloading
- phishing (for passwords, credit card numbers, etc.)
- hacking

Concerns for control

- authorities censoring or regulating information and behaviour on the internet
- authorities controlling personal information and behaviour on the internet

- commercial collection and ownership of personal information and behaviour on the internet
- uploading/posting private information that becomes public without the user understanding future consequences (such as, unwanted contacts, not being employed, etc.)

Concerns for using the internet per se

- excessive use
- isolation
- viruses
- spam (unwanted trash mail)
- etc.

The list gives rise to a couple of reflections. First, it clearly shows that the scope of the concept of 'violence' on and in connection with the internet far exceeds the usual ways of regarding media violence in film, television and digital games (see under 'On the concepts of media violence and aggression' in the section 'Film and Television' p. 9f, as well as in the concluding section 'Towards a Broader Definition of Media Violence' p. 55ff).

Second, the list partly reflects concerns from an adult point of view. In a study of Swedish children's spontaneous contacts via Children's Helpline (by mobile phone, e-mail or chat) to the non-governmental organization BRIS (Children's Rights in Society) in 2007, children also mentioned several of the above-mentioned concerns. But a considerable number of child contacts to BRIS were also about parents' use of IT: Some children had discovered that their fathers visited pornographic websites, in several cases sites with child pornography; that the father – despite an ongoing relationship with the mother – had contact with other women (or younger girls) through various sites; or that the parent/s was/were unfaithful in real life. Other examples of children's discomfort were when parents – owing to excessive use of the internet generally or of gaming or gambling sites – did not devote enough time and attention to them; that the child had contact with one parent only via IT; that one parent said awful things about the other parent via the internet or text messages; or that a parent was terrorizing the child via the internet or text messages.⁵⁰

Examples of research on risks related to the internet

Because research on children, young people and the internet in many respects has still not reached a level that allows results to be generalized, a few scattered examples of findings about risks are presented here. The presented studies mostly come from the U.S. and Europe, as it is there most research has been done.

Content analyses

In the internet's (www's) infancy, some research involved analyses of the prevalence and accessibility of contents or phenomena on the net. Thus, as regards risks, researchers mapped and detected, e.g., extreme violence, violent pornography, child pornography and paedophilia on the net, and found more and worse things out there than expected, and that these things increased in number over time.⁵¹ At present, some of these phenomena are scrutinized by authorities or watch groups and/or are matters for the police.

More recent analyses of the digital media have dealt with new forms of advertising, marketing and selling on the internet, via mobile phones and in computer games. Examples of such advertising are: personally tailored commercial stimuli via the cell phone; advertisers infiltrating instant messaging systems; commercialization of online communities and social networking websites; integration of brands and contents; marketing to individuals on a one-to-one basis; short advertising video clips on, e.g., YouTube, that you can also forward to friends (viral video); peer-to-peer marketing (viral marketing); young people becoming co-creators of and promoting commercials; brands integrating their products into digital games; and advertising through game avatars.⁵²

Adults' concerns and mediation

Several surveys in different regions (for example, Singapore, Australia, Europe and North America) have dealt with the population's or parents' chief concerns for phenomena on the internet, with the parents' own mediation and rules, and with their desire for different kinds of protection and regulation. As mentioned, the findings are culturally determined to a certain extent, and the focus of concern has also shifted somewhat over time.

The user perspective – different uses of violence on the internet

Other research, both previous and ongoing, often involves quantitative surveys or qualitative in-depth studies with internet users themselves. Much of this research focuses on the internet's benefits (see 'Subjectively experienced benefits of the internet' p. 37f).

Research on risks – just as research on the benefits and opportunities of the internet – has partly taken a media perspective, partly a user perspective (see 'The user perspective – different uses of film and TV violence' in the section 'Film and Television' p. 17f).

As an example of a study with a user perspective focusing on internet violence, researchers in a Norwegian qualitative, in-depth study, conducted in the early 2000s, talked with 40 children aged 12-13 and 14-15 years, about, among other things, their possible habit of and interest in visiting websites with violence, pornography and other bizarre elements. The boys were consistently much more interested in these sites than the girls were and maintained that they were more curious than girls were, had a different sense of humour and took it less seriously. The boys had 'travelling sites' with controversial or shocking contents – hard-core porno, animal porno, sadism, morbid violence, mutilations, death, wounded persons, medical pictures of deformed or malformed persons or fetuses, etc. Several such websites mentioned by the boys are cited in the report.⁵³

According to the boys, their reason for visiting the sites was that they wanted to see the 'worst' things (sometimes simultaneously mentioning these sites with disgust). The researchers concluded that for many boys these sites – which the boys themselves called 'unlawful' or 'forbidden' – function as a kind of manhood test and entrance ticket into the male culture, a notion supported by the fact that the boys typically visited such sites in the company of other boys. Thus, the internet becomes an area of experimentation. The boys mentioned also other reasons for visiting these sites: the sites are easily accessible, there are huge numbers of them, they are free of charge, and one can access them anonymously. It appeared that the boys did not believe their parents knew such sites exist, and had never discussed them with their parents.⁵⁴

The media perspective – risks of harmful influences of violence on the internet

In one study, Swedish 9- to 16-year-olds were asked: 'Is there any content on television, film, games and on the internet, that you feel bad about?'. They could choose a maximum of five responses among the fixed response alternatives. Slightly more than 40 per cent (more girls than boys) chose 'shocking pictures on the internet – real pictures or films with dead, bloody people and animals' as content they feel bad about.⁵⁵

Studies with such a media perspective have mostly asked children, young people (and sometimes adults) whether they have deliberately searched for certain contents and contacts on the internet, whether they have unintentionally come across them, whether they have been addressed by others against their wishes, whether they themselves have behaved in one way or another on the net, how they felt when using or running across such phenomena, etc. In this manner, it is possible to get an idea of what contents, contacts and behaviours the user finds offensive or upsetting, as well as what influences that the user her-/himself experiences as harmful. However, such direct inquiry methods do not allow us to detect influences that are harmful even though the user does not experience them as harmful. This requires different, indirect methods, and there is hardly any research of this kind concerning the internet. Furthermore, virtually no one has analysed the long-term consequences of internet contents, contacts and behaviours for users.

According to an investigation in the U.S. carried out in 1999/2000 on how many 10- to 17-year-olds had run across unwanted phenomena on the internet, received solicitations or requests for unwanted activities, or been threatened via the net, 25-50 per cent *of those who were surfing regularly* had encountered such events 'in the past year', and about a quarter *of those who reported these incidents* rated themselves as very or extremely upset or afraid as a result of the incident.⁵⁶

The study was followed-up in 2005 and asked children in the same age range about sexual material, solicitations, threats and harassment on the internet 'in the past year'. A few summarizing findings are:⁵⁷

- One-third of the young internet users saw sexual material online they did not want to see. The youths rated one-fourth *of all exposure incidents* as very or extremely upsetting and one-fourth as very or extremely embarrassing.
- Approximately 1 in 7 (13%) received unwanted sexual solicitations and 4 per cent of all young internet users said online solicitors asked them for nude or

sexually explicit photographs of themselves. Nearly half of the sexual solicitations were from offline acquaintances, mostly peers. And generally, it was much more common for peers and young adults than for adult strangers to make the solicitation. One third of *the youth who were solicited* said the incident left them feeling very or extremely upset and/or very or extremely afraid. These percentages were higher among youth who had been aggressively solicited.

- Nine per cent had been exposed to online harassment (i.e., threats or other offensive behaviour that was not sexual solicitation, sent online to them or posted online about them for others to see). More than one third of *the incidents* were rated as very or extremely upsetting and/or very or extremely frightening.
- During the past year, one third had communicated online with people they did not know personally and about one tenth had formed close online relationships with people they met online.

The report also reveals that seeing sexual material online and online harassment were more prevalent in 2005 than in 1999/2000 (while sexual solicitations were less common).

In general, U.S. research underlines that although the internet increases the risk of being exposed to unwanted sexual material, few such solicitations lead to real-life encounters.⁵⁸

A 2007 overview of studies on harassment and bullying on the internet – in the report called electronic aggression – shows that victimization estimates in different U.S. studies range from about one tenth to about one third of youths, and perpetration estimates range from 4 per cent to 21 per cent of adolescents, where the variation is likely due in part to measurement differences. There is often a relationship between electronic aggression and real-life bullying, and acts of harassment and bullying are most often perpetrated by peers.⁵⁹

As can be seen, percentages vary within the same country depending partly on methodology. Similar studies have been performed in a relatively large number of countries, and when comparing them, percentages vary not only because of the different methods used, but also because of the different cultures and the variation in the spread of and accustomedness to the internet.

In the project EU Kids Online, an overview and analysis of existing European studies on children and the internet in 21 countries, the researchers were specifically interested in identifying online risks. By the end of 2008,

408 studies had been identified, although by no means all treated risks. It appears that many risks have not been studied at all and that researchers have difficulties keeping up with developments on the internet.⁶⁰

Some of the researchers' reflections are: Apart from considerable national variation, it seems that the most researched risks are content related. Generally, research on risks tends to be more concerned with mapping and quantifying risks than asking *why* children exhibit risky behaviour online. And there is little on the *consequences* of risk experiences online. Furthermore, most studies examine the nature and use of websites rather than more interactive, peer-to-peer, multi-user applications (i.e., most evidence is largely focused on Web 1.0 rather than Web 2.0).⁶¹

Bearing in mind that many risks have received little or no attention, the research suggests, according to these scholars, that some risks are more prevalent and/or more homogenous across countries than others are. The findings show an approximate ordering of online risks to teenagers as follows:⁶²

- Giving out personal information: the most common risk in the European studies – around half of online teens do it, with considerable cross-national variation (13% to 91%)
- Seeing pornography: the second most common risk, with around 4 in 10 online teens across Europe doing it, but again with considerable cross-national variation (25% to 71%)
- Seeing violent or hateful content: the third most common risk, with approximately one third of teens doing it (apart from a much higher figure in one country, a fair degree of consistency across countries)
- Being bullied/harassed/stalked: generally around 1 in 5 or 6 teens online experience this (though there is also a group of high-risk countries here and one low-risk country)
- Receiving unwanted sexual comments: ranging from 1 in 10 teens in certain countries to 1 in 2 in one country
- Meeting an online contact offline: the least common but arguably most dangerous risk; there is considerable consistency in the figures across Europe, with around 8 per cent of online teens going to such meetings (in two countries, however, the percentages were much higher). Some research also indicates, however, that many of these contacts are with peers and end up as positive experiences.

A few findings from a later report from the EU Kids Online project are the following:⁶³

- It is teenagers, rather than children in general, who are the digital pioneers in Europe. While children aged 12-17 are more likely to use the internet than are their parents (87% vs. 65%), this is not the case for those under 11 years of age. Hence, for younger children, it is reasonable to expect that parents will understand the internet sufficiently to guide their use, but this may not hold for teenagers.
- In several countries, a degree of distress or feeling uncomfortable or threatened was reported by 15-20 per cent of online teens, suggesting, perhaps, the proportion for whom risk poses a degree of harm. It also seems that increasing opportunities online tend to increase risks, while decreasing risks tend to decrease opportunities.
- There are gender differences in risk: Boys appear more likely to seek out offensive or violent content, to access pornographic content or be sent links to pornographic websites, to meet somebody offline whom they have met online and to give out personal information. Girls appear more likely to be upset by offensive, violent and pornographic material, to chat online with strangers, to receive unwanted sexual comments and to be asked for personal information, but also to be wary of providing it to strangers. Both boys and girls are at risk for online harassment and bullying.
- There is a tendency for parents of higher socio-economic status (SES) to mediate their children's internet use more than parents of lower SES do, and for such mediation to be directed more at girls than at boys. With regard to age, the consistent finding is that of a U curve: Parental mediation increases with age until around 10-11 years and then decreases again.

Patterns of relationships

As mentioned in the preceding section, the research demonstrates certain associations between electronic aggression and victimization, on the one hand, and bullying in real life, on the other. Several U.S. studies have also demonstrated associations between bullying and harassment on the internet and a range of psychosocial difficulties and risk factors, including emotional distress, school conduct problems, weapon-carrying at school, low caregiver-adolescent connectedness, and sexual solicitation.⁶⁴

Research points increasingly at the relationships between risky online behaviour, a troubled home and/or personal life, and corresponding risky offline behaviour.

For example, a U.S. research review from 2008 states that those experiencing difficulties offline, such as physical and sexual abuse, and those with other psychosocial problems are most at risk online.⁶⁵ As for 'sexual

solicitation', 'online harassment', and 'problematic content' – the themes of this review – some youths are consequently more likely to be at risk than others are. Generally speaking, the characteristics of youths who report online victimization are similar to those of youths reporting offline victimization, and those who are vulnerable in one online context are often vulnerable in multiple contexts. Similarly, those identified as 'high risk' (i.e., experienced sexual abuse, physical abuse or parental conflict) were twice as likely to receive online solicitations, and a variety of psychosocial factors (such as alcohol and drug use, sexual aggression, and poor bonds with caregivers) were correlated with online victimization.⁶⁶ Furthermore, children and adolescents engaged in deliberate acts of self-harm are more likely to be contending with other psychosocial issues, have a history of physical or mental abuse as well as a high degree of parent-child conflict, and are more likely to engage in other risky online behaviours.⁶⁷

Thus, these findings do not seem to contradict previous traditional media research (see under 'Aggression' in the section 'Film and Television' p. 11ff) showing that film and TV violence is more likely to contribute to aggression in children who are already aggressive, have a troubled home environment, conflicts at home, poor peer and school relations, etc. Other concurrent factors may be, for instance, use of alcohol and drugs and access to weapons.

One Swedish investigation compared adults' sexual contacts with children via the internet to a pyramid.⁶⁸ In an extensive survey conducted in 2006, one third of all 15-year-olds said that, during the past year, they had been the object of some form of sexual contact on the internet from a previously unknown person who they believed or knew was an adult. (Only two per cent had been the object of a sexual contact from an adult person only offline.) Examples of activities positioned on the base of the pyramid were sexual harassments via chat messages and indecent exposures by the perpetrator via the web cam. Most young people managed to handle these contacts, for instance, by blocking and avoiding the person, although some of these youths felt uneasy and disturbed for a long time. Further up in the pyramid, sexual harassments and the like occur, e.g., via mobile phones, meaning that the victim first must have been persuaded to divulge her/his phone number, or that the victim her-/himself is posing before the cam. At the top of the pyramid are encroachments in which the perpetrator must first make the victim meet him offline so that he can perpetrate the abuse.

The investigation also collected 315 notifications to the police, where the perpetrator and the victim had been in contact via the internet. In nearly 40

per cent of the notifications, a perpetrator who was unknown to the victim before the internet contact succeeded in extending the contact with the victim offline. More than half of these cases (or more than 20 per cent of all notices to the police) included a sexual crime against the victim committed during a meeting with the perpetrator outside the net.

In line with the U.S. studies above, the Swedish investigation shows that youths who say they have been the object of sexual contacts initiated by adults on the internet generally tend to be more risk-taking (e.g., they drink alcohol to intoxication and test drugs). Problems within the family and in school, having been bullied in real life, and being involved in theft and violent crimes are also significantly more common within this group than among other youths.

As mentioned, there is also need for more research on the use of *different media and their contents*, and *opportunities and risks in combination* (i.e., not only singling out specific media) and for more research focused on at-risk children. One example of findings on such a pattern is the following:

- According to Swedish survey performed with ca. 4,350 18-year-olds in 2003, the most common way of viewing pornography among boys of this age was via the internet (86%), followed by cable/satellite TV (81%) and porno magazines (75%). Among girls of the same age, the most common ways to come into contact with pornographic material was cable/satellite TV (61%), porno magazines (40%) and the internet (30%). Nearly 10 per cent of the boys reported that they looked at pornography almost every day (no similar group was found among the girls), and they were categorized as high consumers of pornography. As it turned out, the high consumers' mental health was worse than that of other boys, they had serious behavioural problems to a greater extent, and they had a background including considerably more asocial behaviour. They also had exposed other persons to sexual transgressions and sexual injustices more often than their peers had.⁶⁹
- Furthermore, the high consumers of pornography looked more often than other boys did at violent pornography, child pornography and animal pornography. In addition, these boys were more likely to state that they experienced pornography as exciting and thrilling, that they felt like trying out what they had seen, and that they actually had also tried out sexual acts they had learnt about via pornography.⁷⁰
- It must be stressed that the questions were not formulated in a way that could support a direct relationship between exposure to violent pornography, child pornography and animal pornography, on the one hand, and trying out such sexual acts, on the other, but the authors stated that the research findings do give rise to second thoughts and that more research in this area is required.

For ethical reasons, studies on the (causal) *influences* of using pornography have hardly been conducted with children and younger adolescents. But experiments from the 1980s with young adults in the U.S. found that pornography combined with violence causes men to adopt more callous attitudes towards rape and sexual coercion.⁷¹ And other studies from that period found desensitization to violence in general and sexual violence in particular after viewing sexually explicit content containing violence.⁷² More recent survey research with adolescents, among other countries in The Netherlands, has also taken the internet, in addition to television and magazines, into consideration. The Dutch analysis implies that consuming sexual material, particularly in online movies, is related to beliefs that women are sex objects – the study, thus, provides evidence of correlations, not of causal relationships.⁷³

Another example of a pattern of media uses and other activities is a U.S. *online* study with 10- to 15-year-olds (who, thus, used the internet). The aim of this study was to examine the association between watching depictions of physical violence in the media, including the internet, and seriously violent behaviour. The survey was conducted in 2006 with 1,588 youths. Although online surveys often do not allow sufficient control of the population, sample and non-responses to produce statistically representative results, the patterns of correlations in the study are worth mentioning: Five percent of these youths reported engaging in seriously violent behaviour in the past 12 months, including shooting or stabbing someone, aggravated assault, robbery, and sexual assault. Thirty-eight percent reported exposure to violence online. Exposures to violence in the media, both online and offline, were associated with significantly elevated odds of concurrently reporting seriously violent behaviour. Compared with otherwise similar youths, those who indicated that many, most, or all of the websites they visited depicted real people engaged in violent behaviour were significantly more likely to report their own seriously violent behaviour. After controlling for underlying differences in youth characteristics, it was found that respondents' alcohol use, propensity to respond to stimuli with anger, delinquent peers, lack of parental monitoring, and exposures to violence in the community were associated with significantly increased odds of concurrently reporting seriously violent behaviour.⁷⁴

Thus, although the above findings do not provide evidence of causal influences, the correlational pattern indicates a syndrome in which reports of seriously violent behaviour are associated with use of mediated violence across different media, where violent representations on the internet seem to be of particular concern.⁷⁵

Mobile phones

Background

It was during the first half of the 1980s that mobile phones started to become available for the larger parts of the population, although the history of mobile telephony is much older. Nowadays such phones have appeared in several 'generations', refined with more and more subtleties and gadgets. Use of mobile phones has also continuously reached lower ages. Children's and young people's use of mobiles means, among other things, intensified social contacts and entertainment (music, games, photos, films, etc.) – via SMS (short message service, text messages), MMS (multimedia message service, messages containing text, photos, music, video, etc.) and ordinary phone calls.

Because of the huge digital divide in the world in terms of access to and use of the internet, in recent years some have set their hopes on mobile phones as an alternative medium and as an entrance to the internet. The number of mobile customers around the world by far supersedes the number of internet users, and cell phones are also widespread in poor countries.⁷⁶

Accessing the internet via mobile phones

However, *actual use of the internet via the mobile phone* is still relatively rare in most groups and countries. There are exceptions, though – Japanese teenagers use internet e-mail on their phones to a much higher degree than on the computer. For instance, in 2006 teenage girls in Japan spent on average nearly one hour daily e-mailing via their mobile phones, most frequently in the evenings and with friends. The most common simultaneous activity was watching television.⁷⁷ It appears that mobile e-mailing has a similar function as text messaging, a popular mobile phone activity among young people in many other countries. According to the Japanese researchers, the cell phone also seems to have entered into and become a fixture in the relationship between television and the computer. This multi-screen relationship means that the simultaneous combinations of using these three screens are becoming more and more varied.⁷⁸

Some expressed concerns about mobile phones

While optimists mean that the cell phone could bridge or diminish the internet divide in the future, there are also concerns. For young people, these

relate, among other things, to health (such as over-exposure to radiation from mobile phones) and to the fact that text messages and pictures are also used for bullying, for 'happy slapping' and for hanging out peers (or not privately known persons) on the internet. All kinds of risks related to the internet will also be valid for mobile phones when they, in the future, enable smooth and easy entry to the net.

Specific to the use of mobile phones is also that they can fall outside the realm of parental control, even more so than use of the fixed internet from the home computer. Moreover, cell phones encourage marketers to produce new, more individual and intimate forms of advertising aimed at children and young people, who are increasingly viewed as promising targets in attempts to raise consumption.

Research on mobile phones sometimes overlaps research on the internet, for example with regard to bullying. Different mobile phone studies yield different findings in this respect, however.⁷⁹

Summary of research findings on the risks of harmful influences of violence on the internet

Our scientifically based knowledge about the possible harmful influences of internet violence is limited to studies in which internet users report how they have experienced coming across or being subjected to such violence (becoming upset, afraid, offended, embarrassed, etc.). One reason for this scarcity of research is, at least in part, that the internet entails many risks of harm – the flipside of its many opportunities and benefits – which is why most research has sought to map the manifold risks associated with the internet. Of these, possible encounters in real life (*face-to-face communication* and related behaviour with strangers whom one first met on the internet, as well as the possible harmful consequences of this) have been regarded as the most serious risk. A relatively great amount of attention has also been paid to cyber-bullying and other kinds of harassment between peers on the internet and via mobile phones (*interpersonally or socially mediated communication*). The possible harm resulting from use of violent texts, pictures, films, etc., on websites and in the conventional mass media placed on the internet (*mass communication*) has, thus, been outdistanced by other research interests or has not been clearly singled out in relation to other risks.

At the same time, there are many risks associated with the internet that have not been investigated at all.

However, this does not mean there is no need to study violent internet representations. On the contrary, many parents are concerned that their children will see violently explicit images on the net.⁸⁰ And the research examples mentioned in this section on the internet reveal that many children and adolescents actually see or search for violent content on the net, and that relatively many children also feel particularly bad about seeing realistic pictures and films with violence on the internet.

The research also points out that some young people are more likely to be at risk than others are, namely those with, among other things, a conflict-ridden and troubled home environment. Moreover, there is often a correlation between (risky) offline behaviours and (risky) online behaviours. It would seem that studies taking a multiple media approach – studying the overall media user profile in combination with background variables and the media users' ideas, feelings and behaviours – are necessary in the future.

Towards a Broader Definition of Media Violence

There seems not only to be a need for research that takes a multiple media approach (see the preceding paragraph), but, as alluded to previously, we may also need a broader definition of media violence when considering the internet. In relation to film, television and video/computer games, the violent representations most often referred to in the public debate, as well as dealt with in research, are depictions of visible, manifest, physical violence, and the threat of such violence. However, definitions of media violence are hypothetical constructs, and because the internet comprises almost an infinity of contents, is related to all main forms of communication and offers a great number of user roles – and therefore implies different kinds of violence and aggression – it may be relevant to discuss when it is appropriate to use different definitions of media violence (violent representations) and, for instance, electronic/digital aggression (e.g., cyber-bullying), respectively, and when it is appropriate to use a more comprehensive definition of *mediated* violence and aggression.

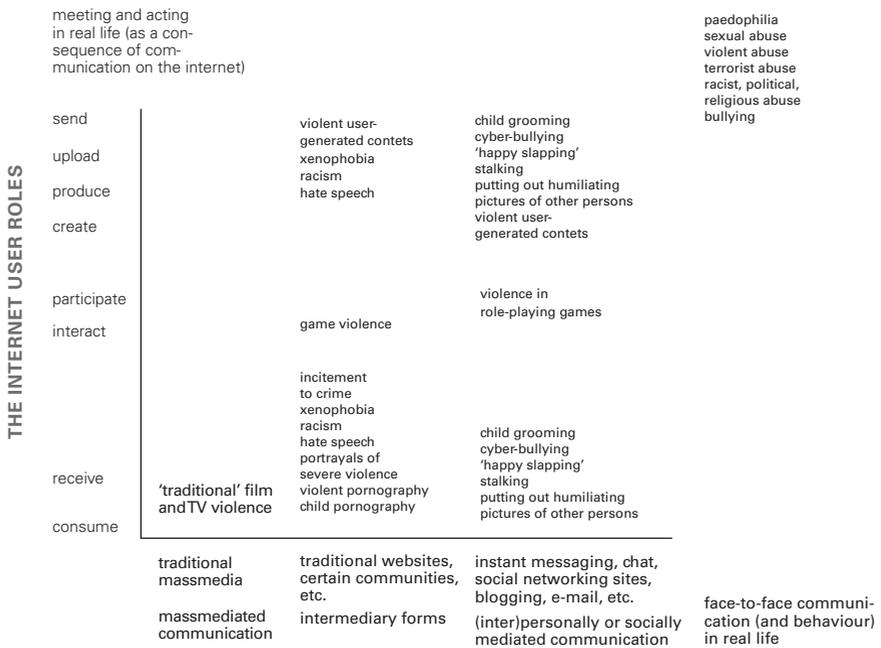
Naturally, research aimed at studying specific violent contents or aggressive communication or actions on the internet may benefit from specific definitions. But if we wish to study people's use of multiple media contents and overall violent or aggressive communication and behaviour, as well as its influences in a broader context (different user profiles, lifestyles, positions in the social hierarchy, etc.), then a broader approach to all kinds of mediated violence and aggression may well be appropriate.

Such an approach to or definition of mediated violence could be: 'every mediated act intended to hurt or the consequences of such an act' (bearing in mind that in mediated contents we cannot always see or know everything about the act, its intention and its consequences). The definition includes visual, audio and printed representations of violence, hatred, etc., in mass media, digital games, on websites, in net communities, and so on, as well as acts of destructive aggression through (inter)personal and social media – and also offline 'in real life' if the act was initiated on the internet. Furthermore, the definition includes physical, verbal (e.g., threat) and nonverbal (e.g., exclusion) violence/destructive aggression

that can lead to physical and/or mental harm or suffering. The violence/destructive aggression can also be societal (e.g., war, police abuse, the power of authorities and institutions over the individual, arbitrary deprivation of liberty) and can be directed at societies, groups or individuals, oneself, animals, nature, and objects. It can also exist within the individual (e.g., strong feelings of guilt owing to inadequate insight into the true nature of a problem).

If we interpret such a definition in a more traditional way, the figure below gives examples of what could be considered mediated violence/destructive aggression on the internet.

EXAMPLES OF MEDIATED VIOLENCE/DESTRUCTIVE AGGRESSION ON THE INTERNET



FORMS OF COMMUNICATION RELATED TO THE INTERNET

It may also be important to think about mediated violence/destructive aggression in an even broader way – that is, oppression and structural violence (arising from gender roles, majority-minority relations, etc.) – meaning every mediated intentional act that works against

- the realization of human rights,⁸¹ e.g., 'All human beings are born free and equal in dignity and rights' (Article 1)
- the realization of children's rights,⁸² e.g., 'In all actions concerning children [...] the best interests of the child shall be a primary consideration' (Article 3)
- ensuring environmental stability by reversing the loss of environmental resources (Goal 7)⁸³

In this way, most acts related to the concerns expressed about the internet would be included in the concept of mediated violence/destructive aggression.

Notes

1. Because of the summarizing character of this booklet and the great amount of research in the area, references to single research studies are only made in a few concrete cases.
2. The statistical explanation is the square of causal correlations, of which the latter range from 0.10 to 0.30 in different studies (and seldom are zero correlations).
3. Some researchers mean that the upper size of the causal correlations mentioned in note 2 is similar to those causal correlations showing that smoking leads to lung cancer.
4. Sachiko I. Kodaira (1998) "A Review of Research on Media Violence in Japan," in Ulla Carlsson & Cecilia von Feilitzen (eds.) *Children and Media Violence*. Yearbook from The UNESCO International Clearinghouse on Children and Violence on the Screen. Göteborg University, Nordicom, pp. 81-105.
5. Barbara J. Wilson, Dale Kunkel, Dan Linz, James Potter, Ed Donnerstein, Stacy L. Smith, Eva Blumenthal & Timothy Gray (1997) "Part 1. Violence in Television Programming Overall: University of California, Santa Barbara Study," in *National Television Violence Study. Volume 1*. Newbury Park, Ca, Sage Publications, Inc., pp. 3-268.
6. Akira Sakamoto (2000) "Video Games and Violence. Controversy and Research in Japan," in Cecilia von Feilitzen & Ulla Carlsson (eds.) *Children in the New Media Landscape. Games, Pornography, Perceptions*. Yearbook from the UNESCO International Clearinghouse on Children and Violence on the Screen. Göteborg University, Nordicom, pp. 61-77.
7. David E. Morrison et al. (1999) *Defining Violence: The Search for Understanding*. University of Luton Press.
8. Philip Schlesinger, R. Emerson Dobash, Russel P. Dobash & C. Kay Weaver (1992) *Women Viewing Violence*. London, British Film Institute Publishing.
9. Lars Cernerud (1987) *Skolhälsovården i Stockholm 1986-1987. En redovisning av skolhälsovårdens verksamhet* [School Health Service in Stockholm 1986-1987. An account of the activity of the school health service]. Stockholms skolor, and follow-up interviews with pupils.
10. These investigations were initiated by George Gerbner and colleagues in the U.S. and have been repeated in several other countries – sometimes but not always with the same results.
11. See, e.g., Ellen Wartella, Adriana Olivarez & Nancy Jennings (1998) "Children and Television Violence in the United States," in Ulla Carlsson & Cecilia von Feilitzen (eds.) *Children and Media Violence*. Yearbook from the UNESCO International Clearinghouse on Children and Violence on the Screen. Göteborg University, Nordicom, pp. 55-62.
12. Kirill Tarasov (2000) "Film Violence: Attraction and Repulsion," *News from ICCVOS*, No. 2, 2000, pp. 5-6.
13. See, e.g., Keith Roe (1983) *The Influence of Video Technology in Adolescence*. Lund University, Department of Sociology, Mediapanel No. 27.
14. Dolf Zillman, James B. Weaver, Norbert Mundorf & Charles F. Aust (1986) "Effects on an Opposite-gender Companion's Affect to Horror on Distress, Delight, and Attraction," *Journal of Personality and Social Psychology*, 51, pp. 586-594.
15. Tove Arendt Rasmussen (1989) "Actionfilm og drengekultur [Action Films and Boys' Culture]," in Lennard Højbjerg (red) *Reception af levende billeder*. København, Akademisk Forlag, pp. 221-234.
16. Tatiana Merlo Flores (2000) *El Impacto Social de la Imagen*. Buenos Aires, Ediciones de la Universidad Católica Argentina, UNIVERSITAS S.R.L.
17. Ragnhild T. Bjørnebekk (1998) "Violence Against the Eye," *News on Children and Violence on the Screen*, No. 2-3, 1998, p. 5.
Gudrun Uddén (1998) "You Want to Be a Hero" – *Young Criminals' Thoughts about Real Violence and Film Violence*. Stockholm, The Council on Media Violence/The National Council for Crime Prevention.
18. Percy H. Tannenbaum (1980) "Entertainment as Vicarious Emotional Experience," in Percy H. Tannenbaum (ed.) *The Entertainment Functions of Television*. Hillsdale, NJ, Erlbaum, pp. 107-131.

19. Jerome L. Singer & Dorothy G. Singer (1983) "Implications of Childhood Television Viewing for Cognition, Imagination and Emotion", in Jennings Bryant & Daniel R. Anderson (eds.) *Children's Understanding of Television*. London, Academic Press, pp. 265-295.
20. Nancy Signorielli (1990) "Television's mean and dangerous world: A continuation of the cultural indicators perspective", in Nancy Signorielli & Michael Morgan (eds.) *Cultivation Analysis. New directions in media effects research*. Newbury Park, Sage, pp. 85-106.
21. See note 12.
22. See note 35.
23. George Gerbner (1997) "Violence in TV Drama", *News on Children and Violence on the Screen*, No. 3, 1997, pp. 6-7.
24. Stephen Kline (2000) "Killing Time? A Canadian Meditation on Video Game Culture", in Cecilia von Feilitzen & Ulla Carlsson (eds.) *Children in the New Media Landscape. Games, Pornography, Perceptions*. Yearbook from the UNESCO International Clearinghouse on Children and Violence on the Screen. Göteborg University, Nordicom, pp. 35-59.
25. Mark Griffiths (2000) "Video Game Violence and Aggression. A Review of Research", in Cecilia von Feilitzen & Ulla Carlsson (eds.) *Children in the New Media Landscape. Games, Pornography, Perceptions*. Yearbook from The UNESCO International Clearinghouse on Children and Violence on the Screen. Göteborg University, Nordicom, pp. 31-33.
26. David Brake (2007) "Electronic Games, Effects of." *Encyclopedia of Children, Adolescents, and the Media. Vol. 1*. Thousand Oaks, CA: Sage Reference, 2007, pp. 268-271, Gale Virtual Reference Library. Gale. Södertörns Högskolebibliotek, 26 March 2008, http://go.galegroup.com.till.biblextern.sh.se/ps/start.do?p=GVRL&u=sh_web.
27. E.g., Craig A. Anderson, Douglas A. Gentile & Katherine E. Buckley (2007) *Violent Video Game Effects on Children and Adolescents. Theory, Research, and Public Policy*. New York, Oxford University Press.
Akira Sakamoto (2000) "Video Games and Violence. Controversy and Research in Japan", in Cecilia von Feilitzen & Ulla Carlsson (eds.) *Children in the New Media Landscape. Games, Pornography, Perceptions*. Yearbook from the UNESCO International Clearinghouse on Children and Violence on the Screen. Göteborg University, Nordicom, pp. 61-77.
28. Craig A. Anderson, Akira Sakamoto, Douglas A. Gentile, Nobuko Ithori, Akiko Shibuya, Shintaro Yukawa, Mayumi Naito & Kumiko Kobayashi (2008) "Longitudinal Effects of Violent Video Games on Aggression in Japan and in the United States", *Pediatrics*, Vol. 122, No. 5, November, pp. e1067-e1072, <http://pediatrics.aappublications.org/cgi/content/full/122/5/e1067#F1> (December 2008).
29. E.g., Alexander Ask, Martha Augoustinos & Anthony H. Winefeld (2000) "To Kill or Not To Kill", in Cecilia von Feilitzen & Ulla Carlsson (eds.) *Children in the New Media Landscape. Games, Pornography, Perceptions*. Yearbook from the UNESCO International Clearinghouse on Children and Violence on the Screen. Göteborg University, Nordicom, pp. 83-92.
30. http://www.ofcom.org.uk/advice/media_literacy/medlitpub/medlitpubrssi/ml_childrens08/ml_childrens08.pdf (September 2008).
31. Birgitte Holm Sørensen & Carsten Jessen (2000) "It Isn't Real. Children, Computer Games, Violence and Reality", in Cecilia von Feilitzen & Ulla Carlsson (eds.) *Children in the New Media Landscape. Games, Pornography, Perceptions*. Yearbook from The UNESCO International Clearinghouse on Children and Violence on the Screen. Göteborg University, Nordicom, pp. 119-122.
32. Mark D. Griffiths (2007) "Videogame Addiction: Fact or Fiction?"; in Teena Willoughby & Eileen Wood (eds.) *Children's Learning in a Digital World*. Oxford, Blackwell, pp. 85-103.
33. Jonas Linderoth & Ulrika Bennerstedt (2008) *Living in World of Warcraft – the thoughts and experiences of ten young people*. Göteborg University, Department of Education & Stockholm, The Media Council, http://www.medieradet.se/upload/Rapporter_pdf/World_of_Warcraft_eng.pdf (December 2008).
34. Mark D. Griffiths & N. Hunt (1998) "Dependence on Computer Games by Adolescents", *Psychological Reports*, Vol. 82, pp. 475-480.

35. See, e.g., Peter Nikken (2000) "Boys, Girls and Violent Video Games. The Views of Dutch Children," in Cecilia von Feilitzen & Ulla Carlsson (eds.) *Children in the New Media Landscape. Games, Pornography, Perceptions*. Yearbook from The UNESCO International Clearinghouse on Children and Violence on the Screen. Göteborg University, Nordicom, pp. 93-102.
36. See note 31.
37. William G. Kronenberger, Vincent P. Mathews, David W. Dunn, Yang Wang, Elisabeth A. Wood, Joelle J. Larsen, Mary E. Rembusch, Mark J. Lowe, Ann L. Giauque & Joseph T. Lurito (2005) "Media violence exposure in aggressive and control adolescents: differences in self- and parent-reported exposure to violence on television and in video games," *Aggressive Behavior*, Vol. 31, No. 3, pp. 201–216.
38. Tor A. Evjen & Ragnhild T. Bjørnebekk (2000) "Basic Technology from the User's Perspective," in Cecilia von Feilitzen & Ulla Carlsson (eds.) *Children in the New Media Landscape. Games, Pornography, Perceptions*. Yearbook from The UNESCO International Clearinghouse on Children and Violence on the Screen. Göteborg University, Nordicom, pp. 163-167.
39. According to statistics from December 2008 – where an internet user is defined as a person who must have a) available access to an internet connection point, and b) the basic knowledge required to use web technology – the internet penetration is 24 per cent of the world population. Distributed by geographical continents, the corresponding figures are: 74 per cent of the population in North America, 60 per cent in Australia/Oceania, 49 per cent in Europe, 30 per cent in Latin America, 23 per cent in the Middle East, 17 per cent in Asia, and 6 per cent in Africa. <http://www.internetworldstats.com/surfing.htm> (March 2009). Internet usage information presented in this source is said to come from data published by Nielsen/NetRatings, by the International Telecommunications Union, by local NICs, and 'other reliable sources'.
40. <http://www.digitaldivide.org/dd/digitaldivide.html> (June 2007).
41. It is true that the internet can be defined as a (mass) medium, as all communication there comes about by means of *technology*, as there is an underlying *organization* (internet service providers, ISPs, and others) that makes communication possible, and as the information and communication on the internet are more or less *public*. However, there are websites and sources on the internet based on other organization/s than the ISPs, and certain communication comes into existence because of the activities of small groups or single individuals. Moreover, not all information and communication on the net are open and accessible to everyone.
42. For more details, technological aspects and consequences for the market, see Tim O'Reilly (2005) *What Is Web 2.0. Design Patterns and Business Models for the Next Generation of Software*, <http://www.oreilly.com/pub/a/oreilly/tim/news/2005/09/30/what-is-web-20.html?page=1> (September 2008).
43. For example, MySpace is owned by the media mogul Rupert Murdoch's NewsCorporation, YouTube is owned by the U.S. internet company Google, and the pictures and other information you put in FaceBook are owned not by you – but by FaceBook. These and other web 2.0 communities are said to be gold mines for advertisers.
44. Cecilia von Feilitzen & Peter Petrov (in progress) *The Role of Media for Identity and Democracy*. Södertörn University.
45. The formulations of such laws differ from country to country.
46. Dafna Lemish & Rivka Ribak (2007) *Israeli Children Go Online*, <http://www.eukidsonline.net> (see under 'Current Newsletter' and 'PowerPoint Presentations') (October 2008).
47. Nokia (2007) *A Glimpse of the Next Episode*, <http://www.nokia.com/A4136001?newsid=1172517> (November 2008).
48. 'The end of mass media', however, was announced more than thirty years ago – see p. 22 in Denis McQuail "Rethinking the Concept of Mass Communication for the Digital Age," in Elena Vartanova (ed.) (2007) *Media and Change*. Moscow, MediaMir, pp. 13-27.
49. Child grooming refers to befriending a child, often in the negative context of preparing her/him to accept inappropriate behaviour.
50. Thomas Jonsland & Peter Irgens (2008) *The Children, BRIS and IT. A study of young people's contacts with BRIS about the internet, IT and mobile telephony 2008*.

- Stockholm, BRIS (Children's Rights in Society), http://www.bris.se/upload/Articles/it_rapport_300dpi.pdf (December 2008).
51. E.g., Ragnhild T. Bjørnebekk & Tor A. Evjen (2000) "Violent Pornography on the internet. A Study of Accessibility and Prevalence", in Cecilia von Feilitzen & Ulla Carlsson (eds.) *Children in the New Media Landscape. Games, Pornography, Perceptions*. Yearbook from The UNESCO International Clearinghouse on Children and Violence on the Screen. Göteborg University, Nordicom, pp. 185-206.
Mark Griffiths (2000) "Sex on the Internet. Issues, Concerns and Implications", in Cecilia von Feilitzen & Ulla Carlsson (eds.) *Children in the New Media Landscape. Games, Pornography, Perceptions*. Yearbook from The UNESCO International Clearinghouse on Children and Violence on the Screen. Göteborg University, Nordicom, pp. 169-184.
Jo Groebel & Lucia Smit (1997) *Gewalt im Internet. Report für die Enquete-Kommission 'Zukunft der Medien' des Deutschen Bundestages*. Universität Utrecht, Departement Media Psychology.
 - Rachel O'Connell (2000) "Paedophile Information Networks in Cyberspace", in Cecilia von Feilitzen & Ulla Carlsson (eds.) *Children in the New Media Landscape. Games, Pornography, Perceptions*. Yearbook from The UNESCO International Clearinghouse on Children and Violence on the Screen. Göteborg University, Nordicom, pp. 207-210.
 52. Kathryn C. Montgomery & Jeff Chester (2007) "Food Advertising to Children in the New Digital Ecosystem", in Karin M. Ekström & Birgitte Tufte (eds.) *Children, Media and Consumption. On the Front Edge*. Yearbook from The International Clearinghouse on Children, Youth and Media. Göteborg University, Nordicom, pp. 179-193.
 53. Taran L. Bjørnstad & Tom Ellingsen (2002) *Nettsvermere. En rapport om ungdom och internett* [Net Swarms. A report on youth and the internet]. Oslo, Statens Filmtilsyn <http://www.medietilsynet.no/Documents/Selvbetjening/Bestilling/Nettsvermere.pdf>.
 54. See note 53.
 55. *Ungar och medier 2008* [Kids and Media 2008]. Stockholm, Medierådet, http://www.medieradet.se/upload/Rapporter_pdf/Ungar_&_Medier_2008.pdf (November 2008).
 56. David Finkelhor, Kimberly J. Mitchell & Janis Wolak (2000) *Online Victimization. A Report on the Nation's Youth* by the Crimes Against Children Research Center. National Center for Missing & Exploited Children, Office of Juvenile Justice and Delinquency Prevention, U.S. Department of Justice, <http://www.unh.edu/ccrc> (August 2001).
 57. Janis Wolak, Kimberly Mitchell & David Finkelhor (2006) *Online Victimization of Youth: Five Years Later*. University of New Hampshire, The Crimes Against Children Research Center, National Center for Missing & Exploited Children, <http://www.unh.edu/ccrc/pdf/CV138.pdf> (January 2007).
 58. The Berkman Center for Internet & Society at Harvard University (2008) "Appendix C: Research Advisory Board Literature Review: Online Threats to Youth: Solicitation, Harassment, and Problematic Content. Literature Review Prepared for the Internet Safety Technical Task Force", in *Enhancing Child Safety & Online Technologies: Final report of the internet safety technical taskforce*. To the Multi-State Working Group on Social Networking of State Attorneys General of the United States, http://cyber.law.harvard.edu/sites/cyber.law.harvard.edu/files/ISTTF_Final_Report-APPENDIX_C_Lit_Review_121808.pdf (January 2009).
 59. Corinne David-Ferdon & Marci Feldman Hertz (2007) "Electronic Media, Violence, and Adolescents: An Emerging Public Health Problem", *Journal of Adolescent Health*, Vol. 41, pp. S1-S5, [http://www.jahonline.org/article/S1054-139X\(07\)00364-3/fulltext#abstract](http://www.jahonline.org/article/S1054-139X(07)00364-3/fulltext#abstract) (January 2008).
 60. "Growing body of research on online risk in Europe", the 4th Alert from EU Kids Online, March 2008, <http://www.eukidsonline.net> (September 2008). The project is led by Sonia Livingstone and Leslie Haddon at the London School of Economics and Political Science.
 61. See note 60.
 62. See note 60.
 63. Uwe Hasebrink, Sonia Livingstone & Leslie Haddon (eds.) *Comparing Children's Online Opportunities and Risks across Europe: Cross-national Comparisons for EU Kids Online*, a report for the EC Safer Internet Plus Programme, 2008, <http://www.eukidsonline.net> (December 2008).

64. See note 59.
65. See note 58, p. 20.
66. See note 58, p. 39.
67. See note 58, p. 33.
68. David Shannon (2007): *Vuxnas sexuella kontakter med barn via internet. Omfattning, karaktär, åtgärder* [Adults' Sexual Contacts with Children via the Internet. Extent, Character, Measures]. Rapport 2007:11. Stockholm, Brottsförebyggande rådet.
69. Carl-Göran Svedin & Ingrid Åkerman (2006) "Ungdom och pornografi – hur pornografi i media används, upplevs och påverkar pojkar respektive flickor" [Youth and Pornography – How Pornography in Media is Used and Experienced and Influences Boys and Girls], in *Koll på porr – skilda röster om sex, pornografi, medier och unga*. Stockholm, Kulturdepartementet, Medierådet, pp. 87-100.
70. See note 69.
71. D. Zillman (1982) and E.I. Donnerstein & Dan G. Linz (1986), cited in Ellen Wartella, Ronda Scantlin, Jennifer Kotler, Aletha C. Huston & Edward Donnerstein (2000) "Effects of Sexual Content in the Media on Children and Adolescents", in Cecilia von Feilitzen & Ulla Carlsson (eds.) *Children in the New Media Landscape. Games, Pornography, Perceptions*. Yearbook from The UNESCO International Clearinghouse on Children and Violence on the Screen. Göteborg University, Nordicom, pp. 141-153.
72. D.G. Linz, E.I. Donnerstein & S. Penrod (1988) and D.G. Linz, E.I. Donnerstein & S.M. Adams (1989), cited in Ellen Wartella et al. (see note 71).
73. Jochen Peter & Patti M. Valkenburg (2007) "Adolescents' exposure to a sexualized media environment and notions of women as sex objects", *Sex Roles*, 56, pp. 381-395, http://www.cam-ascore.nl/images/documents/2007_teen_sex_media.pdf (December 2008).
74. Michele L. Ybarra, Marie Diener-West, Dana Markow, Philip J. Leaf, Merle Hamburger & Paul Boxer (2008) "Linkages Between Internet and Other Media Violence With Seriously Violent Behavior by Youth", *Pediatrics*, Vol. 122, No. 5, November 2008, pp. 929-937.
75. See note 74.
76. The number of mobile customers around the world was estimated at 4.1 billion at the end of 2008 with the majority of these customers in a developing country (see, e.g., <http://www.themobileworld.com>, April 2009). This means that there are more than twice as many mobile customers as the ca. 1.6 billion internet users in December 2008, according to the statistics mentioned in note 39, provided the figures are comparable. Mobile phone technology has been making a particular difference in areas where it is difficult and costly to build fixed-line infrastructure and net access. For example, in some countries mobiles are being extensively used for e-learning, e-commerce, and e-government.
77. Sachiko Nakano & Yoko Watanabe (2008) "Rapid Growth of Internet Use: From the 'Time Use Survey in the IT Age' 2006", in *NHK Broadcasting Studies. An International Annual of Broadcasting Science*, No. 6 (Chief Editor: Sachiko I. Kodaira), pp. 175-203.
78. Yuji Suzuki, Ritsu Yonekura, Sachiko Nakano & Noriko Nishimura (2008) "Mobile Phones as Multiple Information Terminals: From the Research Project 'People and Media Usage in Japan' ", in *NHK Broadcasting Studies. An International Annual of Broadcasting Science*, No. 6 (Chief Editor: Sachiko I. Kodaira), pp. 151-173.
79. Leslie Haddon (2007) *Concerns about Children and Mobile Phone Communications: A Review of Academic Research*. A Report for Vodafone. University of Surrey, Digital World Research Centre.
80. For example: In the 27 European Union Member States in October 2008, parents of 6- to 17-year-olds were asked, for each of eight fixed possible risks, how worried they were that this could happen to their child. The risks included: viewing *inappropriate content*, making contact with *someone who might be intent on grooming* a young person and revealing *personal information*. Expressed in European 'averages', the largest proportion of parents (65%) were worried that their child might see sexually or violently explicit images on the internet. Sixty per cent were also worried that their child might have access to information about self-

harm, suicide or anorexia.

In terms of contact, parents were most worried about their child becoming a victim of online grooming (60%), followed by the fact that their child could be bullied online by other children (54%) or bullied by others via their mobile phone (49%).

Parents were least worried that their child might reveal personal or private information when using the internet, although almost half of the parents were worried about this, too.

Source: Flash Eurobarometer 248: *Towards a safer use of the Internet for children in the EU – a parents' perspective*. European Commission, http://ec.europa.eu/information_society/activities/sip/docs/eurobarometer/analyticalreport_2008.pdf (December 2008).

81. Universal Declaration of Human Rights, <http://www.unhcr.ch/udhr/lang/eng.pdf>
82. UN Convention on the Rights of the Child, <http://www2.ohchr.org/english/law/crc.htm>
83. Millennium Development Goals, <http://www.un.org/millenniumgoals/environ.shtml>

Books on children, young people and media

Clearinghouse Yearbooks

Norma Pecora, Enyonam Osei-Hwere & Ulla Carlsson (Eds): *African Media, African Children. Yearbook 2008.*

Karin M. Ekström & Birgitte Tufte (Eds): *Children, Media and Consumption. On the Front Edge. Yearbook 2007.*

Ulla Carlsson & Cecilia von Feilitzen (Eds): *In the Service of Young People? Studies and Reflections on Media in the Digital Age. Yearbook 2005/2006.*

Cecilia von Feilitzen (Ed.): *Young People, Soap Operas and Reality TV. Yearbook 2004.*

Cecilia von Feilitzen & Ulla Carlsson (Eds): *Promote or Protect? Perspectives on Media Literacy and Media Regulations. Yearbook 2003.*

Cecilia von Feilitzen & Ulla Carlsson (Eds): *Children, Young People and Media Globalisation. Yearbook 2002.*

Cecilia von Feilitzen & Catharina Bucht: *Outlooks on Children and Media. Child Rights, Media Trends, Media Research, Media Literacy, Child Participation, Declarations. Yearbook 2001.*

Cecilia von Feilitzen & Ulla Carlsson (Eds): *Children in the New Media Landscape. Games, Pornography, Perceptions. Yearbook 2000.*

Cecilia von Feilitzen & Ulla Carlsson (Eds): *Children and Media. Image, Education, Participation. Yearbook 1999.*

Ulla Carlsson & Cecilia von Feilitzen (Eds): *Children and Media Violence. Yearbook 1998.*

Other publications

Ingegerd Rydin & Ulrika Sjöberg (Eds): *Mediated Crossroads. Identity, Youth Culture and Ethnicity. Theoretical and Methodological Challenges.* Nordicom, University of Gothenburg, 2008.

Ulla Carlsson, Samy Tayie, Geneviève Jacquinet-Delaunay and José Manuel Pérez Tornero (Eds): *Empowerment Through Media Education. An Intercultural Dialogue.* The International Clearinghouse on Children, Youth and Media in co-operation with UNESCO, Dar Graphit and the Mentor Association, 2008.

Ulla Carlsson (Ed.): *Regulation, Awareness, Empowerment. Young People and Harmful Media Content in the Digital Age.* International Clearinghouse on Children, Youth and Media in co-operation with UNESCO, 2006.

Maria Jacobson: *Young People and Gendered Media Messages.* International Clearinghouse on Children, Youth and Media, 2005.

Simon Egenfeldt-Nielsen & Jonas Heide Smith: *Playing with Fire. How do Computer Games Influence the Player?* International Clearinghouse on Children, Youth and Media, 2004.

Ingegerd Rydin (Ed.): *Media Fascinations. Perspectives on Young People's Meaning Making.* Nordicom, Göteborg University, 2003.

Cecilia von Feilitzen: *Influences of Media Violence. A Brief Research Summary.* International Clearinghouse on Children, Youth and Media, 2001.

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