Digital Citizenship

Growing up with Social Media

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"You understand Teacher, don't you, that when you have a mother who's an angel and a father who is a cannibal king, and when you have sailed on the ocean all your whole life, then you don't know just how to behave in school with all the apples and ibexes."

Astrid Lindgren in Pippi Longstocking

Abstract

Children today grow up with a plurality of technological opportunities. In the last ten years the digital development has enable multiple possibilities to participate in a so called 'digitally mediated society'. Ever since the discussions do not stop, in what way do children learn a responsible use of digital media. How do children develop to Digital Citizens in the future?

For the investigation of the question an empirical study, inspired by living fieldwork and the concept of media repertoires, was conducted. The theoretical identified stages of Digital Citizenship – access, use, understanding and creation – are taken as milestones for the development of children to Digital Citizens. Different forms of participation and the socialization process into digital media were studied in four families in order to identify different ways of education.

From the results it seems that children in the families with the use of digital media as addition to traditional education, have - by the current view - better requirements to develop to Digital Citizens. The children are strongly limited in their range of digital content, what leads to a better understanding of consequences in their digital actions than in the case of children who live in families where digital media have replaced traditional forms and its use is much less restricted. The early reach of the stage of understanding appears as a benefit in the development of Digital Citizenship in a society where even many adults have not passed the stage of use and consume.

Keywords: digital media, digital citizenship, media literacy, media participation, media socialization

Acknowledgment

Table of Contents

Preface

In the first search for a topic for my thesis I came up with the general media regulation by governances and the claim that a digital society exists in which not everyone is able to participate. I engaged a lot in the political, civil and social issues of participation and non-participation online in regard to causes and reasons. After a long run into digital activism in Germany, my children cropped up with their wish to utilize our digital devices. As mother of a six years old boy and a two years old girl I am always concerned with the question of how many screen time is ok for my children. I personally like the technological development, but how many of the digital possibilities should I allow my children? I know they grow up with this technology and I am not a person who reject digital media and its development. So I want that they learn how to engage in a secure way with the opportunities they have online. But this case apparently has nothing to do with digital activism and media regulation by upper institutions. Sure, it has! All parents I know regulate the media consumption of their children, because of the fear of negative consequences. I found many parallels between family and governmental activities regarding digital access and use. Hence I decided to stay close to my personal relation, especially for the implementation of an empirical study in a short time frame. I was able to access the topic by taking my own family life as a reference to prepare the framework of the study. Also I had a bonus of confidence by the families who participated. Beside the formal research situations, I benefited from the small talks and the exchanges parent to parent. I learned a lot about them. Some very useful and detailed information, I got as an exchange of experience as mother. These partly critical reflections helped me to evaluate certain statements and how they have to be put in context. My professional background as designer of among other things digital advertising and my personal interest in online media provided me the understanding of technical and structural issues. It was mostly not necessary to explain online media content to me, to name it and continue with the actual topic was enough. From this side, I was able to estimate the media education of the parents. My knowledge about design and structure in advertising allowed me an interpretation of used digital media in the families. I was able to take the statements into account in my observations, due to a good knowledge of the structural intent of digital media.

1. Introduction

Digital media are a result of the technological development since the invention of computers. It describes the information and communication technology which is programmed and can mostly be accessed by screen. It usually is used as reference to the Internet, but digital media are also modern television, radio, e-books, computer games and smartphones. These are typically described as new media today (Hölig, 2011, p. 18 ff).

Randi Zuckerberg, the sister of Facebook founder Marc Zuckerberg, believes "[…] that technology can change the world for the better. But in order to do that, we have to make it accessible to all genders, languages and cultures – and it starts young. (Primo Toys, 2016)" What she is talking about, in context of advertising a coding toy for preschool children, is the importance for modern children to have early contact with technology. The argument is to give even small children something fun and prepare them playful for discrete actions in complex tasks by a step by step action (Kickstarter, 2016).

The opportunity for early access and socializing with technology is a basic issue in discussions with educators and parents. Henning Kullak-Ublick, directorate of the Union of free Waldorf schools in Germany claims that media literacy is rooted in the absence of digital media in early childhood. Up to twelve years children are unable to reflect and rate online media content. The basic requirement for a responsible use of the Internet is the previous 'analog' socialization, which leads to all needed skills for a later media socialization (Xing, 2016). But the International Computer and Information Literacy Study 2013 clarified that merely growing up in times of Social Media is insufficient for a responsible handling of digital technology (Bos, et al., 2014). So children have to be socialized and educated with digital technology in order to train them to - so called - Digital Citizens.

How this is processed in modern childhood is to my knowledge a rarely studied issue. Essential points in the development of Citizenship seem to be participation and socialization. These points are strongly linked to media literacy (Lunt & Livingstone, 2012, p. 117 ff). Without access and interaction, the active participation in certain media content is not possible (Carpentier & Dahlgren, 2014, p. 7). But a responsible usage of media requires knowledge about it. The process of learning how to use and rate certain media is called media socialization. It describes the orientation of a person in the media landscape and the individual search for preferences of media usage and technology. The personal experience of media use leads to knowledge, which is needed for a well-balanced relation between the possibilities of media and the inherent risks for the individual (Lunt & Livingstone, 2012, p. 118 ff). The goal of media

education is to show people all possibilities of media usage, but also to explain connected dangers. It is a learning process of acquiring knowledge and identifying chances and risks in the online media landscape for all people (Lunt & Livingstone, 2012, p. 118).

Today it is unclear which possibilities will be open for children using new technology. But what is known, is the probably big opportunity of digital technology for children in the future, which has to ponder with excessive demands and impairments of children's development today. The crustal question is how can children be best promoted in handling modern technologies without hampering their overall development? Obviously this question cannot be fully answered, because it requires knowledge about the impact of the current behavior in the future. There is a big variety of exposure for the use of technology by children. The parents stand first in the decision of the children's contact with media, before kindergartens and schools have influences. But the typical discussions about early digital media use in Germany are focused on the education system. Parents and their influence - especially on the access - is often neglected.

A lot of parents in Germany try to avoid the contact of their children with digital media. In international comparisons, Germany has for an industrial nation deficits in digital development and education (Gründinger, 2016). Remarkable is that the use of Social Media is viewed critically in the higher educated social milieu than in others. In no other country in Europe is the use of Social Media by well-educated people less than that of people with lower education (Poushter, 2016). But we live in a world where communication without the Internet is not thinkable. People use the Internet every day, for example for news, social contacts, communication and also to share very private things about themselves and their families with friends and also with strangers. A lot of people use the Internet naturally, especially in the younger generations (Poushter, 2016, p. 22 ff). This means that people interact and use digital media not as something specific, but rather as a tool or as a resource in their everyday practice. Parents today are usually born between the 70s and 90s, so they grew up at least with computers in their childhood and often also with the Internet. For the society and for individuals open more and more possibilities to use digital media.

But not all parents want to participate or that their children participate. Especially the access to social networks like Facebook is heavily discussed. Adults fear a thoughtless usage by children and through this disadvantages and danger. Parents claim that children or teenagers are not allowed to participate in social networks as long as they are not able of a responsible utilization of digital technology. With this ability and the trust in their children comes their permission to participate also on Social Media platforms. Orientated at the impact of current behavior and

education this work focusses on the question: How do children develop to Digital Citizens in the future?

Children today grow up in a digital version of our society. Digital Citizenship is a term for this phenomenon and is strongly linked to participation. The decision for access and the responsibility for clearing media literacy is done by the parents. The important early socialization process with digital media is done in the families. Children can observe their parents using online media, they get access as long as the parents agree and they are able to develop behavior for responsible usage of digital technology. "Taken together, they [different authors in the debate about children and consumer culture] suggest that we need to analyze children's activities as consumers in their broader social and historical context; that we need to understand the complex interactions between the power of the marketers (structure) and the power of consumers (agency); and that we need to see contemporary childhood as inevitably and inextricably embedded within the broader operations of our consumer culture (Buckingham & Tingstad, 2010, p. 13)". Overall it seems that the role as consumer in new media is the first step of Digital Citizenship. Especially for smaller children limitations in the access and the participation in digital media by the parents can be expected. For the analysis of the development to Citizenship, the research of children as consumer of digital media can be viewed as entry. The socialization process starts with the first contact and can be studied till Citizenship.

In order to examine the socialization process and the ways of digital participation for children in the early school age, I conducted an empirical study with four families. Children and parents were interviewed about their media consumption and observed in their digital routine several times. It is asked: How is the handling in families with new technical developments and how do parents and children deal with their opportunities? The aim is to verify the significance of digital technology for children under ten years old. I want to describe how children participate in digital media and how they are socialized at their homes, by their parents and close environments. With these findings I like to give a possible outlook for Digital Citizenship in the future of children.

The work is structured in five parts: First the term Citizenship is reviewed in the literature. It is important to identify specific characteristics of the definition and to analyze how Citizenship becomes 'digital'. The question is: What is Digital Citizenship? This enables me to compare the results of the study with the theory and allow the evaluation in regard to the future. With single stages of skills or habits and characteristics of Citizenship in mind the steps of the

development to Citizenship are comprehensible. The data from the study shows which of the children already fulfill a given stage of digital development and also how they can fulfill missing stages in the future by their media socialization. The focus in the research is put on different possibilities of participation and forms of socialization. Therefore these are also theoretically considered within the theoretical frame of Digital Citizenship. In the second part of the theory, the used methodology is discussed. The concepts of media repertoires (Hasebrink & Popp, 2006; Hasebrink & Domeyer, 2012) and living fieldwork (Gillespie, 1995; Burgess, 1989) are explained and it is described how they are suitable for my research process. Then the implementation of the study is declared and the results are presented in the context of Digital Citizenship.

Four families with seven children between four and eight years old were observed and interviewed about their handling with digital media. The research is framed by the following questions: How do parents prepare their children for digital media use? Why do parents ban certain content from their children? How do children orient themselves in the abundance of content online? Which impact has digital participation and non-participation for the new generation? Afterward the results are discussed with the theory in order to analyze how children today become Digital Citizens in the future and why some children might fail this aim of media education.

2. Defining Citizenship

Citizenship in the basic definition is the status as inhabitant and the membership in a community, which allows the interactions with other members (Encyclopaedia Britannica, 2016). Today an essential part of life requires digital technology. The individual community is enlarged to social networks with a much bigger range than it was possible before. The forms of communication are changed. There are much more possibilities to keep informed and interact with other people over large distances. Options for participation are nearly unlimited, but with all this possibilities raises Citizenship as a status with rights and duties in a society. As part of a community one has the right to participate, to have an opinion and to communicate this argument, but also the duties to accept opinions of other members and let them attend, too. In contact with the Internet, Citizenship becomes digital. This term suggest that all characteristics of 'analog' Citizenship could be transferred. But this seams not possible in times of the fast development of technology. For society and for individuals open increasingly more possibilities to use digital media. Some people are growing into the digitalized world, they become native in this field. Other people try to develop their skills continually and participate, but there are also some people who are not able to participate anymore. They are not Citizens according to the definition of membership. But they are still part of the society, without participating online. Digital Citizenship has the claim to characterize a person, who is media educated and act natively with new technologies (Lunt & Livingstone, 2012, p. 117).

In the following chapter I want to analyze both descriptions of Citizenship with a focus on the definition of Digital Citizenship. Citizenship in general is a term with a specific political definition, grounded on the ability to participate and the note of people in a nation. Digital Citizenship seems to have a less political version of this definition, but clearly involves the ability of access. The differences between the two have to be clarified for the following study.

2.1. 'Analog' Citizenship

Addressing Citizenship today cannot be done without an analysis of Thomas H. Marshall's (1950) theory. He was a British sociologist and professor at the London School of Economic and Political Science. According to Marshall the citizen status implies equal civil, political and social rights. He describes in his book 'Citizenship and Social Class' the historical development and mutual conditionality of these three rights. The relationship between democratization and social security is discussed, as well as the question of how far social rights can be removed without getting into conflict with the economic freedoms (Marshall, 1950, p. 10 ff).

The first element of Citizenship according to Marshall is called *civil*. It includes "individual freedom-liberty of the person, freedom of speech, thought and faith, the right to own property and to conclude valid contracts, and the right to justice (Marshall, 1950, p. 10)". It is the element which is very close to national law and courts of justice. People with civil right are able to move wherever they want, to say what they want to communicate, to belief and think without restrictions and the status to be taken seriously as a person, by the right to own and to receive justice. It follows the second element called *political*: "By the politica1 element I mean the right to participate in the exercise of political power, as a member of a body invested with political authority or as an elector of the members of such a body (Marshall, 1950, p. 11)". Marshal sees the parliament and local governments as agency, which gives the power to the people. They are able to decide as member, for member. Every person has the opportunity to participate. The third element is *social*. It means equal standards of life for every person in the community. "The institutions most closely connected with it are the educational system and the social services (Marshall, 1950, p. 11)". Marshall believes that the three elements are interconnected, but came in an order: first the civil rights, followed by the political and the social rights. In his discussion about Citizenship and social class he comes to the conclusion that social inequality comes through the definition of equality in the definition of Citizenship (Marshall, 1950, p. 47). Through the right for everyone to own property, the basis of capitalism leads to inequality in the social element of Citizenship.

Marshall's theory of Citizenship is criticized for his focused perspective only on Great Britain. It is argued that Marshall missed the historical context of civil, social and political rights and assumed equality in the concepts over centuries (Harris, 2010, p. 12). Furthermore his considerations have a strong link to incidents in Marshall's own biography, so it is insinuated that his observations were not objective. In this context also the limitation on white males are criticized (Harris, 2010, p. 13 f). Marshall's work has also triggered a fundamental debate about whether and in what way social rights can be considered as citizen's rights. For example the right to acquire property is not a civil right, but economically grounded. It should be separated from civil rights (Harris, 2010, p. 11). It also remains to discuss whether the bonding of social rights to the status of the citizen is still relevant in the context of an increasingly globalized world (Harris, 2010, p. 14). With the technical development and the evolution of social networks occurred a society parallel to national memberships and global agreements. The membership is open to every person with digital access, but it does not come with the birth. One has to participate and be socialized in this digital community. The order of the rights seems

to be changed to a focus on the political defined right. So Digital Citizenship must be different, it is not just virtual version of Citizenship.

2.2.   Digital Citizenship

One common definition of Digital Citizenship is done by Mike Ribble (2011), an American educator and employee at Kansas State University. He introduces in his book 'Digital Citizenship in Schools' a framework for teachers of possible issues which arise in progressing technological environments. Ribble identifies areas of need in schools, emerging issues which may become important in some years and he provides some possible understandings for Digital Citizenship.

In his analysis nine elements define a person as Digital Citizen: *Digital Access*, the need of the electronic connectivity (Ribble, 2011, p. 16 ff). A keyword in this context is for example 'digital divide', which describe the gap in the society regarding differences in the access of the digital technologies. *Digital Commerce* is better known as online shopping, so people use the technology as consumer. It is also the ability for an intelligent use of online possibilities and the understanding that virtual action can have real consequences (Ribble, 2011, p. 20 ff). *Digital Communication* mean the exchange of information though the technology. It describe the interaction between users and also the responsible use of smartphones, email or messenger (Ribble, 2011, p. 23 ff). *Digital Literacy* describes the understanding how a certain technology works and the skills to use it. But it means also to be critical to some functions and processes. This knowledge should lead to a responsible use of the digital technology (Ribble, 2011, p. 26 ff). *Digital Etiquette* is an expectation to the user of technology. It addresses the ability to act in a proper manner in the digital world (Ribble, 2011, p. 29 ff). *Digital Law* describe the user's acceptance of certain rules and his individual responsibility for all actions (Ribble, 2011, p. 31 ff). *Digital Rights and Responsibilities* are the privilege and the freedom to use the technology, but also the expectation to a certain behavior as a matter of the online community (Ribble, 2011, p. 35 ff). *Digital Health and Wellness* is a description for psychical and physical well-being in digital life. The awareness of the user is addressed and the knowledge of special indicator for illnesses caused by use of technology (Ribble, 2011, p. 38 ff). *Digital Security* is the protection of electronic data and the knowledge how to do this and why it is important not only for the individual, but also for a whole network (Ribble, 2011, p. 40 ff). Ribble categorizes these elements in three categories with the goal to prepare students "to become 21st-century citizens (Ribble, 2011, p. 44)". They are combined with the topics of *performance*, *behavior* and *environment*. He puts the elements in an order, so teachers know where to start. The first

category affects directly the student, so according to Ribble Digital Access, Digital Communication and Digital Literacy comes first. It follows Digital Security, Digital Etiquette and Digital Rights and Responsibilities in a second category, because of the effects on the school environment and student's behavior. The last category considers the student's life outside the school, it includes Digital Health and Wellness, Digital Law and Digital Commerce (Ribble, 2011, p. 43 f).
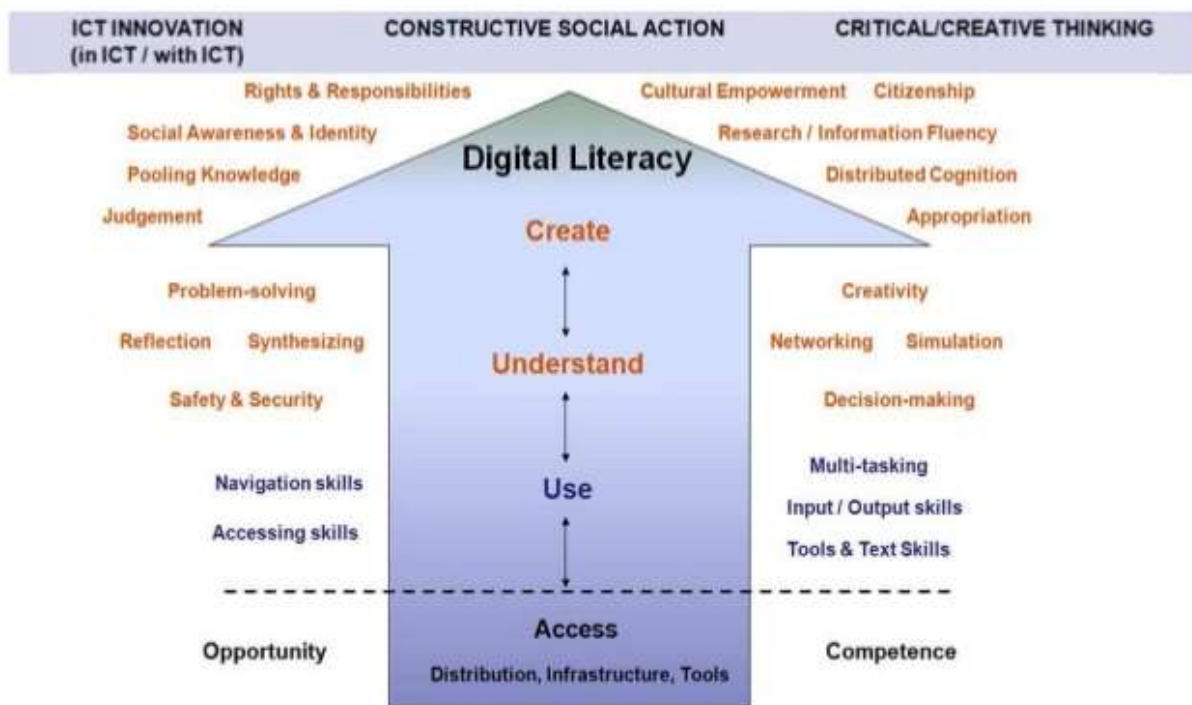
The analysis of Digital Citizenship by Ribble is done from a pedagogical perspective. All these elements are important for a responsible use of the digital technology. In a study of 239 students the approach was used as a scale for selection. Obviously the students who spend more time online comply more, but not all elements of Digital Citizenship (Isman & Canan Gungoren, 2013). From this perspective no participant can be called Digital Citizen, because nobody fulfill all the elements defined by Ribble. Digital Citizenship is seen as an ideal. It seems to have a strong connection to media literacy, because Citizenship apparently changed from an only political afflicted definition to a bridge between the social and the official. As it is linked to empowerment and participation, Citizenship can be also understood as membership (Lunt & Livingstone, 2012, p. 117 ff).

The book Media Regulation by Peter Lunt and Sonia Livingstone (2012) addresses the effects of media regulation to the relation of government, citizen and media. Sonia Livingstone acted as consultant and expert for Ofcom and provided a literature review for Chapter 6 about media literacy and discusses the connection of the public and the government. It is strongly linked to new media and empowerment of citizens as opportunity of the new media. Ordinary people are able to inform themselves and make own decisions. They have the full responsibility for their literary, because nearly every information is documented in the web. The challenge is the general accessibility of every information, even private data and obsolete knowledge. People have to be media literate to navigate as safe as possible though this landscape of risks. In an increasingly liberalized and globalized world, national issues like a tight definition of Citizenship have no significance (Lunt & Livingstone, 2012, p. 117 ff).

According to Lunt and Livingstone Citizenship in times of Social Media needs a new definition. Not all people are able to take part in the *digitally mediated society*, not just because of technical reasons but also because of education. The digital environment requires continual updates of the personal skills, because it changes such fast (Lunt & Livingstone, 2012, p. 120). This learning and the will to develop the own behavior is part of the definition of Digital Citizenship. In times of the fast technological change, people are not able to fulfill a fix table of features:

first, because their learning might be too slow and they are socialized by experience; second, because the list of features are fixed and do not adapt to actual issues of technological change.

Inspired by different pattern a model of digital literacy is created. The basic idea is a network, which has to be accessed and which includes stages to pass on the way to responsible behavior online (van Hammel, 2011, p. 11 f). The following model pictures this idea with the main elements of *use*, *understand* and *create*. These can be understood as steps which have to be passed on the way to Digital Citizenship. The skills alongside can be put as reference of each step in the development, but they can be complemented by the elements by Ribble (2011), too.

A Model of Digital Literacy (van Hammel, 2011, p. 11)

In the definition of Citizenship today are several aspects to include. There are civil, political and social rights (Marshall, 1950), as well as elements which affect the individual, its direct environment and the whole community (Ribble, 2011). Also the aspect of blending public and private in social networks should not be excluded (Lunt & Livingstone, 2012). The Internet seems to be an unlimited source of data. The controversy is the opposition of public and private data and activity. There can be full publicity, which is defined as Citizenship, e.g. political participation and engagement in the Internet. But there is also privacy especially with personal data. The difference is how people participate. As citizens they stand physical for their rights, it is always public, able to be seen by everyone. With the possibilities of the Internet the need for restrictions arises. 'Analog' Citizens can be seen by their close environment, Digital Citizens theoretically by everyone with access to the Internet. So the access has to be controlled.

This understanding of the difference and the use and understanding of online media content, as well as the creation of them makes Citizens to Digital Citizens (van Hammel, 2011).

Both in the classical approach of 'analog' Citizenship and the approach of Digital Citizenship, the term is divided in three parts or steps of development. Marshall (1950) differ between civil, political and social rights; Ribble (2011) categorizes in performance, environment and behavior; and van Hammel (2011) varied usage, understanding and creation. These categories lead in all cases to empowerment of the individual and responsibility within a community. Lunt and Livingstone describe that as a bridge between the social and the official (Lunt & Livingstone, 2012). In the dynamics and features of digital media the problem of primary anonymity leads to the assumption of occupants as single user and consumer, not as citizens. So the impression for people with access to the Internet is focused on their individual and primer rights. This can be compared to the finding of Marshall – full civil rights leads to inequality in the social part. The components of the pervious explained approaches can be put in one model of Digital Citizenship. The basic requirement is always access, this means the opportunity and the competence to gain entrance to digital media. In Marshall's theory this is the belonging to the society and the awareness of personal rights. The first component might be the usage or the consumption of online media content. Ribble (2011) define this also as performance with the elements of access, communication and literacy. As it is said, access is the basis for belonging. Digital literacy seems to be the aim in media education. And it includes a lot more than only the knowledge how to access. Remaining is the element of digital communication, as the civil right it is the freedom of speech. Power to the individual concern is given by the understanding of technical and also social issues. The political right or the environmental category describes the quality of this step of development. The last component, and also the last step to Digital Citizenship is the creation of content. It is also the perception of the equal impact of all members and their rights. If these steps are developed each by each, constructive social action are possible by critical thinking and technological innovation. Digital Citizenship in this way is the aware behavior as member of the global virtual society by the use and understanding of digital media and the creation of new content, in order to act as responsible person in the community.

For the analysis in this work it is useful to examine how children get access and participate in digital media. The first step of use can be seen as consumption, the steps after are the understanding and reflection of behavior and last the creation of digital content. In the view of privacy, children should not participate at all until they are Digital Citizens. In the converse argument children are unable to develop to Digital Citizens without access and participation. The solution seems to be the socialization into the digital world and the education of the stages

of Digital Citizenship. Therefore I want to view in the following two paragraphs different possibilities of participation and forms of socialization.

2.2.1. Possibilities of Participation

One of the first approaches of participation is Sherry Arnstein's model of a ladder with eight rungs and three categories (Arnstein, 1969). The model differs between non-participation, tokenism and citizen power. Arnstein sees partnership, delegated power and citizen control as participation, because people are able to engage and decide on majority alone. On the other hand placation, consultation and informing are categorized as pretended participation and therapy and manipulation count as non-participation in the model (Arnstein, 1969, p. 217). The rungs of Tokenism can be seen as the first step for participation, but also as an attempt to exclude people from decisions, while let them feel like they would have a choice (Arnstein, 1969, p. 219 f).

Nico Carpentier differs between minimalist and maximalist democratic participation (Carpentier, 2011a, p. 17 ff) as well as passive and active audience participation (Carpentier, 2011a, p. 66 ff). The concepts are connected as minimalist media participation, which is based on the power and control of professionals and focuses on a homogeneous audience. The maximalist perspective of media participation is a balance of control and participation, focusing on heterogeneity (Carpentier, 2011a, p. 69). In the minimalist perspective participation is limited to access and interaction. Access means the presence of technology, media content, people and organizations in both production and reception. Interaction is defined as communicative actions. It is specified as using the technology, contend production or selection and interpretation of content. People produce and consume data together, also in an organizational context and discuss them with the aim to receive feedback. On the contrary to access and interaction, participation is the ability to make co-decisions on or with technology, content, people or organizational policy (Carpentier, 2011b, p. 30). This approach is assigned also to democratic participation. "While minimalist participation is characterized by the existence of strong power imbalances between the actors (without participation being completely annihilated or reduced to interaction or access), maximalist participation is characterized by the equalization of power relations (Carpentier, 2011b, p. 32)".

The authors of the article 'Non-participation in digital media: toward a framework of mediated political action (Casemajor, et al., 2015)' create with a theoretical discussion and literature reviews of the previous addressed approaches a conceptual new tool for the understanding of participation. Nathalie Casemajor, Stéphane Couture, Mauricio Delfin, Matthew Goerzen and

Alessandro Delfanti examine the active non-participation as a possible form of participation. They find that in previous studies non-participation is mostly regarded as passivity. In contrast participation is seen as a form of empowerment and responsibility of citizens. But non-participation may also be active, it can be considered in some cases as a profound act of social communication. The article describes several forms of media participation and define them separately. The authors want to show that the active non-participation is a serious political action that may not be equated with passivity (Casemajor, et al., 2015, p. 850 f). For the theoretical access, Sherry Arnstein's approach of a ladder is first used - participation is defined as a form of power and control and non-participation as their absence. Nico Carpentier's (2011a; 2011b; 2009; Carpentier & Dahlgren, 2014) approach of participation as the involvement in decision-making processes and their positioning and communication is used as well. The authors identify in both theories weaknesses and break them down to the basics. Arnstein only distinguishes between participation and non-participation. Carpentier extended this theory to the digital world and speaks of an active participation (+P), a passive participation (P) and the right not to participate (NP) (Casemajor, et al., 2015, p. 854). Casemajor et.al (2015) want to differ and speak about passive non-participation (NP) and an active non-participation (+NP). The authors conclude that active participation (+P) and active non-participation (+NP) are closely interrelated. Through cross-connections single cases of participation and non-participation cannot always clearly be classified with other forms of participation. The strong relationship between +P and +NP allows a rotation, hence a deeper and more particularly exemplary analysis of +NP is necessary to understand their significance in political communication. They see +NP as well as +P as empowering and ask for a negative form of political engagement. In this context, the approach of active non-participation establish a scientific link between digital media and politics. The expectation of participation can also be answered with an active non-participation (Casemajor, et al., 2015, p. 863 f).

2.2.2.   Forms of Children's Socialization

Socialization is the acquirement of skills for personality and identity. In the psychological concept it is the development from an unknowing to a knowing being by a defined sequence of steps. The problem in this approach is that children are seen as passive subjects in the development to adulthood (Cook, 2010, p. 65). But in the context of digital media more and more the approach of children as consumer is established. "Children need to be understood as actors in their own right who make meaning and encounter the world on their own terms, rather than as derivative of and incomplete in comparison to adults (Cook, 2010, p. 65)". Since

children are seen - as well as adults - as consumer, parents are in discrepancy to regulate the consumption of their children. In the process of general socialization it becomes more and more important to be media educated (Sutter, 2000, p. 5). Parents struggle with their claim to prepare children for adulthood. Today early support should also include media education (Ribble, 2011), but the early use of digital media cannot be connected with children development approaches, which ban this kind of media consumption into adolescence or adulthood (Xing, 2016). "Modern childhood may be understood as a construct of adult longings and frustrations emerging with the 20th-century market society. In the early years of the last century, parents increasingly came to regard children not as a source of labour or as heirs of property but as guarantors of private life and even as the refuge of simplicity. Thus, they tried to isolate children from the market and all of its implications (Cross, 2010, p. 18)". This means the parents actively detract children from new media, the consumption is stigmatized.

A lot of behavioral factors and technology factors need to be taken into account to explain how children come in contact and behave with digital media. In the history the view on certain media consumption as child changed according to the media use of their parents in the past. Some media seems to be more accepted than others (Smith, 2010, p. 57 ff). So while in the past the television consume of children was in the focus of discussions, now it is digital media. This can be explained by the socialization of the parents. They benefit from their own experiences of consumption. Parents are able to estimate impacts of consumption, because they did it too and are grown up. But now it is a different media, a different time. "Children are sometimes regarded as Others, as a separate tribe, living their own lives, having their own exotic culture, doing other things and thinking in other ways than 'we' do (Johansson, 2010, p. 80)". With this comes the problem of needs and desires of children and parents. Parents can remember their own childhood, the desire for watching television. They want to permit the media consumption, which they never had. The desire for novelty (Campbell, 2005, p. 56) let children and parents struggle with satisfaction of needs and desires and the restriction of consume. Restrictions leads to conflicts and stresses the child-parent relationship (Cross, 2010, p. 26 f).

Different views on technology might be also caused in the concept of technic-generations (Claßen, 2012, p. 27 ff). Based on the fact of a formative phase between the age of 15 and 24 (Klaffke & Parment, 2011, p. 6), the acceptance of technology is examined. If in this period a new technology is established, the following behavior in adulthood is native (Claßen, 2012, p. 236). Older people see the new technology critical according to this concept. They have usually no need for the new technology and like to stay at the old and traditional forms. The concept of technic-generations can explain why parents want to limit the time of digital media

consumption of their children. In a study examining different generations according to the concept in order to discover the mystery around the term 'digital native' found that native behavior with digital technology is dependent of the education (Manschwetus, 2016, p. 13 ff). By a representative sample of German's population, the different generations are viewed and compared with a categorization of the highest education certificate. While according to the age the habits of use shows no big differences between the generations, people with higher education use digital technology a lot more and have a better knowledge about it (Manschwetus, 2016, p. 7 ff).

By the time when children get access to digital media, they also start the socialization process. The psychological and social development according to Erik Erikson (2005) are divided in eight phases. For the children considered in this study apply *phase 2* (two to three years old), *phase 3* (four to five years old) and *phase 4* (six to twelve years old). In *phase 2*, the child develops an own personality with own wishes and needs. In *phase 3*, the relationship of the child to the parents opens. The child realize social roles and institutions, it requests mental and physical demand. In *phase 4*, the child learns to solve task and receive admission for their behavior. This desire is called competence, which is closely connected to the possibility to be productive (Erikson, 2005; 1973).

Socialization is differed between foreign-socialization and self-socialization. Foreign-socialization is the education or instruction by outside standing persons or the influence by environment. Self-socialization is described as the autonomous process of personal development and the assimilation of environmental factors (Sutter, 2000, p. 6). The theoretical framework can be found in the concepts of *constructivism* and *interactionism* (Sutter, 2000, p. 18 ff). Klaus Hurrelmann (2002) disclaim the term self-socialization, instead he prefers self-organization as description for higher demands of reflexive and self-controlled behavior. In his opinion the socialization process in adulthood is replaced by the modification and reconfiguration of already existing structures (Hurrelmann, 2002, p. 164 f). So in this context it can also be expected, that children are not socialized, but organized with digital media content. In regard to daily routine and social status it might be possible that children are organized into predestined images by their parents.

Digital media are mostly pictured as instance of foreign-socialization with big influences on the individual. But the aspect of self-socialization or self-organization gains in importance with the rise of Social Media. In times of fast technological development children are increasingly forced for independent accomplishment of digital media content. Therefore there might be a

connection between the general media shift and the growing significance of self-socialization (Sutter, 2000, p. 17 f). In addition parents seem not to offer help in the socialization process, first because they might not be media educated enough or second, because they want to protect their children from negative influences. The change of mass media communication to interactivity in social networks offers many possibilities for intervention and feedback. But this kind of technology and concept of interaction is only working if people not only consume, but also co-operate with digital media (Gscheidle & Fisch, 2007, p. 398).

In the first assumption one cannot claim that children want to interact from the beginning. In the beginning children participate as consumer. The consumer socialization is divided into three stages: focusing on single dimensions, flexible and adaptive decisions and underlying dimensions by reflection. Parents serve as important factor to push forward these steps (Cook, 2010, p. 66 f) as well as peers, siblings and other family member can have important influences on the development (Cook, 2010, p. 71) An analysis of empirical data of digital media use in Germany shows that three quarter of Internet user are passive. That means, they only access information, but do not create content. The importance of digital media is for many user obviously not the possibility for participation, it is the big source of information. The purpose to use the Internet seems to be mostly the consumption of content (Gscheidle & Fisch, 2007, p. 401). In the model of Digital Citizenship this is the first step. Without the step of understanding they go through creation, which leads obviously to problems of responsibility. Therefore the socialization process is important to assess the single steps on the individual. The understanding can be reached by self- or by foreign socialization (Sutter, 2000) and can be categorized also in three steps. Erikson (1973; 2005) and Cook (2010) claim first the perception in one dimension – consume, than understanding and finally reflection, solving tasks and responsibility. The steps of socialization are the same steps as for Digital Citizenship, because socialization can be seen as the development of children to citizens. Today the virtual society is a part of life, which a child has to be socialized with. Erikson gives also age examples for the development, so from the school age children should make the last step to Digital Citizens.

2.3. Summary

The last chapter showed how Digital Citizenship is interrelated with 'Analog' Citizenship, digital participation and socialization. With the rise of digital media and the success of social networks gains the importance of media literacy and responsible behavior. Citizenship is seen as membership in a community. In the classic approach this is typical the national belonging and the possibility to participate and interact in society. The Internet, especially Social Media

can be defined as digital community or as 'digitally mediated society' (Lunt & Livingstone, 2012, p. 118). Digital Citizenship is an evolution of different stages with the goal of responsible and aware behavior. It is defined as the use and the understanding of digital media and the creation of new content as responsible person in the community, provided the access.

Digital Citizenship requires participation, to become a member and also socialization to become a citizen of this society. Participation is the way of usage or consumption of digital media. It is divided in passive and active participation and non-participation. Active participation seems to include the creation of content, passive participation mainly describes consuming. Socialization is the way how people go through the steps of use, understanding and content creation. Mostly it is differed between prohibition and the use or consumption. That goes hand in hand with the active and passive participation approach.

The theory should be applied to an empirical study in order to examine how children in Germany become Digital Citizens and which influences do take the parents on the access and the participation of the children. Also it should be observed in what way children are socialized with digital media by their parents. The options are in a wide range, from full access and participation to the prohibition of every contact to digital media by children. Obvious is a way between the two, because of the parents own childhood and their technological socialization and the todays everyday use of digital technology. It seems not possible to elude children today completely from digital media, while parents are now with reservations dependent from digital media use as communication tool. Therefore the use and understanding of digital media by all family members are important for an overall picture of influences on the children. If a device is secured with a children security app, the form of participation immediately change from active to passive participation. With prohibitions it has to be detect whether the non-participation is grounded in an active decision or in the lacking knowledge by children. The possibilities of participation might influence the socialization process of children into digital media. Self-socialization is more connected with active participation, while foreign-socialization influences children from the outside. So there would be a tendency to passive participation. In the steps of Digital Citizenship and the socialization process children might be allowed to use and to consume digital media. It is expected that the process of socialization into the digital world can be compared with other socialization processes. At least with the different stages of development, the evolution to Digital Citizenship can be observed and evaluated.

3. Methodology

The methods of the study need to survey a routine in families focused on how children get access to digital media, which content they are allowed to use and how they use it. Problems arise with the wide range of digital technology today. The Internet is an inherent part of everyday life. The technological developments allows access at any time from every place. A lot of traditional media, like newspapers, television and radio are also represented online, so nearly everything can be accessed. The border between one media to another media becomes blurry. Is live streaming in the internet synonymous with watching television? What does the audience exactly mean if they state as their sources of news and information just they get it from the Internet? The study of children's development to Digital Citizens requires a methodology focused on the children and their family, not only on the used media. But audience research in times of converging media is challenging. It is difficult to cover all possibilities and their meaning for the audience in one research as well as to consider individual media use without big limitations, as the Internet is constructed by many components (Livingstone, 2004, p. 75). Digital Citizenship refers to all parts of digital technology and all possible reasons to participate or to refuse. An empirical study for the research of the media education of children has to cover two demands in methodology. First, it must consider the full scope of media use and prohibitions in a family and secondly, it has to investigate how the practice in families is and also how parents explain their own behavior. To watch the given information in the context of the families is important. So a very open approach in the methodology is needed, to consider each family in their individual digital practice and social context.

In the following paragraphs two concepts are considered for the research process. The concept of media repertoires (Hasebrink & Popp, 2006; Hasebrink & Domeyer, 2012) covers the open approach in regard of endless possibilities of media participation. The concept of writing ethnography or living fieldwork serves as inspiration for the implementation of the study in the families (Gillespie, 1995; Burgess, 1989).

3.1. Media Repertoires

The concept of media repertoires was first developed by Uwe Hasebrink and Jutta Popp in 2006. It includes the question "how people combine contacts with different media and different kinds of content (Hasebrink & Popp, 2006, p. 369)" The authors assert according to the theory of Wolfgang Riepl that with the rise of new media, the old media are not replaced, but their function is changed (Hasebrink & Popp, 2006, p. 370). So they conclude that the patterns of behavior have to change as well. By an analysis of traditional methods of media and audience

research, they establish the idea of an individual media repertoire as "specific patterns of media use (Hasebrink & Popp, 2006, p. 371)". With this idea they were able to introduce a new research method, focused on the general media use of the audience. The concept and the method is seen as an integral approach for analyzing "a) bi-lateral relationships between different media, b) media repertoires and types of media users, and c) links between media repertoires and everyday practices (Hasebrink & Popp, 2006, p. 375)". The authors center their research on the relationship of the different types of media and their importance for the audience. The concept was re-published with an improved empirical study by Uwe Hasebrink and Hanna Domeyer. It is presented as a conceptual idea for a new method of both quantitative and qualitative research of media audiences (Hasebrink & Domeyer, 2012). The authors address in their paper the gap between two paradigms of audience research, the study of audience behavior and the individual media reception by the audience. It is criticized that large scale audience studies are "[...] far away from people's everyday practices and thus 'meaningless' (Hasebrink & Domeyer, 2012, p. 758)" while qualitative studies are limited and do not lead to general conclusions. The authors see their approach as two sides of a coin, the combination of individual audience research with the meaning of general media use. It is defined as 'patterns of behavior' and 'as meaningful practices' (Hasebrink & Domeyer, 2012, p. 759).

The authors asked in empirical studies for individual media use, the variety and how different media are individually related. In general the concept of media repertoires is able to cover a wide range of different media without limiting the audience in their answers. Media repertoires are a complex set of individual favorites selected by the audience (Hasebrink & Popp, 2006, p. 376 ff). So the approach makes it possible to study the media landscape and their audience despite its constantly changing nature. They found out that the importance of certain media depends on the age, the education, specific interests and backgrounds. A pilot study was done with a homogeneous group of people to test this assumption of dependent factors. The focus was on a group of five media users of higher education between 20 and 30 years old. The participants in the study had to write media diaries and were interviewed by the researchers. The researcher could confirm their assumption that the social context of people has influences on their media repertoires (Hasebrink & Domeyer, 2012, p. 770 ff). In other words, similar age, education and social background lead to similar media repertoires. They also identified a specific social function in media consumption and describe this phenomenon with for example the ritual to meet friends (Hasebrink & Domeyer, 2012, p. 768). Participants in the study indicated for themselves a broad set of different media, reflected on an individual function and different links between the components of their media repertoire and also of their social

background (Hasebrink & Domeyer, 2012, p. 769). The authors show how a specific media repertoire can be constructed and compare them to other factors. So they show changes in the duration of media use from 1980 to 2010, preferences in media consumption according to the age and five typical compositions of media repertoires in Germany (Hasebrink & Domeyer, 2012, p. 772 ff).

For further studies the authors of media repertoires focused one specific motive for media use, because they had no capacity for a further study on a big level of qualitative interviews for general media repertoires. The following study was aimed on the specific need for information and news (Hasebrink & Domeyer, 2010). They asked how an individual stays informed in times of converging media environments. With that they wanted to prepare an empirical study of information repertoires. By the theories of the users-and-gratification and information-seeking approach, the authors developed a four step model for satisfaction of information needs in their paper. They also discovered a change in society from 1980 to today and from old to young people, for the needs of information (Hasebrink & Domeyer, 2010, p. 58 ff). In an empirical study the authors found out that people rate different media according to their function and traditional media are still mainly used for information, but the Internet as source for information becomes more and more important (Hasebrink & Schmidt, 2012).

In the development of media and information repertoires raises the question, what is the audience actually doing when they use different types of media for a specific need. The first study which addressed this gap of research was focused on Internet audience (Hölig, 2011). Later it was generalized as communication modes for media audience research (Hasebrink & Hölig, 2013). Based on the approach of media repertoires, the problem of converging media for audience research was identified, too. Traditional audience research in the view of the authors cannot work with multimedia, cross platform and cross network content, different and new devices and the merge of information technology, media and telecommunication. It is necessary to close the gap between patterns of behavior and social practice. But while the concept of media repertoires considers which media a person regularly uses, now a specific situation like information repertoires is examined and generalized to all possible intentions of media use. The communication mode refers to a specific situation of using media, the activity in this moment and the user's identity. With this approach many cross media activities by an individual can be combined to one action (Hasebrink & Hölig, 2013, p. 199). The focus is on the audience and their own statements about behavior. This allows the audience to explain and clarify what they are doing, which needs they satisfy and how they define their media use (Hasebrink & Hölig,

2013, p. 197 ff). It is possible to ask the audience directly, which media they consider as their main source to fulfill certain needs. It means, that people are able to say why they are watching television and what they exactly define with television. With that researchers can differ from the perspective of the audience, people's media consumption and behavior without regarding different devices and media content. This can also explain, if it is used because of habit and socializing and not to satisfy a need.

These concepts can be applied to the research of media socialization in families. Parents and children pick individually specific digital media for their usage with different motives. Parents might use different media for information and news and children for example for entertainment. But in the case of children the agreement of general media consumption can also be framed by the communication mode of media socialization and the aim to learn a responsible use of digital media. The concepts allow the investigation how children learn media literacy and how they use certain media for what purpose. The link between the individual media repertoire and everyday practice makes the approach suitable for the analysis of media socialization and Digital Citizenship. If an individual has a specific repertoire of certain media for a regular use, than the experience of this routine will show in a confident handling of the specific media. If a certain media is not in the media repertoire of a person, the individual use will be not as precise as for a person who used it before and included it in his or her regular used set of media. In the definition given by the authors, media repertoires are a result of single situations, different behaviors and media contacts and contents (Hasebrink & Domeyer, 2012, p. 762). Children are confronted with technology they do not know. The socialization progress starts with trying out, vague contact with the media and its content. If a child decides or is allowed to use this media again he or she starts on a basic level from the first experience and the first knowledge about function and content. Children are socialized with the repeated use and the experience of different effects of their behavior. In times of converging media environments, media socialization seems to be 'learning by doing'. But 'doing' in the sense of socializing does not necessarily mean own experience and own knowledge. 'Doing' can also mean that other people use the media the same way and have their experiences to share (Berger & Luckmann, 1991; Sutter, 2000). Media repertoires and media socialization in this way are also influenced by the interaction between certain media, the communication within the audience and individual experiences.

The participation of the audience and the use of the media is the basic requirement for a media repertoire (Carpentier & Dahlgren, 2014). Considering an audience with the same age, the same

education and approximately same experiences in their life Ian Hacking (2000) argues that these people act in similar ways. So similar patterns of media use or participation should lead to similar media repertoires. The authors of the concept of media repertoires assume that the media use of a person is an active decision. They did not investigate the process of the media use, the process of socialization. The authors claim that the media repertoires are given by the individual social background, but in addition the learning process of own experiences and interaction with others should be considered. The difference is the way of participation. While the authors of media repertoires continuously assume active participation of the audience for their decision of media use, I am referring to other forms of participation (Casemajor, et al., 2015). In the media socialization of children, it is not necessarily an active decision of action and use, it is also be influenced by parents, other people and technology.

Therefore environmental influences are important to consider. Today it is easy to use a smartphone to stay informed on the way. The information online is the same as those probably available in traditional media, but the habit of use and the access is different between old and young people, also the structure of the media differs. In the example of news in the Internet and news in traditional television it is discovered that nearly all people in Germany have access to the Internet, but while nearly all young people use it regularly, only half of the older generations are actually online (ARD/ZDF, 2016). For them the Internet is a bonus, but has not such a big importance. Older people are more socialized with radio and traditional television as only source of news, so of course they have a radio and a television device. This is not necessarily the case for the younger generations. The possession of a TV at home only for watching traditional television decrease for them as modern television devices are able to show also online content (ARD/ZDF, 2016; Statista, 2016). So the general use of a television device is not necessarily an indicator for the used content and media. Especially teenagers grow up with Internet and the accessibility of news from everywhere. Today they also own smartphones, so they can access news on the way, at any time. For them the use of a traditional television program for information and news is not necessary, their first chosen media is online (ARD/ZDF, 2016). But they still might use the traditional television program for gaining information, as their parents and grandparents watch it (Smith, 2010). The imitation of the behavior of elder is part of the general socialization in a society (Brocher, 1985). But according to education scientists, sociologists and psychologists, the process of identification and selection while growing up is also important for the concept of identity (Berger & Luckmann, 1991; Freud, 2010; Goffman, 1956; Giddens, 2009). The authors of information repertoires included only the development of identity from childhood to adulthood in their considerations.

They consider the construction of identity as a key concept, so they refer very close to media repertoires with similarities in the social background (Hasebrink & Domeyer, 2010, p. 62 f). The influence between the construction of identity, types of socialization, participation and interdependency of these factors are not considered. But they have to be viewed if one wants to understand how parents decide which media children are allowed to use. There are not active decisions by the children expected because the communication modes of children and parents differ. The different motives have to keep isolated from each other.

Following the example, there is also a difference in the structure of news online and in the traditional television program. TV news are 'given', relevant events are presented more or less in detail one after the other. In the Internet such detailed information like in the television program mostly requires 'action', like a klick on a headline or it can be manipulated with jumping in the timeline of a video. The authors of information repertoires characterized a non-directional information need, which can be fulfilled for example with traditional television news. They also identified Social Media as topic related or peer group oriented needs. In the structure of online content and traditional television it is for both not easily possible to fulfill the opponent's needs. Television has a program, where news are in a given order, on which the audience has no influence. Of course the chosen program by the audience can be topic or peer group related, but for the example of news it is typically not. The audience has only influence by choosing a specific channel. Otherwise online news ask for at least minimal activity of the audience, there are possibilities to select the content and to change the order according to individual interests. In my opinion online news are not able to fulfill non directional information needs, because people watch it according to their interests and are able to skip content they do not want to see. For empirical studies by the concept of information repertoires, this becomes important also for the basic data. The offer of content of a specific media can also be a factor for the preference of one media to another. The gap between older and younger people and their main focused need can be also explained by the structure of media content they are socialized with. That would mean that the habit of regular media use is not changing as fast as the current media landscape. Parents preferable use the media from their childhood and restrict with their choice and behavior their children. Like this the media repertoires in families might not adapt as close as it is illustrated in the concepts.

3.2. Living Fieldwork

Living Fieldwork or field research is the investigation of a small group in society, called 'field'. Scientists want to live and work among the people in order to understand their behavior. "[F]ield research is a learning situation in which researchers have to understand their own actions and activities as well as those of the people they are studying. The main instrument of social investigation is the researcher, who has to learn the local language, live among the people and participate in their activities over relatively long periods of time in order to acquire a detailed understanding of the situation under study (Burgess, 1989, p. 1)". There is a long history of different approaches and remarks, but doing field research still remains as a very open approach to study people. Even very popular scientists were asked for their implementation, the scientist itself remains as an object to conduct the study (Burgess, 1989, p. 14 ff). Researcher have to be aware that his or her presence and actions have influences to the studied field. The participants are asked for their daily routine in certain situations by interviews. Observations are done to identify unknowingly behavior or routines which the people do not reflect on (Gillespie, 1995, p. 75). Therefore the researcher has to become part of the field for authentic results. The scientist has to deal with a double role in the study – the objective observing fellow and the person, which takes part in the field. One of the most discussed problems of the approach is the open entry and completion of the study. Particularly with regard to the immersion of the researcher into the field there has to be a framework, which is open enough to modify according to individual situations, but also tight enough for the aim of the study (Burgess, 1989, p. 23). So the theoretical framework is the evidence for all questions and introduced actions. The study has to be planed according to certain situations, to clarify how the researcher acts in early days, how he or she demarcates, when questions are allowed and when intervention is possible. But all the results have to be taken as surprise (Gillespie, 1995, p. 73).

3.3. Summary

The concepts of media repertoires and communication modes, modified by the approach of writing ethnography were in the last chapter identified as suitable method for the evaluation of data for the analysis. Doing a study with families, especially with children needs a very flexible approach. It is necessary that the scientist comes into the familiar environment and is open for every possibility to start the research. The scientist is working in different fields, but has to make the data comparable. The requirements in each family are different, so the researcher have to 'navigate' interviews and activities according to the framework of the study. The researcher should not have expectations for the study, but a theoretical frame.

With the aim to analyze habits and needs of children and their parents regarding digital media, all answers and actions have to be taken as a surprise. One can say that the researcher is 'teached' by the families, what case apply and how different issues are solved. The family is asked for their daily routine with digital media and also their use in certain situations. The concepts of media repertoires and communication modes can be extended to fieldwork, which includes in addition to interviews the observation of the participants. The media consumption of a person does not has to be on purpose, there are many reasons to use a certain media without awareness. The media socialization process can be considered with interviews for active reflections about participation, communication and interaction. With observations the researcher is able to understand the context in which a behavior occurs. This is important for the evaluation of all received data and all information.

4. Digital Practices in Families

4.1.　Frame of the Study

The study was conducted from March to April 2016 in Hamburg, Germany. The families were first contacted by online announcements. I placed requests in different groups on Facebook, in an online community for parents, on a media network for parents and teacher in Hamburg (Mediennetz Hamburg, 2016) and sent it via email to the parents in the kindergarten of my own children. From about ten interested families, four remained and agreed regular visits and interviews. They signed a consents called 'Einwilligungserklärung' (see Appendix), in which they agree to the framework of the study and the usage of the given information in this work. The interviews with the parents were held in German and were recorded. Observations were hold on pictures and a personal research diary was written by me. For the publication of the results, the personal data are anonymized according to the wishes of the participants.

One family has their children in the same kindergarten than I have my children, three families were complete unknown for me. They got in touch with me via a Facebook group for parents, via a commercial group for re-sales on Facebook and via the online community of parents. All were very interested in the topic and curious in the approach. In all families both mother and father have a similar education. Two have an academic background and the other two parents have a secondary education. The parents are between 27 and 42 years old and have overall nine children. One family employs also an Au-Pair in the age of 20 years old, who was interviewed in English language. I took her answers as an indication for the generation between the parents and the children. Included in the study are three boys and four girls in the age of four to eight years old. Two younger siblings were not taken into account, because both are too young for any interest in digital media.

The first visits in the families were always without children in order to get to know each other and clarify what I am going to do. I used these meetings to ask for daily routines, rules in media consumptions, habits and reasons for specific decisions and behavior. It was important for me to find out in the very beginning, on which opinions and habits the family structures are based on. In this conversation I usually started with the profession of the parents and asked for their work at the computer. After that we came to the topic of working at home and adult's media consumption and how they handle this with their children. In the case of non-working parents, I asked for their general media use at home and the handling with the children. We discussed the parents' wishes and aims for their children, how they react to technological development and what is individually allowed and forbidden in media consumption in the family. In the

theoretical framework, I asked for the full media repertoire of the family, individual media repertoires of the children and adults, and specific communication modes.

In the following research process, I started observing the children by let them show their usually used devices to me. In this step of the study I was very flexible with my time, because I wanted also to talk with them trustfully while they show me 'their' applications. The children were very different in this issue, some needed a long period of playing around and from other children I had immediately the attention on the topic. I directed them to explain me what they are doing and if they could explain I asked for reasons. The children were allowed to show me everything they wanted, but I asked them only for their favorite applications. Otherwise some children showed me the programs of the parents, which are fascinating to them. The parents were allowed to attend, when I spoke with the children, but I asked them not to influence anything.

In the role of a regular visitor it became after some visits difficult to stay close to the framework of the study. I always had to have in mind not to influence my participants with small-talks, which seemed important for casual talks. Sometimes I had to push the topic according to the settled frame. It was very time consuming to come to the main points of each visit and getting answers about the real behavior, not how they would like to do it. I always had to pass over the point of representing a 'perfect' family or the 'socially' right solutions for problems. I had to re-question a lot what I observed in the families.

The evaluation of the given information by the families required a lot of knowledge about the context and intention of behavior. In the following section I want to present my results in regard to the previous discussed theory. The findings are described as detailed as necessary for the understanding of the context. A table of the main characteristics in the families can be found in the appendix of this work.

4.2. Digital Access and Use by Parents

Every adult participating in this study has an own smartphone and at least one other device with access to the Internet. Parents see the Internet as an unlimited source of knowledge, from which their children might suffer. But preferential this source of data is mainly accessed by themselves. Often named are e-mail provider and messenger as tool for communication. The knowledge of parents becomes unlimited in the eyes of children, because they are able to look for answers on children's questions online. Google and Wikipedia is an important source for information, Google pictures and YouTube videos are shown to the children if oral explanations are not sufficient. The easy access to information, videos and pictures is the fastest way to

knowledge. The Internet might replaces heavy books in a shelf, the way to the library or to a museum, even sometimes the look out of the window is replaced by watching pictures of birds on Google pictures. For the children digital media are mainly entertainment and the devices are often used as toys.

Digital devices are a part of the most important facilities in a household today. The adults grew up with the rise of digital media. They experienced the changes in technology, know the old and know the new. It is totally normal for them to use new technologies and new media, it made their life easier and more comfortable. Liliana for example is a breastfeeding mom, for her the procedure is very boring. But if she can use her smartphone she does not feel herself chained or isolated at home.

I'm a fan of Google and YouTube. How could my parents live without that shit?

Liliana (32)

Gesa has similar experiences. When her daughter was born, she both worked at home and breastfeed. She took care of her fresh baby by holding her at the chest and working simultaneously on her laptop or smartphone.

Finally, she grew up with it. I had an iPhone as she was born. That way I grew up - with the newspaper at the breakfast table - it was never questioned, it [the smartphone] was always existent. Gesa (36)

Children do not know their parents without smartphones, tablets or computers. These devices are a natural part of a household, even of a person. The access to technology by adults is not challenged, for children mobile devices and digital media are an indispensable part of adulthood.

In the research process I could identify two different views of the parents. Therefore the results are presented separated by each other. They are structured according to the stages of Digital Citizenship: access, use, understanding and creation.

4.3. Practice in the view of digital media as replacement

Two of the four visited families in the conducted study represent the view of digital media as a replacement of traditional forms and education. In these families the access and the use of the Internet is regarded as an essential part of modern childhood, in order to prepare children for their future. The parents want to support their children in the use of digital media, because they hope for benefits in school, as well as with the handling of the devices, when these skills are

needed outside the family. They come from secondary education and use digital media a lot for their own education, communication and entertainment.

David is 37 years old and comes from an information technology background. He is very interested in technology, new devices and possibilities. He gave up to follow every digital development when social networks were established and he could not keep track of all the new tools and gadgets anymore. So he focused his attention to online gaming and digital team playing in bigger communities. He uses online offers of newspapers a lot and Facebook for his social contacts. Bianca, his wife is 27 years old and unemployed. She never learned a profession and stays at home with the children. For her the Internet is a communication tool to the people outside of her family. She uses Facebook, Twitter and WhatsApp for her social contacts, holding friendships and finding new contacts. She is also playing smaller online games for her amusement and enjoy the opportunity to order things via Internet, so it comes directly home.

> *Digital Media makes yourself comfortable … you have not to go out …*
>
> David (37)

This comfort today, due to the Internet is seen as enrichment of modern life. David would have liked to have similar possibilities in his childhood than his children have now with the technology. Therefore he wants to support the use by his children.

> *You are no longer allowed to prohibit such things today.* David (37)

But David also reflects on the bad things of digital access. He is aware of some risks, if he allows his children the access and the use of online content.

> *Formerly you said: 'I beat you' and now one write something wicked on Facebook. One thinks no more about what you actually do with those things.* David (37)

David and Bianca want to offer a better life to their children than they had. For themselves they identified the digital media as an enrichment of their lives and the prohibitions in their own childhood as without proper cause. Both see disadvantages for their children in the future if they would elude them from digital technology. For them digital media are part of the modern life today, because the early contact is needed for the children's interest. Children have to know how life is going, they have to experience the possibilities in early childhood and will have like this benefits in adulthood. Their children are Devin, a seven years old boy, who came to school in the age of 6, but was now deferred from attending classes because of social and psychical issues; Miley, a five years old girl in pre-school and Felix, 18 months old boy, who was not involved in the observations. Bianca is not the biological mother of Devin and Miley, but she

is accepted in this role by the children. Devin lives permanent with his father, while Miley visits them regularly.

The second family included in this category are the parents Martinho, 33 years old and Liliana, 32 years old. Their children are Leandro, an eight years old boy who attend the second level of elementary school; Maria, a six years old pre-school girl and Marsio their nine month old brother, who was not observed in the study because of his young age. The parents consider digital media primarily as a big source of information. Both come from lower education and image a better life for their children. Especially Liliana sees in knowledge the way out of dependency and poverty. She by herself cannot offer the required knowledge and education to her children, but the Internet can. So she uses Wikipedia and YouTube very often for her own education and use it as well for the education of her children.

> *If I want to see a dolphin than I google dolphin and if we want to know how a car is build, we watch it on YouTube.*   Liliana (32)

Liliana says about herself, that she is depended from the Internet and the access to Google and YouTube. These are tools which help her to educate her children and they are necessary today. She is a very ambitious mother, who always want the best choice for her children. In her own childhood she suffered under unclear information by her parents and a very traditional education without any newer technology. The experience in her childhood was that the other children knew or had always more than her. This drives her now to support her children as much as possible in school and education. It includes in her view also the early access to information with the restriction of possible risks, which she is aware of. Her children should learn how to access and interact with digital media, but they have to accept the regulations of the allowed content. Liliana sees social networks very critical for children, she prefer the real contact between them.

> *I rather prefer ten kids jumping around me, than I don't know what they are doing.*
>
> Liliana (32)

Liliana is a careful Facebook user, who has mostly real known contacts and seems to be confident with her personal data. That is what she also wants for her children. Martinho, her husband, is a workaholic, who mainly uses digital media in the evenings to relax. He reads online offers of newspapers, news of friends on Facebook and stay in contact with his family abroad via Skype. He is less reflected in his own behavior and digital use, the digital media is needed for him to break from his profession and he do not want to be disturbed. So Martinho

agrees with the media consumption of his children as long as they stay quiet when he is at home. At the same time he observes that the children also calm down with the use of digital media and it is easier for him and Liliana afterwards to put them to bed. Any bad impact are not seen by both. Liliana sees no need for restrictions, she says her children have not enough time beside school and social contacts to play too much on their tablets.

4.3.1.   Access

In both families the children own personal devices. The applications and functions are mainly arranged by the parents, but the older siblings in the families, Devin and Leandro are also allowed to download free application from the app-store on the device by themselves. The store is working with suggestions based on the already installed apps. The differentiation of numbers and letters makes the children able to decide whether an application is free or not. Maria and Miley are too small for the permission to download something according to the parents. In each family exists a television, which was always running with a children's channel, and shared devices accessed by the children.

Miley has according to David and Bianca an own smartphone from her biological mother. Unfortunately this circumstance could not be documented, because the biological mother did not agree in any research at her home. I was not able to ask detailed questions in this issue and could not observe Miley with the device. Devin has a personal computer, which is connected using the same account as for the computer of his father. Due to synchronizations of the computers David is able to follow the activities of his son.

> *An own computer is already practically, he does not sit constantly at mine.*
>
> David (37)

Devin's computer is permanently in his room. Hence Bianca added her critical thoughts to this situation. Devin is playing too much at his own computer, so they had to introduce a timeframe.

> *We don't want to let him play more than one and a half hour per day, otherwise he becomes aggressive ... than it is not nice with him anymore.*   Bianca (27)

David agrees with that, even if he would like to allow more. In his family the children have also access to a Nintendo Wii in the living room and also another one in the children's room. Devin is allowed to use the family tablet and sometimes also the computer of his father in the living room. David told me, to give his children more than he had in his childhood let him feel as a good father. The tablet used by Devin is secured with an age-restriction and a payment password. David's family is working with a fixed amount, which is allowed to spend for game

attachments, mainly by adults. Gaming is a usual leisure activity by both mother and father, for which money is needed. But the amount is often accidently used by Devin for downloads. If Devin and Miley do not behave well, their parent may restrict the allowed time of use further. This is not always connected with the media itself. The media consumption is used as a pressure for the children to behave, which leads to fears of the children. Devin told me, that he can never come to his parents with problems, because 'it is always his fault'. With every bad action his media consumption is reduced. His parents use their power to decide without explanations and reflections. Devin is forced to make own decisions and solve problems by himself. This already leaded to clever solutions in the use by Devin. Miley's access to digital media are strongly restricted, because she needs more help with the handling. David and Bianca do not want support her digital media use, so they qualify their help.

Leandro and Maria have both an own tablet without a SIM card, so they are only connected to the Internet in the home network of their parents. The children's tablets have no payment data registered. Typically personal devices of the parents are not allowed to be touched by the children. The conflict of ownership in the past and the risk of damages leaded to personal devices for the children.

> *I do not want the children to play with the tablet ... In the evening Martinho and me are used to sit down and read on it. Then, when the battery is empty, because of the previous use of them or my children are grouching, because they want to use the tablet, he and I am annoyed. Therefore, the children have their own tablets.*   Liliana (32)

The parents want to use their personal devices by their own, without limitations in time and function. Therefore the children got own devices as alternative. Like this it is possible for the parents to use their devices individually, also while the children are busy with gaming on an own device. The purchase is seen as luxury and is also communicated like this to the children. With own devices comes the responsibility for the gadget. Especially the task to load their tablets is given to the children in the family of Liliana and Martinho. The limitation of energy is seen positive by Liliana. '*If children do not care about their stuff, they cannot use it*', was a representative message by her. That follows the thought that adults need and care of their digital access which is for children not necessary. Liliana calculates with the incompetence of her children to take care of their own devices, which leads to natural limitations in the use without intervention. Typically the device shuts down with low energy during use. The children, especially Maria have not the patience to wait for full load of the battery, so it cannot be used long after an 'emergency load'. If Maria is not interested anymore the device is left like any

other toy and not plugged in. So Liliana's children have in theory unlimited digital access, which is practically not possible, because in their age the children are not able to have the full responsibility. The access is limited due to technical circumstances, which is taken into account by both parents. In the family they also share an old iPhone as music station and if Martinho is not at home the children can use the father's tablet. But basically it is preferred that the children use their own devices. Liliana and Martinho expect preferably an independent navigation by their children on digital devices until they are allowed to use specific functions. Maria usually ask her mother for help on Google and YouTube, mainly for writing the keywords. Liliana mainly supports these actions only if the search is useful in her eyes and promote general education. Sometimes Maria also ask her brother, often when she know her mother would not help her.

4.3.2. Use

The devices are preferential used without any help by the parents. So the children showed me their devices on their own. While observing the children I intervene and asked for applications they ignore, these were mainly pre-installed applications or communication tools. The children did not want to open them, justified with explanations about prohibitions and boring use.

Leandro is able to read and to write, so he can act nearly independent from his parents. He likes the camera and the album on his tablet, as well as the settings for the background and a drawing tool. Leandro uses the Google Search, YouTube and some games from the app-store. They are very complex in their structure and time intensive to solve. The tasks are to run and jump, to solve exercises and of course to win. YouTube and Google is utilized self-confidently by him. When it is possible, his navigation is orientated at pictures, rather than texts. While Liliana wants the use of the tablets mainly for education, Leandro is more interested in the game options. Together with his mother, he uses the drawing tool for the training to write. Google is used for homework, to look for information and solutions. Without support of the parents YouTube is only used for watching cartoons, educational videos have to be mentioned by Liliana.

Devin is not able to read or to write yet, but he uses his knowledge about graphical components and colors to navigate. For him is an arrow to the left backwards on pages and to the right to move along, red is cancel, blue or green buttons continue. He observed his parents and know important combinations on the keyboard. In other tasks he uses also the speech input at the tablet in order to do not need help or not to ask his parents. Devin's total use of digital media is focused on gaming. At his computer he plays similar games than his father, mostly team-shooter

with age restrictions over twelve years. The keyboard looks typical for gamer, with damages at the keys used for movement (WASD). The multitasking of mouse movement and keyboard buttons is no problem for Devin. The team-speak is deactivated for Devin's account, so he is not able to communicate with his team members, but he can hear them. At the computer of David I observed Devin while he played on a children's game webpage. He selected easy driving games with open end. The games becomes more and more difficult until the reactions of the user are not fast enough. The games on the tablet are comparable to these.

On the contrary to the older boys stand their sisters, who always need help when reading or writing is necessary. The restrictions of access for Miley in the family of David and the refusal of her biological mother leaded to the fact that I could not further observe her usage. Maria navigate, similar to Devin though to her intuitive knowledge of graphical elements and pictures. She has less applications than her brother on her tablet, she uses mainly a drawing tool for colorations of pictures. Maria also likes to change the background in the settings, she saw it at her brother and imitated his behavior. For her, pictures and buttons with symbols are very important to navigate. The lists of suggestions on YouTube, based on previous watched videos is used a lot by her. This leads to a problem of content, because Maria is not allowed to watch every video she is curious about. But these videos are suggest more and more, because she watches them secretly.

4.3.3. Understanding

The understanding was tested according to the abilities for reflection, problem solving and decisions. In the two families only Leandro was able to explain what he is doing on his tablet. The other children seemed to have intuitive actions and progressions which they learned to get what they want. Leandro explained that the Internet is working over electricity only at his home. He has an idea that there is something more, because his tablet can be full loaded and still has no connection if he is elsewhere. But other people can have access, he does not know why. Leandro is able to adapt his behavior according to specific pattern of use he knows. Making decisions is difficult for him, he feels unsecure in every usage he does not know. In the decision for an application he comes always back to applications with the structure and the task he solved previously. Even with the help of me as an adult, Leandro did not want to continue in the task to explore new applications. The other children were overstrained by my questions and the task to use other applications than the known.

4.3.4.   Creation

Devin is the only child in this study with an own Facebook account. It is created by his father as login for small online games. Only close family members are friends, while the timeline is mostly filled with the automatic generated posts of the games played by Devin. During my observation it turned out, that Devin is not aware of this account by himself at all. The other children do not generate content online. They prefer direct communication to a known person, which is mostly done by traditional phone. In Martinho's family Skype is used sometimes with his help.

4.4.   Practice in the view of digital media as addition

Two families in the study see digital media as addition to the traditional education. The parents do not see any need for the usage of digital media by their children. They belief that traditional actions, playing with classical toys and with other children is more important than an education focused on the early socialization with digital media. However the children get access to digital devices and are allowed to use them, but this is not part of the central education in the families.

Susanne is 40 years old and married with Peter, 42 years old. They are both graduated at university and work only with the help of computers. The family shares a laptop at home and a tablet. They have no television, but instead they use Amazon Prime for TV series, rarely films and Spotify for music and audio dramas. Susanne has very good memories to her childhood without digital media, but she values the relief which came with the Internet. The family lived a longer time abroad and honors the modern possibilities of fast messages and free calls. But still social networks are hard to understand for them. Neither Susanne nor Peter have an active Facebook account. Susanne tried it in her time abroad, however she experienced it as a surreal theater to display oneself and present only positive things of life to endless unknown friends. She deactivated her profile very soon after her registration. When she wants to stay in touch with friends and family, she sends pictures and messages individually via WhatsApp or Facetime. Traditional calls are done via Skype and often with the video option. Susanne owns two smartphones, one for her private use and one for professional concern. With the exception of home office when her children are sick, there is no other situation where she wants to use the laptop or the professional phone in the presence of her children. Her private smartphone is used by her in moments of aware use. She would never look immediately on her phone when it is just vibrating not ringing. Peter seems more focused on his smartphone and hold it always available. He looks also every time on it when it notifies him of something. In contrary to Susanne's smartphone the children are allowed to use his phone sometimes. So his children

observe him with the handling of the phone. In order to solve specific problems he can use Google for hours. A third adult family member is Siiri, a 20 years old Au-Pair from Finland. She also has a smartphone to stay in contact mostly with her friends via Facebook and also to call her family via Skype. Siiri agrees with her guest parents in the view of digital media as addition to traditional education.

> *When I'm used to babysit in Finland, they always watched something on the tablet ... I felt like my job was to say no to the kids ... my job was trying that the kids do something else than playing on the tablet.*   Siiri (20)

As person in charge for children, Siiri sees her task in the restriction of the technology use. She by herself limits her smartphone use in the present of the children only to very important messages. So she wants to stand as an example vis-à-vis to the children. In the moments she feels unobserved by the children she uses her smartphone without interruption. As an adult person she does not see any danger in her behavior. The children in the family are Ella, a six years old girl in pre-school and Mats, a four years old boy in the kindergarten. Mats is strongly orientated at his sister and was knowingly separated for the observations.

The second family in this view is composed of Gesa, 36 years old Pedro, 39 years old and Anna, six years old. However Pedro is not the biological father of her. Gesa and Pedro are not married, because it appears not necessary in their relationship. They are convinced of Montessori education and practice this with their daughter. Anna visits the first grade of a Montessori school. Gesa and Pedro are using digital media a lot, while Gesa is also grounded in traditional activities like writing by hand. She has her own music production company and is working in the management and marketing section in her home office. Pedro owns an agriculture and forestry company. In addition he has a farm separated from their home where he grows food plants as hobby. Both are higher educated and come from good situated families. They have good memories from their childhood. Gesa has strong limitations in her media consumption at all, Pedro grew up with an of course use of technology. It is important for them, that children can experience the world before it is explained by adults. In their view, parents have to bounder the area of action for children, but within these, they should not restrict.

> *That's something I want to pass on to my children. No matter what it is, your parents are standing behind you.*   Gesa (36)

Gesa does not want to forbid anything, she spends a lot of time to explain and to show everything to her child. In order to have the control even for possible harmful things she allows

it with the restriction of her presence. Like this she wants to keep her child secure and be sure that Anna always comes to her with problems. Digital media are a welcome education tool in the family, but cannot replace social contacts, sightseeing travels and traditional skills.

> *She can play with the smartphone also when she is 18, jumping with the neighbors' children through the puddles looks maybe a little silly with 18.* Gesa (36)

Gesa sees that her child has different preferences than media consumption. She allows the use in leisure times and on request, but preferred are other activities. Her fear is the social isolation of her daughter and the dependency from media. Gesa sees a difference in the use of digital media by adults and by children.

> *I do not ask if I can send a text message or not ... for adults it [the smartphone] is a communication tool - not yet for children.* Gesa (36)

For children it is still important to develop in the manual and traditional way first, according to Gesa. She believes that this is the way of a basic socialization into society. Digital Media are an addition and an assistant to make some things easier. Therefore the digital media use by adults is uncritical.

> *Our generation is changing ... my father told me how horrible he found mothers sitting with a smartphone on a playground ... but he himself was formerly located there with the newspaper. I see no difference in reading news in paper or on iPhone.*
>
> Gesa (36)

For children the feeling of the surface matter. Coloration on a screen can be the same than in a book, but when it comes to holding a pen or to paint by own creativity, traditional activities are preferred by Gesa. These are seen as positive for development, which is standing behind new media use.

> *Real experiences are worth much more than to see it virtual ... I want my child to experience everything real.* Gesa (36)

The family is traveling a lot around the world, especially for Gesa it seems important to visit the places where others see mostly pictures. Accordingly she has a lot to tell from her personal experiences abroad. Anna really likes these trips, exploring other countries and continents seems to be the completion of her daily experience. In school she has a lot of friends with other nationalities, also she knows that her mother lived a long period abroad and Pedro's native

language is Portuguese. The family stays in a very international environment with connections to highly educated and reflective social milieus.

4.4.1. Access

In both families the children can access digital media with shared devices in the families. While films, series and YouTube is only accessed with the help of an adult, the children utilize the specific applications for children by their own. They ask for help in every other activity than the applications specialized for them. So if they want to use Google, hear music or watch a movie they know the applications, but they do not use them without the presence of an adult or help by them. Typically the parents are not observing their children in the activities, so there seems to be an inner impulse by children to not try it alone. Different situations of a needed activity against boredom led in the past in both families to the general permission to use digital media and the download of children's applications to the shared tablets. The benefit for the routines stands before the fear of unlimited consume. In fact all the devices in both families are secured with a code, but all children know how to unlock the devices

Mats and Ella can use the tablet in their family and sometimes the laptop for their free choice of activity. Ella is in this time mostly the deciding person, while Mats goes ahead and mainly observe the activities by Ella. They are allowed to stream series and films via the Amazon Prime account of the family.

> *I was never allowed to watch TV ... that has not harmed me. Today I find this limitation well, so my children are allowed only on weekends from 17 o'clock until dinner to use the tablet.*   Susanne (40)

Susanne has not the feeling that her children would limit their media consumption by themselves. The idea of *'lördagsgodis'* – sweets only on Saturdays – a tradition in Sweden, changed to the choice of sweets or tablet use on weekends. The older Ella picked the tablet, while her brother went along with that. The question for concrete anxiety of unlimited access was difficult to answer by Susanne. She justifies her restriction mainly by her own education, feelings in her childhood and intuition as parent. Siiri agree with this solution, because of the clear rule of time for media consumption for the children. This makes her time with the children easier. For Siiri it seems a conviction that children are not allowed to use digital devices or need restrictions with the consumption. The limitation only on weekends is broken, if the activities on the devices are used against boredom at home in the case of sickness or on trips. Susanne and Peter are working with the prohibition to use digital devices if their children had broken a border in their behavior. For Ella and Mats digital devices are fascinating. They would miss the

media use on the weekend, so they are motivated to behave. Their father is often playing around with his smartphone, they see the regular media use of him. Even if Siiri tries to avoid to use her smartphone in the present of the children, she has it always with her and use it for example to take photos of the children. Also Susanne looks up important information online in the presence of the children and in the home office the laptop belongs to her.

In the second family, Anna shares the devices only with her parents Gesa and Pedro. She has an own folder with applications on the tablet. There are downloaded films for children on the tablet and also on the laptop. Gesa has the feeling that Anna do not use the tablet or the laptop too much, so she had not to limit the access. If Anna want to use one of the devices she is allowed to do. On travels she uses more digital media than at home.

> *If we are on a plane, she don't understand that she has to sit for hours and be quiet… I give her the tablet to play in this time, so I can relax and enjoy the flight.*
>
> Gesa (36)

For Anna is the access to the Internet a natural component of her life and because of that seems not such unique. Gesa is very proud of her daughter's behavior and trust her activities. She would never do something, which was previous forbidden.

4.4.2. Use

The children showed me their applications on the tablet because on the laptops only films or videos were accessed with the help of adults. Mats presented me some easy game applications like kicking a ball to a goal with finger swipe and an interactive story, where he had to decide what the main character has to do. Ella showed me on the same device an application with mini games: dressing of figures, making and decorating of pancakes and feeding the figures with the prepared food. In general the whole game appeared as a dollhouse with specific oral explanations what can be done in the different rooms. The same game is used in an extended version by Anna. She also uses a similar game, where she has to turn out the light in order to put to sleep all animals on a farm. The required actions are explained by a voice over. Both girls like to use drawing and coloration applications as well. The children are allowed to use the games by their own, all necessary actions are explained by a voice or by their experience in traditional activities. For example the use of a pen and different colors appears similar on the tablet than the children know it from drawing on paper. It is eye-catching that the general appearance of games is very childish. Figures have big eyes, big heads and behave cute; the story is very easy and appears innocent. The games are mostly structured interactive, children often have to decide and experience consequences in the frame of the game. This means also

an instant 'answer' to the children, with features of communication. The games have not the task to win, more to develop or to finish a story. They have usually a specific point to end, so during my observations the children closed the applications by themselves. In case of unexpected occurrences all children tend to look for help by an adult. Opened windows and requests are not intuitively closed, they are typically show to a person in charge. However, if they know what happened, they are most of the time able to find the cross for closing advertisements or in selection screens they experienced already that green buttons and arrows continue the game. In an emergency every child knows the home-button, which can be pressed to cancel all and go back to the desktop. From there the game can be restarted. The children are quit fast with this single operations to solve their problem. It seems that they have a catalogue of learned steps in known situations they try before they have to ask for help. In my presence the children also tried some applications they never used before, but closed them very fast when the general appearance could not be categorized into their list of actions. We tried the handling with YouTube together, where all children navigated without my help. They orientated themselves according to the pictures in the list of suggestions. Anna also tried to read the titles.

4.4.3.   Understanding

Mats was not able to explain what he is doing on the tablet. His actions seemed to be intuitive and not reflected by aware actions. Al lot of his behavior was based on trial and error or random. The games are not designed to loose, so every decision leads finally to success. In the decisions of the interactive story he does not differ between meaningful and useless actions. For him it is important to continue the story, so he makes a random decision. Ella and Anna could explain the functions of their games. They were able to reflect why an action is necessary and what makes sense and how to interact with the application. They acted purposeful and direct with the games they showed to me. Games with another structure than the known, lead to the question to an adult how to use it. It seems that both girls understood that every application and function on the devices comes with a specific task, they want to solve. At the moment every bigger or unknown problem is given to an adult. This also means the handling of the devices outside of the children's known surface. While the girls decide with the change of the graphical appearance to stop the action and ask for help, Mats continued and tried out his set of actions to solve a problem. Finally this problem led to big frustration and an interruption of my observations as I had to help him.

4.4.4. Creation

No one of the observed children in this part of the study create any public content online. Mainly this results from the limitation of the children's field of action, but also from the fear of the parents of accidentally publishing private data online. The children prefer a direct communication, which is only be done with the help of the parents via different messenger and e-mail.

4.5. Summary

The results were presented according to two different view. Apparently these are connected with the education of the parents and their own background in childhood. In the studied families with higher educated parents the impact of the Internet as information source for children's questions deceases. So it seems that some parents are more dependent by digital resources than others. Parents with secondary education in the study tend to see the digital contents and functions as a replacement of traditional media and education. The higher educated parents use the Internet as a welcome addition to traditional solutions and see it as a tool for easier access. These views have different impacts on the general exposure of digital media to the children.

In the families a common approach of both parents does not always happen. The media consumption, permissions and prohibitions can differ between the responsible person in the situation. I observed, that the handling in the families is mainly orientated on the mother's view. Even as Bianca is not the biological mother and David seems to be more responsible for the children, Bianca's point of view dominates. The fathers are more qualified with technology, but restrict less. In the common agreement in the families comes more restrictions of media consumption by the mother's arguments.

Bianca was the youngest of the participating parents. At the same time the habits in the family of Bianca and David were mostly focused on digital activities. They do not want to forbid digital media consumption at all and limited the time of use for health reasons of the children. For their own there are no limitations and as I observed there is no moment without a running television, computer, or gaming console. The parents themselves have a basic understanding of technology and functions, but primarily they want to use and take part in social networks. In opposite stands the family of Susanne and Peter with the age of around 40. They are very critical to online media content, especially social networks. Their children mainly are allowed to watch films on the tablet, which is considered as controlled television. The habits of extended use of digital media by parents and the critical thinking in respect to the children are connected in the families of Gesa and Liliana. Gesa is higher educated and has a better understanding than Liliana in

digital practice. Therefore Gesa is more aware of possible risks in the Internet and try to teach her child an understanding of technology by first traditional education. Liliana let her children use the technology in order to let them learn by practicing digital media within specific borders for children. That comes with the approach that Liliana cannot offer as much knowledge about technology to her children.

It was very interesting to speak also with Siiri, the au-pair in Susanne's family. She sees digital media as a no-go for children in the age of her fosterlings. If she is present or responsible, the children should play in traditional ways. Why the media consumption should be forbidden is only justified by this argument and she cannot reflect more on it. This view seems to come mainly from the common critics of Social Media consumption in her generation. The fact that her guest-family is practicing a similar conviction enforces her point of view. It might be an acquired belief that digital media or in general screens are negative for the children's development. In adulthood the responsible persons for children are in the position to evaluate their experience in childhood. With the decreasing age of the participants drop the ability for the reflection of their opinion. While the parents in the study are mainly able to explain their decisions in some way, Siiri is just assured in the prohibition of digital media for children without any reason. I was not able to examine any cause for her belief, whether this is connected to her age and generation or to her education and socialization. For a further research this would be interesting to investigate.

Depending on the rules and habits of media use in the family, the children have to share devices with their parents and siblings or different devices are available. Personal devices for children comes with the need for the exclusive utilization due of the development in the last years of personal accounts and the limitation of energy for portable devices. Especially in families where digital access is seen as a basic need, own devices for children are a logical consequence of this development. In the families where the children should handle digital devices without the help of the parents, a save digital environment becomes important. This means that the parents have to limit access to possible harmful content, thereby they would limit their access too. With the ability to read and to write children enlarge their radius of action and acquire the skill to communicate online. In the view of the interviewed parents this is no option in the age of children under ten years old. The possibility of access by reading and writing becomes a new perspective in later elementary school age, when access should not mean full access to all content. Just the ability does not lead to the competence to handle all the options. This view leads to conflicts in later years, because the reasons of parents to control the access becomes abstract to the children. Parents want to protect their children of disturbing pictures and bullying

in social networks. Some parents are aware of this possible conflict and started to explain the difference to their children. No child in this study uses his or her individual digital time for communication yet. Even if WhatsApp, Skype or Facetime is used by children to stay in contact with other family members, this communication is introduced by the parents. The ability to see the speaking person makes this communication particular against traditional telephone calls. But the conventional telephone still stays first, because normal phone seems to be - in opposite to Skype and Facetime – a communication tool without digital media consumption. For the children, the video function is not that much important. They prefer the direct phone call without the need to start the computer, the software and looking if the person is online.

5. Discussion of the results regarding Digital Citizenship

5.1. The differences of utilization as impact on access

Two perspectives can be distinguished in the overall view on digital media by the studied parents based on their education. Higher educated parents are more critical in the view on digital technology (Poushter, 2016), but they do not use it less than lower educated parents. Digital media are accepted as important source of information by all parents in the study. They are mostly aware of their own behavior, but the higher educated parents in the study seems also to have a bigger knowledge for the handling of digital media (Manschwetus, 2016). It is interesting how the parent's childhood seems to be interrelated with the education of own children. Parents transfer habits and feelings in their own childhood into their children. In other words, the technology which they commonly used in childhood is more accepted for regular use than newer technology. This can be explained with the concept of technic-generations and the socialization in the formative phase (Claßen, 2012). Parents as well were limited by their parents in technology use. The view and the own feeling in this situation helps parents in the decision to adapt this education for their children or not. Some assume that their television consume in childhood was not harmful, so online media are comparable and safe. A similar result was discussed by Smith (2010). The comparison of television and online media by parents can be explained by a similar structure when it comes to the consumption of films. But it is also the function in the situation (Hölig, 2011; Hasebrink & Hölig, 2013) with the perspective of the development of technology over time (Johansson, 2010; Campbell, 2005). In the other view of parents the prohibition to watch television was not as bad as it felt as child. These parents adapt the education from their own childhood. They take themselves as reference for a good development in order to fulfill their own desires in childhood on their children (Campbell, 2005).

According to the findings in former studies regarding media repertoires, these similarities in education lead to related habits in the families (Hasebrink & Domeyer, 2012; Hacking, 2000). The age of the parents in this study is not such variable that only the concept of technic-generations can explain the different views. Parents with higher education seems to be more aware in the use of digital technology than those with lower education. In the view of lower educated parents with the rise of the digital technology, traditional activities and content are replaced by new media. That means for them that the old and traditional media are not necessary in education anymore. The view on digital media as replacement of traditional forms in this study can be connected to the results of the major access of digital content in Germany for

consumption (Gscheidle & Fisch, 2007). In regard to the education and the transfer of knowledge to the children the lower educated parents seem to be more dependent on the Internet as source. They tend to the use of digital media for their education and entertainment. This includes also the engagement in social networks. It can be confirmed that higher educated adults in Germany are less active in social networks like Facebook (Poushter, 2016). However the digital technology is used by them in daily routines, mainly for direct communication. The public creation of content is mainly disclaimed because of data security, or it is detailed reflected by the author. These parents see new digital media as an addition to the classical media. In the opinion of higher educated parents in the study it is necessary for the development of children to learn first traditionally before some things can become easier or faster with digital tools. Alternative educational concepts can confirm this view (Xing, 2016). For the research of Digital Citizenship the perspectives on education influences the participation and socialization process of the children.

5.1.1. The meaning of replacement by digital media

In families where digital media are used instead of traditional forms, children might be more allowed to participate active in online media. These families have less restrictions, more exceptions of possible limitations and own devices for children seems usual. The media consume is focused on the personal experiences of children, their own decisions and the own responsibility of consequences. Passive participation takes place, if the parents fear harmful content for their children or are afraid of health consequences. So children get some rules for utilization and behavior. In this case the parents make the active decision how the child is allowed to participate. Non-participation is viewed as disqualification in education in times where digital media are one of the most important resources.

The turning point seems to be in the view of 'knowledge is power'. Parents with lower education in the study want to offer their children better and easier entrance into adulthood and all possibly needed skills. In this view the early socialization with digital media starts with the early access and use of technology. The children are allowed to explore the digital world in order to learn specific skills by trying. In most cases that is working very well, the children learn fast in this way and become confident in the use of the devices. In the theoretical framework this approach can be considered as self-socialization (Sutter, 2000). But I am convinced that parents want to organize their children to learn specific tasks by their own (Hurrelmann, 2002). Self-orientation in this case is the passive participation, or the limitation to specific boundaries of consume in order to let children explore the functions of technology. Children are socialized with digital

media on their own, but the framework is organized in the view of the importance of digital media today. Like this children develop from an unknowing to a knowing person in the classical sociology. According to Erikson's (1973; 2005) steps of development and his declaration of an approximated age it is possible to locate the steps of media socialization according to Cook (2010).

The results of this study show that the socialization process with digital media starts later than the age mentioned by Erikson. Media socialization seems to take more time than traditional socialization. So the recommendation to start the media socialization not before the age of twelve years old in order prefer traditional ways first (Xing, 2016), should be reviewed in regard to the children's development. Maria and Miley show no signs of adaptive behavior. Their media consumption is restricted to directly shown actions by the parents or by their siblings and friends. Leandro and Devin are in addition able to adapt single behavior to other actions. They interact with similar designs and structures of technology as native as it was primarily shown to them. Leandro understands some consequences of his behavior and is able to solve specific tasks without help. The ability to read and to write allows him a better understanding of content, which Devin does not have. The behavior of Devin is shaped by random decisions without reflections. In his psychological development, he still thinks in single dimensions (Cook, 2010).

5.1.2. The meaning of the addition of digital media

The higher educated parents in this study see digital media as addition to traditional media education. Whenever parents have a choice, they prefer printed dictionary for their children before Wikipedia, playing with other children instead of virtual games and selected stored films on hard disc in place of YouTube. In the view of this parents digital media are indeed an important part of modern life, but the use of them by children is not necessary for their development and benefits in adulthood. The selection of digital media for children is well-thought-out and is not necessarily conducted as source of knowledge. The curiosity of children can be mainly satisfied by parent's explanations on their own without help of the Internet. In cases for visual stimulation parents prefer trips and excursions for real experiences. This approach can be considered as active non-participation and as cause of other options of socialization. Children are allowed to use digital technology, but they are also taught in self-engagement, painting by hand and social contacts instead of media consume. Furthermore the variety of media options is strongly restricted and obviously very childish. The duration or stimulation of an application is short timed and limited to a few decisions. So children of parents who see digital media not as part of children's socialization do not even know other options and functions of digital media. Passive non-participation in the view of the children seems to be the

aim of this education. If children ask for access, which they saw with adult's consumption, the difference between adults and children is explained, as well as the skills which are indispensable for a responsible utilization.

The socialization process of children into digital media starts with learning consequences of behavior in strictly limited environments. Though interactive games and very limited sources of content and decisions, children learn not only by using digital media, but also to understand the outcome of their behavior very fast. So children are not able in their development according to Erikson (1973; 2005) and Cook (2010) to adapt much of their behavior to other content, but they have benefits in the understanding how digital media are working. Mats seems still too young for that, however Ella and Anna show the ability to understand digital media within the boundaries given by their parents. The parents are closely involved by explanations and content controls, so mainly foreign-socialization takes place (Sutter, 2000). But again this also appears as foreign-organization (Hurrelmann, 2002), because parents invest a lot of time for the selection of suitable applications and explanations to their children.

5.2. The meaning of the different views for Digital Citizenship

5.2.1. Access

Citizenship in the theoretical view is seen as membership with specific civil, political and social rights (Marshall, 1950; Lunt & Livingstone, 2012). The civil right in regard to digital media seems to be first the view of the media replacement. This is the conviction of a mandatory need for digital access and use in childhood for benefits. This right comes from the parents and is interrelated with the political right of access and participation as well as with the social right of equality. Parents want to have benefits for their children's future, so they try to offer as many options as possible to participate. Limited is this only by health reasons and possible harmful content. In the studied families there are many limitations in the content, because full access might be dangerous. In the second view of digital media as addition matter 'Analog' Citizenship more than Digital Citizenship. The traditional approach of civil, political and social rights (Marshall, 1950) are educated to the children. The civil right is a childhood focused on the needs of children, excluded is the need for media consumption. Children are allowed to participate in digital media as it can be described as political right and as social right of equality. All the rights are situated into the proportion of age and are extended while growing up. If parents have the feeling of responsible use of certain applications, the children are allowed to extend their sphere of action. So the main difference between the two views is the range of possible digital action by children. Some seem to have open access for theoretically every

content they want to use. They have a lot of opportunities without basic limitations. These come with the use of digital media and the possible harmful content for children. Others are limited in their access, but they are free in the use of content they reach and to explore. Every activity which need action beyond the allowed range have to be accompanied by an adult.

5.2.2.   Use

The stage of use requires access and interaction for active participation (Carpentier & Dahlgren, 2014). But it was found that the children in this study mostly passive participate or active non-participate in digital media. So the use by children can be seen mainly as consumption without co-operation (Gscheidle & Fisch, 2007). This can be based on the behavior of the parents, who also mostly consume like the majority in Germany (ARD/ZDF, 2016; Gründinger, 2016). The children adapt and imitate the behavior by the parents (Brocher, 1985). This explains why Devin's activities online have similarities with those of his parents and also why Anna do not focus her attention by herself on digital use.

5.2.3.   Understanding

Digital Citizenship includes nine elements according to Ribble (2011), which can be also categorized into use, understanding and creation (van Hammel, 2011). Only the element of digital access can be put into the category of use, which is given to all children in the study with different outcomes. It was discovered that children who are more limit in their range of action developed a basic understanding of their digital actions. They started their development by thinking in single dimensions and are now able to reflect their action in the borders they know (Erikson, 1973; 2005; Cook, 2010). Children with less restriction in the study might need more time for this development, solving tasks is very difficult for them. Leandro started with the development of digital commerce, communication with family member, security and literacy. He is socialized with his parents beliefs, rules and habits and act quite save in adaption of his parent's behavior. Maria, Miley and Devin are still at the simple use of digital media for entertainment. They do not ask for any other functions and do not reflect on real consequences of behavior yet. The six years old girls of Susanne and Gesa do not fulfill the understanding of all nine elements by Ribble (2011), but they touch all. In the step to the creation of content they have for example an idea of public and private data, just because they are able to differ between traditional and digital forms of media and activities. Summarized this means that children probably need tight borders of free actions to develop early a feeling and an understanding for their behavior. The single use, 'learning by doing' seems not lead soon to any reflection and awareness. Of course this have to be further explored when the children grow up.

5.2.4. Creation

The creation of content is typically excluded from the allowed activities in the observed age of children. This can be grounded in the adaption of behavior from parents, who mainly consume the digital content, but also in the disability of creation by prohibitions and lacking skills as it requires in the most cases the ability to read and to write. However in the example of Devin content creation is possible without these skills. On Facebook automatically generated posts are possible, but in my view these are not what is meant in the theory with the stage of creation. The posts are a result of the utilization of functions, not even of the understanding. Creation is the last step to Digital Citizenship, so it should be an aware behavior with the reflection to the public audience of digital networks.

6. Conclusion

This work was motivated by the question how children today become Digital Citizens in the future. This issue matter because of the fast development of digital technology in the last ten years. Children are growing up with digital media, they take the technology and the utilization for granted. A lot of traditional media and forms of communication are in addition possible to use in digital versions. Some are even replaced by new media and a lot of more options were added in the last years by new technology. In this variety of old and new possibilities of media use and participation, the benefits and risks of early digital media consumption by children is an often discussed topic. The aim is to educate children already in early years for a responsible utilization of digital technology. The term for a successful media education and the socialization into a digital society is called Digital Citizenship.

The empirical study in this work was orientated at the concept of living fieldwork (Burgess, 1989; Gillespie, 1995). Doing research with children and different types of family constructions needs a very open approach, which allows flexibility in the structure. The theory served as a framework for questions and observations within the families. The approach of media repertoires and communication modes were used as a toolbox for an audience centered evaluation. The diversity of possibilities and offers of digital media requires a theory which includes everything, which is named by the participants. With that I was able to study the handling of new technical developments in families and observed how parents and children deal with their options.

Four families participated in the study. They were contacted online and all are interested in the topic of children's media consumption. The age of the children is between four and eight years old, the age of the parents between 27 and 42 years. The families were differentiated between parents with high education and parents with secondary education. All parents see digital media as an important source of knowledge. But with the decreasing education level of the parents increases the importance of media consumption as the access to information also for children. The parents want to promote their children and try to give them the support which they had wished in their childhood for themselves. In the lower educated families of the study, answers to children's questions are often found online. They are given very detailed, by quotations of Wikipedia articles by patents or YouTube videos are shown to the children. The general view on digital media is shaped by a replacement of traditional media with digital alternatives. In opposition stands the agreement of mainly higher educated parents with the education in their childhood. It is embossed by the limitation or the prohibition of new media consumption. This

view seems founded in the ability of higher educated parents to satisfy children's curiosity by own knowledge without searching online. These information can be less detailed or are also improved and supported with digital content. But in the general view of the parents this is not necessary for children's good development. Digital media are seen in these families as an addition to traditional media education. Children have no need for digital media use as long as they do not use it for school or for communication.

From the different views on the importance of digital media for modern childhood emerge two basic concepts of practices in families. It is claimed that the media socialization and especially the decision for access to digital media by children are primarily made by parents. They have the power by their own behavior and their convictions in education how children come in contact with the technology. In order to conduct an empirical study for Digital Citizenship, which consider possibilities of participation and forms of socialization in digital media, the different terms were theoretically considered. In the literature Citizenship is described as membership in a nation with different rights to participate and to engage in society. The characteristics of Citizenship are interrelated and are discussed by different views in the past. Especially the approach of Marshall (1950) , which classify Citizenship as civil, political and social rights is criticized as outdated in times of globalization (Harris, 2010). The digital world can be considered as one society and their inhabitants as Digital Citizen (Lunt & Livingstone, 2012). The basic requirement for the membership in a virtual community worldwide is the digital access. For this, different forms of participation are theoretically considered. I emphasized the differentiation of active and passive participation as well as active and passive non-participation (Casemajor, et al., 2015).

In the study all parents use digital media in their daily routine, each parent owns a smartphone and allows their children controlled access to digital media. Children with lower educated parents tend to have own devices for active digital participation in the future. In the moment children passively participate due to limitations of their own skills (writing, reading, dependably load of battery, general responsibility) and limitations due to specific fears by the parents. However, the parents primarily want to allow the participation of their children in regard to the possible benefits in their future and their desires. In the view of higher educated parents, non-participation in digital media are preferred in order to support traditional activities. The biggest aim seems to be passive non-participation, so children do not even know the possibility or function and would never miss it. If this comes later as an addition to traditional skills, children

will be also able to use it. In the development of the children I could not find any benefits due to the early use of digital technology.

Only the ability to participate makes children not to citizens, so it is discussed which skills are needed for a responsible use of the Internet and how Digital Citizenship is defined. I found multiple of characteristics, skills and theories how Digital Citizenship is represented at individuals. Single elements by the theory of Ribble (2011) can be applied in the model of van Hammel (2011). From this I come up with a new definition, which involve also the approach of Lunt and Livingstone (2012). At the very base, Digital Citizenship it is defined as the use and the understanding of digital media and the creation of new content in the virtual world, in regard of aware behavior to act as responsible person in the community. With this definition in mind I discuss how children are socialized with digital media and how they probably become Digital Citizens. Theoretically I viewed therefore different socialization theories. Generally it was assert that socialization is the development from an unknowing to a knowing person. Ericson (1973; 2005) put this evolution in different phase according to the age. For age two to three applies a very self-involved approach; four to five years old is embossed by curiosity and the opening relationship to the parents; five to six years old comes with the ability to solve specific tasks. The approach of Cook (2010) is applied to this categorization as thinking in single dimensions, adaption of habits and the ability for reflection. It is faced to the definition of Digital Citizenship. In this study it was found that the socialization into the digital world goes not together with the age addressed by Ericson. The observed children up to eight years old mainly adapt habits of their parents, but still think in single dimensions. The third step according to Cook is not always fulfilled, because apparently it is learned without any reflections by the children. The ability to read and to write seems to be the starting point for the possible last step of Digital Citizenship.

Children can be socialized by foreign-socialization and self-socialization. The first is the learning of skills by the help of outside standing persons and influences by the environment. Self-socialization is the autonomous process of development and the assimilation of environmental factors (Sutter, 2000). The children with own devices in the conducted study tend to self-socialization, while the big influence of parents on shared devices in the families results in foreign-socialization. Hurrelmann (2002) claims that in modern times the socialization process can be replaced by organization. So children may be pushed into habits and behavior according to social norms and expectations. The empirical results show that children seems to be organized rather than socialized into digital media use today. This comes

with the assumed force of lower educated parents to support the digital contact of children for future benefits in adulthood. Higher educated parents struggle with their bad conscience only to occupy their children with digital media and elsewise forbid the consumption. In both views the fear of social disadvantages drive parents to their decision to allow and support the digital media use or to avoid and to restrict the consumption. An agreement seems to be the restriction of time for health reasons in both views.

Children can be prepared for their digital future in two ways, which cannot be rated as better as or worse as the other. Sooner or later they all come in contact with the Internet and have to learn a responsible use. Parents do not allow risks for their children and limited the access according to their beliefs. Around the school age digital media can become one main source of information. At this point children are allowed to participate actively online. In the view of lower educated parents in the study the use of digital media leads to routines and later responsibility. Higher educated parents support first the understanding by the education at traditional media. When this children use digital media they suffer in unexpected moments from traditional experiences. In practical experiences and the adaptation to other digital content these children are behind of children in the same age who just started with the general use. But traditional education stands as an orientation for the use of digital media. According to Gscheidle and Fisch (2007) most people stop at the first point. So some children never will come to the understanding when they started to use or consume digital media. Starting with the second step in the education and socialization process seems useful in order to create a background for a later extended use of digital media by the children. The last step of creation could not be observed sufficient in the study. The participating parents in the research were very aware of their children's digital media use and did not allow their children such open access that creation would be possible for them.

In the beginning of this work I mentioned a coding toy which should support children in the later use of digital media (Kickstarter, 2016). Basically this is designed as a traditional toy or game, but it requires the development of an understanding, which is needed for coding. The early need for media socialization is not the use of technology, it is the start of understanding with the goal of independent actions in the later steps. The limited possibilities leads to competent actions and self-confidently children. The use of technology by children do not need a full repertoire, it need frame conditions in which children can act and understand the influences of their behavior. It does not matter where children start their digital development, important seems only the later aware reflection of results of their behavior. The understanding

is the turning point, children should know what they do in order to chance their actions for another result. In the theoretical analysis, Digital Citizens have to pass all three steps of use, understanding and creation (van Hammel, 2011). All children in the study have the opportunity to develop Citizenship into a digital society. But the understanding could be only observed in higher educated families yet. From the perspective at the current stage these children have better requirements for Digital Citizenship than the others. Of course this is a very vague assumptions by the evaluated data in this study. It has to be reviewed in a bigger field and also in families with older children, where the step of creation can be examined too. So from the perspective of this research only children who develop though the stage of the only use of digital media are able to become Digital Citizens in the future. The better requirements from the current perspective is given in families which start the socialization of children at the understanding of digital media. The use of it comes naturally with the need for participation due to school for example. The coding toy seems to be a new gadget adapted from this idea, to support children in this development.

7. References

ARD/ZDF, 2016. *ARD/ZDF Onlinestudie 2014.* [Online]
Available at: http://www.ard-zdf-onlinestudie.de/index.php?id=506
[Accessed 16. 03. 2016].

Arnstein, S., 1969. A ladder of citizen participation. *Journal of the American Institute of Planners,* 35(4), pp. 216-224.

Berger, P. L. & Luckmann, T., 1991. *The Social Construction of Reality: A Treatise in the Sociology of Knowledge.* London: Penguin Books.

Bos, W., Eickelmann, B. & Gerick, J., 2014. *ICILS 2013 auf einen Blick International Computer and Information Literacy Study: Presseinformationen zur Studie und zu zentralen Ergebnissen.* [Online]
Available at: http://www.ifs.tu-dortmund.de/cms/Medienpool/Projekte/ICILS-2013/ICILS_2013_Presseinformation.pdf
[Accessed 29. 03. 2016].

Brocher, T., 1985. *Stufen des Lebens: Eine Bibliothek zu den Fragen unseres Daseins.* Stuttgart: Kreuz Verlag.

Buckingham, D. & Tingstad, V., 2010. *Childhood and Consumer Culture.* Houndmills, Basingstoke, Hampshire: Palgrave Macmillan.

Burgess, R. G., 1989. *Field Research: A Sourcebook and Field Manual.* London and New York: Routledge.

Campbell, C., 2005. The desire for the new Its nature and social location as presented in theories of fashion and modern consumerism. In: R. Silverstone & E. Hirsch, Hrsg. *Consuming Technologies: Media and information in domestic spaces.* London and New York: Routledge, pp. 44 - 58.

Carpentier, N., 2009. Participation is not enough: the conditions of possibility of mediated participatory practices. *European Journal of Communication,* 24(4), pp. 407-420.

Carpentier, N., 2011a. *Media and Participation: A Site of Ideological Democratic Struggle.* Bristol: Intellect Books.

Carpentier, N., 2011b. The concept of participation: if they have access and interact, do they really participate?. *Communication Management Quarterly,* 6(21), pp. 13-36.

Carpentier, N. & Dahlgren, P., 2014. Histories of media(ted) participation: an introduction: special journal issue on histories of media(ted) participation. *Communication Management Quarterly,* 30(9), pp. 7-14.

Casemajor, N. et al., 2015. Nonparticipation in digital media: toward a framework of mediated political action. *Media, Culture & Society,* 37(6), pp. 850-866.

Claßen, K., 2012. *Zur Psychologie von Technikakzeptanz im höheren Lebensalter: Die Rolle von Technikgenerationen,* Heidelberg : Ruprecht-Karls-Universität Heidelberg .

Cook, D. T., 2010. Commercial Enculturation: Moving Beyond Consumer Socialization. In: D. Buckingham & V. Tingstad, Hrsg. *Childhood and Consumer Culture.* Houndmills, Basingstoke, Hampshire: Palgrave Macmillan, pp. 63 - 79.

Cross, G., 2010. Valves of Adult Desire: The Regulation and Incitement of Children's Consumption. In: D. Buckingham & V. Tingstad, Hrsg. *Childhood and Consumer Culture.* Houndmills, Basingstoke, Hampshire: Palgrave Macmillan, pp. 17 - 30.

Encyclopaedia Britannica, 2016. *Citizenship.* [Online]
Available at: http://www.britannica.com/topic/citizenship
[Accessed 30. 03. 2016].

Erikson, E. H., 1973. *Identität und Lebenszyklus.* Frankfurt am Main: Suhrkamp.

Erikson, E. H., 2005. *Kindheit und Gesellschaft.* Stuttgart: Klett-Cotta.

Freud, S., 2010. *Abriß der Psychoanalyse.* Nr. 18689 ed. s.l.:Reclams Universal-Bibliothek.

Giddens, A., 2009. On Rereading The Presentation of Self: Some Reflections. *Social Psychology Quarterly,* 72(4), pp. 290 - 295.

Gillespie, M., 1995. *Televison, Ethnicty and Cultural Change.* London: Routledge.

Goffman, E., 1956. *The Presentation of Self in Everyday Life.* Edinburgh: Social Sciences Research Centre.

Gründinger, W., 2016. *Digitaler Rückstand: Warum Deutschland eine erfolglose Internetnation ist.* [Online]
Available at: http://www.vorwaerts.de/blog/deutschland-erfolglose-internetnation
[Accessed 29. 03. 2016].

Gscheidle, C. & Fisch, M., 2007. Onliner 2007: Das „Mitmach-Netz" im Breitbandzeitalter. *Media Perspektiven,* Band 8, pp. 393 - 405.

Hacking, I., 2000. *The Social Construction of What?.* Cambridge: Harvard.

Harris, J., 2010. *Citizenship in Britain and Europe : some missing links in T.H. Marshall's theory of rights.* [Online]
Available at: http://www.ssoar.info/ssoar/bitstream/handle/document/35846/ssoar-2010-harris-Citizenship_in_Britain_and_Europe_?sequence=1
[Accessed 31. 03. 2016].

Hasebrink, U. & Domeyer, H., 2010. Zum Wandel von Informationsrepertoires in konvergierenden Medienumgebungen. In: M. Hartman & A. Hepp, eds. *Die Mediatisierung der Alltagswelt.* Wiesbaden: VS Verlag für Sozialwissenschaften, pp. 49-64.

Hasebrink, U. & Domeyer, H., 2012. Media repertoires as patterns of behaviour and as meaningful practices: A multimethod approach to media use in converging media environments. *Participations: Journal of Audience & Reception Studies,* 9(2), pp. 757-779.

Hasebrink, U. & Hölig, S., 2013. Conceptualizing Audiences in Convergent Media Environments. In: S. Diehl & M. Karmasin, eds. *Media and Convergence Management.* Berlin/Heidelberg: Springer Verlag, pp. 189-202.

Hasebrink, U. & Popp, J., 2006. Media repertoires as a result of selective media use: A conceptual approach to the analysis of patterns of exposure. *Communications,* 31(3), p. 369.

Hasebrink, U. & Schmidt, J.-H., 2012. *Informationsrepertoires der deutschen Bevölkerung: Konzept für eine regelmäßig durchzuführende bevölkerungsrepräsentative Befragung im Rahmen des Vorhabens „Erfassung und Darstellung der Medien- und Meinungsvielfalt in Deutschland".* [Online]

Available at: https://www.hans-bredow-institut.de/webfm_send/657
[Accessed 07. 04. 2016].

Hölig, S., 2011. *Informationsorientierte Kommunikationsmodi im Internet: Eine Differenzierung gratifikationsbestimmter kommunikativer Handlungen zwischen Massen- und interpersonaler Kommunikation.* [Online]
Available at: http://ediss.sub.uni-hamburg.de/volltexte/2012/5819/pdf/Dissertation.pdf
[Accessed 10. 03. 2016].

Hurrelmann, K., 2002. Selbstsozialisation oder Selbstorganisation? Ein sympathisierender, aber kritischer Kommentar. *Zeitschrift für Soziologie der Erziehung und Sozialisation,* 22(4), pp. 155 - 166.

Isman, A. & Canan Gungoren, O., 2013. *Being Digital Citizen.* [Online]
Available at: http://ac.els-cdn.com/S1877042813046788/1-s2.0-S1877042813046788-main.pdf?_tid=d487266c-f719-11e5-b702-00000aab0f6c&acdnat=1459412781_8784a75419df9d29963fa4a877a0a32b
[Accessed 31. 03. 2016].

Johansson, B., 2010. Subjectivities of the Child Consumer: Beings and Becomings. In: D. Buckingham & . V. Tingstad, Hrsg. *Childhood and Consumer Culture.* Houndmills, Basingstoke, Hampshire: Palgrave Macmillan, pp. 80 - 93.

Kickstarter, 2016. *Cubetto - Hands on coding for ages 3 and up.* [Online]
Available at: https://www.kickstarter.com/projects/primotoys/cubetto-hands-on-coding-for-girls-and-boys-aged-3/description
[Accessed 21. 03. 2016].

Klaffke, M. & Parment, A., 2011. Herausforderungen und Handlungsansätze für das Personalmanagement von Millennials. In: M. Klaffke, Hrsg. *Personalmanagement von Millennials.* Wiesbaden: Gabler Verlag/Springer Fachmedien, pp. 3 -21.

Livingstone, S., 2004. The Challenge of Changing Audiences: Or, What is the Audience Researcher to do in the Age of the Internet?. *European Journal of Communication,* 19(1), pp. 75-86.

Lunt, P. & Livingstone, S., 2012. *Media Regulation: Governance and the Interests of Citizens and Consumers.* London: SAGE.

Manschwetus, C., 2016. *Der Irrtum um die Generation der Digital Natives: Eine empirische Untersuchung zur Begriffsdefinition auf Grundlage der BiBB/BAuA Erwerbstätigenbefragung 2012 ,* Hamburg: Hamburg University.

Marshall, T. H., 1950. Citizenship and Social Class: and other essays. In: Cambridge: University Press, pp. 1-85.

Mediennetz Hamburg, 2016. *Hamburger Familien für Forschungsprojekt zu Onlinemedien gesucht.* [Online]
Available at: http://www.mediennetz-hamburg.de/index.php?MAIN=3&NAV=6&RECORD=1669
[Accessed 11. 04. 2016].

Poushter, J., 2016. *Smartphone Ownership and Internet Usage Continues to Climb in Emerging Economies: But advanced economies still have higher rates of technology use.* [Online]
Available at:
http://www.pewglobal.org/files/2016/02/pew_research_center_global_technology_report_final_feb

ruary_22__2016.pdf
[Accessed 29. 03. 2016].

Primo Toys, 2016. *Randi Zuckerberg, Technologist and Mother.* [Online]
Available at: https://www.youtube.com/watch?v=NDjLU98IU2w&feature=youtu.be
[Accessed 21. 03. 2016].

Ribble, M., 2011. *Digital Citizenship in Schools.* 2nd Hrsg. Washington: ISTE.

Smith, J., 2010. The Books That Sing: The Marketing of Children's Phonograph Records, 1890–1930.
In: D. Buckingham & V. Tingstad, Hrsg. *Childhood and Consumer Culture.* Houndmills, Basingstoke,
Hampshire: Palgrave Macmillan, pp. 46 - 60.

Statista, 2016. *Prognose zur Verbreitung und Nutzung internetfähiger TV-Geräte in Deutschland von
2009 bis 2015 (Haushalte in Millionen).* [Online]
Available at: http://de.statista.com/statistik/daten/studie/159888/umfrage/internetfaehige-tv-
geraete---verbreitung-und-nutzung-in-deutschland/
[Accessed 11. 02. 2016].

Sutter, T., 2000. *Medienkommunikation, Mediensozialisation und die „Interaktivität" neuer Medien.
Ein konstruktivistisches Forschungsprogramm.* [Online]
Available at: https://www.psychologie.uni-freiburg.de/forschung/fobe-files/149.pdf
[Accessed 08. 04. 2016].

van Hammel, A., 2011. *From Consumer to Citizen: Digital Media and Youth Civic Engagement.*
Ottawa: Media Awareness Network.

Xing, 2016. *Haltet die Kinder bis zum 12. Lebensjahr von Computern fern!.* [Online]
Available at: https://www.xing.com/news/klartext/haltet-die-kinder-bis-zum-12-lebensjahr-von-
computern-fern-490?sc_o=da536_df4_1_t
[Accessed 29. 03. 2016].

Appendix

Hamburg, den_____

Einwilligungserklärung

Vielen Dank, dass Sie mich bei meiner Arbeit unterstützen möchten. Sie nehmen an einer Studie im Rahmen meiner Masterarbeit an der Lund University in Schweden, mit dem Titel *Digital Citizenship: Growing up with Social Media,* teil. Ziel dieser Arbeit ist es die Bedeutung der Teilnahme in einer digitalen Gesellschaft für Kinder zu untersuchen.

Hierfür ist es erforderlich, dass Sie als Familie dem Ablauf der Studie zustimmen. Ich plane Sie und Ihre Kinder in einem Zeitraum von ein bis zwei Monaten regelmäßig für etwa eine Stunde zu besuchen. In dieser Zeit werde ich sowohl Interviews mit Ihnen führen, als auch den Umgang mit digitalen Medien in Ihrer Familie beobachten.

Die Teilnahme an der Studie ist absolut freiwillig: es ist Ihre Entscheidung, ob sie teilnehmen oder nicht. Außerdem sind Sie nicht verpflichtet Fragen zu beantworten, die Ihnen unangenehm sind und können jederzeit die Befragung oder die Beobachtung unterbrechen oder beenden.

Die Gespräche werden aufgezeichnet und Beobachtungen mit Fotos dokumentiert, jedoch wird beides ausschließlich von mir persönlich genutzt. Alle erhaltenen Informationen werden vertraulich behandelt und nur anonym verwendet. Meine Masterarbeit wird in der Datenbank der Lund Universitiy veröffentlicht.

Wenn Sie weitere Fragen haben, kontaktieren Sie mich bitte:
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Mit Ihrer Unterschrift stimmen Sie der Teilnahme am Forschungsprojekt zu. Sie bestätigen diese Information gelesen zu haben und dass alle Ihre Fragen von mir beantwortet wurden.

Vielen Dank für Ihre Teilnahme!

_____   _____

Name   Unterschrift

	Family 1	Family 2	Family 3	Family 4
Parents (age)	Liliana (32) and Martinho (33)	Bianca (27) and David (37)	Gesa (36) and Pedro (39)	Susanne (40) and Peter (42)
Observed Children (age)	Maria (6) and Leandro (8)	Miley (5) and Devin (7)	Anna (6)	Mats (4) and Ella (6)
Other family member (age)	Marsio (9 month)	Felix (18 month)	-	Siiri (20) Au-Pair
Digital devices in the household	smartphones of the parents and an old iPhone, 3 tablets television, laptop	smartphones of the parents, as well as many unused devices, tablet, three computer, television, gaming console	smartphones of the parents, laptop, tablet, television	smartphones of the adults, laptop, tablet
Digital devices used by children	iPhone, two tablets are owned by the children, television	tablet, one computer is owned by Devin, television, gaming console	smartphones, laptop, tablet, television	tablet, smartphone of the father
Limitations in digital access	no limitation	computer use is limited to 90 minutes per day	no limitation	tablet use at weekends from 17 p.m. for 90 minutes
Education of the parents	secondary education	secondary education	higher education	higher education

Basic characteristics of the families participating in the study (own diagram)