"Interactions between multi-screening practices and familial sociability within the home environment"
The perspective of Dutch households

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ABSTRACT

In the last decade, new (media) technologies had a profound impact on the way people consume media nowadays. The significant increase in ownership of mobile devices in the Netherlands illustrates how society embraced new (media) technologies. As a result, mobile devices became more and more interwoven with the routines within households, especially the smartphone gained a lot of ground among adolescents. One of the practices that resulted from the emergence of new (media) technologies is the practice of multi-screening. Consequently, multi-screening practices changed the configurations, practices and values of households throughout the years. This study focuses on the perceptions and experiences of adolescents on multi-screening practices in the home environment and how it effects familial interactions. For this aim, the study also includes the viewpoints of their parents, because in this way the perspective of the adolescents can be verified and complemented. To study multi-screening practices as an everyday action and habit, the non-media centric approach is used for this research.

The qualitative research method of conducting in-depth interviews was considered the most appropriate and effective to address the research questions as it provided an insight into participants' perception and experiences. The research data is drawn from 12 with six Dutch adolescents and one parent of each of them.

The study reveals that multi-screening practices are triggered by the constant presence of mobile devices and the urge to immediately respond to incoming notifications triggers them the most often. This urge is mainly driven by the fear of missing out, boredom or a lack of engagement with the initial screened media activity. The multi-screening practices are less diverse than previous studies imply, as the television still plays the most prominent role in the current multi-screening practices of adolescents. Because of the combination of the social function of joint television viewing and constant presence of mobile devices, joint television viewing can be considered as the most common occasion in which multi-screening practices affect familial sociability. Logically, the other common multi-screening scenarios, like the laptop – smartphone and the PlayStation – smartphone, are less likely to affect direct familial sociability.

In general, the participants are aware of that the fact that the practice of multi-screening tend to interfere with this valuable shared leisure activity within households. The presence of other screened devices causes distraction, impacts direct sociability and compromises the quality of shared leisure activities, such as joint television viewing. However, most adolescents do not feel bothered by the multi-screening practices of others, and they also do not seem to be conscious about the effects of their multi-screening behaviour on their environment. In contrast, the majority of the parents get easily annoyed by people who multi-screen in their presence. This irritation originates from the emotional distance that arises when people multi-screen in the presence of others, the disinterest of multi-screeners in their surroundings, and the direct nuisance multi-screening causes, like flashing lights and vibrations coming from mobile devices. This irritation being caused undermines the direct social interactions, so familial sociability, within households.

KEYWORDS: multi-screening practices, experiences and perceptions, Dutch adolescents, familial sociability, non-media centric approach

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1. Introduction

1.1 The impact of new media technologies

In the last decade, new (media) technologies had a profound impact on user behaviour, business models, technological platforms and content development in the media industry (Dias, 2016). The emergence of mobile devices clearly shaped the way people consume media nowadays. The significant increase in ownership of mobile devices in the Netherlands illustrates how society embraced new (media) technologies (GfK, 2016). In December 2016, 83% of the Dutch population, who have access to internet, had a smartphone, which means that the percentage has increased with 38% over the last five years (GfK, 2016).

Within the Dutch population, adolescents are the most connected to the internet (CBS, 2017). Data on 'Internet access, use and facilities' from Statistics Netherlands (2017) suggests that 99,3% of the Dutch adolescents between 12 and 18 years have access to the internet in 2017 and 95,1% uses the internet every day. Particularly, the smartphone gained a lot of ground within this age group in the past years. The number of adolescents with access to a smartphone increased from 82,3% in 2012 to 98,6% in 2017 (CBS, 2017). Nowadays, smartphones are interwoven in the daily routines of adolescents. A research by Media:Tijd shows that Dutch adolescents spend 7 hours and 42 minutes a day on media consumption, of which 4,5 hours is consumed through their smartphone (Wennekers, Van Troost, & Wiegman, 2016). Based on these statistics, it can be argued that digital media have become a ubiquitous part of the Dutch culture and the lives of adolescents, as it allows them to consume media and interact online 24/7 (GfK, 2016; CBS, 2017).

Over the last decade, traditional media converged into new media technologies, which means that traditional media are being merged and reshaped by portable and interactive technologies (Jenkins, 2004). This process of media convergence reshaped media aesthetics and the way people consume media nowadays (Jenkins, 2004). An example of media convergence is the (partial) replacement of traditional television by mobile media. By now, television content is easily accessible through online applications, whenever and wherever we want (Dias, 2016). In this way, mobile devices and mobile media encourage a very flexible way of media consumption (Jenkins, 2004). Consequently, the individualisation of media consumption is fostered, because mobile media allows people to consume media on any preferred device and to select media from numerous databases based on their personal interests and time scheme (Chambers, 2016). Furthermore, new technologies also encourage media multi-tasking, as they allow the consumption of different media on multiple (mobile) devices simultaneously (Segijn, Voorveld, Vandeberg, & Smit, 2017). Generally, it can be stated that these new (media) technologies led to new emerging practices and behavioural patterns in media consumption (Dias, 2016).

1.2 Multi-screening practices

One of the practices that resulted from the emergence of new (media) technologies is multi-screening. Multi-screening is a rather new form of media multi-tasking, that intensified the individualisation of media consumption (Segijn, Voorveld, Vandeberg & Smit, 2017). This study will particularly focus on multi-screening practices, which implies that people are using multiple screens simultaneously without the co-occurrence of another non-media related activity (Segijn, 2016). Multi-screening became a daily practice for many of us, it can even be stated that "digital consumers need a minimum of two screened devices to satisfy their needs of simultaneous social interaction, information, entertainment and sense of productivity and accomplishment" (Nielsen, 2014, p. 4). Therefore, it is not surprising that people spend more than 25% of their media time using multiple media simultaneously (Media:Tijd, 2016).

The term multi-screening evolved because of all the new mobile devices that entered the market. At this moment in time, consumers have access to a great variety of screened devices, which can be used simultaneously (Dias & Teixeira-Botelho, 2016). First, it was quite common that television was involved in multi-screening practices. But, because of the many available devices and the diversity in content, activities and settings that come along, multi-screening practices became more frequent and diversified (Nielsen, 2014; Dias & Teixeira-Botelho, 2016). To include all different screen combinations, this research refers to the concept of multi-screening as the use of more than one screened device simultaneously (Segijn, Voorveld, Vandeberg, Pennekamp, & Smit, 2017). This definition allows for a broader understanding of the phenomenon, because multi-screening does not only centred around television anymore. It includes the simultaneous use of all screened media devices.

When including all screened media devices in the research, it is important to be aware that different screen combinations are used for various purposes. Consequently, there are some behavioural patterns and motivational factors within the practice of multi-screening that can be distinguished. Based on these behavioural patterns, Hritzuk and Jones (2014) and Ainasoja et al. (2014) defined four multi-screener profiles. These multi-screener profiles contributed to the research process and the analysis of the materials, because they helped to understand the relationships people have with each screen and the triggers that stimulate them to multi-screen. In this way, the multi-screening behaviour of the participants could be generalised and compared.

1.3 Sociability in media-saturated households

As can be inferred from the text above, multi-screening intertwined with the increase of mobile devices (Dias, 2016). Because of the continuous presence of mobile devices nowadays, people are more inclined to multi-screen and consume media more on an

individual basis (Dias, 2016). In other words, the emergence of multi-screening practices and the individualisation of media consumption are closely related developments. Social scientists are concerned about these developments, as they reduce the leisure time spent on socialising with friends and family members (Franzen, 2003; Bargh & McKenna, 2004). In line with this, it can be questioned how the practice of multi-screening affects social relations and how these social effects are experienced by multi-screeners. Franzen (2003) argues that joint media consumption is at stake due to new behavioural patterns, like multi-screening, because it would reduce individuals' face-to-face communication. Based on these insights, the practice of multi-screening can be considered as a reasonable threat to sociability. Sociability is defined as the ability, or tendency, of people to interact with others and to establish some kind of social relationship based on certain types of needs and interests, which may evolve spontaneously or during an organized occasion, and which can either be supportive, conflicting, instrumental or simply gratifying (Gallino, 1993). Although new media technologies also facilitate new forms of (online) sociability, this research focuses on the impact of multi-screening practices on direct sociability within the households. Direct sociability refers to immediate, face-to-face interactions.

As multi-screening practices tend to undermine direct sociability, it can be assumed that multi-screening practices do not only impact individuals, but also social groups, such as households. In this research, the 'household' refers to the physical space as well as the group of people living in there, including all different living arrangements (Chambers, 2016). It is relevant to research multi-screening practices within the home environment, because most media-based forms of entertainment, including television, radio, gaming, literature, music, movies, social media, streaming media and web browsing, are consumed in the home environment (Moss & Walmsley, 2014). Moreover, Chambers (2016) emphasizes that multi-screening practices changed the configurations, practices and values of households throughout the years. Because of the significant increase in mobile devices, media became more and more interwoven with the routines within households (Pink & Leder Mackley, 2013). In the last years, the home environment became a "complex media environment with mobile gadgets such as laptops, smartphones and tablet computers" (Chambers, 2016, p. 2). Because of the relevance of studying multi-screening practices in the context of the home environment, this study will focus on the consequences of these practices for familial sociability in particular, thus the social interactions between household members. Because adolescents are the most frequent multi-screeners within the home environment (Dias & Teixeira-Botelho, 2016), this research will adopt the perspective of adolescents and how they experience the effects of multi-screening practices on family sociability within the household. In addition, the study of Segijn, Voorveld, Vandeberg, Pennekamp and Smit (2017) shows

that the younger people are, the longer they will multi-screen. The multi-screening behaviour of adolescents is primarily motivated by time-efficiency, as it allows them to manage daily tasks better simultaneously, sociability and the need to constantly keep up-to-date with what is happening in the world (Dias, 2016; Dias & Teixeira-Botelho, 2016).

Although that the study specifically focuses on the perspective of adolescents, the study also includes the viewpoints of their parents. The insights of the parents are valuable, because they are used to verify and complement the perspective of the adolescents. The inclusion of the parents in this study provided richer data about the media routines within the household, as household members share the same domestic practices and daily routines (Morley, 1986). As a result, it has led to a twofold understanding of how multi-screening practices are embedded in adolescents' everyday routines in the home environment and how this potentially impacts familial sociability.

1.4   A non-media centric approach

To investigate the multi-screening practices of adolescents in relation to their experiences regarding familial sociability, it is useful to adopt a non-media centric and non-representational approach. This approach makes the content of media subservient and allows studying multi-screening as an everyday action and habit (Deuze, 2012). It is relevant to investigate how media is part of everyday routines, because media became more and more interwoven with the routines within households (Pink & Leder Mackley, 2013; Chambers, 2016). The entanglement of media and household routines relates to Deuze's (2007) viewpoint on 'media life', which implies that nowadays "our life is lived in, rather than with, media" (p. 242). Multi-screening is closely related to the 'media life' phenomenon, as it illustrates the profound presence of (screened) media in daily routines. Moores (2012) argues that the non-media-centric approach is suitable to study the impact of multi-screening on familial sociability, because it offers the possibility to delve into everyday media uses alongside other (social) practices. He emphasizes that the consumption of media is no longer an isolated activity (Moores, 2012). Thus, the non-media centric approach fits with the concept of multi-screening, as it enables the simultaneous analysis of media activities.

The non-media centric approach is not regularly used in media studies, and very often attention is given to the content of media and how this impacts people's routines, perspectives and place-making (Pink & Leder Mackley, 2013). Nevertheless, the argument for taking this approach is that it allowed to gain understanding of how multi-screening practices are embedded in everyday routines and how this potentially impacts the familial sociability (Pink & Leder Mackley, 2013). It enabled us to comprehend the role of media in everyday life in ways that go beyond the content (Pink & Leder Mackley, 2013).

1.5   Research questions

Based on the insights and context presented, the following research questions are formulated:

- *How do Dutch adolescents perceive and experience multi-screening practices in the home environment?*

- *To what extent and how do multi-screening practices affect the family interactions within households?*

1.6   Scientific and social relevance

As Segijn, Voorveld, Vandeberg, and Smit (2017) stated, it is relevant to delve into the practice of multi-screening as it is a relatively understudied phenomenon and not much research is done regarding the consequences of this behavioural pattern in relation to familial sociability. Moreover, previous studies on multi-screening focused on the household as a whole, which led to generic information and a lack of data about the different age groups within households (Dias, 2016). So, it is socially and scientifically relevant to have more qualitative data about adolescents within these 'media-saturated' households, especially because they are considered as the most internet-connected age group and the most frequent multi-screeners within the home environment (Dias & Teixeira-Botelho, 2016; CBS, 2017). Hence, the present study does not only attempt to contribute to the academic literature about multi-screening practices in general, but it also delves into a specific age group within the household.

Aside from that, Christensen and James (2000) argue that the imprint of circumstances and behavioural patterns in the childhood has lasting consequences. These consequences may differ in size and impact, as the circumstances where they derive from differ from parental conflicts to family traditions, and from education to media usage. Because of the importance of family interactions for adolescents' social behaviour and identity development, it is important to study their perception and experiences on the social effects of media practices, like multi-screening. Especially in a time of family upheaval and rapid social change as a result of technological developments, it is becoming increasingly important to study the consequences of growing up in contemporary society. (Christensen & James, 2000)

Furthermore, Segijn et al. (2017) claim that multi-screening practice increases consumers' overall exposure to media content largely. As a result, multi-screening does not only affect the way media is consumed, but also the amount of media that is consumed (Segijn et al., 2017). However, the impact of multi-screening practices is not limited to the amount of media being consumed. The practice of multi-screening also contributed to the

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emergence of some major behavioural patterns, like the individualisation and personalisation of media consumption (Jenkins, 2004; Chambers, 2016). Because of these new patterns, joint media consumption is at stake, which threatens direct familial sociability and might lead to the isolation of household members (Media:Tijd, 2016; Dias, 2016). The fact that multi-screening practices undermine the capability of media to provide opportunities for shared leisure activities makes the practice socially relevant for further research (Chambers, 2016).

Although this potential impact on familial sociability, there is little known about adolescents' perception on multi-screening practices and the effects on familial sociability. This study aimed to start filling this research gap by exploring the perception of adolescents regarding multi-screening practices in the home environment and how they experience the social effects of it (Media:Tijd, 2016; Dias, 2016). Through this, the study aimed to inform and create awareness about how contemporary media patterns threaten the sociability within families - the core unit of society. As mentioned, studying the multi-screening behaviour of adolescents in the context of the home is relevant, because most media-based entertainment is consumed in the home environment (Moss & Walmsley, 2014). This can be explained by the fact that "the home environment offers occupants a more affordable and secure environment to relax and consume media in a social way" (Moss & Walmsley, 2014, p. 3).

In addition, also with a view to the future, it is interesting to explore the effects of multi-screening practices on familial interactions. Moss and Walmsley (2014) expect that media technologies will continue to develop, which will result in even more advanced home media entertainment. These media technologies will use of interactive technologies and virtual reality to make the home environment even more entertaining and competitive towards out-of-home entertainment (Moss & Walmsley, 2014). Moreover, Moss and Walmsley (2014) suppose that the use of multi-screening technologies will play a significant role in the development of home media entertainment, which makes it useful to explore the effects of this practice on familial sociability within households.

1.7   Thesis outline

This research aims to study the perceptions and experiences of adolescents regarding multi-screening practices in the home environment and how this effects the family interactions within households by means of qualitative methods of research. Chapter 2 gives an overview of previous and relevant studies being done in the field of multi-screening practices, media consumption in the home environment, familial sociability, and the non-media centric approaches to media studies to illustrate the context in which the research is done. It forms the theoretical foundation embedded in the research question and will lead up to the in-depth data analysis. Subsequently, Chapter 3 presents the methodology and justifications for the chosen research approach. A description of the unit of analysis, the sampling method, the

sampling criteria, interview preparations, the data analysis method, the key demographics of participants and the ethical considerations will be provided. Chapter 4 presents the results derived from a thematic analysis of the interviews conducted in the form of quotations and paraphrases originating from the transcriptions of the in-depth interviews that were held. Finally, Chapter 5 provide the conclusions of this research by providing adequate answers to the research questions posed by this thesis. Furthermore, the last chapter will also critically reflect on the implications of the findings pf existent theories and studies as well as the shortcomings of this study, and suggestions for further research.

2. Theory and previous research

This chapter gives an overview of studies being done in the field of multi-screening practices, media consumption in the home environment, familial sociability, and the non-media centric approaches to media studies in order to illustrate the context in which the research will be done. Furthermore, some relevant theories and insights that are used to execute this research are described and linked to the research question.

2.1 Multi-screening practices

2.1.1 Adolescents embrace mobile devices

Over the last two decades, traditional media converged into new media technologies, which means that traditional media are being merged and reshaped by portable and interactive technologies (Jenkins, 2004). The number of adolescents with access to a smartphone illustrates how the Dutch youth embraced new (media) technologies (CBS, 2017). This number increased from 82,3% in 2012 to 98,6% in 2017 (CBS, 2017). Nowadays smartphones are integrated in the daily routines of adolescents. They are spending on average 4,5 hours on their smartphone, which is more than half of their media consumption. (Wennekers, Van Troost, & Wiegman, 2016). So, digital media have become a ubiquitous part of the Dutch culture and the lives of adolescents (GfK, 2016; CBS, 2017). Ling (2004) and Wei et al. (2013) relate this to the high sense of instantaneity when it comes to the use of smartphones, because of its attention-seeking features (sound, vibration, lightening) that push notifications.

Generally, it can be stated that new media technologies led to new behavioural patterns in media consumption (Dias, 2016). One of the practices that resulted from the emergence of new media technologies is multi-screening. Multi-screening implies that people are using multiple screens simultaneously without the co-occurrence of another non-media related activity (Segijn, 2016). In most cases, it is the instant availability of these 'needy' mobile devices that fosters the simultaneous consumption of different media on multiple devices (Segijn, Voorveld, Vandeberg, & Smit, 2017). Although multi-screening is considered a recurrent practice among a wide audience, adolescents are identified as the most frequent multi-screeners (Dias & Teixeira-Botelho, 2016). However, this is not surprising when looking at the number of adolescents with access to a smartphone and the time spent on using it.

2.1.2 From second-screening to multi-screening

Multi-screening originates from the concept of 'second-screening'. Second-screening refers to the use of laptops or mobile phones while watching television (Dias & Teixeira-Botelho,

2016). In the case of second-screening, the role of digital media was subordinate, which means that the attention of the user was mainly focused on TV while the activities on mobile devices were secondary. However, due to the variety of (mobile) devices that are instantly available to people nowadays, second-screening activities became more frequent and diversified, and do not necessarily include television anymore (Nielsen, 2014; Dias & Teixeira-Botelho, 2016). Dias and Teixeira-Botelho (2016) argue that the role of mobile devices became more preponderant, asking most of the users' attention and engagement. This is illustrated by the fact that 84% of the mobile devices owners are multi-screening while watching television (Nielsen, 2014). Because consumers have access to multiple mobile devices, which can be used simultaneously, the concept of second-screening evolved to the practice of multi-screening. This research refers to multi-screening as the use of more than one screened device simultaneously that might, but not necessarily, include television (Segijn, Voorveld, Vandeberg, Pennekamp, & Smit, 2017).

Segijn et al. (2017) distinguished two distinctive characteristics of multi-screening. The first and most distinctive feature of multi-screening entails the act of frequently switching the attention between different visual media activities. It is unavoidable for consumers to switch their attention while multi-screening. They are not able to divide their attention simultaneously on two or more visual media activities, because it requires the same type of attention. The second characteristic refers to the use of multiple, and often interactive, screens, that offer the possibility to consume related information on both screens or to interact with others about the same content (Segijn et al., 2017). This characteristic refers for example to the simultaneous combination of playing games through online game consoles (i.e. PlayStation) while using WhatsApp to discuss the tactics with your remote teammates.

2.2 Media consumption in the home environment

2.2.1 Media fostering familial sociability

Initially, media can connect people by providing opportunities for shared leisure activities. Television is particularly known for being a typical medium that is suitable for joint media consumption, as this media device is pre-eminently offering people the possibility to consume the same content physically together. In many cases, TV has a social function within the home environment, as it facilitates social interaction among family members by providing common topics for conversation (Morrison & Krugman, 2001; Ducheneaut et al, 2008; Chambers, 2016). The experimental research of Ducheneaut et al. (2008) suggests that television-mediated sociability is even regulated by cultural practices and interaction rules, which make sure that "joint viewers can simultaneously enjoy each other's company and preserve the structure and pacing of the show they are watching together" (p. 152).

Additionally, Morrison and Krugman (2001) showed that people describe the television viewing areas within the home as "warm" and "cosy" places, which are arranged for social gatherings and multiple-person television viewing. These characteristics confirm that media, and especially television, can facilitate shared leisure activities, which encourage sociability.

As stated in the introduction, sociability is defined as the ability of people to interact with others and to establish some kind of social relationship based on certain types of needs and interests, which may evolve spontaneously or during an organized occasion, and which can either be supportive, conflicting, instrumental or simply gratifying (Gallino, 1993). Ducheneaut et al. (2008) and Morrison and Krugman (2001) point out two forms of sociability, which are encouraged by media. On one hand, media can foster direct sociability that occurs when people consume the same content physically together. Direct sociability leads to immediate social interactions between people while consuming media. This relates to Morley's (1986) family television practice, which refers to the family gathering in the main living room to watch the shared television. This provides the occasion for both conviviality and power plays, in which household members share interests, pleasures and conflicts (Morley, 1986). On the other hand, media also encourage indirect sociability when consumers discuss media content after they have seen it independently and at different times (Morrison & Krugman, 2001; Ducheneaut et al, 2008). An example of indirect sociability is when a group of colleagues have all seen the same television programme and discuss it the next day at the office during the lunchbreak. In this case, media do not only foster social interaction at the time that media are consumed collectively, but also at a later stage when people who have consumed the same media content meet and talk with each other about it.

2.2.2　The impact of digital media on households

The continuous presence of mobile devices, that fosters the simultaneous use of multiple media devices, can be considered as a major threat to the social function of joint media consumption. When people are already focusing on two or more media devices, they are less inclined to socially interact with family members in the same physical space (Chambers; 2016; Dias, 2016). In this way, multi-screening practices undermine the social function of joint media consumption. Consequently, multi-screening contributed to the emergence of some major behavioural patterns that interfere in the social function of media, such as the individualisation and personalisation of media consumption (Jenkins, 2004; Chambers, 2016). Mobile media technologies allow people to consume media individually on any preferred device and to select media content from numerous databases based on their personal interests and time scheme (Chambers, 2016). Social scientists are concerned about these developments, as they threaten direct sociability and reduce the leisure time

spent on socialising with friends and family members, which might lead to the isolation of people (Franzen, 2003; Bargh & McKenna, 2004; Media:Tijd, 2016; Dias, 2016).

Hence, one can argue that multi-screening practices also have an impact on family interactions within households. As a result of the emergence of mobile devices, the media saturation in the home environment increased and media became more and more interwoven with the routines within households (Pink & Leder Mackley, 2013; Chambers, 2016; Livingstone, Blum-Ross & Pavlick, 2018). Livingstone (2007) points out that where (screened) media devices first entered the home for shared use in the living room, they are now scattered to kitchens, bedrooms and even bathrooms. Accordingly, it can be assumed that the development of mobile media encouraged the shift in family life (Livingstone, 2007). Back in the days, family life interactions were centred around the collective space of the living room, but nowadays household members are more dispersed in the home environment and, increasingly located in the bedroom (Livingstone, 2007). Because media devices became more affordable, more children have access to their own television in their bedrooms. Consequently, several studies showed that there are direct positive associations between the presence of a television in the bedroom and an increase in the total amount of time spent on watching television by children and adolescents (Saelens et al., 2002; Gorely et al., 2004; Barr-Anderson et al., 2008). Moreover, Roberts, Foehr, and Rideout (2005) argue that children who have a television in their bedroom, watch nearly 1.5 hours more television per day than children without a television in their bedroom.

In line with this, Livingstone (2007) indicated a trend of transforming bedrooms into private living rooms. As a result, homes are more predominantly organised according the principle of communal spaces and personal spaces, which impacts the balance between a communal or individualised model of family life. Livingstone (2007) argues that "the domestic media introduced into Western homes over the past half century or more are first conceived as communal but then, as they become cheaper and more portable, they are reconceived as personal media, particularly by children and young people" (p. 1). As a result, the 'bedroom culture', which is especially applicable to children and young people, became more common (Bovill & Livingstone, 2001). The bedroom culture refers to the bedroom as a central place, both physically and symbolically, of media use and the mediation of everyday life (Livingstone, 2007). Bovill and Livingstone (2001) also argue that girls tend to spend more time in their own room than boys.

All in all, it can be argued that the entry of digital media in the home changed the interior design, and the configurations, practices and values of households throughout the years (Chambers, 2016). The individualised model of family life emerged at the expense of co-viewing, which refers to adults and children watching television together, sharing the

viewing experience (Bryce & Leichter, 1983). Research by Bryce and Leichter (1983) shows that co-viewing has positive effects on children, as it can be regarded as a form of mediation. Parents and children who watch television together tend to feel closer to each other. Another positive effect of co-viewing is that children learn more about social relationships from when they watch family programmes together with their parents (Bryce & Leichter, 1983). In other words, the practice of multi-screening interferes with this valuable shared leisure activity within households. The presence of other screened devices cause distraction and compromises the quality of shared leisure activities, such as joint television viewing (Chambers, 2016).

Because of the positive effects of joint media consumption on the development of children, it is important to study how adolescents perceive and experience the effects of multi-screening on the social interactions within the household. Christensen and James (2000) argue that the imprint of circumstances and behavioural patterns in the childhood has long-term effects on the development of the adolescents. Current studies investigating multi-screening practices do not reveal any insights in how this practice affects family sociability. This study will fill this gap, because especially in a time of family upheaval and rapid social change as a result of technological developments, it is becoming increasingly important to study the consequences of growing up in this media-saturated society (Chambers, 2016).

2.2.3 The impact of excessive media use on familial sociability

As can be inferred in the previous section, the multiplication of media devices in the home fostered a shift in media use from 'family television' (Morley, 1986) to individualised media lifestyles (Flichy, 2006). For this reason, it can be argued that the entry of digital media in the home environment had a great impact on familial sociability. In general, today's digital media landscape generates many pessimistic claims about the fact that "excessive use of home-based media undermines family communication and face-to-face interaction, isolate children from parents and fracture traditional boundaries between home and outside the world through the encroachment of work on home life and the infringement of privacy" (Chambers, 2016, p. 6). In the end, Chambers (2016) argues that the family unit is at stake, because this individual way of media consumption impairs direct family sociability. Surprisingly, consumers are less concerned about the effects of excessive use of home-based media, and so multi-screening. Most internet users argue that their digital media behaviour has no influence on time spend with their families and friends (Cole & Robinson, 2002; Franzen, 2003). This is also in line with the research findings of Livingstone, Blum-Ross, and Pavlick (2018), as they show that parents acknowledge that media play a major role in their children's live. Nevertheless, parents remain optimistic about the role of digital media in their children's lives (Livingstone, Blum-Ross & Pavlick, 2018). Livingstone et al. (2018) also

reflect on the findings of their research about parents' perception and experiences regarding their children's digital behaviour. The perception of parents on the sociability part is two-sided. On one hand, they realise that digital media can bring families together, as it offers possibilities for shared leisure activities like playing video games or watching movies (Livingstone et al., 2018). On the other hand, the research revealed that some parents experience that digital media interfere with their time spend on shared leisure activities with their children (Livingstone et al., 2018). The parents experience that they often pick up our phones unconsciously and get lost in the endless amount of online applications (Livingstone, Blum-Ross & Pavlick, 2018).

Based on previous studies on the effects of new media patterns, it can be argued that most researches focus solely on the perception of parents and do not reveal any insights into the perceptions and experiences of children in media-saturated households. Building on this, it can be questioned how adolescents perceive and experience multi-screening practices in the home environment and their effects on familial sociability within households. Aside from that, the practice of multi-screening is a relatively understudied phenomenon and not much research has been done regarding the consequences of this behavioural pattern in relation to familial sociability, which makes this study even more relevant.

2.3 Scenarios, categories and profiles in multi-screening practices

2.3.1 Multi-screening scenarios

When interviewing the adolescents about their perception and experiences regarding multi-screening practices in relation to familial sociability, it is useful to know which multi-screening scenarios are the most common in household routines. According to Segijn et al. (2017), the most prevalent screen combinations are: television – laptop, television – smartphone, and television – tablet. The results deriving from a study conducted by Google (2012) confirm that the combination of television and the smartphone is the most common in daily routines. For this reason, it is certainly relevant to include these multi-screening scenarios in this study. The fact that television plays a major role in multi-screen practices is worrisome in terms of familial sociability. As mentioned earlier, television is known as a typical medium with a social function, because it facilitates joint media consumption by fostering social gatherings and providing common topics for conversation. Therefore, it can be argued that the multi-screening scenarios that include television are the most likely to affect the adolescents' perception and experiences on familial sociability within households.

Based on the most prevalent screen combinations, Segijn et al. (2017) recommend to focus especially on mobile devices, like laptops, smartphones and tablets, in further research on multi-screening practices, because they are the most likely to stimulate simultaneous

interactions. The most frequent companion device in multi-screening practices is the smartphone: 57% of the time people are taking part in multi-screening practices, the smartphone is involved (Google, 2012). A research from Nielsen (2014) shows that 84% of the mobile devices owners are multi-screening while watching television. In addition, the Google research (2012) states that 77% of the time people are watching television and using another device, such as a smartphone (49%) or laptop (34%). Therefore, it can be argued that television is no longer able to command people's full attention (Google, 2012; Nielsen, 2014; Dias, 2016).

2.3.2   Multi-screening categories

Even though all multi-screening practices have some characteristics in common (Segijn et al.,2017), there are different categories that can be distinguished within the practice of multi-screening (Google, 2012; Smith & Boyles, 2012; Nagel, 2015). It is useful to explore these different categories, because it will help to identify the different behaviours of the participants. Multi-screening, as defined by Dias (2016), implies that people are engaging with multiple screened media at the same time, simultaneously or in sequence. Based on this definition, the 2012 Google study (2012) elaborated on two different modes of multi-screening: sequential- and simultaneous multi-screening. When a user is sequentially multi-screening, it means that the user is moving from one screen to another to complete the same task (Google, 2012). Simultaneous multi-screening refers to the act of "using more than one device at the same time for either a related or an unrelated activity" (Google, 2012, p. 17).

Segijn et al. (2017) indicated a research gap in terms of the relatedness of the media activities across screens. The authors (2017) suggested that future research regarding multi-screening should also take this into account. Therefore, this study differentiates whether the participants are involved in related or unrelated activities while multi-screening. Within the category of simultaneous multi-screening, Nagel (2015) distinguishes two sub-categories regarding the relatedness of media activities across screens: multi-tasking and complementary usage. When users are using multiple screened devices for unrelated activities, there is talk of multi-tasking (Nagel, 2015). When users are involved in related activities, it can be considered as complementary usage (Nagel, 2015). The same sub-categories of simultaneous multi-screening are described by Smith and Boyles (2012), but they refer to it as respectively distracted or connected viewing. Research shows that distracted viewing is more common and happens more frequent than connected viewing (Dias & Teixeira-Botelho, 2014). Based on the two sub-categories within the simultaneous multi-screening, the Eriksson Consumer Lab (2012) elaborates on the mobile devices that are involved in these practices. Mobile devices, which are supporting connected viewing, are called 'enhancers'. An example of an enhancer is when a mobile device is used to enrich the

television experience with a social layer, extra information or allowing participation. In the case of distracted viewing, the devices are called 'companions'. (Eriksson Consumer Lab, 2012)
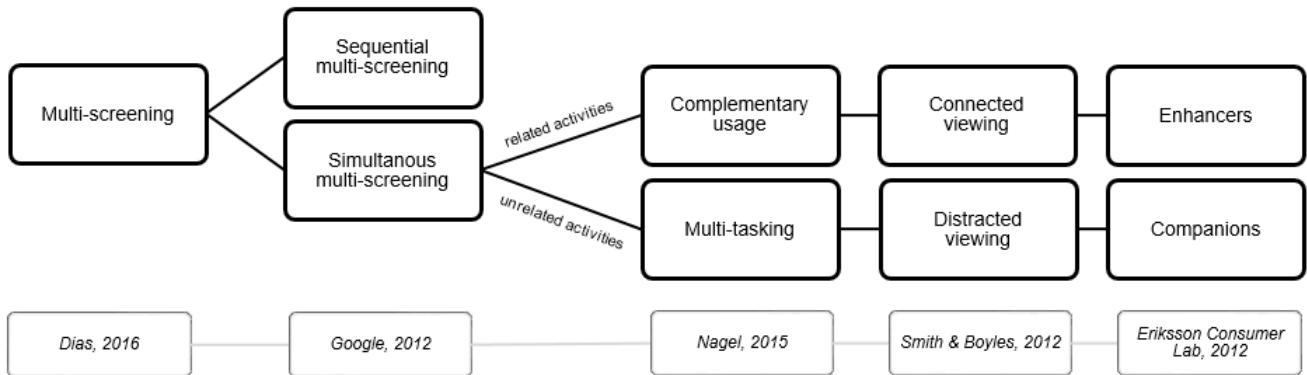
Figure 1.1 *Categories of multi-screening*

2.3.3   Multi-screener profiles

The different categories regarding multi-screening practices are based on certain behavioural patterns and motivational factors (Hritzuk & Jones, 2014; Ainasoja et al, 2014). By analysing these patterns and motivations, Hritzuk and Jones (2014) and Ainasoja et al. (2014) defined four multi-screener profiles each. Some profiles overlap with each other, but some are also complementing each other. The multi-screener profiles contribute to the research process and the analysis of the materials, because they help to understand the relationships people have with each screen. In this way, the multi-screening behaviour of the participants can be compared. Furthermore, it is important to look at the multi-screener profiles from the perspective of familial sociability, because there might be a relation between the multi-screener profiles of adolescents and their perspective on how multi-screening practices effect the familial sociability in the home environment.

Content grazers

The first and most common multi-screener profile is content grazing. Grazing occurs when unrelated content is consumed on two or more screened devices simultaneously (Hritzuk & Jones, 2014). For this reason, the content grazing profile fits in the simultaneous multi-screening category (Google, 2012). During the research, it is important to avoid misunderstandings about content grazing and multi-tasking, because people tend to describe content grazing behaviour by marking it as multi-tasking. From their perspective, both concepts refer to the execution of various tasks on different media with some temporal overlap (Adler & Benbunan-Fich 2012; Salvucci & Taatgen 2011).

With regards to this study, there are two possible variations on multi-tasking. Based on the definition of Hagel (2015), content grazing and multi-tasking have some similarities,

because both concepts refer to the use of multiple screened devices for unrelated activities. According to Segijn et al (2016; 2017), multi-tasking also refers to the simultaneous consumption of screened as well as unscreened media that allows complete temporal overlap, like listening to Spotify while reading a blog on a tablet. However, when talking about multi-tasking in relation to multi-screening, it is important to mention that no complete temporal overlap takes place. Multi-screeners, like content grazers, cannot simultaneously divide their focus among the different tasks, as it requires the same type of (visual) attention (Segijn et al., 2017). In other words, multi-screening involves frequent attention switching between different tasks. So, content grazing and multi-tasking do not always refer to the same academic definitions (Hritzuk & Jones, 2014; Segijn et al., 2017).   In contrast to what content grazers claim about the efficiency of multi-tasking, they are less focused on getting tasks done, because they are frequently switching their attention between tasks (Segijn et al., 2017). Content grazers are eager on grabbing a quick moment of fun or escape, and in the end, they are "just flitting from device to device out of habit" (Hritzuk & Jones, 2014, p. 38). Logically, content grazers fit within the sub-category distracted viewing, because they are involved in all sorts of screened activities simultaneously (Smith & Boyles, 2012). This type of behaviour can be illustrated by the moment the TV commercials start. As soon as a television programme is on pause, they will grab their mobile devices and check upon their social media channels to catch up with anything new. These content grazers are driven by the need for continuous entertainment (Hritzuk & Jones, 2014).

Social- and investigative spiders

The second multi-screener profile covers the multi-screener who is 'social spider-webbing'. These consumers are actively seeking for social connections while multi-screening, as they want to have a sense of belonging (Hritzuk & Jones, 2014). The content triggers them to share and connect socially with others (Hritzuk & Jones, 2014). Especially, live events on television are a perfect occasion to interact with like-minded consumers on social networks, like Facebook, WhatsApp and Twitter. This extrovert multi-screener profile defined by Hritzuk and Jones (2014) can be compared with the 'commentators' profile of Ainasoja et al. (2014). Commentators attach a lot of value to the social aspect of consuming media, because they like to exchange opinions and information about the content (Ainasoja et al., 2014).

The third profile, which involves the 'investigative spider-webbing' multi-screeners, is comparable to the latter profile. The profiles are similar as they both relate to connected viewing, because there is a connection between the content being consumed (Smith & Boyles, 2012). But, instead of seeking for social connections, these consumers are actively searching on additional devices for additional information or content that complement and amplify the content of the other screen (Hritzuk& Jones, 2014). These multi-screeners are

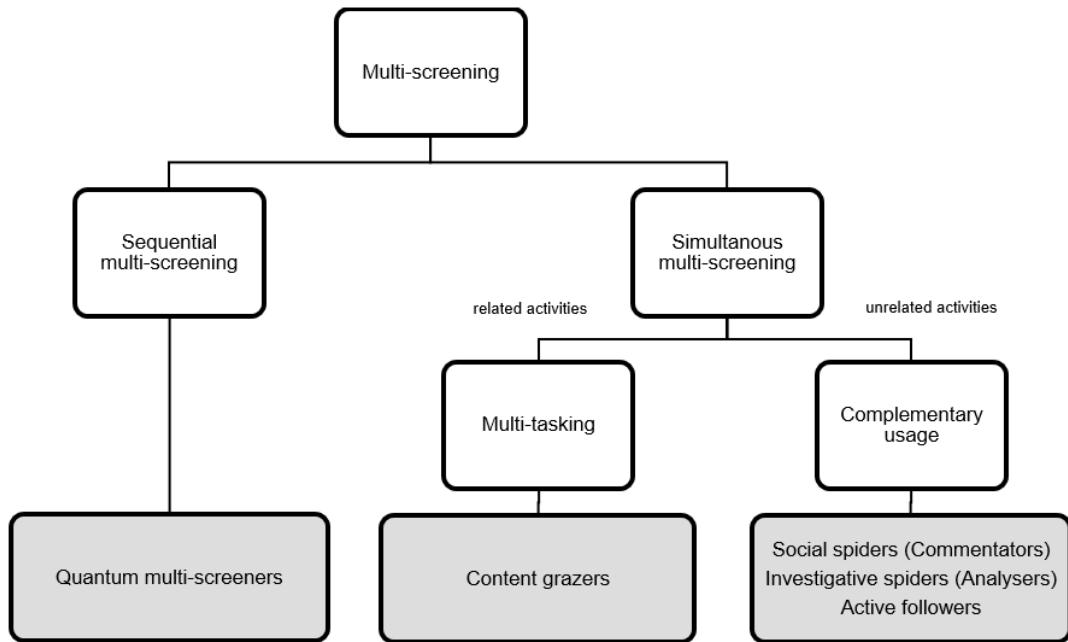often driven by curiosity and engagement (Hritzuk& Jones, 2014).

The 'investigative spider-webbing' profile is the same as the 'analyser' profile defined by Ainasoja et al. (2014), because the analyser also uses the second screen to obtain relevant information related to the television content. Additionally, Ainasoja et al. (2014) suggests that analysers also use additional devices to comment on the content. Because of this, the analysers seem to have something in common with the commentators. Nevertheless, the difference is that analysers analyse and comment within a wider time frame. Analysers see the content in a broader perspective, while commentators are more spontaneous and comment on items as soon as they pop up (Ainasoja et al., 2014).

Furthermore, Ainasoja et al. (2014) also distinguished the 'active follower', which can be considered as a mixture between social- and investigative spider-webbing. Active followers relate to investigative spiders, or analysers, as they are also looking for additional information related to the media content. They specifically delve into the facts, backgrounds, learning, history and career development of their favourite television personas. However, active followers go beyond this. With the help of social media, they also want "to express and share the support of persons with other viewers or friends" (Ainasoja et al., 2014, p. 201).

All in all, it can be stated that the multi-screener profiles in this section fit within the multi-screening theory as defined by Segijn et al. (2017), who referred to the use of multiple, and often interactive, screens that offer the possibility to either consume related information on both screens or interact with others about the same content. Nowadays, it is becoming increasingly common that broadcasters encourage multi-screening practices by developing second screen companion content (Vanattenhoven & Geerts; 2017). Through online applications they provide supplementary content, which ranges from additional information and footage to play along games (Vanattenhoven & Geerts; 2017). In this way, broadcasters and application developers utilise the fact that television viewers frequently interact with their mobile devices simultaneously.

Multi-screeners on the move

The last multi-screener profile 'quantum' can be described as a pathway in which consumers start an activity on one screen and continue it on another, because they are able to accomplish tasks everywhere, on any screen. This type of behaviour is triggered by the need for efficiency, productivity and ease, which is characterising the contemporary way of living. Hritzuk and Jones (2014) stated that consumers move to a second screen, because they "want to feel organised and get things done, and they want to use technology effectively to help them get there" (p. 40). This multi-screener profile is the most applicable for activities like working, shopping and completing tasks related to the household or administration.

Multi-screening

Sequential multi-screening

Simultanous multi-screening

related activities

unrelated activities

Multi-tasking

Complementary usage

Quantum multi-screeners

Content grazers

Social spiders (Commentators)
Investigative spiders (Analysers)
Active followers

Figure 1.2 *Relations between multi-screening categories and multi-screener profiles (Ainasoja et al., 2014; Hritzuk & Jones, 2014*

2.4   The application of the non-media centric approach

Because multi-screening practices are interwoven with media technology, and consequently embedded within household routines, it is useful to adopt a non-media centric approach to understand how Dutch adolescents perceive and experience multi-screening practices in the home environment. This approach provides a more subjective, localized perspective on the practice of multi-screening as an everyday action and habit by focusing on how media are embedded in materialities, socialities and everyday routines by making the content of media subservient (Deuze, 2012; Pink & Leder Mackley, 2013). Because of the focus on every day routines, Moores (2012) argues that the non-media-centric approach is suitable to study everyday media uses alongside other (social) practices. He emphasizes that the consumption of media is no longer an isolated activity (Moores, 2012). Thus, the approach does not only fit with the concept of multi-screening, as it enables the analysis of simultaneous media activities, but it also serves the research goal to study multi-screening alongside social practices that foster familial sociability.

The study of Pink and Leder Mackley (2013) brings the non-media centric approach into practice through the ethnographic study of media beyond media content, and as part of the affective routines of everyday life. Their study delves into "the role of media in the making and experiencing of environments, centring on their salience to daily routines of transition in the home" (Pink & Leder Mackley, 2013, p. 677). In other words, they study the role of media in everyday life within the specific context of the home environment. In order to do this, they used the non-media centric approach by using a framework based on three analytical prisms, which are related to home environment: environment/place, movement/ practice and

perception/sensory embodied experience (Pink, 2009, 2012a, 2012b). The first prism, place, gives guidance in the analysis of the home environment. The prism can be understood from two different perspectives. The first perspective is rather concrete and refers to the actual physical environment and its furniture, which people call their home. However, the building does not solely define home. For that reason, the second perspective is more abstract and can be understood as "the coming together of the multiple processes and movements of things that converge in ways that are constantly shifting and changing, to constitute home" (Pink & Leder Mackley, 2013, p. 683). Both perspectives originate from the idea that place, or the home in this case, is the 'occupation' of an empty space. Ingold (2008) argues that the tangible assets, and the flows of materials and humans are 'entangled' in the constitution of home as place. Within the current research, this prism can be applied by taking into account the composition of the household, the living arrangements, the type of house, the available screened media devices and the arrangement of communal spaces.

The second prism refers to the movement of persons within the home environment. As the first prism indicates a place, a house in this case, exists of the entanglement of tangible and intangible assets, and the flows of materials and humans. Based on this argument, it can be questioned how people move through the home, get faced with other persons and things, and become interwoven as their paths cross each other. This prism puts the focus on the media routines, with multi-screening practices in particular. The analysis of actual movement brings to the fore how certain practices become routinized within households, and it offers a way to study the role of certain mobile devices in daily life (Pink & Leder Mackley, 2013).

The last prism, perception and sensory embodied experience, focuses on how people perceive the dimensions of the home and how the movements within the home are experienced. This prism fits with the aim of the research to study the perceptions of adolescents on multi-screening practices in relation to familial sociability. All in all, the three prisms as conceptualised by Pink and Leder Mackley (2013) will help to move away from media-centrism, because it focuses on "media as part of place, as embedded in movement and as experienced within the flow of everyday life" (p. 689). Moreover, it offers a methodological approach to the study of multi-screening practices in the specific context of the home environment.

3. Research design

The purpose of this qualitative research is to study the perception and experiences of Dutch adolescents on multi-screening practices in the home environment, and how these practices affect the familial interactions within household. Because of the exploratory nature of the research, a qualitative method of conducting in-depth interviews was considered the most appropriate. The total sample size of this study includes twelve participants, which consists of six adolescents, as well as interviews with a parent of each adolescent. This chapter provides details about the chosen methodology, the unit of analysis, the sampling method, interview procedure, and the method of data analysis. Aside from this, the ethical issues and consideration are addressed in the last section of this chapter, because a vulnerable and relatively young population being sampled in this study.

3.1 Methodology

Previous studies on multi-screening were focused on the household and have used different types of research methods (Dias, 2016). Hence this research focuses particularly on the multi-screening practices of adolescents within the home environment. By focusing on adolescents, the research aims to provide a new perspective on multi-screening. Because of the exploratory nature of the research, a qualitative research method is a suitable choice for gathering rich and contextualized materials through interaction with the target group (Strauss & Corbin, 1998; Creswell & Poth, 2017). Accordingly, Creswell and Poth (2017) add that qualitative research methods are particularly useful for understanding the contexts or settings in which participants talk about certain behaviours, practices and experiences. Therefore, a qualitative method is adopted in the study of adolescents' experiences regarding multi-screening in the home environment and to discover their deeper thoughts about how they experience the effects on familial sociability (Creswell & Poth, 2017).

Moreover, Creswell and Poth (2017) argue that a detailed understanding of a phenomenon can only be established by "talking directly with people, going to their homes or places of work, and allowing them to tell the stories unencumbered by wat we expect to find or what we have read in the literature" (p. 45). For this reason, in-depth interviews are held. By asking open and objective questions, the participants had the opportunity to answer the questions without being pushed into a specific direction with a limited set of answers (Strauss & Corbin, 1998). In this way, there was room for multiple meanings and the participants could use their own vocabulary and frameworks to elaborate on their meanings, attitudes, beliefs and experiences (Flick, 2009). This approach suited the research's aim to gather details about the adolescents' feelings, thoughts and experiences regarding their multi-screening practices and how this relate to the familial sociability within their home environment (Strauss

& Corbin, 1998). Furthermore, interviews offered the possibility to ask for supportive explanation when needed or to verify given answers to ensure a good comprehension of the adolescents' experiences (Boeije, 2014). All in all, the aim of the research was to get rich insights into the practice of multi-screening rather than to generalise, which made a qualitative research method the most suitable (Marshall, 1996).

3.2 Unit of analysis and sampling method

The unit of analysis of this study is twofold, because the adolescents as well as one of their parents is being interviewed. According to Dias and Teixeira-Botelho (2016), adolescents who are living in urban areas are identified as the most frequent multi-screeners. In principle, adolescence refers the transition phase between childhood and adulthood, which is related to elements like biological growth and major social role transitions. In general, adolescence involves people aged between 10 and 19 years (Sawyer et al., 2018). However, previous studies have shown that adolescents complete their education at a later age, which consequently affects the age they get married and get children. In order to respond to the delayed timing of role transitions, Sawyer et al. (2018) argue that the definition of adolescence should be expanded. Therefore, they argue that a definition of 10–24 years corresponds more closely to adolescent growth and the current understandings of this life phase (Sawyer et al., 2018). For this reason, the six adolescents who are interviewed are aged between 11 and 24 years and living in urban areas.

Aside from that, Christensen and James (2000) argue that most children of 11 and older are fully able to communicate their perceptions, opinions and beliefs, which made the communication between the researcher and the participants more convenient. The interviews are held with adolescents from the Netherlands, because they live in a highly mediatised society. In 2017, 98,6% of the Dutch adolescents between 12 and 18 years has access to a smartphone, which they use on average 4,5 hours a day (GfK, 2016; CBS, 2017). Because of the great access to media technologies, digital media have become an ubiquitous part of their daily routines, which made it relevant to expose this particular target group to a non-media centric research approach (Pink & Leder Mackley, 2013). Furthermore, the interviews were held in Dutch, because it can be assumed that the age group is the most at ease when expressing themselves in their native language.

Aside from the adolescents' perspective, it was useful to explore the perspective of their parents. Morley (1986) emphasizes that the household is more than just a group of people living in the same physical space. Household members share the same domestic practices and daily routines, which made it useful to include the perspective of the parents (Morley, 1986). Through the parental interviews, the outcome of research became more valid, because the answers given by the children could be checked and complemented by

the parents. On the contrary, the interviews with adolescents limited the social desirability bias, as it has been claimed that children are less inclined to give social desirable answers (Christensen & James, 2000). According to Lindlof and Taylor (2011), interviews are an appropriate method to verify, validate or comment on information from other sources. Verification is relevant in this specific case, because media are increasingly present and shaping daily life nowadays, which may cause that 'people do not recognize their media habits because they are a constitutive part of them' (Deuze, 2012, p.138). Therefore, one of the parents of the adolescents was also interviewed, bringing the total sample size to twelve participants. The level of saturation was also reached at this point, because new categories, themes or explanations stopped emerging from the data (Marshall, 1996).

A combination of sampling methods is used to recruit the participants. First, purposive sampling is used to sample participants by exploiting the researcher's personal network (Babbie, 2013). This nonprobability-sampling method selected participants "on the basis of the researcher's judgement about which ones will be the most useful or representative" (Babbie, 2013, p. 200). In the context of this research, it means that this nonprobability-sampling method relied on the available subjects in the researcher's network. Public calls for participation are posted on the researcher's social media. Furthermore, potential participants in the researcher's network are selected and approached proactively. When the first participants are sampled, the snowball sampling method is used by asking whether the participants have other potential participants in their network (Lindlof & Taylor, 2011). This study applied the following sampling criteria, which all participants must meet in order to participate in the research:

- The participant is between 11 and 24 years old.
- The participant lives in an urban area.
- The participant's household consists of at least three family members.
- The participant has access to at least two screened media devices.
- The participant owns a smartphone, because the smartphone is the mobile device that is the most frequently involved in multi-screening activities (Google, 2012).
- The participant must be willing to speak about of their experience.

3.3   List of participants

To provide insight in the participants' profiles, an overview with the key demographics of the participating households is established (see table 1). Four of the six adolescents being interviewed is female and the age of the ranged from 14 to 20 years old. With regards to the parents, an equal number of females and males have been interviewed and their ages vary from 44 to 59 years old. The education level and level of occupation of all participants was

rather diverse. Most of the households consists of two parents and two children. Only Household 1 and 5 are composed differently, because both are single-parent households. Furthermore, the majority of participants preferred to remain anonymous. For this reason, the names as well as current places of residence are not revealed, and pseudonyms are used in the transcripts.

Table 1: Key demographics of participants

Participating households		Age	Sex	Occupation
1	Adolescent 1	18	Female	Student (Management assistance)
	Parent 1	59	Male	Retired (Former office director at a bank)
2	Adolescent 2	20	Male	Student (Sports academy)
	Parent 2	53	Female	Owner of a restaurant
3	Adolescent 3	16	Female	Pupil (Pre-university education)
	Parent 3	45	Male	Project manager (ICT)
4	Adolescent 4	18	Female	Student (Port logistics management)
	Parent 4	49	Female	Sports instructor
5	Adolescent 5	14	Male	Pupil (Pre-vocational secondary education)
	Parent 5	44	Female	Waitress
6	Adolescent 6	17	Female	Pupil (Higher general secondary education)
	Parent 6	45	Male	Logistics coordinator

3.4 Interview procedure

All interviews are conducted by the researcher, a master student of the Erasmus University Rotterdam. In order to direct the conversation, an interview guide was prepared. The interview guide consists of a topic list that provided guidance throughout the interviews and helped to check whether all (sub-)topics are discussed (Lindlof & Taylor, 2011). Based on the topic list, all the leading questions were proposed, where the interviewer could rely on when needed. The interview guides, which are used during the interviews can be found in Appendix 1 and 2. All questions needed to be posed in a way that stimulates the participants to think about their (unconscious) media habits, as people tend to take their media routines for granted (Deuze, 2012). Therefore, the method of obtaining the data is based on a non-

media centric approach in order to gain insight in adolescents' daily routines (Pink & Leder Mackley, 2013). Moreover, this approach fostered a more subjective perspective of the participants' media routines and multi-screening practices, because it also considers the perception and sensory embodied experience regarding multi-screening practices and familial sociability.

As explained, the non-media centric approach is conceptualised by Pink and Leder Mackley (2013) for the aim of studying media routines in the home environment. This led to the three analytical prisms that gave guidance through the research process and the analysis of the materials. The interview questions are constituted according to the following prisms: environment/ place, movement/practice and perception/sensory embodied experience (Pink & Leder Mackley, 2013). Nevertheless, it is important to emphasize that the interview was semi-structured, as a certain level of flexibility enhanced the fluency of the interview and the researcher could respond to any unforeseen contingencies that raised during the interview (Lindlof & Taylor, 2011). The interview guide provided the required topics and the leading questions in a preferred order, but the actual execution of the research varied among the participants, depending on the person and the answers given.

Even though most adolescents were fully capable of communicating their perceptions, opinions and beliefs, it was necessary to be aware of the possible problems of literacy, confidentiality and context that can emerge because of age differences (Christensen & James, 2000). Christensen and James (2000) emphasize the importance of pre-testing the interview guide, because it will detect "problems with comprehension and ambiguities in question wording, to detect flippancy and boredom, and to discover discrepancies between the children's understanding and the researcher's intent" (p.102). For this reason, the interview guide was flexible to change throughout the research, which was necessary because the level of understanding of the questions, extensity of the answers and the fluency of the interview varied largely among the participants. For each interview, the guide was evaluated and adjusted. As expected, the adolescents had a different understanding, the interviewer needed more leeway than when interviewing adults. The interviewer had to be patient and respectful towards the interviewee, and willing to reformulate the question several times when necessary, because some participants needed more time to get familiar with the interviewer, the topics and the way of asking questions (Morrow & Richards, 1996). Especially, the interviews with the youngest participant needed some extra revision to make sure that the questions were applicable to them. Based on the first two interviews, it became clear that some topics needed more introducing questions first. The multi-screening topic, for instance, was introduced too directly, which made it difficult to get valuable answers. The lack of introduction questions caused that the rest of the questions about this topic were

laboriously answered, because the participants had no clear idea of the phenomenon, while it turned out to be very recognizable to everyone with a little more explanation and some accompanying questions.

Before participating in the research, the participants were asked to sign the consent form that gives permission for recording. Recording the interviews resulted into richer data, because it avoided distraction by note-taking and provided the possibility to listen to the interviews again while transcribing. All interviews are done at the interviewees' homes, because it was important that the interviewees felt comfortable. Furthermore, the participants were informed about the fact that participation in this study involved no cost and that they would not be paid for participating. The participation in the interviews asked for some time, effort and openness of the participants.

3.5 Data analysis

Qualitative research methods make it possible "to discover concepts and relationships in raw data and then to organise the findings into a theoretical explanatory scheme through a non-mathematical process of interpretation" (Strauss & Corbin, 1998, p. 192). To organise the emerging topics from the interviews systematically, the transcriptions are exposed to a thematic analysis, which is a method for identifying, analysing, and reporting patterns within qualitative data and exploring the concept without any generalisation (Creswell & Poth, 2017). The six steps as described by Braun and Clarke (2006) helped to conduct the thematic analysis. In the first step, all interviews are translated and transcribed in English, which was an effective way to start familiarising with the data. The second step within the analytical process was the organisation of all the information gained from the interviews into manageable parts (Braun & Clark, 2006). This was done through the segmentation of the data by using open coding (Boeije, 2014). Open coding implies that the fragments that belong to the same topic are marked by the same code (Strauss & Corbin, 1998). By doing this, the data will be organised in a meaningful and comprehensible way.

The third step of the thematic analysis is axial coding, which refers to the act of re-analysing and segmenting the codes, that derived from the open coding, into relevant and broader categories (Braun & Clark, 2006; Boeije, 2014). So, the 'first order' codes are divided into some overarching themes. In this way, the researcher got insight in how the different codes, subthemes and themes are related to each other, which helped to find explanations for what was observed during the interviews (Braun & Clark, 2006). Braun and Clark (2006) argue that "data within themes should cohere together meaningfully, while there should be clear and identifiable distinctions between themes" (p. 91). The themes and codes were flexible to change, because thematic analysis is a continuous process that allows to combine, refine, separate and discard initial themes and codes (Braun & Clark, 2006). The

second last step consists of selective coding which refers to refining and defining the themes and subthemes (Braun & Clark, 2006). An overview of these themes and codes can be found in Appendix 5. Building on thematic analysis, the researcher will compose an interpretable overview of the research results in Chapter 4, using empirical evidence that relates to the themes, research question, and theoretical framework (Braun & Clark, 2006).

3.6 Ethical considerations

Christensen and James (2000) stress the importance of the researcher's ethical responsibilities when interviewing children. The ethics that apply to interviewing children are stricter than with adults, because children are a vulnerable target group. Children are less able to protect themselves, and they have a different understanding and experience of the world, and different communication competencies (Thomas & O'Kane, 1998). Therefore, Morrow and Richards (1996) emphasize some important issues that require special consideration when including children in research. One of these issues is concerned with the consent process. Because of the discussion among academics whether informed consent needs to be obtained from the parents or the children themselves, it is recommended to ask both to sign the informed consent (Morrow & Richards, 1996; Thomas & O'Kane, 1998). Therefore, for the present study, consent must be given by adolescents as well as by one of the parents in order to anticipate on potential ethical problems. First of all, the informed consent insures the willingness of the participant to be interviewed. Secondly, it explains the purpose and nature of the research, and how the information will be collected and used, in a comprehensible manner (Christensen & James, 2000). Apart from that, the consent states that the participation in the research will be anonymous, as all identities will be changed into fictional identities. In this way, it is guaranteed that the information that is obtained from the interviews is kept in confidence and not traceable to individual persons. Because of the consent, the participants are encouraged to act naturally and share their experiences openly. Furthermore, Thomas and O'Kane (1998) suggest that children should have a certain level of freedom over how they participate in the research. For this reason, the consent also confirms the participant's right to the possibility to withdraw their participation at any point, to skip a question or to disagree with tape recording. In addition, the adolescents as well as the parents had the opportunity to receive the transcript, so they could verify the document. All the topic and issues named are covered in the consent, which can be found in Appendix 3 and 4.

4. Analysis and results

The overarching goal of this research is to study the perception and experiences of Dutch adolescents on multi-screening practices in the home environment, and how these practices affect the familial interactions within household. Additionally, the perspective of the adolescents is enriched with insights of their parents to make the outcome more complete and valuable. Both perspectives contribute to the understanding of how multi-screening practices are embedded in everyday routines and how this potentially impacts familial sociability. This chapter provides an overview of the research results using empirical evidence that relates to the research questions and the theoretical framework. It gives insight into the main themes and subthemes that were extracted using the thematic analysis and how these themes relate to each other. The analysis is presented in the form of quotations and paraphrases originating from the transcripts of the in-depth interviews. As argued in the theoretical framework, the analysis of the research materials is done by adopting a non-media centric approach. Therefore, the analysis is conducted in the light of the analytical prisms as indicated by Pink and Leder Mackley (2013): environment/place, movement/ practice and perception/sensory embodied experience (Pink, 2009, 2012a, 2012b).

4.1 Everyday media routines

RQ1:   How do Dutch adolescents perceive and experience multi-screening practices in the home environment?

To answer the first research question, it is necessary to address the variety of screened media devices that are available to the adolescents and how they are embedded in the daily (media) routines of adolescents. These insights help to understand how media practices, and multi-screening in particular, take place in the home environment and how they are perceived and experienced by the adolescents.

4.1.1   Media devices and places

The first prism of the non-media centric approach, place, gives guidance in the analysis of the tangible and intangible arrangements within the home environment. It takes into account the availability of screened media devices and the arrangement of communal and personal spaces. At first the participants were asked which media devices they own. The answers did not only give insight into the media devices that can be combined in multi-screening practices, but it also allowed to researcher to identify the role of each media device in daily life.

In general, the media devices that are personally owned by the adolescents are a smartphone, a laptop, a tablet, a television and a PlayStation. As the sampling criteria of this study required, all adolescents being interviewed own a smartphone and they all indicated this mobile device as the most important. The primary reason why their smartphone is of great importance for them is to that it allows them to be in touch with friends and family. When asking whether they have preferences for particular social networking platforms, most of the participants expressed their preference for Facebook, Snapchat and /or WhatsApp. Facebook is used by all ages to keep people in contact with friends and family that they do not see less often or live further away. Snapchat is fun application that is frequently used by the adolescents. WhatsApp is considered as a tool that is mainly used to arrange daily activities and to discuss work- and school related topics:

> *"It (WhatsApp) makes it so much easier to meet people, to make plans together, to work together with classmates. I see it as a tool actually…"*   **- Adolescent 2 -**

> *"We also have a family WhatsApp group, so we can easily check where everybody is or notify each other when plans are changing."*   **- Parent 3 -**

In addition, the adolescents also named several other reasons for using their smartphone in daily routines. They use their smartphone to listen to music, play games, read the news, keep informed about school related topics, plan outings and watch series. One of the adolescents reflects on the prominent role of her smartphone in her daily routines:

> *"I use my telephone for everything: to be in touch with friends and family, to play games, to listen to music, to check my grades, and I even use it for checking the time. I am wearing a watch, but I still use my phone for checking the time."*   **- Adolescent 1 -**

The parents use the same media devices as their children. Just like the adolescents, the adolescents reported that their smartphone is the most important media device. Except for Parent 5 who does not own a smartphone. However, they use this device in a more effective and practical way and for other purposes.

The primary reason for adolescents to use the laptop is to do their homework. Almost all adolescents own a laptop themselves, except for the two youngest adolescents. Adolescent 3 and 5, respectively 16 and 14 years old, use their parents' laptop when they have to make a school assignment on the computer. The interviews reveal that the older the adolescents are, the more often they use the laptop. The parents use their laptop for work, administration, searching for information, and booking trips. Based on this, it can be stated that the laptop is mainly used functionally by the adolescents and the parents. Adolescent 1 and 4 accidentally use their laptop to watch series, but it is not the preferred devices for that.

Within households, the tablet often turns out to be superfluous, because smartphones and laptops have the same functions and are more optimised for certain activities or circumstances. The tablet seems to be somewhere in middle of all mobile devices: *'you can do everything with it, but it is never best option'*, argues Parent 3. Only Household 2 uses the tablet to connect to the television screen to watch series through applications like Netflix.

It is remarkable that all adolescents being interviewed have a television in their bedroom, but they do not or hardly use it for watching television. This finding contradicts with previous researches, as they showed that there are direct positive associations between the presence of a television in the bedroom and an increase in the total amount of time spent on watching television by children and adolescents (Saelens et al., 2002; Gorely et al., 2004; Barr-Anderson et al., 2008). Based on the interviews, it can be argued that this data turns out to be irrelevant, because none of the adolescents watch television in their bedroom regularly. The analysis shows that the superfluity of the television in the bedroom can be explained by two reasons. On one hand, the adolescents pointed out that they rather use their laptop or smartphone to consume videos, series and movies, because these devices provide easy access to media databases, like, YouTube, Netflix and Videoland. On the other hand, the majority of the adolescents expressed their preference for the living room when they were asked about their most comfortable place to consume media. All female adolescents (Adolescent 1, 3, 4 and 6) prefer the living room over their bedroom. They all explain this preference by emphasizing that they prefer to be surrounded by others:

> *"On the couch! Downstairs in the living room, because then I am also among the others. I do not like to lock myself up here in my room."*   - **Adolescent 1** -

> *"It feels weird to be upstairs alone when the rest is downstairs. I never do that. I prefer to be in the living room."*   - **Adolescent 6** -

In contrast to the female adolescents, the male adolescents, Adolescent 2 and 5, seem to prefer their bedroom over the living room:

> *"It is quiet. Nobody bothers me. I can close the curtains if I want to and just chill on my bed as long as I want."*   - **Adolescent 2** -

> *"Because my bed is nice and comfortable, and I can do whatever I want."* - **Adolescent 5** -

This preference of the male adolescents can be explained by the fact that they use the television in their bedroom to play games on their PlayStation. Here emerges a difference in terms gender, because none of the female adolescents use a game computer, whereas the male adolescents regularly play games on the PlayStation. For them, it is one of their primary activities when they do not have any school- or sport obligations. The parents also state that

this is the reason why they spend more time in their bedroom. Both parents expressed that the sound that goes with playing games on the PlayStation is very loud, especially when the adolescents play online with their friends. Because of this noise, they often separate themselves:

> *"The living room is place for all of us. When he is playing games on his PlayStation, he makes a lot of noise. (…) It is not very pleasant when he would do that in the living room. I think it is important that the living room is a place where you can normally talk with each other, without being disturbed by online noise."*   **- Parent 2 -**

Although that Adolescent 1 spends most evenings in the living room, her brother seems to have other media routines. He often separates himself to play online games in his bedroom. Accordingly, Parent 1 acknowledged that he can familiarise with a remarkable message he received earlier:

> *"Last week I received a message saying 'the Wi-Fi signal has been lost, the children are coming downstairs. 'Wow, they all have grown up!'"*   **- Parent 1 -**

This message illustrates the viewpoint of Bovill and Livingstone (2001) about the bedroom culture, because it refers to the bedroom as a central place, both physically and symbolically, of media use and the mediation of everyday life where children spend increasingly more time nowadays (Livingstone, 2007). Consequently, it appears that new media practices, including multi-screening practices, changed the configurations, practices and values of households throughout the years (Chambers; 2016). In line with this, Parent 2 recalls a time before the individualisation of media consumption. The quote points out that where (screened) media devices first entered the home for shared use in the living room, they are now scattered to kitchens, bedrooms and even bathrooms (Livingstone, 2007). Throughout the analysis of the interviews, it became clear that the parents are aware of the impact of new media technologies and how it changed households:

> *"Back in the days, there was just one television (…) Because of this, you automatically spend more time together. Nowadays there are much more possibilities regarding media, everybody can watch their own programmes and series."*   **- Parent 2 -**

> *"I cherish the moments that we spend the evenings together as a family. A lot of children tend to lock themselves up in their bedroom nowadays. They rather play games online or watch their own Netflix series. When I am honest, I am happy that we do not have a Netflix subscription (…) people tend to watch series and movies on their own when there is so much choice."*   **- Parent 6 -**

Based on the interviews, it can be claimed that the bedroom culture is more applicable to male adolescents, as they clearly expressed their preference for their bedroom for the consumption of media. This completely contradicts with the findings of Bovill and Livingstone (2001), who argued that girls are likely to spend more time in their bedroom. However, although that the female adolescents could not relate themselves to the bedroom culture, but they do recognise this phenomenon in other households, like Adolescent 4 for instance:

> *"I notice that a lot of people of my age prefer to be on their own, and spend the night in their bedrooms, separated from their family. They do not undertake much with their parents."*
>   **- Adolescent 4 -**

The emergence of the bedroom culture can also be related to the fact that shared media devices are less used in comparison to media devices that are owned personally. All households have a television in the living room, which is meant for common use. The adolescents as well as the parents state that the television is only media device which is frequently used for joint activities. In line with this, the participants also refer to the social function of the television in the home environment (Morrison & Krugman, 2001; Ducheneaut et al, 2008; Chambers, 2016). Based on this, it can already be claimed that the screen combination which potentially threatens familial sociability is the television and the smartphone. Especially because the analysis regarding the ownership of media devices and the role of these devices in daily routines reveal that the smartphone plays a ubiquitous role in the adolescents' lives. All adolescents indicated that they start and end the day by checking their smartphone. In line with this, they acknowledged that they are addicted to their smartphone or depending on it to certain extent. This analytical claim can be based on the very convincing answers the adolescents gave to the question whether they consider themselves as addicted to their smartphone. Moreover, the parents firmly confirmed the adolescents' acknowledgements:

> *"Maybe yes. Haha! I always have my phone with me, everywhere. It is in my pocket, next to me or on my desk. My telephone is always close to me."*   **- Adolescent 1 -**
>   *"It is an extension of her body. She is fused with it, if she does not have her telephone in her hand, her hand must have been cut off. Haha!"*   **- Parent 1 -**

> *"Addiction is a strong word, but I could not live without it."*   **- Adolescent 2 -**
>   *"Every moment of the day he is in touch with his telephone. You will never see him without his telephone for let's say one hour."*   **- Parent 2 -**

> *"I would not say that I am addicted, but if I do not have my telephone with me, it will be very annoying that I cannot reach other people."*   **- Adolescent 5 -**

> *"Sometimes I ask him: are you married with your telephone?"*   *- Parent 5 -*

All above statements confirm how digital media, and especially smartphones, have become a ubiquitous part of the Dutch culture and the lives of adolescents (Wennekers, Van Troost, & Wiegman, 2016; GfK, 2016; CBS, 2017). It also supports the Ling's viewpoint, who argued in 2004 already that the mobile phones would become 'irresistible' and 'addictive' to people.

Some of the adolescents were emphasising on the fact that are heavily depending on their smartphone. There are different explanations given for this. Some examples relate to school, as schools communicate a lot of important information, like schedules, homework and grades, through online applications. Other examples relate more to social interactions, as a lot of essential communication with family, friends, colleagues, teachers and classmates comes through their smartphone. The dependence as described by the adolescents also aligns with Deuze's (2007) viewpoint on 'media life', which implies that nowadays "our life is lived in, rather than with, media" (p. 242), because the interviews point out that the smartphone is involved in every aspect in daily life. Moreover, the quotes support the statistical data of GfK (2016) and CBS (2017) that indicate that Dutch adolescents are the most connected to the internet and that most of the media is consumed through their smartphone. This intense connectedness with their smartphone triggers them to use different media devices simultaneously. Consequently, it is not surprising that all the parents being interviewed consider their children as frequent multi-screeners. Five out of six adolescents also agree on this, and see themselves as a frequent multi-screener:

> *"When I am doing homework, when I am playing games, when I am watching series… so, I think yes. Absolutely."*   *- Adolescent 2 -*

4.1.2   Media uses

The second prism of the non-media centric approach refers to the movement of persons within the home environment and it allows us to study media consumption as an everyday action and habit (Deuze, 2012). This prism is used to focus on how media, with a particular focus on multi-screening practices, is embedded in household routines.

Morning routines

Although that the adolescents deal with a tight time schedule in the morning, they do not feel rushed. In general, there is little time for media in the morning. However, all adolescents being interviewed check their smartphone as first thing when they wake up:

"It is compulsion and it became a habit. My telephone is always next to me when I sleep, that makes it easy to grab it as soon as you wake up. You immediately see if you have missed any messages. I want to read them right away." - **Adolescent 1 -**

"To check whether I have new messages and I like to wake up quietly, so I think it is nice to stay in bed for a little longer and scroll through Instagram or read some articles on AD (news site)." - **Adolescent 3 -**

After getting out of bed, the consumption of media is very minimal. Most adolescents indicate that they do not have time for media from the moment they get out of bed until they leave the house. They are all quite focused on getting ready to leave the house by taking a shower, dressing up, having breakfast and packing their bags. The only exceptions are Adolescent 1 and 5, who have time to watch Netflix and YouTube videos before they go to school. Nonetheless, they both indicate that the time spent on this is limited.

In terms of familial sociability, there seems to be less social interaction between the family members in the morning in comparison to the afternoon and the evening, because all participants are quite focused on their own morning routines. The only part of the morning routine that allows some social interactions is during breakfast. Although not all the adolescents and their parents have breakfast together, the occasion itself fosters social interaction between the household members in some way. In all households the morning routines do cross each other while having breakfast. When there is no time to have breakfast together, the parents prepare breakfast for the adolescents or set the table for breakfast. The mornings in the weekend are different, because there is more time. This time is spent on sleeping, having breakfast together and sports obligations. Despite the fact that there is more time in the morning, this time is not spent on media consumption. The amount of media consumed in the morning do not depend on the day of the week.

As the findings above already imply, the adolescents are not involved in any multi-screening practices in the morning due to tight time schedules. The telephone is the only media device that plays a role in the morning, but this use it also minimal. Logically, multi-screening practices have no effect on family interactions within households in the morning.

Afternoon routines

To get a sense of how occupied the adolescents are in general, they were asked whether they feel busy outside school hours. Half of the adolescents feel busy outside school hours because of their homework, sports obligations, side jobs and family occasions. The parents of the adolescents recognise that their children have a busy life with tight schedules. Adolescent 1, 5 and 6 state that they do not feel busy outside school hours. In general, this results in more media consumption throughout the day.

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When the adolescents come home from school, they all take a short time to catch up with their parents, refresh themselves, have a drink, get something to eat and relax for a while. Subsequently, the adolescents were asked how they relax:

"I have one game on my telephone, but it is more like a game to relax. It is all about drawing and connecting numbers. It may sound childish, but it helps me to simmer down. I just do it for a few minutes and then I put it away." - **Adolescent 1 -**

"When I come home, I freshen up, I eat something sweet and I grab a drink. Then I am going to relax in my room, I watch an episode of a series or a part of a movie. When I feel rested again, I will start with my homework." - **Adolescent 2 -**

"I want to relax for a bit after being in overheated bus for 45 minutes, haha! I check my telephone, or I have a chat with my mom when she is home already." - **Adolescent 3 -**

From the above comments it can be argued that a significant number of participants consume media for the purpose of relaxation. As soon as they have recovered from the school day, they resume their afternoon routine. The after-school routines of the adolescents differ and are heavily depending on the amount of homework. When asking the adolescents about their favourite leisure activity after school, they all answered that they prefer to meet or do something fun with friends or family. However, it appears from the interviews that this is not what they actually do after school. In practice, they spend more time on homework and the consumption of media. The reasons that keep them from doing their favourite leisure activities is the amount of homework and the unavailability of friends and family.

In general, the adolescents seem to consume less media in the weekend, because they are quite busy with other activities, like catching up with friends, sports activities, family occasions and sleeping. Adolescent 2 argues that he uses more media on weekdays, because he often feels bored and distracted at school and during his homework.

With regards to multi-screening practices in the afternoon, the adolescents are regularly involved in practices where they use more than one screen simultaneously. One of the multi-screening scenarios that appeared from the interviews is the smartphone and the PlayStation. Both male adolescents use their smartphone to contact their friends while playing games online. Another multi-screening scenario which regularly takes place in the afternoon when doing homework. Aside from using their laptop, the adolescents make use of their telephone to contact class mates or to search for information. Aside from these multi-screening scenarios, a few adolescents also watch a series or a movie in the afternoon while using their smartphone simultaneously.

Evening routines

All adolescents and parents appreciate to have dinner together. However, this often proves to be a challenge due to the different time schedules relating to work, school and sport. Sports is a determining factor in the evening, because all adolescents have obligations which are related to sports on two weekday evenings. The parents indicate to be very involved in the sport activities of their children, which varies from active support to volunteer work at the club. When the adolescents have no sports obligations in the evening, they are likely to undertake the following activities: finishing up their homework, meeting with friends, watching television, series or a movie, and playing games on the PlayStation. The same activities are named by the parents of the adolescents.

In many households the main activity of the evening is joint television viewing. As argued in the theoretical framework of this study, this activity facilitates and encourages social interaction among family members (Chambers; 2016; Dias, 2016). Because of the social function of joint television viewing and the constant presence of the smartphones, joint television viewing can be considered as the most obvious occasion in which multi-screening practices affect familial sociability. To gain understanding of how and when familial sociability is affected by multi-screening practices, it is useful to explore how, and which media households consume together.

As already mentioned, the television is most often used for joint media consumption. All adolescents watch television with their parents at least twice a week. Five out of six households have scheduled a joint television night every Sunday for instance. However, in most households joint television viewing turns out to be a daily practice in the evening. Although, there seems to be a difference between boys and girls. The analysis reveals that all female adolescents being interviewed have a clear preference to spend the night watching television in the living room together with their parents, where the male adolescents tend to prefer their bedroom. For many adolescents, the content turns out to be decisive in whether they would like to participate in this joint media activity:

> *"Back in the days, we used to watch more television together: four or five days a week, every night. But at a given moment you get different preferences regarding series and movies."*
> **- Adolescent 2 -**

The parents seem to be decisive in what is being watched. When the adolescents do not like the content being watched on the television, there emerge two different possibilities from the interviews. One of the consequences is that the adolescents leave the living room and go to their bedroom to consume media content. This is a situation that occurs in every household time by time.

> *"When two programmes start at the same time, there are discussions* sometimes *about what should be watched. But these issues are always easily solved, I go upstairs to watch something else."*   **- Adolescent 1 -**

> *"She also became interested in other series. Because of this, she sometimes prefers to go to her own room and watch her favourite series there."*   **- Parent 3 -**

The other consequence may be that the adolescents stay in the living room and start multi-screening. While being (partly) involved in joint television viewing, they start to use a mobile device simultaneously, such as the laptop or their smartphone:

> *"When she asks me to watch a programme with her that I do not like, I finish some tasks for school at the same time on my laptop. Or I watch Netflix on my laptop while my mom is watching something on the television. However, I do check regularly what is happening on the television."*   **- Adolescent 4 -**

> *"Sometimes I watch some YouTube videos on my telephone while my father and my stepmom are watching a series, which I do not like. I cannot go to my bedroom, because as I already said my brother is sleeping there."*   **- Adolescent 5 -**

The first set of quotes points out how the individualisation of media consumption is fostered by the possibilities that mobile media offer. Especially the adolescents make use of the numerous media databases that allow them to consume media based on their preferred devices, personal interests and time scheme (Chambers, 2016). The last quote illustrates how the (continuous) presence of mobile devices nowadays encourage people to multi-screen and consume media on an individual basis, even in the presence of other household members (Dias, 2016). Thus, the statements illustrate that the individualisation of media consumption and multi-screening practices are closely related developments. Moreover, the statements give the impression that the adolescents do not care about the fact that the media preferences within the household differ, as they easily adjust themselves to the situation. The parents do not seem to have any problem with this either, and give their children the freedom to do whatever they like, as long as they not isolate themselves:

> *"It is also ok to have your own interests as long as you do not lock yourself up or completely distant from each other."*   **- Parent 1 -**

Although that everybody seems to be ok with it, the parents of Household 2 consciously choose a movie that everyone likes time by time, because their children do not like the series they normally watch, and they still want to keep up with joint media consumption:

> *"We also like to spend time with our children as well, even though it is just watching a movie. We get cosy with some drinks and crisps. We like to do that!"* **- Parent 2 -**

The activities that are undertaken with family or friends who come over are regularly related to media activities. The male adolescents being interviewed, for instance, mentioned that they regularly have friends coming over to play games on the PlayStation together. Besides this, a significant number of participants expressed that they regularly invite friends and family to come over and watch a certain television programme or sport events. Adolescent 2, who is not watching television with his family daily, outlines a specific situation wherein the content is decisive whether media is consumed together or not:

> *"On Sundays, when we do not go to Feyenoord, we watch the football match together in the living room. I am always the first one who is ready, I put the right channel on... that is my responsibility. (…) My father and I are watching anyway. Sometimes my sister, her boyfriend and even my grandmother are joining us as well."* *- Adolescent 2 -*

The statement above already indicates that sports are a connecting factor when it comes to joint media consumption. This also seems to be the case in all the other households:

> *"Especially when there is a football match, friends of Cees and Tim come over and they watch the match together. Although I do not like football, it is fun that everybody comes together and have a drink."* **- Parent 4 -**

It is difficult to determine who takes the initiative to jointly consume media. In many cases, joint media consumption is based on standard traditions and routines within households. Most participant argue that is not necessary to make agreements about this every time:

> *"In most cases somebody puts the television on and the rest joins automatically. We all know when we are going to watch television. Nobody is actually organising that."*
> **- Adolescent 6 -**

Social media as well as the television programming appears to play a role in how joint media takes place within households:

> *"When I see on Facebook that there are new series or movie released on Netflix that might seem interesting for us both, I ask my dad whether he would like to watch it together."* **- Adolescent 1 -**

> *"Sometimes I come across a new Netflix series on Facebook for example, or we browse through the Netflix app together, or we just watch a new series on RTL 4. We always watch these standard Sunday-evening family programmes."* **- Adolescent 3 -**

In any case, it is certain that all participants are satisfied with the frequency in which media is consumed together. The participants were also being asked whether they would like to undertake more media-related activities together. The answers were clear, there is no need for more joint media consumption.

As emphasized by the theoretical framework, the television is particularly known for being a medium that has a social function within the home environment, as it facilitates and encourages social interaction among family members (Morrison & Krugman, 2001; Ducheneaut et al, 2008; Chambers, 2016). This relates to how Morrison and Krugman (2001) described the television viewing area based on their research. The television area is often described as "warm" and "cosy" and is arranged for social gatherings and shared leisure activities. The interviews reinforce this statement as four out of six households sketched a situation that illustrates that the television stimulates a particular atmosphere, where the adolescents easily come by and have chat with their parents while they are watching television. So, the television does not only provide common topics for conversation, but it also facilitates an open atmosphere wherein familial sociability is fostered.

> *"When I come home after a training, my parents are often watching television in the living room, usually I join them for a while and I tell about the training."*   **- Adolescent 2 -**

> *"I join them while they are watching RTL Late Night or something like that. We catch up about our days and about the plans for the next day."*   **- Adolescent 3 -**

The above statements contradict with the viewpoint of Livingstone (2007), as she emphasises on the fact family life interactions were centred around the collective space of the living room back in the days and that household members are more dispersed now in the home environment. This still seem to be true to a certain extent, also considering the bedroom culture. However, based on these interviews it can be stated that the value of the living room as a central place should still not be underestimated in contemporary society.

All in all, the above analysis of the (media) routines of Dutch households reflects that (digital) media became more and more interwoven with the routines within households (Pink & Leder Mackley, 2013; Chambers, 2016). Furthermore, it became clear how the social function of joint media consumption is challenged by the constant presence of mobile devices that dispersed media consumption.

The role of parents

Throughout the analysis of the interviews, it became clear that all parents are quite aware of their children's media routines. The analysis revealed that there are many similarities in what is being told by the adolescents and by their parents. The only difference that emerged is

that the parents emphasized more on the frequency and intensity of the adolescents' smartphone usage than they did themselves. In terms of the content being consumed by adolescents, the parents attempt to maintain a certain distance. Some even stated that they do not want to know what they do or watch, as they do not want to control their children:

> *"It is difficult sometimes, because I do not want to check her. She has her own*
> *privacy and she must feel that we trust her."*   **- Parent 3 -**

Nevertheless, most of the parents worry about their children's media consumption and online behaviour time by time. These worries mainly relate to getting in touch with people with bad intentions or sending nude pictures through social media. They realise that the impact they have is minimal, so they can only express the hope that their children are judicious enough to decide what information or images they share online. The parents being interviewed are minimalizing their worries by creating an open relationship and warning them about the potential risks. The underneath quote of Parent 3 illustrates this:

> *"We discuss these kinds of topics openly within our family to make them aware of*
> *that. (…) Sometimes she finds it unnecessary to discuss these topics and she*
> *promises that she knows what she is doing. However, I think it is necessary to keep*
> *discussing these topics."*   *- Parent 3 -*

Most households have just one rule with regards to the use of media devices. In five out of six households it is not allowed to use any mobile device while having dinner. All participants see this as a shared moment where the family members speak to each other face-to-face. In their opinion it is important to hold on to this rule, because everybody is quite busy in daily life. However, it often proves to be a challenge because of work, school and sports activities. All participants admitted that this rule, or the breach thereof, cause irritation or disagreement among the household members sometimes. Household 3 illustrate such situation:

> *"When my bother or I check our telephone during dinner, they get mad immediately. It*
> *does not make difference whether it is important or not. It is so annoying, because I*
> *almost never do it, so if I do so, it must be important (…) It takes me one second to*
> *check my telephone, but they are nagging about it for minutes."*   **- Adolescent 3 -**
> > *"We also have difficulties to be consistent and live up the rules. In their*
> > *opinion, that gives them permission to use their telephone during dinner."*
> > > *- Parent 3 -*

Aside from this rule, there are no other rules regarding the consumption of media. The parents do not prohibit certain media content or limit their children's media consumption to

certain time slots. They only give them advice and make their children aware of their media consumption time by time to warn them for the possible consequences.

4.2 The perceptions and experiences on multi-screening practices

The insights into the variety of screened media devices that are available to the adolescents and how they are embedded in the daily (media) routines of adolescents form a basis for understanding their perceptions and experiences on multi-screening practices in the home environment. These insights, as discussed in the previous section, help to understand the role of each media device in daily life and how media practices, and multi-screening in particular, take place in the home environment. This paragraph is the continuation of the second prism of the non-media centric approach, which refers to the movement, or routines, of persons within the home environment. This paragraph delves deeper into the practice of multi-screening by focusing on the adolescents' awareness of their multi-screening behaviour, the common multi-screening scenarios, the most prevalent screen combinations and the interrelationship between screens involved, and the consequences of multi-screening practices.

4.2.1 Awareness of multi-screening practices

In the interviews, multi-screening was discussed as a stand-alone topic. All participants were introduced with this topic by the question whether they were familiar with the practice of multi-screening. The answers to this question varied: most of the participants knew what the practice entails and Adolescent 3, 4, 5 and 6 recognised what it entails after a short explanation. Regardless of whether the participants needed some explanation or examples of what the practice of multi-screening entails, all of them recognised themselves or others in this practice. All adolescents who have been interviewed use multiple media devices simultaneously, only the frequency, the situation and the screen combinations differ. The outcome with regards to the parents shows that they are considerably less involved in multi-screening practices.

It is striking that the adolescents seem to be more aware of their multi-screening practices in comparison with their parents. Parents tend to undermine, or maybe forget, their own multi-screening behaviour, but they are conscious about the multi-screening practices of their children. Adolescent 1 and 6 particularly indicated that they are aware of their multi-screening practices during the interview, but not at the moment they are multi-screening:

> **I >** *"Are you aware of your own multi-screening practices?*
>
> > **A1 <** *Yes. Now I am thinking about it, I think that I should multi-screen less.*
>
> **I >** *Why? Because you also mentioned that you feel restless when ignore messages while you are watching television or doing homework.*
>
> > **A1 <** *Somewhere it has also to do with addiction, I cannot ignore it.*
>
> **I >** *Do you ever think that when you are actually multi-screening?*
>
> > **A1 <** *No… actually not.*
>
> **I >** *Would you say that this interview makes you aware of your multi-screen habits?*
>
> > **A1 <** *Yes, it does."*

In general, the interviews show that there is a certain lack of understanding among the parents regarding the multi-screening practices of adolescents. Most of the parents being interviewed cannot understand how and why their children multi-screen. The quote underneath demonstrates that not only academic studies notice that the home environment became a "complex media environment with mobile gadgets such as laptops, smartphones and tablet computers" (Chambers, 2016, p. 2). Especially the generation of the parents cannot empathize themselves in the multi-screening scenarios of their children:

> *"I cannot understand that someone can watch television with a laptop on their lap and a telephone in their hand. (…) I cannot believe that you can concentrate on your homework when the television is on and you are using your telephone at the same time."*
>
> <div align="right">- Parent 1 -</div>

> *"I cannot concentrate on the movie when I am texting at the same time. I have to put the movie on pause. I do not know how she can do that at the same time."*   - **Parent 4 -**

4.2.2 Common scenarios and prevalent screen combinations

As discussed in the theoretical framework of this research, the most prevalent screen combinations are: television – laptop, television – smartphone, and television – tablet (Segijn et al., 2017). The interviews revealed that the most prevalent screen combination among adolescents consists of their smartphone and the television. This finding reinforces the studies of Google (2012), Dias (2016) and Segijn et al. (2017) that show that the combination of the television and the smartphone is the most common in multi-screening practices.

As stated in the theoretical framework, several studies have shown that multi-screening practices became more frequent and diversified, as a result of the many available media devices, and the diversity in content, activities and settings that came along with new media technologies (Nielsen, 2014; Dias & Teixeira-Botelho, 2016). The insights that derived from the interviews partly align with these studies. Particularly because the current study also

show that the multi-screening practices became more frequent. Nevertheless, the theories being presented in the theoretical framework also argue that second-screening evolved to multi-screening, because the combinations became more diverse than just the television, smartphones and/or laptops (Dias & Teixeira-Botelho, 2016). The results of this study show that this statement needs to be nuanced. The multi-screening practices of adolescents are still much like second-screening, which refers to the use of laptops or mobile phones while watching television (Dias & Teixeira-Botelho, 2016). In many cases, multi-screening practices still exist of a combination of a television and a laptop and/or a smartphone.

Based on the research findings, there also can be discussions held about the role of digital media in multi-screening practices. In the case of second-screening, the role of digital media is subordinate (Dias & Teixeira-Botelho, 2016). With the emergence of multi-screening, Dias and Teixeira-Botelho (2016) argue that the role of mobile devices became more preponderant, asking most of the users' attention and engagement. When comparing the multi-screening behaviour of the adolescents and their parents, there emerges a difference between the generations. It becomes clear that the attention of the parents is still mainly focused on television while the activities on mobile devices are secondary. In fact, most of the parents do not or rarely multi-screen. Only urgent messages and phone calls can disturb them during other screened media activities. Previous studies also identified already identified that older generations are less involved in multi-screening practices than adolescents (Dias & Teixeira-Botelho, 2016). The present study shows that the multi-screening behaviour of adolescents is less unequivocal. In their case, the main-focus of their attention is highly depending on the type of activities that are combined while multi-screening and how interested they are in the content. However, as they are considered as frequent multi-screeners, their multi-screening practices are more likely to affect familial sociability. Especially during joint television viewing, because television still plays a prominent role in the current multi-screening practices of adolescents. In this way, they threaten the social function that is associated with joint media consumption.

Nevertheless, the current study also proves that the term 'multi-screening' is a more appropriate term nowadays as some adolescents even indicated that they use more than two screened media devices at the same time. When the adolescents were asked to describe in a common situation in which they are multi-screening, three adolescents revealed that they regularly use more three screened media devices simultaneously. In the two fragments underneath, Adolescent 1 and 2 both describe a regularly occurring situation in which they are in 'a triangle of media devices'. These fragments mirror the statements of Nielsen (2014) that "digital consumers need a minimum of two screened devices to satisfy their needs of

simultaneous social interaction, information, entertainment and sense of productivity and accomplishment" (p. 4).

> *"When I am working on my laptop in the living room, I regularly get a message on my telephone. I grab my telephone to check it, and then I am already multi-screening, right? Because I am using two screens at the same time. Often my dad is watching television next to me at the same time, which distracts me sometimes when I see something interesting. So, at that moment I am busy with three screens at the same time, especially when I end up in a conversation on WhatsApp."*   - **Adolescent 1** -

> *"I am sitting on my bed with my laptop, working on my homework. I am surrounded by papers. My telephone is next to me. I always receive a lot of messages from class-mates about the homework, so I am texting with them, but also with other friends about other topics. The television is on for some background noise. Every now and then I have a look at it. I think it creates a better atmosphere."*   - **Adolescent 2** -

All in all, it can be stated that the smartphone is the most involved in multi-screening practices. Therefore, the smartphone can be considered as the major companion in contemporary multi-screening practices, or in other words a mobile device with the largest share in distracted viewing (Eriksson Consumer Lab, 2012).

The interrelation between media devices involved

The study also differentiated whether the participants are involved in related or unrelated activities while multi-screening, because Segijn et al. (2017) indicated a research gap in terms of the relatedness of the media activities across screens. As anticipated from the theoretical framework, there are different categories that can be distinguished within the practice of multi-screening (Google, 2012; Smith & Boyles, 2012; Nagel, 2015). In this analysis, these multi-screening categories are combined with the multi-screener profiles of Hritzuk and Jones (2014), and Ainasoja et al. (2014).

The practice of sequentially multi-screening, as described by the 2012 Google study (2012), did not come back in the interviews with the adolescents and their parents, because the participants did not refer to any activities in which they are moving from one screen to another to complete the same task. In contrast, simultaneous multi-screening turned out to be very common in household routines, as most adolescents referred to different multi-screening scenarios in which they are using more than one device at the same time for either a related or an unrelated activity (Google, 2012). Within this practice of simultaneous multi-screening, there are two sub-categories regarding the relatedness of media activities across screens: multi-tasking and complementary usage (Nagel, 2015). The interviews reveal that

there is no connection between the media devices in most of the multi-screening scenarios of adolescents, which means that they can be considered as multi-taskers according Nagel (2015). Based on the analysis, it can be claimed that all adolescents are content grazers in most of their multi-screening practices (Hritzuk & Jones, 2014).

There are a few situations named in which there is relation between the media devices being used. Nagel (2015) argues that when users are involved in related activities while multi-screening, it can be considered as complementary usage. As observed by Adolescent 2 and 4, they make complementary usage of different media devices while doing homework. Aside from their laptop, they make use of their smartphone to contact classmates, to search for information and to translate texts. These activities do not seem to affect familial sociability, because in most cases they are not performed in the presence of other household members.

> *"While working on school assignments, I am texting with classmates about*
> *assignments and projects. Or we are just complaining, haha! But most of the*
> *time, I am texting about other things with my friends."*   - **Adolescent 2 -**

> *"When I am working on group projects at home, I use my telephone quite often to*
> *check what I have to do, to tell the others what I have done or to arrange a meeting."*
>   - **Adolescent 4 -**

In principle, the multi-screener profiles relate to multi-screening scenarios that involve television. However, the above practices of Adolescent 2 and 4, which includes a laptop and a smartphone, can also be considered as part of the social spider-webbing profile (Hritzuk & Jones, 2014). The reason for this is that they are actively seeking for social connections with their classmates for the aim of arranging group work, sharing feelings about school related topics or just getting a sense of belonging.

Another combination of media devices that is regularly used for related activities is the smartphone and the PlayStation. Both male adolescents use their smartphone to contact their friends while playing games online. This multi-screening scenario also do not seem to affect familial sociability, because they are not performed in the presence of other household members. Aside from these related activities in multi-screening practices, there were also a few incidental situations described such searching for related information about topics, products and brands that appear in series, movies, television programmes or commercial. These adolescents, who are often driven by curiosity and engagement, fit seamlessly within the investigative spider-webbing profile, because they are actively searching on additional devices for additional information or content that complement and amplify the content of the other screens (Hritzuk& Jones, 2014):

> *"When I like a brand that they are promoting a certain brand or event, I look it up on the internet for example. But this happens occasionally, in most of the cases there is no relation between the different screens."* - **Adolescent 4** -

As stated above, this analysis marked the smartphone as the most important companion in multi-screening practices. However, based on the interviews, it can also be argued that the smartphone is also the most common 'enhancer', a mobile device that fosters connected viewing (Eriksson Consumer Lab, 2012). Throughout the analysis of the different multi-screening scenarios, it became clear that the outcome is aligned with the statement by Smith and Boyles (2012), which says that distracted viewing is more common and happens more frequently than connected viewing (Dias & Teixeira-Botelho, 2014).

In most multi-screening scenarios there is no relation between the media devices. This gave rise to the question what the adolescents would think about second screen experiences offered by television programmes. Especially because television still plays a prominent role in the current multi-screening practices of adolescents. *Second screen experiences* are online applications, which can be accessed by mobile devices, that are designed for a specific television programme (Vanattenhoven & Geerts; 2017). These applications support and enrich the traditional television experience by fostering online participation and providing supplementary content (Vanattenhoven & Geerts; 2017). Vanattenhoven and Geerts (2017) argue that collocated viewers, using second screen applications in the home environment, valued these applications because of the increased interactivity between each other and the enhanced social experience.

In the current study, all participants do not seem to be familiar with the concept of second screen experiences in a first instance. After providing a short explanation and some examples, they turned out to be familiar with the concept. However, the adolescents as well as the parents being interviewed are hardly interested in this kind of applications. Most participants even consider second screen experience as superfluous and sometimes even disturbing. Four of the six adolescents have tried such this type of application a few times, but they were not enthusiastic and even slightly sceptical about the concept of second screen experiences:

> *"I am not interested in these kinds of apps, I rather focus on the programme. Otherwise, I will miss out on something. I do not see the added value."* - **Adolescent 1** -

> *"I am not interested in these kind of apps (….) However, it makes watching television a bit competitive, that is what I do like about it. Although, it should not be too intense. I do not want to be too busy with my telephone."* - **Adolescent 2** -

Thus, there is no interest in additional content offered by broadcasters that supplement the initial medium among the adolescents. Overall, the participants did not reflect directly on the positive effects on the interactivity and the social experience, that were stated by Vanattenhoven and Geerts (2017). However, several participants mentioned one positive social feature of the second screen applications. When these applications add competitive layer to the television programmes, the participants are more likely to participate in second screen experiences. According to the participants, this will have a positive effect on the familial sociability, because everybody is fostered to actively share insights and discuss topics.

> *"I can image that it is fun to participate with the family in quizzes, because it would add a competitive element to the television programme."*   - **Parent 3 -**

Thus, competitiveness could be a potential requirement that encourages adolescents as well as parents to make complementary usage of different media devices. This finding supports the viewpoint of Vanattenhoven and Geerts (2017) who emphasized on the engaging power of competitive elements in second screen applications.

Currently, the multi-screener profiles do not mention competitiveness as a motivational factor for multi-screening practices. In line with this, the current multi-screener profiles lack any form of organised participation that foster multi-screening behaviour. The multi-screener profiles could be considered as outdated because they are not aligned with the current behavioural patterns and motivational factors in contemporary multi-screening practices, and exclude relevant mobile devices, like laptops and PlayStations. Some of the multi-screener profiles as defined by Hritzuk and Jones (2014) and Ainasoja et al. (2014) also turned out the be irrelevant to the multi-screening behaviour of Dutch adolescents, like the active follower and the quantum.

4.2.3   Motivations for multi-screening

The analysis of the interviews reveals that the most prevalent motivation for multi-screening behaviour is founded in the urge to answer on messages or to react on notifications. Great emphasis is placed on the role that notifications play in multi-screening practices. This result is consistent with the uses and gratification as described by Ling (2004) and Wei et al. (2013), as they found a high sense of instantaneity among multi-screeners when it comes to the use of smartphones, because of its pushing features that seek for immediate attention. In line with this, Adolescent 1, 3 and 4 particularly emphasized on their aversion to notification signs and red buttons with the number of notifications in the corner of an application. Because of the constant presence of their smartphone they continually triggered to multi-

screen. As soon as they notice these buttons, they are inclined to check what the notification entails regardless of what they are doing or who they are surrounded by.

> *"Despite the fact that I am really into the movie, as soon as I notice that I receive a message or a notification, I grab my telephone right away to check it. When it is a WhatsApp message, I want to answer immediately, because I would like to have clean sheet."*   - **Adolescent 1 -**

> *"I am curious, and I cannot ignore flashing lights or other signs that indicate that you have received something. So, I also check my telephone to get rid of that light."*
>   - **Adolescent 3 -**

A motivation for multi-screening which is quite related to the urge to answer on messages or to react on notifications is the fear of missing out, which means that there is immediacy urgent need to get and know everything in real time and to be in touch with close circles and the world (Dias, 2017). Several adolescents emphasized this fear multiple times, like Adolescent 6:

> *"I can also put my telephone away for a few hours, but after that I want to check everything and catch up with all my apps, so that I am up-to-date again. (…) It would be good if I would care less about what other people do on Snapchat or Instagram, because it keeps me too busy. In fact, in most cases it is disappointing what you see, and I forget about it in no time."*   - **Adolescent 6 -**

Because of the fear of missing out, some adolescents admit that they feel regularly distracted by their smartphone, which results in multi-screening behaviour. However, the adolescents do not seem to be worried about this. When asking Adolescent 1 whether she ever experienced any negative effects of multi-screening, she denies it. It seems like her fear of missing out predominates:

> *"I think I feel more restless when not using my telephone while knowing that I have new messages than when I am using more devices at the same time."*   - **Adolescent 1 -**

In line with this, Adolescent 2 also argues that he does not care about the fact that he often is distracted by his smartphone:

> *"I do not care, because I get interrupted by something fun while I am finishing my homework. It makes it less tedious to do my homework (…) I can do my homework more efficiently. But I do not feel really bothered by it."*   - **Adolescent 2 -**

Both statements reflect that they do not bother the fact that they are distracted by other media devices. However, the reason why it does not bother them differs. In fact, Adolescent

1 is choosing between the lesser of two evils, because she expects that she will feel restless anyway. Therefore, she tends to choose for best short-term solution, and check their smartphone regularly. On the contrary, Adolescent 2 is frequently switching between two different devices to create better circumstances. He is aiming to make the initial activity, doing homework on his laptop, more fun by start using an additional device simultaneously.

Much like emphasized by Livingstone, Blum-Ross and Pavlick (2018), the majority of the adolescents experience that they often pick up their smartphones unconsciously and get lost in the endless amount of information and entertainment that is offered by online applications. Especially when the adolescents are involved in related activities on different screens, they admit that get distracted by unrelated messages and notifications:

> *"It is difficult to focus sometimes, because you also see other notifications and messages coming in, you must ignore these (…) You easily get distracted on your telephone. You are just one step away from the other apps."*   - **Adolescent 6 -**

Alike Adolescent 6, most adolescents who have been interviewed admit that they regularly feel distracted because of using multiple screen devices at the same time. People are not able to divide their attention simultaneously on two or more visual media activities, because it requires the same type of attention. For this reason, the adolescents feel distracted when they try to divide their attention between two screens. This is a typical symptom that related to content grazers, because this type of multi-screeners cannot simultaneously divide their focus among the different tasks (Segijn et al., 2017). The participants of Household 3 experience this effect regularly when watching television together. It even leads to time inefficiency and irritation among other household members. The fragment underneath, deriving from the interviews with household 3, illustrates that the adolescents are not always aware of the irritation, that their multi-screening behaviour might stimulate. This is experienced as a threat to familial sociability, according to Parent 3:

> *"When you are multi-screening you are always distracted in some way. You always miss out something from the television programme or the series you are watching. (…) However, it does not bother me, because I will catch up later."*   - **Adolescent 3 -**
> *"It is annoying when people ask you to tell what has just happened, because they were not paying attention because of their telephone."*   - **Parent 3 -**

Another recurring motivation for multi-screening behaviour that derived from the interviews is boredom or a lack of interest in the initial screened media activity. As mentioned earlier, some of the adolescents start multi-screening in the living room when their parents are watching a television programme or a series which they do not like. Especially commercial

breaks when watching television incite multi-screening behaviour among adolescents as well as parents. Both motivations are illustrated by the quotes underneath:

> *"Sometimes I also check my telephone when I have to wait before a game until everybody is online (on the PlayStation). So, I watch a short video, or I have quick look at Snapchat or Instagram."*   **- Adolescent 5 -**

> *"When my mom starts watching a television programme or a series, which I do not like, I tend to check social media or text somebody in the meantime. Or when she asks me to watch a programme with her that I do not like, I finish some tasks for school at the same time on my laptop."*   **- Adolescent 4 -**

All the motivations named above relate to the same multi-screener profile (Hritzuk & Jones, 2014). Throughout the analysis of the interviews, it became clear that in most multi-screening practices adolescents are content grazing. It does not matter whether the adolescents are waiting, feeling bored, suffering from the fear of missing out, or seeking for a sense of social belonging, all adolescents are eager on grabbing a quick moment of fun or escape. This finding aligns with the content grazers' profile, because they are driven by the need for continuous entertainment (Hritzuk & Jones, 2014).

The studies in the theoretical framework imply that the multi-screening behaviour of adolescents is primarily motivated by time-efficiency and productivity, as it allows them to manage daily tasks better simultaneously, sociability and the need to constantly keep up-to-date with what is happening in the world (Dias, 2016; Dias & Teixeira-Botelho, 2016). The latter two motivational factors align with the findings of the present study, as they are related to the urge to answer directly to messages or notifications and the fear of missing out. However, none of the adolescents mentioned that they are motivated by time-efficiency or a sense of selffulfilment as argued by Dias (2016). Based on the analysis, boredom, or a lack of engagement with in the content of the initial screened media activity, can be claimed as other primary motivations for multi-screening behaviour.

4.3 The social implications of multi-screening practices

After presenting the results regarding the perceptions and experiences of Dutch adolescents on multi-screening practices, this section focuses on the effects of multi-screening practices on the familial interactions within households. Therefore, this section aims to answer the second research question posed by this thesis, namely:

RQ 2: To what extent and how do multi-screening practices affect family interactions within households?

4.3.1 Familial sociability within the home environment

To get a sense of how the familial sociability is impacted by multi-screening practices, it is necessary to delve into the family composition and the relationships they have with each other. Most of the households being interviewed consist of the parent(s) and two children. There were only two exceptions, because Household 1 consists of a father and his two children, because the mother died at a young age, and Household 5 consists of a mother and her son, because the parents are divorced. All participants seem to have close and open relationships with the other household members. They emphasized the importance of spending time together with their family. For this reason, Parent 3 argues that it is important to take the effort to keep time for each other.

> *"You notice already that the children are quite busy with homework, friends, side jobs and sports. We are working full-time. So, I think it is important to find some time in between everything to spend together. We must keep in mind that there is some time left for each other."*
>
> **- Parent 3 -**

Most participants particularly expressed that they appreciate the rather simple activities that are undertaken with their parents and siblings. The leisure activities that are regularly undertaken by the adolescents and their parents are: doing groceries, having dinner, watching television, going out for lunch, shopping, visiting other family members and sports activities. Furthermore, all households are regularly welcoming friends and family. Five households describe their home as an open environment, where family and friends are always welcome:

> *"A lot of people come over to our place. My grandparents visit us regularly. Friends of me and my brother come over regularly. And of course, my parents always have a Friday afternoon drink with their friends at our place (…) It is about having a drink and a bite, watching a movie, catching up, gossiping, relaxing on the couch."* **- Adolescent 4 -**

Aside from this, the participants were also asked whether they consider themselves as a homebody and whether they prefer to be surrounded by others or rather to be alone. However, the participants were not able to give an unequivocal answer, because they all argue that it is about the balance between spending time at home and going out. Age does not seem to play a role here.

As discussed earlier, in most households, joint television viewing turns out to be a daily practice in the evening. The adolescents as well as the parents do not refer to any concrete benefits of consuming media together. Nevertheless, all participants expressed what they like about consuming television together:

> *"It is fun to watch football together, because it is good to have discussions with each other, to chat about random topics and to make jokes."*   **- Parent 1 -**

> *"We always make fun of the people and most programmes do not require your full attention, so you can talk about something else at the same time."*   **- Adolescent 3 -**

> *"We talk about it and speculate about how it will continue the next episode. When we do not understand something, we discuss it with each other."*   **- Adolescent 5 -**

> *"We make it cosy with candles, snacks and drinks. (...) It is also a moment you can just relax together and be yourself, that creates also a bond."*   **- Parent 5 -**

This illustrates how direct familial sociability is fostered by joint media consumption. As argued by Ducheneaut et al. (2008) and Morrison and Krugman (2001), media can foster direct sociability that occurs when people consume the same content physically together. The quotes above reinforce the fact that media can lead to immediate social interactions between people while consuming media. Moreover, it confirms that Morley's (1986) family television is still relevant nowadays, which refers to the family gathering in the living room to watch the shared television. Family television provides an occasion for both conviviality and power plays, in which households share interests, pleasures and conflicts (Morley, 1986). Parent 2 expressed her viewpoint on these topics, where the above comes altogether:

> *"It creates a bond and you share your interests with other people. You do not always have to sit around the table in order to have good conversations, it is also pleasant to share a relaxed moment together and just watch some television. It is also fun to watch a quiz programme together and discuss about. It can lead to conversations. Some television programmes also allow you to talk in between, those programmes are not really asking your full attention the whole time. In that case, the television is more present in the background."*   **- Parent 2 -**

In line with Bryce and Leichter's (1983), the interviews show that co-viewing has positive effects on the social interaction between adolescents and their parents. It is stated that children learn more about social relationships when they watch family programmes together with their parents, because it is considered a form of mediation. (Bryce & Leichter, 1983). The analysis of the interviews showed that the parents as well as the adolescents recognise themselves in this mediating function of joint media consumption. For instance, Adolescent 4 argues that co-viewing fosters conversations about possible situations and issues in real life. This quote proves that joint television viewing facilitates a learning process wherein children learn more about social relationships (Bryce & Leichter, 1983):

"You can easily talk about these types of programmes and share your opinion about the clothing, the locations, the make-up, the issues and the participants… we ask each other: 'what do you think about it? Would you do something like this? Do you think this is normal?'"

<div align="right">**- Adolescent 4 -**</div>

4.3.2 The effects of multi-screening on family interactions

As argued by the literature discussed in the theoretical framework, the joint media consumption facilitates and encourages social interaction among family members (Ducheneaut et al, 2008). Multi-screening practices undermine the social function of joint media consumption, because people have to divide their attention between multiple screened devices and the people with whom they are consuming media. Consequently, the practice can be considered as a threat to familial sociability (Chambers; 2016; Dias, 2016). The last prism of the non-media centric approach, perception and sensory embodied experience, is used to analyse the perception of adolescents on multi-screening practices in relation to familial sociability, as it focuses on how people perceive the dimensions of the home and how the movements within the home are experienced (Pink & Leder Mackley, 2013). In other words, it fits with the aim of the present study.

In most households, joint television viewing turns out to be a daily practice in the evening. As argued, television is a typical medium that is suitable for joint media consumption, as this media device is very convenient to consume the same content physically together. The previous sub-chapter illustrates how direct familial sociability is fostered by joint media consumption. All participants seem to appreciate the moments that are spent watching television together. Throughout the analysis, it was clearly confirmed that the practice of multi-screening interferes with this valuable shared leisure activity within households. The presence of other screened devices cause distraction, impact direct sociability and compromises the quality of shared leisure activities, such as joint television viewing (Chambers, 2016). Based on the analysis, it can also be claimed that the other multi-screening scenarios, like the laptop – smartphone and the PlayStation – smartphone, do not affect direct familial sociability, because in most cases they are not performed in the presence of other household members.

When analysing the effects on familial sociability, the perspective of the parents turned out to be extremely valuable. It offered the opportunity to delve into the effects of multi-screening practices on family interactions from two perspectives. This resulted in divergent viewpoints with regards to multi-screening practices in the presence of other household members. In general, it can be argued that most adolescents do not feel bothered when others are multi-screening in their presence. Moreover, they also do not seem to be conscious about the effects of their multi-screening behaviour on their environment:

"It is not bothering me at all, because I do it myself as well."   **- Adolescent 2 -**

"I think that they hardly notice it, because they do it as well or they are watching television."   **- Adolescent 6 -**

The only exception is made by Adolescent 6, who also argues that she does not mind when people are multi-screening in her presence, but she only gets annoyed when people watch videos with the sound on, because that is experienced as distracting when watching television. On the contrary, five out of six parents get bothered easily by people who multi-screen in their presence.

"I regret that personal contact with the people around you is impacted by multi-screening, because when you are busy with your telephone, you cannot pay your attention to the television and the people around you at the same time. It creates distance, because it feels like everybody has their own virtual life besides their real lives, which is apparently seems to be more important at that moment."   **- Parent 3 -**

"You miss out on the social aspect of the household and the sociability. You shut down instead of opening up to the people around you."   **- Parent 4 -**

"When you are multi-screening, you are actually too busy to really pay attention to what you are watching on television. So, it is even more difficult to also participate in the conversations around you. That is a pity. Aside from that, you give people the impression that they are not interesting enough."   **- Parent 6 -**

Furthermore, Parents 2 and 3 do not only express that the principle of multi-screening itself stimulates annoyance, but also the direct nuisance it causes.

"When we are watching television or relaxing in the living room, I cannot resist the constant light of telephones in the corner of my eye all the time. So, I say something about and then it solves itself."   **- Parent 2 -**

"Sometimes she gets on my nerves with the vibration of her telephone while we are watching television. Suddenly that sound starts to irritate me. I cannot always hide that irritation."   **- Parent 3 -**

Based on the analysis of all interviews, it can be claimed that multi-screening practices have a negative effect on the familial sociability with households. Most parents attempt to minimise this effect by making their children aware of their multi-screening behaviour time by time. This is often in vain, because it does not change the multi-screening behaviour of the adolescents. In some cases, the reaction of the parents annoys them in their turn, but in their

opinion, it is not worth fighting. In none of the households being interviewed multi-screening practices cause actual disagreement. The quote underneath illustrates that Adolescent 3 accepts the warning, but it does not change their opinion about multi-screening practices in the presence of others:

> *"Sometimes it bothers them when I am using my telephone in their presence. They always ask me whether I am bored or whether they are not interesting enough. (…) Usually I do not say anything, and I put my telephone away. Although I feel annoyed by it, I do not want to quibble about it. (…) When we are watching television together, I think it is okay to use your telephone."* — **Adolescent 3 -**

It is remarkable that the parents are more irritable by the multi-screening practices of adolescents, because they also acknowledge that they also multi-screen sometimes. As discussed earlier, the parents indicate that urgent messages can disturb them during other screened media activities. Some adolescents notice this and express their incomprehension:

> *"They do say something about me when I am multi-screening. It bothers them, so you would say that they do not multi-screen themselves, right?"* — **Adolescent 6 -**

Even though the majority of the participants admits that mobile devices could be considered as a potential threat, they all argue that it is not applicable to their family.

> *"She downplays it, which is ok because in our case it does not affect the sociability because she does not do it the whole time, but it should not happen more frequently."* — **Parent 6 -**

This is striking, because at the end of the interview several were asked to share their general thoughts about the interview and the topics and several adolescents expressed that they should reduce their (simultaneous) media consumption as they became more aware of their media behaviour during the interview. Based on this, it can be questioned whether the adolescents reflected on the actual effects of their multi-screening practices. The fragment underneath illustrates this:

> **A1 >** "*I think that talking about my behaviour made me more aware of my habits. It made me realise that I am maybe too busy with my telephone. It might be necessary to put my telephone away sometimes, especially when I am in the presence of others.*
>
> **I >** *It was not my intention to make you feel like this, or to warn you.*
>
> **A1 <** *I know, but it made me more aware.*
>
> **I >** *It is striking that you do not encounter any direct negative effects of multi-screening, but still you want to multi-screen less. Why?*

A1 < *Because it can disturb other I think. I do not know. It does not disturb me, because I am doing it as well. But it might disturb others, they might think: 'What are you doing? Are you watching television? Are you doing your homework?' It is not clear where I am really paying attention to."*

Within this study, two multi-screening scenarios were found that foster familial sociability. One scenario relates to the second screen experiences which could add competitive layer to the joint television viewing. According to the participants, this will have a positive effect on the familial sociability, because everybody is fostered to actively share insights and discuss topics. Another scenario is when the content of both screens is shared with each other:

"We are chat about all kinds of stuff and we show each other posts on Instagram or Facebook. (…) It is fun though, because we are sharing posts we get to know more, haha! We can gossip about it.   **- Adolescent 3 -**

All quotes above give insight into the answers that were given when directly asking them about their perception on how multi-screening affects interactions within the households. To generate more in-depth insights into the relation between mobile devices and familial sociability, the participants were also questioned whether they see mobile devices as a potential threat to familial sociability or the time spent on joint activities, and whether they consider mobile devices as an enrichment or a distraction. All adolescents agree to the statement that mobile devices are an enrichment in daily life, because it makes it easier to arrange daily activities to stay in touch with family, friends, classmates and colleagues and to consume media. The parents tend to see mobile devices as a distraction. Parent 4 claims that many activities on your telephone are unnecessary and not adding value to your daily life. Parent 1 even considers the mobile devices as an *'impoverishment of family life'*, because the use of these devices is at the expense of personal contact. Thus, these additional questions reinforce the findings regarding the negative effects of multi-screening practices on familial sociability as described earlier.

All interviews were ended with a question about their expectations regarding the development of media consumption and how this relates to the conviviality in the home environment. The answers vary significantly among the participants. It already became clear that the adolescents have difficulties to express themselves about this, they do not seem to have an envision about how media consumption will develop. The future views of the parents can be divided into two directions. One part argues that the intense media use will tone down in the end, because they expect that people will start to realise that there is more in life than media. Parent 2 particularly expressed that the perception and experiences of adolescents

will change as they get older, because they will value direct sociability more than indirect sociability through online applications:

> *"You start to realise that there is a lot more in life than media, because it is all happening in the real world. In your teens, you are way too busy with keeping up what is happening in the lives of others and there is a fear to miss out on something."*
>
> **- Parent 2 -**

Parent 4 agrees with this but emphasizes that mobile devices will be used in a more practical way (e.g. completing payments, making reservations and storing information). The other part expects that the consumption of media becomes even more individual and based on personal preferences, which counteracts the ability of media to facilitate direct sociability.

5. Conclusion and discussion

This study aimed to explore the perception and experiences of Dutch adolescents and their parents on multi-screening practices in the home environment, and how these practices affect the familial interactions within household. Because of the importance of family interactions for adolescents' social behaviour and identity development, it is important to study their perception and experiences on the social effects of media practices (Christensen & James, 2000). This chapter answers the research questions posed by this study by providing the main-conclusions based on the analysis of the interviews. Furthermore, the theoretical implications of the research findings are addressed, and the theories and methodologies used are reflected. At last, some suggestions for further research in the field of multi-screening practices are suggested.

5.1 Perceptions and experiences regarding multi-screening practices

First, the study delved into the variety of screened media devices that are available to the adolescents and how they are embedded in the daily (media) routines of adolescents. The results did not only give insight into the media devices that can be combined in multi-screening practices, but it also allowed the researcher to identify the role of each media device in the daily lives of adolescents. From this starting point, the study provided more in-depth understanding of how media practices, and multi-screening in particular, take place in the home environment and how they are perceived and experienced by the adolescents. In this way, the first research question of the study could be answered: *How do Dutch adolescents perceive and experience multi-screening practices in the home environment?*

The screened media devices that are owned by the adolescents being interviewed are a smartphone, a laptop, a tablet, a television and a PlayStation. Of all these mobile devices, the smartphone appears to be the most important for all participants. All adolescents acknowledged that they are addicted to their smartphone or depending on it to certain extent. This result is consistent with the uses and gratification as described by Ling (2004) and Wei et al. (2013). These authors found a high sense of instantaneity when it comes to the use of smartphones, because of its pushing features (sound, vibration, lightening) that seek for immediate attention (Ling, 2004; Wei et al., 2013). The intense connectedness of the adolescents with their smartphone triggers them to use it alongside other media practices and social activities. In accordance, it is not surprising that the smartphone is the most involved in multi-screening practices, and therefore a threat to the social benefits of joint media consumption.

Regardless whether they were already familiar with the practice of multi-screening before the interview, all participants recognised themselves or others in this practice. All

adolescents who have been interviewed use multiple media devices simultaneously sometimes and most of them even consider themselves as a frequent multi-screener. Although that the multi-screening scenarios and the screen combinations differ per adolescent, most of the adolescents' multi-screening practices are embedded in the afternoon and evening routines. The two most prevalent multi-screening scenarios in the afternoon that appeared from the interviews is the smartphone combined with either a laptop or a PlayStation. In the evening, the adolescents are mainly involved in multi-screening practices while watching television.

Although, there seems to be a difference between boys and girls when it comes to their multi-screening behaviour. This difference can be related to their preferences for consuming media in the living room or in their bedroom. The present study observed that all female adolescents being interviewed have a clear preference to spend the night watching television in the living room together with their parents. In contrast, male adolescents prefer their bedroom for the consumption of media in the evening. In conclusion, it can be claimed that the bedroom culture is more applicable to male adolescents, which contradicts the research from Bovill and Livingstone (2001). As female adolescents frequently watch television with other household members, it can be concluded that female adolescents are more likely to be involved in multi-screening scenarios that affect familial sociability. As a result, the social function of joint television viewing is put at stake, because of the constant presence of the smartphone, which fosters the female adolescents to multi-screen.

Based on the interviews, it can be concluded that the most prevalent screen combination among adolescents consists of their smartphone and the television. Other combinations that revealed from the research are the smartphone and the laptop, the laptop and the television, and the smartphone and the PlayStation. It is remarkable that television still plays such a prominent role in current multi-screening practices of adolescents, because previous studies claimed that multi-screening practices became diversified than just the television, smartphones and/or laptops (Nielsen, 2014; Dias & Teixeira-Botelho, 2016). So, the present multi-screening practices of adolescents are not as diverse as previous studies suggest. Additionally, it is not only striking that television is still extremely relevant in current multi-screening practices of the adolescents, but the interviews showed that the television also asks most of the users' attention and engagement. This also contradicts with what previous studies claim, as they argued that the role of mobile devices became more preponderant when watching television (Dias & Teixeira-Botelho, 2016).

Furthermore, the present study also gained additional insights in the motivations of adolescents for their multi-screening behaviour. This study revealed that the urge to immediately respond to incoming notifications and messages triggers them the most often.

This urge is driven by the fear of missing out, boredom or a lack of engagement with the initial screened media activity. Participants revealed that in most cases there is no connection between the media devices. So, the findings presented in this thesis essentially confirm that distracted viewing, or content grazing is the most common multi-screener profile for adolescents. It does not matter whether they are feeling bored, suffering from the fear of missing out, or seeking for a sense of social belonging, all adolescents are eager on grabbing a quick moment of fun or escape to fulfil their need for continuous entertainment. Several participants perceived the practice of multi-screening as distracting, resulting restless feelings and time inefficiency. However, this study reveals that this does not stop them from multi-screening as the urge to respond and the fear of missing out predominates. For future researches, it would be useful to delve into the mental and physical consequences of multi-screening, as the interviews revealed that adolescents' multi-screening practices emanate from an irresistible urge that result in restless feelings and addiction.

The adolescents as well as the parents state that television is the only media device which is used for joint activities. In most households joint television viewing turns out to be a daily practice in the evening. Based on the analysis, it can be concluded that the adolescents experience the social function of television within the home environment, as they expressed their appreciation for joint television viewing and how it facilitates and encourages social interaction among family members. So, it can already be concluded that the obvious screen combination which potentially threatens familial sociability can be defined in terms of television and the smartphone. The other multi-screening scenarios do not seem to affect familial sociability, because in most cases they are not performed in the presence of other household members.

5.2   The relation between multi-screening practices and familial sociability

The insights deriving from the previous research question provided insight into how multi-screening take place in the home environment and how they are perceived and experienced by the adolescents. In this way, the second research question posed by the present study was answered: *To what extent and how do multi-screening practices affect the family interactions within households?*

Among the parents, there is a certain lack of understanding regarding the multi-screening practices of adolescents. Most of the parents being interviewed do not understand how and why their children multi-screen, which leads them to be hardly involved in multi-screening practices. Because the multi-screening behaviour of the parents is so limited, they never experience any effects of their own multi-screening behaviour. Thus, it can be stated that the multi-screening practices of the parents hardly affect familial sociability in the home environment.

Throughout the analysis, it became clear how the social function of television viewing is challenged by the constant presence of mobile devices and the dispersed media consumption in the home. In general, the participants are aware of that the fact that the practice of multi-screening tend to interfere with this valuable shared leisure activity within households, as it causes a loss of attention to the direct environment of people. In line with this, it can be stated that the other multi-screening scenarios, like the laptop – smartphone and the PlayStation – smartphone, do not affect direct familial sociability, because in most cases they are not performed in the presence of other household members.

When analysing the implications of multi-screening practices on familial sociability, the perspective of the parents turned out to be extremely valuable, as their thoughts on the effects of multi-screening practices in the presence of other household members differed from the adolescents' perspective. The majority of the parents get bothered easily by people who multi-screen in their presence. The origin of their irritation derives from the emotional distance that arises when people multi-screen in the presence of others, the disinterest of multi-screeners in their surroundings, and the direct nuisance multi-screening causes, like flashing lights and vibrations coming from mobile devices. This irritation undermines the direct social interactions within households. Generally, it can be argued that most adolescents do not annoy themselves by the multi-screening practices of others, and they do not seem to be conscious about the effect of their behaviour on their environment. Although that the multi-screening practices do not cause actual disagreement among household members, the divergent perspectives on their effects on familial sociability can conflict sometimes. In most cases, the social effects of multi-screening practices are limited to the parents who point out to the adolescents that their multi-screening behaviour is bothersome by giving them a warning. This warning is often in vain, because it does not change the multi-screening behaviour of the adolescents. Often, the adolescents do not even contradict their parents, so one could even describe their attitude as careless. Therefore, it is striking that several adolescents expressed that they want to lessen their multi-screening practices as they became aware of their media behaviour during the interview. This conflicts with their negligent attitude as described above, and it might indicate that the adolescents did not express their actual perception on the effects of their multi-screening behaviour during the interview. It can be questioned why they want to change their multi-screening behaviour if they do not experience any negative (social) effects of it. f

5.3   Implications of the research findings

The practice of multi-screening is considered as a relatively understudied phenomenon and not much research is done regarding the consequences of this behavioural pattern in relation to familial sociability. In that sense, this study contributes to the expansion of existing

literature by filling the following research gaps, which are earlier described in paragraph 1.6 that elaborates on the scientific and social relevance of this study:

- The effects of multi-screening practices on familial sociability in the home environment;
- The perceptions and experiences on the (social) effects of multi-screening practices from a specific target group within the household (Media:Tijd, 2016; Dias, 2016);
- The relationship between screened media devices in multi-screening practices (Segijn et al., 2017).

This study has contributed to these aspects by exploring two different perspectives within Dutch households and comparing their perceptions and experiences on multi-screening practices in order to get insight in how do multi-screening practices affect the family interactions. Aside from its contribution to the existing literature, the implications of this study mainly relate some points of consideration for the development of home media entertainment. The expectance is that media technologies continue to develop, which will result in even more advanced home media entertainment (Moss & Walmsley, 2014). Moreover, it has been argued that multi-screening technologies are likely to play a significant role in the development of home media entertainment. Therefore, it was, and will be, necessary to explore the effects of this practice on familial sociability. The outcome of this study shows that multi-screening has a reasonable potential to have negative impact on the familial sociability within households, as it stimulates annoyance and nuisance among household members. Media practices like this undermine the importance of family interactions, which could lead to major societal implications, as familial interactions are of great importance for the adolescents' social behaviour and identity development (Christensen & James, 2000). This reinforces the necessity to create awareness of how (new) media practices, like multi-screening, affect familial sociability.

Considering these negative effects of multi-screening, the research findings bring forward some societal as well as practical implications that relate to the development of advanced home entertainment technologies. Aside from the negative effects, the interviews also revealed a multi-screening scenario in which online applications could also have a positive effect on familial sociability. Some television programmes, like TV-quizzes, offer an online application that supports the content by encouraging groups of people, like households, to participate collectively while watching the programme and compete against each other. The participants of this study argue that this type of multi-screening stimulates direct interaction in a positive way, especially when there is some form of competition incorporated, because it encourages that people actively interact with each other. So, this practical example deriving from the interviews shows the added value of second screen

experiences and how the inclusion of competitive elements could have a positive effect on direct familial sociability (Vanattenhoven & Geerts; 2017).

By including competitive elements, multi-screening technologies could foster people to actively share insights and discuss topics while watching television. This will maintain the initial social function of joint media consumption. From a practical point of view, the developers of the advanced home entertainment technologies should avoid that new home media entertainment technologies foster individual multi-screening practices that could lead to annoyance and direct nuisance among household members. Instead, developers of home media technologies should focus on socially-friendly and direct interaction-stimulating innovations that foster the positive forms of multi-screening that fosters the participation of more household members. Future research could focus on answering the question 'how to make sure that second screen experiences only fosters direct sociability rather than individual multi-screening practices?'

5.4 Strengths and limitations

In general, the in-depth interviews turned out to be useful for understanding the contexts or settings in which respondents talk about certain behaviours, practices and experiences, which suits the purpose of this study. Moreover, the interviews with the parents were an appropriate method to verify and validate the outcome of the interviews with adolescents. The unique strength of this paper lies in the fact that the perspective of the adolescents is enriched with insights from their parents to make the outcome more complete and valuable. Combining these two perspectives offered an insightful account of how multi-screening practices are embedded in everyday routines and how this potentially impacts familial sociability. As a result of the twofold perspective, divergent viewpoints regarding the effects on multi-screening practices were found among the participants. Without the insights of the parents, the study would provide a limited perspective on the effects on familial sociability as the adolescents seem to downplay the effects of their multi-screening behaviour.

Furthermore, the non-media centric approach turned out to be useful for the preparation of the interviews and the thematic analysis of the interview transcripts. The framework based on three analytical prisms, as defined by Pink and Leder Mackley (2013), provided a structure for the preparation as well as for the processing of the interviews. With the help of this framework, the research could take more subjective perspective on the practice of multi-screening and approach it as an everyday action and habit. As a result, the adolescent's multi-screening practices could be researched alongside other (social) activities, and not just as an isolated activity (Pink & Leder Mackley, 2013).

Although the theoretical framework as well as the research method turned out to be useful and successful to answer the research questions, there are some limitations that

came forward during the execution of this study which are worth mentioning. The limitations of the study are mainly related to participants who have been interviewed. The study aimed to sample equal number of female and male adolescents to avoid a possible impact on the findings of the study. In the end, the final sample consisted of four female and two male adolescents. For future research it is advised to have an equal number of males and females. Especially because, based on the current sample pointed out some differences between males and females, and the different ages involved, regarding multi-screening practices. However, the sample size of this study is too small to draw significant conclusions on this. Therefore, future research concerned with multi-screening practices could benefit from adopting a methodological approach that relies on a larger sample size. So, it would be valuable to conduct a quantitative follow-up study among a large target group in the form of a survey. Consequently, more significant conclusions about the experiences and perceptions on multi-screening in relation to gender and age could be drawn.

Additionally, it is striking that all members of the households involved in this research have good mutual relationships with each other. All adolescents and parents indicate to be close to each other, which results in a greater appreciation, or even a preference, for joint media consumption. This could have influenced the outcome of the research, certainly because the research aim relates the familial sociability and multi-screening practices. The study could have led to different results when there is more diversity in terms of mutual relationship within the target group.

The last potential influence that should be taken into account is the role of the interviewer, the research in this case. Although the interviewer made all efforts to not interfere inappropriately with the answers given and to limit personal opinions and experiences, allow the participants to guide the direction of the conversation. However, when analysing the transcripts, it became clear that there were a couple of situations wherein the interviewer could have rephrased the question in order to be less leading or allowed the discussion to continue further without interruption.

5.5 Suggestions for further research

As explained, the present study is limited by some aspects, which gave rise to some suggestions for further research that already have been mentioned above. However, there are also some other relevant recommendations that are worth mentioning.

Even though in-depth interviews are considered the best research approach for this particular study, it could also be interesting to complete this study with some in-house observations or focus groups. These approaches could surely result in an even richer data set and provide additional insights to the topic. Observational studies allow for the observation of what people actually do or say, rather than what they say they do (Kawulich;

2005). The dynamics focus groups can have a positive influence on the quality of the research output, because the discussions within the focus group can lead to new ways of thinking among participants (Parker & Tritter; 2006). The group dynamics allows the participants to share their opinion, whether they are agreeing or disagreeing, or whether they can familiarise themselves with the other participants (Parker & Tritter; 2006). This would be useful, because the present study revealed that people do not seem to be aware of the effects of their media habits as they are a constitutive part of them.

Segijn et al. (2017) indicated a research gap in terms of the relatedness of the media activities across screens, so this study differentiated whether the participants are involved in related or unrelated activities while multi-screening. In order to do this, this study exploited some theoretical insights regarding multi-screening categories and multi-screener profiles to analyse adolescents' experiences and perceptions on (the effects of) multi-screening practices (Hritzuk & Jones, 2014; Ainasoja et al, 2014; Nagel, 2015; Segijn et al., 2017). In general, these theoretical frameworks helped to compare and define the multi-screening practices of adolescents. However, the categories as described by Nagel (2015) turned out to be rather limited when it comes to multi-tasking, which relates to users employing multiple screened devices for unrelated activities. Based on this study, it can be concluded that in most of the cases all participants are involved non-related activities. This multi-screening category turned out to include so many different multi-screening scenarios, media devices and motivations, that it would be beneficial to distinguish these behavioural patterns within the current category of multi-screening. In line with this, the multi-screener profiles as defined by Hritzuk and Jones (2014) and Ainasoja et al. (2014) could also be considered as outdated, because they are not fully aligned with the present prominent role of mobile devices in Dutch culture and the lives of adolescents. As a result, they do not reflect on the behavioural patterns in contemporary multi-screening practices, as they do not consider the significant relevance of the current features of mobile devices, like for example online shopping, online gaming, online payments, online working tools, etc. For this reason, follow-up studies could focus on distinguishing up-to-date, or more generic, multi-screening categories and multi-screener profiles that fit with the current behavioural patterns in multi-screening practices.

Lastly, it is also important to consider that the present study did not specifically focused on the content being consumed while multi-screening. The present study is approached by the non-media centric approach, which means that the practice of multi-screening as an everyday action and habit. The study focused solely on how media is embedded in materialities, socialities and everyday routines by making the content of media subservient (Deuze, 2012; Pink & Leder Mackley, 2013). However, it could be possible that

the content is determinative in how adolescents perceive and experience multi-screening practices within the home environment. It could also be interesting to further investigate adolescents' multi-screening behaviour in relation to the content, which in turn might lead to different perspectives on the effects on familial sociability.

6. References

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Appendix 1:   Interview guide – Adolescents

Introduction

1. Informing the participants about the time frame of the interview.
2. Explaining the research goals by referring to the information sheet and the consent form.
3. Emphasising on the most important issues of the consent form: anonymity and the permission to be recorded.
4. Signing the consent form.
5. Explaining the structure of the interview.

---

1.   Demographics and the composition of the household

- What is your age?
- What is your level of education?
- What do you study?
- Do you have any brothers or sisters?
- With whom do you live together?
- Since when do you live in this house?

2.   Daily routines and familial sociability in the home environment

2.1   General routines
- How often do you have to go to school per week?
  - How long are those days at school?
- Can you describe your morning routine?
  - What is the first thing you do after you wake up?
  - Is there a difference between weekdays and weekend mornings?
- Can you describe your after-school routine?
  - What is the first thing you do when you come home?
  - If you have no homework, what is your favourite thing to do after school?
  - Do you feel that you are busy outside school hours?
- Can you describe your after-dinner routine?
  - What do you do in the half hour before you go to sleep?

2.2 Familial sociability in the home environment

- Do you consider yourself as a homebody?
  - What about the other household members: are they often at home?
- Do you like to spend time alone at home or do you prefer to be surrounded by others?
- Do you have regularly family or friends coming over to your home?
  - What do you do with them?
- Do you think spending time together as a family is important to you?
- How would you describe your relationship with your parents?
  - How do you spend your time with them?
- How would you describe your relationship with your brother(s)/sister(s)?
  - How do you spend your time with them?

3. Media practices in the home environment

3.1 Media devices

- What mobile devices do you own?
- Which mobile device is the most important to you?
- Which mobile device do you use the most?
  - Where do you use it for?
  - What is your favourite application on this mobile device?
  - Where do you use this mobile device the most?
    - Do you also use this device the most when you are at home?
  - Would you say that you are addicted to this mobile device?
  - Do you think that others would say that you are addicted to this mobile device?
  - Where would you spend more time on when you are not allowed to use this device for three days?
    - Which problems would you face?
- Which other mobile devices do you use daily or with some regularity?
- Which mobile device, which you own, do you use the least?
  - Why is this mobile device less important to you?
  - What makes this mobile device less attractive to you in comparison with…?
- Which screened devices are present for common use at home?

3.2 Media uses

- Which mobile devices do you use for school?
    - For which purposes do you need these mobile devices?
    - Do you consider the usage of these devices as your own choice or do you feel obligated by school?
- What is your morning routine regarding media?
    - What is the first media device you use after you wake up?
    - Why is this media device important at this moment?
    - What other media do you use before you go to school?
- Can you describe your after-school routine in terms of media?
    - Which media devices do you use the most when you come home?
- Can you describe your after-dinner routine regarding media?
- What are the differences between weekdays and weekend days in terms of media use?
- Where in the home do you consume media, what is the most comfortable place for you?
    - When do you consume media in your bedroom?
    - When do you consume media in the communal places within the home?
- If you have to choose one specific media channel or application that is the most important to you, which media would it be?
- Are there rules or restrictions regarding the media consumption within the household?
    - Who made these rules?
    - What was the occasion to make these rules?
    - Does it happen that these rules, or the breach thereof, cause irritation or disagreement among the household members?
- How would you compare your media consumption with that of other people of your age?
    - What do you notice in terms of media consumption in other households?

3.3 Joint media consumption

- Which media activities are undertaken collectively with other household members?
    - What media do you consume together with your parents?
    - What media do you consume together with your siblings?
    - Does it happen that you all consuming media together?
- Does it happen that the other household members consume media together without you?
    - Why do you not join these joint activities?
- Do you notice any differences between weekdays and weekend days in terms of consuming media together?
- What makes it fun to *[… collective media activity…]* together?

- What are the positive effects of *[… collective media activity…]* together?
- Does it happen that *[… collective media activity…]* together cause irritation or disagreement?
    - What are these disagreements often about?
- Do you take the initiative to undertake media-related activities together?
    - How do the other household members react on this?
- Would you like to undertake more media-related activities collectively with each other?
    - What kind of media activities?
    - What are the barriers to consume media together at the moment?
- Do you think that consuming media together has a positive effect on familial relations?

3.4   Multi-screening

- Are you familiar with the practice of multi-screening?
    - Can you explain what it entails?
- Which screened devices do you use simultaneously?
    - What is the most prevalent screen combination for you?
    - Do you sometimes use more than two screens at the same time?
- Can you describe a situation in which you are using more than one screened device at the same time?
    - Is the content on the different devices in some way related to each other?
    - Which applications do you use the most while multi-screening?
        - For what aim do you use these applications?
    - Why do you start using an additional screened device at the same time?
    - Where in the home do you often use more screened devices at the same time?
- Do you feel aware of your own multi-screening practices?
    - Do you consider yourself as a frequent multi-screener?
    - How often do you multi-screen?
- Are you familiar with media (television) that offer a second screen experience?
    - Can you name examples of these second screen experiences?
    - What do you think about this?
    - What would be the reason for people to make use of second screen experiences?
    - What are the effects of second screen experiences on the sociability within the household?

4. Perception & experiences of multi-screening

- What are the benefits of using more than one screen at the same time?
- Have you ever experience negative effects of multi-screening?
- Do you multi-screen in the presence of other household members?
    - How do they react when you are multi-screening in their presence?
    - Does your multi-screening behaviour cause irritation or disagreement among the other household members?
- Do others within the household multi-screen in your presence?
    - Do you think that they are aware of their multi-screening practices?
    - What do you think about household members who multi-screen in your presence?
    - How do you react when they are multi-screening in your presence?
- Do you think that multi-screening affects social interactions within the household?

5. Closing questions

- If you had to choose: do you see mobile devices as an enrichment or a distraction?
- Do you consider the use of mobile devices as a threat to sociability within the household?
- Have you ever experienced that the time spent on shared leisure activities with family suffers from the use of mobile devices?
- What do you think about your own media consumption?
    - Would you like to change something in your media behaviour?
        - What would you like to do more?
        - What would you like to do less?
- What are your future expectations regarding the consumption of media in home environment?
    - What positive effects will this have on familial sociability within the home environment?

Appendix 2: Interview guide – Parents

Introduction

1. Informing the participants about the time frame of the interview.
2. Explaining the research goals by referring to the information sheet and the consent form.
3. Emphasising on the most important issues of the consent form: anonymity and the permission to be recorded.
4. Signing the consent form.
5. Explaining the structure of the interview.

---

1. **Demographics and the composition of the household**

- What is your age?
- What is your level of education?
- What do you do for a living?
    - How many days do you work per week?
- How many children do you have?
- With whom do you live together?
- Since when do you live here in this house?

2. **Daily routines and familial sociability in the home environment**

2.1   General routines
- Can you describe a usual morning in your household?
    - Is there a difference between weekdays and weekend mornings?
- Can you describe your child's after school routine?
    - What is the first thing they do when they come home?
    - Do you feel that he/she is busy outside school hours?
- Can you describe the after-dinner routines within the household?
    - What do you do in the half hour before you go to sleep?
    - What does your child do in the half hour before he/she goes to sleep?

2.2   Familial sociability in the home environment
- Do you consider yourself as a homebody?
    - What about your child: is he/she often at home?

- Do you like to spend time alone at home or do you prefer to be surrounded by others?
  - Does he/she like to be at home alone?
- Do you have regularly family or friends coming over to your home?
  - What do you do with them?
- Do you think spending time together as a family is important for you?
- How would you describe your relationship with your child(ren)?
  - How do you spend your time with them?

3. Media practices in the home environment

3.1 Media devices
- What mobile devices do you own yourself?
- Which mobile device is the most important to you?
- Which mobile device do you use the most in general?
  - Why is this mobile device important to you?
  - What makes this mobile device so attractive to you?
  - What is your favourite application on this mobile device?
  - Where do you use this mobile device the most?
    - Do you also use this device the most when you are at home?
  - Would you say that you are addicted to this mobile device?
  - Do you think that others would say that you are addicted to this mobile device?
  - Where would you spend more time on when you are not allowed to use this device for three days?
    - Which problems would you face?
- Which other mobile devices do you use daily or with some regularity?
- Which mobile device do you use the least?
  - Why is this mobile device less important to you?
  - What makes this mobile device less attractive to you in comparison with…?
- Which screened devices are present for common use at home?

3.2 Child's media uses
- What mobile devices does *[… child's name…]* own herself/himself?
- What is his/her morning routine regarding media?
  - What is the first media device he/she uses after he/she wakes up?
  - Why is this media device important at this moment do you think?

- What other media does he/she use before he/she goes to school?
- Can you describe his/her after school routine in terms of media?
  - Which mobile devices does he/she use for school / homework?
- Can you describe his/her after dinner routine regarding media?
- Do you notice any differences between weekdays and weekends in terms of media use?
- Where does he/she consume media, what is the most comfortable place for him/her?
  - When does he/she consume media in his/her bedroom?
  - When does he/she consume media in the communal places within the home?
  - Is there a bedroom culture in your household?
- Have you experienced any changes in the media uses of your child in the last few years?
- How would you compare the media routines of your children: what are the differences?
- Do you consider your children's media use as usual compared to other teenagers?
  - Do you notice any differences between other teenagers or families you know?
- How would you compare your child's media consumption with your media consumption when you were a child?
- Are you feeling aware of what he/she is doing on his/her mobile devices?
- Have you ever felt worried about your child's (digital) media consumption?
  - What kind of risks do you foresee?
  - How are you dealing with these worries?
- Would you say that he/she is addicted to her smartphone/laptop/tablet?
- Are there rules or restrictions regarding the consumption of media?
  - Who made these rules?
  - What was the occasion to make these rules?
  - Does it happen that these rules, or the breach thereof, cause irritation or disagreement among the household members?

3.3 Multi-screening practices

- Are you familiar with the practice of multi-screening?
  - Can you explain what it entails?
- Is he/she using more screens simultaneously?
  - What is the most prevalent screen combination for him/her?
  - In what situations is he/she using multiple screened devices at the same time?
  - Is there is some relation between the screens while he/she is multi-screening?
  - What is her/his reason for using more screened devices at the same time?
  - Do you think that he/she is aware of their multi-screening practices?

- o Do you consider him/her as a frequent multi-screener?
  - o Where in the home does he/she use more screened devices simultaneously?
- Does she/he multi-screen in the presence of other household members?
  - o What do you think it when he/she is multi-screening in your presence?
  - o How do you react when he/she is multi-screening in your presence?
  - o Does her/his multi-screening behaviour cause irritation or disagreement (among the other household members)?
- Do you multi-screen yourself?
  - o Which screened devices do you use simultaneously?
    - ▪ What is the most prevalent screen combination for you?
  - o Can you describe a specific situation in which you are using more than one screened device at the same time?
    - ▪ Is the content on the different devices in some way related to each other?
    - ▪ Which applications do you use the most while multi-screening?
    - ▪ For what aim do you use these applications?
    - ▪ Why do you start using an additional screened device at the same time?
    - ▪ Where in the home do you use more screened devices at the same time?
  - o Do you feel aware of your own multi-screening practices?
    - ▪ Do you consider yourself as a frequent multi-screener?
    - ▪ How often do you multi-screen?
  - o Are you familiar with media (television) that offer a second screen experience?
    - ▪ Can you name examples of these second screen experiences?
    - ▪ What do you think about this?
    - ▪ What are the effects of second screen experiences on the sociability within the household?
    - ▪ What effects do these experiences have on the social interactions?
  - o What are the benefits of using more than one screen at the same time?
  - o Have you ever experience negative effects of multi-screening?
  - o Do you multi-screen in the presence of other household members?
    - ▪ How do they react when you are multi-screening in their presence?
  - o Do you think that multi-screening effects social interactions within the household?
- If you had to choose: do you see mobile devices as an enrichment or a distraction?

3.3 Joint media consumption

- Do you think that consuming media together has a positive effect on familial relations?
- Which media activities are undertaken collectively with other household members?

- o What media do you consume together with your children?
- o Does it happen that you all consuming media together?
- Does it happen that the other household members consume media together without you?
  - o Why do you not join these joint activities?
- Do you notice any differences between weekdays and weekend days in terms of consuming media together?
- What makes it fun to *[… collective media activity…]* together?
- What are the positive effects of *[… collective media activity…]* together?
- Does it happen that *[… collective media activity…]* together cause irritation or disagreement?
  - o What are these disagreements often about?
- Do you take the initiative to undertake media-related activities together?
  - o How do the other household members react on this?
- Would you like to undertake more media-related activities collectively with each other?
  - o What kind of media activities?
  - o What are the barriers to consume media together at the moment?
- Do you think that consuming media together has a positive effect on familial relations?

6. Closing questions

- If you had to choose: do you see mobile devices as an enrichment or a distraction?
- Do you consider the use of mobile devices as a threat to sociability within the household?
- Have you ever experienced that the time spent on shared leisure activities with family suffers from the use of mobile devices?
- What do you think about your own media consumption?
  - o Would you like to change something in your media behaviour?
    - ▪ What would you like to do more?
    - ▪ What would you like to do less?
- What are your future expectations regarding the consumption of media in home environment?
  - o What positive effects will this have on familial sociability within the home environment?

Appendix 3: Consent – Adolescents

**ERASMUS UNIVERSITY ROTTERDAM
PERMISSION FORM FOR RESEARCH PARTICIPATION**

You are being asked to take part in a research study:

Interactions between multi-screening practices and familial sociability within the home environment: The perspective of Dutch adolescents.

This form contains important information about the set-up of the research: what will be asked from you, and the way we would like to use information about you if you choose to participate in this study.

This form needs to be completed by the participant, as well as their parent/guardian.

This project has been approved by the Erasmus School of History, Culture and Communication, part of the Erasmus University Rotterdam.

RESEARCH INFORMATION

- You are being asked to participate in a research study about the perception and experiences of adolescents regarding multi-screening practices in the home environment and the effects on familial sociability.

- You will be asked to participate in an individual in-depth interview. This interview contains questions about your media consumption, family situation and the home environment.

- The interview will last between 45 and 60 minutes.

- The interview will take place at the participant's home.

- Preferably, the interviews will be audio taped to make sure that the information can be processed accurately. The tapes will be kept on the researcher's personal laptop and a Google Docs account, which can only be accessed by the researcher. In principal, the tapes will only be used by the researcher and master thesis supervisor. However, the Erasmus University may request access to the tapes to verify the reliability of the research.

- You will get the option to receive the transcript, so the document can be verified on truthfulness.

- Your participation in this study does not involve any physical or emotional risk.

- It is not likely that you will directly benefit from your participation in this research study. This study aims to investigate the perception and experiences of Dutch adolescents regarding multi-screening in the home environment.

- Participation in this study will involve no cost and you will not be paid for participating.

- Participation in this study is voluntary. You may skip a question or withdraw from this study at any time and you will not be penalized in any way or lose any sort of benefits for deciding to stop the participation.

- Results of this study may be used in publications and presentations.

- All information you provide will remain confidential and no information that could lead to the identification of any individual will be disclosed in any reports on the project, or to any other party. No identifiable personal data will be published. The identifiable data will not be shared with other organisations.
-
- If you have any questions about your rights as a participant in this research, you may contact the researcher or the thesis supervisor (TS):

	Christie van der Giesen	dr. Amanda Paz Alencar (TS)
Phone:	+31 (6) 234 382 24	+31 10 408 8629
Email:	christievdgiesenh@hotmail.com	pazalencar@eshcc.eur.nl

CONSENT - ADOLESCENTS

By signing this form, you agree to participate in the research study described above and the selected checkboxes underneath.

☐ I understand the information on the form and I agree to take part in the study on the effects of multi-screening in the home environment and I am willing to take part in an individual interview.

☐ I understand that agreeing to take part means that I am willing to allow the interview to be audiotaped.

☐ I understand that any information I will provide is confidential, and that no information that could lead to the identification of any individual will be disclosed in any reports on the project, or to any other party.

☐ I have the right to change my mind and to decide to withdraw from the study at any time. I know that I do not have to answer all the questions and that I can decide not to continue at any stage of the project without being penalised or disadvantaged in any way.

☐ I understand that I have the possibility to receive a transcript of data concerning the interview for my approval before it is included in the write up of the research.

Optional

☐   I give permission to the researcher to observe my media routines within the home environment for predetermined time frame.

Date

…………………………………………

Name   **Signature**

…………………………………………   …………………………………………

Appendix 4:   Consent – Parents

ERASMUS UNIVERSITY ROTTERDAM
PARENTAL PERMISSION FORM FOR (CHILD'S) RESEARCH PARTICIPATION

You and your child, for whom you are a parent/guardian, are being asked to take part in a research study:

Interactions between multi-screening practices and familial sociability within the home environment: The perspective of Dutch adolescents.

This form contains important information about the set-up of the research: what will be asked from you, and the way we would like to use information about you if you choose to participate in this study.

This form needs to be completed by the parent of the participating child, who is going to be interviewed as well.

This project has been approved by the Erasmus School of History, Culture and Communication, part of the Erasmus University Rotterdam.

RESEARCH INFORMATION

- You and your child are being asked to participate in a research study about the perception and experiences of adolescents regarding multi-screening practices in the home environment and the effects on familial sociability.

- You are both asked to participate in an individual in-depth interview. This interview contains questions about your media consumption, family situation and the home environment.

- Both interviews will take between 45 and 60 minutes each.

- The interview will take place at the participant's home.

- Preferably, the interviews will be audio taped to make sure that the information can be processed accurately. The tapes will be kept on the researcher's personal laptop and a Google Docs account, which can only be accessed by the researcher. In principal, the tapes will only be used by the researcher and master thesis supervisor. However, the Erasmus University may request access to the tapes to verify the reliability of the research.

- You will get the option to receive the transcripts of both interviews, so the documents can be verified on truthfulness.

- Participation in this study does not involve any physical or emotional risk to you both.

- It is not likely that you will directly benefit from your participation in this research study. This study aims to investigate the perception and experiences of Dutch adolescents regarding multi-screening in the home environment.

- Participation in this study will involve no cost and you will not be paid for participating.

- Participation in this study is voluntary. You and your child may skip a question or withdraw from this study at any time and you will not be penalized in any way or lose any sort of benefits for deciding to stop participation. Results of this study may be used in publications and presentations.

- All information you provide will remain confidential and no information that could lead to the identification of any individual will be disclosed in any reports on the project, or to any other party. No identifiable personal data will be published. The identifiable data will not be shared with other organisations.

- If you have any questions about your or your child's rights as a participant in this research, you may contact the researcher or the thesis supervisor (TS):

	Christie van der Giesen	dr. Amanda Paz Alencar (TS)
Phone:	+31 (6) 234 382 24	+31 10 408 8629
Email:	christievdgiesenh@hotmail.com	pazalencar@eshcc.eur.nl

CONSENT – PARENTS

By signing this form, you agree on the participation in the research study described above and the selected checkboxes underneath.

☐ I understand the information on the form and I agree to take part in the study on the effects of multi-screening in the home environment and I am willing to take part in an individual interview.

☐ I, as a parent/guardian, agree that my child also takes part in this study and I also confirm that his or her participation is voluntary.

☐ I understand that agreeing to take part means that I am willing to allow the interview to be audiotaped.

☐ I understand that any information we will provide is confidential, and that no information that could lead to the identification of any individual will be disclosed in any reports on the project, or to any other party.

☐ I have the right to change my mind and to decide to withdraw from the study at any time. I know that we do not have to answer all the questions and that we can decide not to continue at any stage of the project without being penalised or disadvantaged in any way.

☐ I understand that I have the possibility to receive the transcripts of data concerning the interview for my approval before it is included in the write up of the research.

Optional

☐ I give permission to the researcher to observe my (child's) media routines within my home environment for predetermined time frame.

Date

………………………………………

Name   **Signature**

………………………………………   ……………………………………………

………..

…………………….

Appendix 5:   List of coded themes

Overarching themes	Sub-themes	Sample(s) of coded text
Key demographics	Age	'I am 18 years old."
	Occupation	"I started my career as a project manager in the ICT sector. Back then, I worked for a for a telecom company. After a while, I have been promoted to manager of all the project managers. I am still in that job right now."
	Household composition	"I live here with my brother and my parents."
	Living arrangements	"I am with my father on Saturday and Sunday. When I do not have a game, I am already at my father's home on Friday until Monday."
Media devices	Personal devices	"I own a laptop from work, which I also use at home. I have a telephone. Let me think…I also own an iPod and a tablet, but I do not use them very often."
	Shared devices	"The only device we are sharing is the television I think."
	Importance	"It is gives me a good feeling that you are accessible wherever you are when there is something wrong. It is good to know what somebody is doing, where they are… and I also want to be accessible for when something happens to my parents."
	Addiction (dependence)	"I always have my phone with me, everywhere. It is in my pocket, next to me, on my desk, it is always close to me. "
Online applications	Important applications	"I think I use WhatsApp the most of all the applications. We also have a family app group, so we can easily check where everybody is or to notify each other when plans are changing."
	Favourite applications	"I think Snapchat, it is so much fun to send ugly pictures to each other."
Daily (media) routines	Morning routines	"I wake up, then I have breakfast, I take a shower and dress up. For the rest I do not do that much in the morning."
	Afternoon routines	"When I have some homework to do, then I will do that first. When I do not have homework, I watch Netflix again."

	Evening routines	"After dinner... uhh... I am sitting on the couch, again. I take a shower and watch the television programmes I like."
	Weekend routines	"The weekends are all about sports. We watch football matches, Studio Sport, summaries of matches... Only sports. We watch more television than Netflix in the weekend."
	Place	"Personally, I do not watch television in the living room that often. When my parents watch television there, I join them sometimes, but I never watch television there myself." "On the couch in the living room. I am never in my room, only when I go to sleep."
	Rules	"When we are having dinner together, we are not allowed to use your telephones. " "Lars violates the rules sometimes, if that happens then my father gets very irritated."
	Adolescent's perceptions and experiences	"I notice that a lot of people of my age prefer to be on their own, and to spend the night in their bedrooms, separated from their family. They do not undertake much with their parents."
	Parent's perceptions and experiences	"We are all using our telephones so much during the day. I think that it would be good if we skip our telephones before we go to sleep."
Multi-screening practices	Familiarity	"It means that you are using more screens at the same time, like for example your telephone, television, tablet."
	Awareness	"As you might noticed, no! Haha! I forgot about some of the combinations."
	Motivations	"I think because of distraction and the urge to answer on messages or to react on notifications."
	Scenarios	"I am sitting on my bed with my laptop, working on my homework. My telephone is next to me. I always receive a lot of messages from classmates about the homework, so I am texting with them, but also with other friends about other topics. The television is on for some background noise. Every now and then I have a look at it."

	Screen combinations	"Sometimes it is only the television and my telephone, or my telephone and my laptop, but it two of these three devices are always involved."
	Frequency	"When I am thinking about it, I think yes. I am quickly inclined to grab my telephone."
	Relatedness of screens	"We are texting about the homework, when I am working on the laptop."
	Consequences	"Sometimes I miss some scenes and I do not follow the storyline anymore. In that case, I rewind the movie to the scene where I got distracted."
Familial sociability	Relationships	"We get along with each other very well! A good home situation."
	Shared leisure activities	"I have a season ticket for Feyenoord together with my dad and sister. So, we are going to a match every two weeks. With my mum, I am doing groceries. We like to go shopping together."
Joint media consumption	Motivations	"I like the social aspect about it: you do something together and you can talk about it."
	Initiative	"Yes, when I really want to see something particular, I propose to watch it together in the living room."
	Setting	"My father and I are watching anyway. Sometimes my sister, her boyfriend and my grandmother are joining us as well."
	Frequency	"We use less media in the weekend, so we also watch less Netflix and television together in the weekend. "
	Effects	"We think it is nice to do this together, and it fosters conversations about random topics."
Effects of multi-screening on social interactions	Negative effects	"Aside from that, sometimes she gets on my nerves with the vibration of her telephone while watching television. Suddenly that sound is beginning to irritate me. I cannot always hide that irritation."
	Positive effects	"However, I can image that it is fun to participate with the family in quizzes and to add a competitive element to the television programme. That seems fun to me."

Future perspectives on media consumption	General development of media consumption	"I think that the media use will increase in the coming years and perhaps become even more individualistic, but I think it will tone down in the end. I expect that there will be a moment in the future that people start to realise: we are done with it, there is more in life than media."
	Desired change	"It might be necessary to put my telephone away sometimes, especially when I am in the presence of others."