Henriksen and Flora (1999) Revisited – A Literature Review on Third-Person Effects and Children/Adolescents

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This paper should be cited as follows:

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A Literature Review on Third-Person Effects and
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Abstract

In this literature review on third-person effects (TPE) and the behavioral consequences on children the research questions posed is how the body of knowledge has evolved since the first empirical evidence of TPE among children and what knowledge gaps that remain. The traceable developments are two: 1) Compared to the vast amount of articles on TPE in general, the 59 identified on the topic of children are few and two thirds actually focus on adolescents/young adults rather than children. The reason put forward for studying younger children is the urge to prevent risky behavior through media literacy programs or pro-social advertisements. 2) The studies have not primarily addressed results to support occurrence of TPE among children. Rather they support parental third-person effects or among the adolescents that TPE and reverse TPE occur due to certain kind of media content. The discussion on knowledge gaps that remain follow three themes: 1) Differentiations between self and others are in psychological studies implied to occur among children between the ages of 3–4 years, yet no study address how children develop TPE. 2) There is a tendency to follow the more general development within TPE research with the renewed interest in behavioral consequences. But the primary behavioral consequence studied in TPE in general and within studies of TPE and children is support for censorship. Few studies address “real” behavioral consequences like parental mediation. 3) There is also a need for more theoretically coherent research on the importance of social distance.

Keywords:

Corresponding Author:
Introduction

Third-person effects (TPE) also known as third-person perceptions (TPP), does not necessarily refer to real media effects. Rather it refers to a phenomenon of social differentiation between self and others meaning that people tend to ascribe stronger relative persuasive effects due to media messages on other people than they ascribe themselves (Davison, 1983:3; Perloff, 1999). Numerous articles have been written about TPE (see review by Perloff, 1999, 2002). A decade ago, Henriksen and Flora (1999) in a study on the perceived impact of pro- and anti-smoking ads, also provided evidence of that TPE occur among children (9–14 years old) and Chapin (1999) published an article on TPE and sexual risk taking among minority “at-risk” youth (8–17 years old).

This is a literature review on how the body of knowledge on TPE and children/adolescents has evolved since 1999. There is a special focus on behavioral consequences since most of the research on TPE is on the phenomena itself and the explanatory factors behind it. Originally Davison referred to these consequences in terms of the third-person effect hypothesis, nowadays referred to as behavioral consequences of TPE. The hypothesis implies that the perception of how others may be influenced by the media can cause us to act. Our expectations of how others can come to be affected by media content lead to that we try to prevent this in our eyes negative influence (see Salwen, 1998; Perloff, 2002). But even though parents may ascribe stronger media effects to other children than their own, they probably would try to regulate their own children from media exposure (see Bybee, Robinson & Turow, 1982; van der Voort, Nikken and van Lil, 1992). For example, if parents think that their children are more affected by commercials on children’s channels than themselves, they as a consequence of this perception might act upon it if they believe that the effect is negative to their children. They might try to prevent their children by changing to another channel or watch the programs together with them. The attitudes of the parents’ have shown to be of important in the effects of media on children (Nathanson & Yang, 2003:111; Warren, 2005:851; Funk, Brouwer, Curtiss & McBroom, 2009:981,984). It is however unclear whether the attitudes of effects reflect parents’ beliefs about children in general or their own in particular (Hoffner & Buchanan, 2002:233–236). So both the perceptions of media effects amongst children and parents and the consequences of these perceptions are of essence. The research questions posed are (RQ1) how has the body of knowledge evolved since 1999 and (RQ2) what are the behavioral consequences of these perceptions? 

1Consequently there are other types of perceptions called first-person perception (Zeitz, 1988), first- person effect (Tiedge, Silverblatt, Havice and Rosenfeldt, 1991) or reversed third-person effects (Cohen and Davis, 1991) meaning that people tend to ascribe stronger effects on themselves than they do others. Second-person perception, second-person effect, shared effects or the influence of perceived influence (Gunther & Storey, 2003) refers to that people ascribe persuasive effects on both others and themselves.

2Borzekowski et al. (1999) has been discarded due to similar results (and Flora is a co-author).
evolved since the first empirical evidence of TPE among children and (RQ2) what knowledge gaps remain?

Method

The search for articles was primarily conducted in Social Science Citation Index (Thomson Scientific/ISI Web Service) on search strings including the “third-person effect” and “children” or “adolescent” components. Corresponding meanings as “third-person perception” or abbreviations as TPE or TPP, “third-person effects hypothesis” or TPE and “behavioral consequences”, “reversed third-person effects” or “first-person perception” was also used. Complementary search was conducted in Academic Search Elite (EBSCO), CSA Social Science (including also IBSS: International Bibliography of the Social Sciences (CSA) and Sociological Abstracts (CSA)), IDB International Data Base, International Encyclopedia of the Social & Behavioral Sciences, Intute: Social Sciences, CIOS/ComAbstracts and Ncom: Nordicom Media Research Publications. Works which are irrelevant have been discarded and those which are peripheral have been looked at critically. The complete list of the secondary sources that have passed through the review can be found in the appendix.

Results

Few of the Articles Concerns Children rather Adolescents or Young Adults

Compared to the vast amount of articles on TPE in general, the 59 identified on the topic of children (from birth up to the age of puberty) are few and two thirds actually focus on adolescents/young adults rather than children (see table 1 below, table A1 in appendix). In perspective the result follows the general attention paid to background factors within TPE research where none of similar background factors like age for instance gender and nationality (Perloff, 2002) or minorities (Mays & Cochran, 1988) has gained much specific attention, rather the phenomena itself has.

The majority of the (one third of the) studies that actually involve children (up to the ages of 14) encompass children in their early adolescents or preteens, the ages of 11–13 years. The common denominator in these studies is that preteens have been chosen because social identity is an important explanations for third-person perception (see Duck, Hogg, & Terry, 1999; Gunther & Mundy, 1993; Gunther & Thorson, 1992), and the preteens is the age when social identity and social behavior developments are especially observable (Scharrer & Leone, 2006:262). The focus on social identity and behavior is expressed by studies of how peer norms can exert especially forceful influence on adolescents. This through the adaptation to the perceived changes in the smoking behavior of others (Gunther, Bolt, Borzekowski, Liebhart & Dillard, 2006:53), or the focus on if the age-based heuristics is used by the preteens in
relations to those younger than themselves studying the perceptions of effects on aggression and desensitization of playing violent video games (Scharrer et al., 2006:261–262). But not only risky behavior is studied, also materialistic values and shopping norms and values among both pre-teens, their peers and parents (Chia, 2010). In other words, in the interest of these studies is the pressure of the social norms of peers as part of the explanation for TPE.

Table 1. Age Span of the Children/adolescents in Focus in the different Studies

<table>
<thead>
<tr>
<th>Age span of the children/adolescents in focus in the different studies</th>
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Comments: The age span in the different studies range from the lowest to the highest age (some articles include more than one study). When ages are not specifically stated in the studies, they have in the table above been estimated. College or university students maximum age is set to 22 years old and studies from the age of 18 and upward are set to the age of 75.

In the studies that include children from toddlers up to the age of ten, my interpretation of why these ages are included are twofold. The first case is that if we are to prevent risky behavior, we must know more about how to reach the younnglings at an early. The first way is through the study of the impacts of education by an evaluation of a media literacy training program to prevent adolescents from substance abuse (Austin et al., 2005:75–76). The problem
posed is that the lack of scientific studies of the effectiveness of the strategy leaves advocates open to skepticism with the goal to evaluate if programs designed to foster young peoples’ skepticism towards advertisements can make viewers less affected by advertisements (ibid). Another way is through learning more about how to design campaigns, how anti-drug ads can be improved to motivate 10–15 year olds (Cho et al., 2008:170) or through studies if the understanding of the persuasive element of advertising comes with age, by comparing younger (8–13 years old) and older respondents (21–36 years old) (Tal-or, 2007:405). The second case is a theoretical interest in the social distance between the parents and their children. This is elaborated in the section below.

**General Support of Occurrence of TPE among Children is not the Primary Result**

The studies have not primarily addressed results to support the occurrence of TPE among children. In approximately 40 percent of the articles the occurrence is discussed in a more general manner to show that children or adolescents follow the patterns of adults concerning third-person effects, meaning that they ascribe larger effects on others than on themselves. Two of these studies look closer at TPE and the age heuristic in itself, the tendency that the gap between how others and oneself are effected increases with increased age among the adolescents (Day, 2008:246, Cho et al., 2008:171).

In the studies where there is a theoretical interest in the social distance between the parents and the children the parents rather than the children/adolescents are the respondents. These studies do not address TPE among children/adolescents but studies parental third person perception (PTPP) and the results in these studies emphasize the similarity in TPE between child and parent. The object of study is either harmful television in general (Nathanson et al., 2002), televised violence or sex in particular (Hoffner et al., 2002: Meirick et al., 2009) but also daytime drama (Tsfati et al., 2005). In comparing their own children to the children of others, other children are ascribed stronger media effects and their own child less as the well as the parent itself. An interpretation of this is that children are seen as extensions of the parents (Nathanson et al., 2002:389). The youngest children in these studies of the parent’s perceptions are three (Hoffner et al., 2002), four (Meirick et al., 2009), five (Tsfati et al., 2005:3) and seven (Nathanson et al, 2002) years old.

The most common characteristic in the results is not as expected the more general support of occurrence of TPE, rather the support TPE or reversed TPE due to specific media content or messages is. This result is found in nearly three fourth of the articles.¹ On the one hand these results support the fact that TPE increase with negative, unwanted or controversial media content/message. And on the other they support that the reversed TPE increases with pro-social messages or when it is regarded positive to be influenced. In other words as stated within TPE research that both the magnitude and direction of TPE

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¹One specific study can cover more than one characteristic.
depends on the desirability of the message (Perloff, 2002). Risk related content like substance abuse, violence, pornography or the prevention of risky behavior is the most common, especially the abuse of drugs, tobacco and alcohol (see figure 1). On the topic of drug related content and that TPE occur when a message is perceived negative or socially undesirable there are studies that give support for behavioral consequences in banning direct-to-consumer (DTC) ads on prescription drugs (Huh et al., 2004:569; 2007:379).

**Figure 1. Types of Content in Articles on TPE and Children/adolescents**

![Figure 1](image)

*Comments*: The diagram above show the percentage of occurrence of different types of content studied in the articles on TPE and children/adolescents, n= 53.

Drug related content is also used to support that pro-social messages like anti-drug use and attitudes towards drug use among adolescents lead to reversed TPE (Cho et al., 2008:171). “The results suggested that adolescents estimated the anti-drug ad effect on the basis of their behavioral experience, the self–anchored expectancy and of pro-social media effects (ibid:169). But not only respondent’s perceptions and intended actions are studied. There are studies look closer at drug abuse and other related substance abuse like alcohol in movies and films from a health perceptive (Stern, 2005) and what a primary care practitioners need to know about the influence of the media on adolescents Strasburg (2006). Risky content as tobacco is primarily studied in relation to anti-smoking messages. As discussed earlier with the intent to evaluate media literacy training in preventing risky behavior (Austin et al, 2005:76). But also through an interest in the importance of peer norms “[…] suggesting that smoking related media content may have a significant indirect influence on adolescent smoking via its effects on perceived peer norms” (Gunther et al., 2006:52). Even though the indirect effects of anti-smoking ads through peers
was stronger than for pro-smoking ads, the results are that the both types influence susceptibility indirectly through peers (ibid). Or in relation to specific media contexts like anti-smoking messages on television, radio, the Internet, in magazines and billboards or outdoor signs (Pack et al., 2007). On the topic of alcohol, TPE of beer commercials that encourage alcohol consumption (Lambe et al., 2005:281-282) or affects like humorous and fear-evoking anti-drink driving messages (Lewis et al., 2008) are studied. A conclusion from the latter being that content context (media type) is most relevant for TPE and behavioral consequences in relation to whom this significant “other” is (Lambe et al., 2005:290).

Another type of content that relate to the prevention of the risky behavior ascribed above is studies of public service announcements (PSA). They are a type of non-profit specific type of ads, trying to prevent risky behavior like substance abuse but also other types of risky behavior, like preventing sexual risks with safe-sex ads (Chapin, 1999). Studied are emotional responses to PSA’s and their perceived effectiveness of persuasion (Dillard et al., 2000, 2001, 2008) with the result that the judgments on the perceived effectiveness even if two dimensional can be reduced to one. Most individuals reported using more than one referent (person or group) when they made the judgments but the referent changes with both type of message and judge. But also how arousing fast-paced radio PSA’s, can decrease TPE (Chock, Fox, Angelini, Lee and Lang, 2007) with the explanation that is the largely the dominance of visual media that have been studied, not audio.

Generally studies of real effect studies of violence on aggression especially on children, is within media and communication (together with the studies of political campaigns) among the oldest in the field, and mostly researched within the context of television (see overviews by McQuail, 2009). In relation to TPE and children the content related to aggression like violence or the prevention of violence is related to three different media type context: First, like real effects, TPE is studied in relation to televised violence where both the children/adolescents (Scharrer, 2002; Nathanson et al., 2002; Meirick et al., 2009) as well as the parents responses (Hoffner et al., 2002) are in focus, and on the other hand in relation to both TPE and reversed TPE on anti-violence programs amongst the MTV generation (Chapin, 2005). Second, TPE in relation to violent video games (Boyle et al., 2008; Scharrer et al., 2006; Scharrer, 2008). Third, TPE in relation to violence prevention in schools (Chapin, 2008).

Sexual content in relation to TPE have besides studies in relation to safe-sex behavior in relation to PSA messages been studied from the point of comparing the support for censorship between violent and sexual media content (Meirick et al., 2009:221; Nathanson et al., 2002). With the result that parental mediation and support for censorship occurred more frequently on account of sexual than violent television. Their use of protective behavior depended on perceived threat for their own and other children, and perceptions of self- and response efficiency (ibid). But also as pornography on the internet (Lo et al., 2002, 2005), adult entertainment clubs (Lo et al., 2010) and
pornographic videos that depict women as sex objects (Lambe et al., 2005). Other types of risky content is connected with health and environment issues like TPE on the out brake of bird-flu in Taiwan (Weir et al., 2007, 2008) or on news coverage of dioxin regulation and wolf reduction (Jensen et al., 2005).

But there are some exceptions to study of TPE in relation to risky content or risky behavior like political advertisements (Cheng et al., 2008; Richardson et al., 2008; Johansson, 2007; Paek et al., 2005; Weir et al., 2007b) or commercial content like perceptions of materialism (Chia, 2010) or positive product advertisement (Tal-or, 2007). But also related to different values like stereotypes of elderly (Robinson et al., 2006; Umphrey et al., 2007) or minorities (Zhong, 2010) and views on femininity and masculinity (Zhang, 2010) and perceptions of thinness (Park et al., 2007).

To grasp the different characteristics of the results in the articles under study I have besides the general support for TPE, the support for parental TPE and TPE/reversed TPE found the following three ways that TPE among children/adolescents is discussed in 20 percent of the articles respectively: to support motivational or other individual factors to explain TPE, to support that TPE increases with increased social distance and in specific relation to TPE hypothesis or behavior.

Individual factors as support for the importance of self-enhancement (Hoffner et al, 2002:235; (Wei et al, 2007b:371), ego-enhancement (Boyle et al., 2008:166), biased-optimism (Wei et al, 2007:668; Zhong (2009:292) can play a part in explaining the occurrence of third-person effect. Nathanson et al. (2002) deals with the motivational factors behind parental protective behavior. Their results show that protective behavior is related to four factors: content, perceptions of audience (TPE), perceptions of one’s one abilities and perceptions of responses effectiveness (ibid:400–402). As mentioned earlier also demographics like age is used as an individual factor to explain the occurrence of TPE (Day, 2008:246) or gender (Scales et al., 2008:752) were males displayed more apparent TPE than females. Most of the results presented in the articles that support that TPE increases with increased social distance and in specific relation to TPE hypothesis or behavior lead towards identified knowledge gaps. The characteristics of these studies are therefore discussed below in relation to the knowledge gaps that remain.

**Discussion on what Knowledge Gaps that Remain**

The knowledge gaps that remain follow three themes: 1) Differentiations between self and others are in psychological studies implied to occur among children between the ages of 3–4 years, yet no study address how children develop TPE. 2) There is a tendency to follow the more general development within TPE research with the renewed interest in behavioral consequences. But the primary behavioral consequence studied in TPE in general and within studies of TPE and children is support for censorship. Few studies address
“real” behavioral consequences like parental mediation. 3) There is also a need for more theoretically coherent research on the importance of social distance.

A Lack of Studies on Occurrence and Development of TPE among Children

The question posed is at what age is it fruitful to begin research on TPE, and at what age does third-person effect begin? There are studies that show that even really young children between the ages of one and two and a half year old can sense how their parents and caretakers may view their conducts and how their views might matter to their action (Kidwell et al., 2006:1). Stipek and Hoffman (1980) showed that children between three and six allocate higher rewards to themselves than others. With a reference to Henriksen and Flora (1999) there is also an article that claim that third-person effect occur at such an early age as four (Roese, 2007:133–134). But a mix-up must have been made between years and grade, because the youngest one in the article by Henriksen and Flora is in the fourth grade (meaning 9 years). So the actual ages when TPE first occur are unclear. But in the interest of further studies it is stated that even though the differentiation between self and others do occur at early ages, it is first at the age of seven that the differentiation occur as a regular pattern (Frey and Ruble, 1990).

There is a Tendency to Follow the Development in the Field of TPE in General

Dillard & Peck, (2000, 2001) call for more research on the link between third-person effects and consequences on behavior. In another article, a meta-analysis on TPE and behavioral consequence the authors urge us to move further, to leave the third-person effect perception hypothesis and move over to the behavioral hypothesis (Xu & Gonzenbach, 2008:376). The argument for this shift is taken from two of the most influential authors on TPE, Perloff (1999) and Gunther & Storey (2003). The reason for this within the common body of research (as stated by Salwen, 1998; Perloff, 1999; Gunther & Storey, 2003) is that now that most about TPE is already known it’s time to deal with the really interesting parts of the original TPE hypothesis posed by Davison (1983:3). But to bear in mind though, the expectations on the outcomes compared to studies of the perceptual part should be modest. The results of the meta-analysis show that when the authors compared behavioral consequences to third-person effect perceptual hypothesis the size of the effects on behavior was weaker and inconsistent (Xu et al., 2008:382).

But support for censorship has been the most studied behavioral consequence of TPE, both within the general studies of the TPE hypothesis as well as more specifically on children/adolescents. With the support of Rucinski & Salmon (1990) and Gunther (1995), Xu et al. (2008) argue that the most commonly researched third-person effect behavioral aspects is consequences in the form of support for censorship (Xu et al., 2008:367). In resemblance with what has been showed in this review, the most prominent body of research on consequences has also been within questions of support for censorship. What we learned from this research on children/adolescents is that it is not yet clear whether it is first-, second or third person perceptions that lead to the most
support for censorship. If focus is put on explaining the behavioral consequences, then preferably all three perceptions should be caught up in further studies. But another reason or the call for more research on behavioral consequences within the research on children/adolescents is plausible. As showed in this review it is not that unusual (approximately 20 percent of the articles cover these issues) with studies of behavioral consequences. The reason behind a renewed turn towards behavioral consequences is rather a more specific one: to leave consequences like support for censorship, and to begin to study “real” consequences. Like for example made in the study by Tewksbury et al. (2006), were emotional anxiety as a consequence of third person effects are studied. Like Tewksbury et al., Xu et al. (2008) in the beginning of their meta-analysis urge us to also move from studies of censorship to other areas of behavioral consequences (ibid:375). The authors argument for that when it comes to other areas than censorship the links are more contradictory (voting, self-image of towns, body image etc) (ibid:377). Like in the problem of all effect studies made upon cross-sectional data like the data used in the study by Xu et al. (2008), there are however still a theoretical and methodological problem when it comes to causality (and other issues) (ibid). Even though Tewksbury et al. (2006) was successful in analyzing consequences of third-person perception of violence on increased anxiety, the general results by Xu et al. (2008) are discouraging. The latter study (meta-analysis) was not successful in to draw focus beyond censorship into real-life consequences of third-person effects. The reasons discussed are either that censorship is a unique behavior and that third-person effect behavior consequences are only true in specific context or that the research somehow is inconsistent (Xu et al., 2008:382). To be on the safe side when analyzing data on TPE behavioral consequences both the support for censorship as well as alternative behavioral consequences should be included, like for instance parents interventions on children’s media consumptions.

A field of interest where “real” behavioral consequences of third-person perceptions on children can be found is within the field of parental mediation. When it comes to the behavioral aspect, if not actually studying the children themselves, there is another field of interest that could be relevant. The field is called parental mediation (see Nathanson et al, 2001; Hoffner et al., 2002; Tsfati et al., 2005) or parental third-person perception (Meirick et al., 2009: 230-231). The article by Tsfati et al., (2005) makes it clear that when it comes to parental mediation, even if not specifically related to third-person effect is represented in the literature way before 1999 when Henriksen and Flora as well as Chapin wrote their articles on children and TPE. This leads to a whole new body of research. Most of the research I came across searching for studies on children/adolescents seems to primarily relate to television and seems to be from the 1990’s. So it could be fruitful to bring the two complexes together in real time, for instance on parental mediation of online gaming and use of the Internet. More specifically in relation to young children as purposed between the ages of three to five and six to eight years of age is to focus on the parents views of these younger groups, as performed when focus was on parental
mediation on television shows and choice of friends (Tsfati et al., 2005) on television violence and support for censorship (Hoffner et al., 2002) and on commercials and materialism (Meirick et al, 2009).

More Theoretically Coherent Research on the Importance of Social Distance

In relation to the social distance corollary the hypothesis: the more distant the social corollary, the larger the perceptual gap between self and others in estimating media effects (Wei et al., 2007b; Zhong, 2009), could be further investigated. Especially the relationship between perceived impact on the one hand one-self, one’s own child/children and the friends of one’s child/children and on the other hand the child self, the child’s friends and other children. Closeness in social distances has been shown to be larger with friends than with parents (Chock et al., 2007:621 were children ascribe greater influence on their parents due to tobacco advertisements, than they ascribe their friends, even those friends that smoke). But also the opposite when it comes to younger children, when the parents ascribed similar third-person effects on themselves as their own children (Nathanson et al, 2002:389; Tsfati et al., 2005:3). And if also other children are added to the models impact is greater on other children than their own (Tsfati et al., 2002: ibid). There can also be interesting results from studying the third-person effect inside the age heuristic, where older children assess’ greater impact on younger children than themselves (Scharrer et al., 2006:212). Besides the methodological issues, that some of the results are not statistically significant, critique has been directed towards the article by Henriksen and Flora (1999) when it comes to the importance of a coherent use of concepts in measuring social distance and its direct or indirect influence on TPE (Umphrey et al., 2007:313). As a general recommendation also the possibility to compare the results to the outcome of other TPE studies should be made possible, like for instance through studying differences between oneself and others, and as noted the questions are not to be separated (Nathanson et al., 2002). As well as studies of social distance and third-person perceptions are of interest for further studies, the relation to the TPE hypothesis is. “[…] severity of media influence on both one’s own and others’ children may be an important factor in research on protective behaviors” (Nathanson et al., 2002:389). Below a conceptual model for further quantitative studies on TPE and TPE behavioral consequences built on the discussion above is presented.

Table 2. Conceptual Model on the Social Distance Corollary and Third-Person Effects and TPE Hypothesis on Children/adolescents

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<tr>
<th>Social distance</th>
<th>One hand:</th>
<th>Other hand:</th>
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<td>Oneself</td>
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<td>Censorship</td>
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Finally, it is striking that there are few studies performed outside of America. TPE are said to differ with media types, media content and cultures (Cohen & Davis, 1991; Gunther, 1991; Gunther & Thorson, 1992; Henriksen & Flora, 1999; Hoffner et al., 2001; Mutz, 1989; Perloff, 1989; Rojas, Shah, & Faber, 1996; Rucinski & Salomon, 1990; Scharrer, 2002). But it is remarkable that if we look at context as in country, only two studies relate to European countries and only one study relate to a Nordic country (Johansson, 2005).

Appendix

Table A1, Articles used in the review with age-span, n-values and types of uses

<table>
<thead>
<tr>
<th>Articles</th>
<th>Age 1</th>
<th>N1</th>
<th>Age 2</th>
<th>N2</th>
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<th>H</th>
<th>III</th>
<th>IV</th>
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<td>Austin et al. (2005)</td>
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<td>Boyle et al. (2005)</td>
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<td>Chapin (1999)</td>
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<td>Chen (2010)</td>
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<td>Che et al. (2008)</td>
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<td>Chon et al. (2007)</td>
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<td>Delorme et al. (2006)</td>
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<td>Diller et al. (2001)</td>
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<td>Diller et al. (2008)</td>
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<td>Golen et al. (2006)</td>
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<td>Gunther et al. (2004)</td>
<td>14:12</td>
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<td>Henriksen et al. (1999)</td>
<td>12:13</td>
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<td>Hoffner et al. (2002)</td>
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<td>Hult et al. (2009)</td>
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<td>Huh et al. (2004)</td>
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<td>Huh et al. (2006)</td>
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<td>Huh et al. (2007)</td>
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<td>Jeffers et al. (2008)</td>
<td>14:395</td>
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<td>Jensen et al. (2005)</td>
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<td>Johansson (2005)</td>
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<td>Kippen et al. (2005)</td>
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<td>Land et al. (2005)</td>
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<td>Lewis et al. (2002)</td>
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<td>Lo et al. (2002)</td>
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<td>Lo et al. (2010)</td>
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<td>Merck et al. (2009)</td>
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<td>Nettleton et al. (2002)</td>
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<td>Peck et al. (2005)</td>
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<td>Peck et al. (2007)</td>
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<td>Per et al. (2007)</td>
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<td>Richardson et al. (2008)</td>
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<td>Robinson et al. (2006)</td>
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<td>Rode et al. (2007)</td>
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<td>Salisbury et al. (2005)</td>
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<td>Scalet et al. (2009)</td>
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<td>Scherrer (2002)</td>
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Comment: In some articles more than one study is presented. The letters before age imply the following: A=University students; C= College students; P=Parents or caregivers to the ages specified. In the types of uses: I=TPE occur among adolescents/children; II=TPE/reversed TPE due to certain kind of content; III= TPE increase with increased social distance; IV=TPE and motivational or individual factors; V=TPE and behavioral factors; VI=TPE in a more general manner. In the NORDICOM database Ncom there are some overlaps of articles due to the fact that some of the reports are originally written in Swedish (Berglie, 2004 is compatible with the content of Johansson, 2005). The chapter by Gunther et al, (2000) will be included later (not included in this version due to lack of time to implement).

References


Cheng H & Riffe D (2008) “Attention, perception, and perceived effects: Negative political advertising in a battleground state of the 2004 presidential election” In
MASS COMMUNICATION AND SOCIETY, Volume: 11, Issue: 2, Pages: 177-196.


