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Understanding Pre-Teen Consumers' Social Media Engagement

Abstract

Social media (SM) platforms are frequently used by pre-teen (8-12-year old) consumers for curating their self-identity, developing social relationships and for learning. This paper identifies the building blocks that drive pre-teen SM engagement. We use the Gioia method to analyse interview data collected from 32 pre-teens and parents, in France. Findings show that the primary building blocks are *FoMO (Fear of Missing Out) and social inclusive experience, being noticed online*, *multiplicity, excessive use (without guidelines)* and *self-regulation*. Identity constructs (self-identity and social-identity) are used to explain SM engagement – and to empirically define core conceptual building blocks (aggregate dimensions) that drive SM engagement. We contribute to consumer theory by developing a holistic research framework to examine pre-teen SM engagement. Self-identity and social-identity theories help explain the factors that drive pre-teen SM engagement and explain push/pull influences of parents and schools in encouraging or discouraging certain behaviour. We build on current research into SM usage, drawing from the fragmented existing literature, to reveal causes of both excessive screen-time and SM usage among pre-teen consumers, which may indicate antecedents of future adult behaviour. Practical and regulatory policy issues are considered and addressed.

Introduction

This study addresses gaps in the fragmented literature on social media (SM) engagement. Researchers acknowledge that SM enable individuals to create and share images, maintain an online presence, interact and engage with others for formal and informal communication, and curate online identity through user-generated content (Dhir et al. 2021; Vrontis et al. 2021). The impact of SM engagement on adolescents is a topical field of interest in the academic community (Ferguson et al., 2014), acknowledging the link between deviant behaviour and excessive use of SM (Mubarak and Quinn, 2019). Little is known, however, about children's consumption of SM (Rozgonjuk et al. 2021). We address this gap by examining pre-teen (8-12-year old) consumers' SM engagement.

The scope of research into SM engagement covers SM influencers (Vrontis et al. 2021), SM as a social change agent (Yannopoulou et al. 2019), use of SM platforms (Muhammad et al., 2021), impact on self-esteem and satisfaction (Dutot, 2020), SM for recovering trust lost owing to COVID-19 (Wang et al., 2021) and senior users (Bui, 2021). Yet, these studies overlook pre-teen consumer engagement and what prompts them to engage with SM (Haddon, 2015).

SM usage has become a normative part of adolescent behaviour (Coyne et al., 2020). Children are increasingly accessing SM content through their mobile devices (Pasquale, 2020), including purpose-built platforms such as *Google Classroom* and *Ecole Directe* that connect pupils with their teachers and schools (Blasco, 2021). Facebook, TikTok, Instagram, YouTube and Snapchat are also widely used by children aged under 13, who circumnavigate the minimum age policy for opening an account (De Veirman,

Hudders and Nelson, 2020; Martínez and Olsson, 2019). Kim (2017) calls for a better understanding of how individual, digital and social factors influence pre-teen SM consumer behaviour. This sentiment is echoed by Dwivedi et al. (2021) who also indicate that the regulation of SM marketing will come from both inside and outside the industry, yet often lags behind technological advancement, which points to the need for continued scholarly research.

The functional *'building blocks'* of SM (Kietzmann et al., 2011; 2012) offer insights into how children engage with SM to construct their own self-identity (Martínez and Olsson, 2019) and social-identity (Reyes-Menendez et al. 2020). Hence, *identity constructs*[1] may help explain children's SM engagement. In this paper, the 'Honeycomb Model' (Kietzmann et al., 2011; 2012; Baccarella et al., 2018) offers a theoretical lens for identifying factors that drive pre-teen SM usage – and for developing a framework. In this paper, we take an inductive approach to address gaps in knowledge and attempt to answer the following research question: "*what factors drive pre-teens to engage with SM*?" Our specific objectives are to: (i) identify the building blocks associated with pre-teen SM engagement; (ii) explore the role played by self-identity and social-identity in pre-teen SM engagement. To add context, we investigate how the parent/pre-teen and school/pre-teen digital interfaces influence SM engagement.

We contribute to the emerging-yet-fragmented literature by: (i) developing a data-driven holistic research framework of the building blocks of pre-teen SM engagement, using

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[1] Dupot (2020) interprets personal (self)-identity and social-identity as two different theories, underscoring debate over similarities (Stets and Burke, 2000) and differences (Hogg, Terry and White, 1995) between the two. We treat them as separate-yet-related aggregate dimensions, as informed by our data and consistent with our methodological approach. "The main difference between identity theory and social identity theory is how they define the influence of individuals on themselves with respect to the influence of the society" (Reyes-Medendez, Saura and Thomas, 2020:2).

the *Gioia* method (Gioia, Corley and Hamilton, 2013); and (ii) using identity constructs to understand the drivers behind pre-teen SM engagement. In addition, we explore the interplay between the building blocks and external push/pull influences from parents and schools.

Our results show how pre-teens self-regulate their behaviour individually and in groups – a phenomenon overlooked in existing studies. Acknowledging the lack of research exploring what prompts pre-teens to engage in SM, the literature review (which follows) draws from five strands: pre-teens in the era of social technologies, parent/pre-teen and school/pre-teen interfaces, self-identity theory, social-identity theory and relationships, and building blocks of SM engagement.

We build upon the literature on children as consumers (Pourali, Zadeh and Yacyachi, 2016; Kowalczyk and Royne, 2016) and young consumers in the digital era (Berg, 2018; Hook, Bazter and Kulczynski, 2016; Lichy, 2011), by showing how they engage with SM for identity building (self-identity and social identity). We develop a framework to show how identity constructs (*self-identity* and *social-identity*) empirically define the core conceptual building blocks that drive SM engagement, which may reveal antecedents of future adult SM consumer behaviour, acting as a guide and foundation for researchers.

1. Theoretical background

The literature review introduces the building blocks of SM engagement, then outlines the key concepts that emerged from our study, in line with the Gioia method (c.f., Mäntymäki, Baiyere and Islam, 2019). As the notions, themes and dimensions emerged from our empirical findings (Lillqvist et al. 2018), the literature was used to refine our

categorization of building blocks and relationships.

SM engagement captures a variety of actions, from enabling users to stay in touch with other users in their 'social network' (Loiacono and McCoy, 2018) to empowering consumers (Tajurahim et al. 2020) – yet it creates challenges relating to the 'dark sides' of SM usage (Boer et al., 2021; Coyne et al., 2020; Dhir et al. 2021). Potentially negative implications of information technology usage constitute fruitful research territory (Dwivedi et al., 2021). Our research contributes to this body of knowledge by identifying what drives pre-teens to use SM, acknowledging that usage is somewhat mediated by parents and schools, who influence and shape their SM engagement.

2.1 Building Blocks of SM Engagement

Inspired by Social Network theory (Granovetter, 1973) and high-velocity markets (McCarthy et al., 2010), Kietzmann et al. (2011;2012) develop a Honeycomb Model to show the 7 functional building blocks of SM activities, which they identify as: identity, conversations, sharing, presence, relationships, reputation and group. Each building block enables researchers to explore a specific facet of SM engagement, and therefore provides a useful theoretical lens for our study. The building blocks are not mutually exclusive and are not required to be present in all SM activity. Extending the framework of Kietzmann et al. (2011;2012), Baccarella et al. (2018) adapted the building blocks to show the multidimensionality of observable 'dark side' phenomena and negative consequences of SM engagement. For further details, please see Appendices: "Supplementary materials (A)".

Using the Honeycomb Model as structural inspiration for this paper, we take an

interpretive approach to empirically develop building blocks that relate to *pre-teens* (i.e., 8-12-year olds) online, drawing attention to identity constructs, as demonstrated below.

2.2 Self-Identity Theory

The 'self' is a collection of identities, reflecting the roles that a person occupies in a social structure. Identity theorists argue that the self is a social construct (Stryker, 1968). Our behaviour is not *'just human nature'*; we actively create our identities from people, ideas and objects around us (Kimmel, 2010). Self-identity encompasses internally generated role-expectation (Thoits and Virshup, 1997), capturing the question 'who am I in my own eyes?' (Lee et al., 2006). It is linked to self-presentation, which refers to the process of communicating one's image to others (Baumeister and Hutton, 1987). Studies show that SM provide a platform for pre-teen self-presentation activities associated with identity development (Yang et al., 2017). Self-identities, forged between the ages of 6 and 14, are a self-concept and an orientation towards achievement that will play a significant role in shaping individual success in school, work and life (Eccles, 1999). Self-identity, personal factors, and the SM user's conception of themselves, which originates from other members within SM groups, will influence the decision to use SM (Dutot, 2020). These concepts may help explain the drivers of pre-teen SM usage. They provide a rich context for understanding the building blocks of SM engagement during this pivotal developmental stage.

2.3 Social-Identity Theory

Social-identity refers to how individuals enhance their self-concept by becoming members of social groups (Hogg et al., 1995), and make "social comparisons that

bolster the status of the 'in-group' (to which they belong) at the expense of the 'outgroup'" (Gillooly et al., 2020:1505). Oliveira, Huertas and Lin (2016) show that social identity has a positive impact on young consumers' (aged 16-24) engagement in Facebook.

Pan et al. (2017) examine how SM users perceive themselves at two different levels: a collective-level identity that views the self as a member of a social group ('the group') and a relational-level identity that views the self from the perspective of interpersonal relationships. Equally, the concept of homophily (McPherson et al., 2001) – '*birds of a feather flock together*' – applies to SM for predicting personal attributes based on the attributes of nearby individuals in the social group (e.g., Thelwall, 2008).

Hook et al. (2016) highlight the complex relationships that exist between evaluative social identity (the comparison of in-group and outgroup choices), network commitment, network recommendations and the personal self-esteem and emotions of 6-14-year-old children – and point to the need for further research on social identity regarding the online behaviour of children. Loiacono and McCoy's (2018) study of adolescent SM usage confirms that group norms predict behavioural intentions. This study seeks to extend such findings, as it explores interfaces that push/pull pre-teens to use SM.

2.4 Pre-teens in the 'social' era

'Childhood' is a social construct that varies culturally and evolves over time (Haddon, 2015). We focus on pre-teens (8-12-year olds), in line with Bauman and Tatum's (2009) study of websites and young children. Children nowadays stay digitally connected via mobile devices (Mertala, 2020). In western society, children are required to be active in

their own socialisation, which in the case of interacting with technology, is done without the benefit of leveraging intergenerational knowledge (Ling, 2000). The results of the survey *Global Kids Online* (http://globalkidsonline.net) affirm that more time is spent online at an increasingly younger age.

The pervasiveness of mobile and wireless devices has enabled *social media multitasking* (SMM) – i.e., concurrently using two or more media. SMM can cause distraction, reduction in memory, divided attention during in-class learning, and a decrease in an individual's productivity and performance, as well as encouraging shallow thought (Annisette and Lafreniere, 2017; Demirbilek and Talan, 2018). Similarly, Liu et al. (2015) found that multitasking with mobile devices can create stress, and increase insecure mobile behaviour.

For pre-teens, SM can also trigger harmful outcomes on health and well-being (Nagata, 2020), and consequently, much of the literature on young children and media deals with the negative effects, exploring how children can be protected from harmful aspects (Alper, 2013), including technology addiction and spreading divisive narratives (Celik, 2019). Scholars have raised concerns about the effects of SM usage on the well-being and cognitive development of youth (van der Schuur et al., 2015), as well as exposure to developmentally inappropriate or harmful content (Top, 2016). While studies cannot confirm a direct correlation between SM usage and health risks, Ilakkuvan et al. (2019) and Dhir et al. (2021) indicate that peer interactions on SM play a key role. The anonymity, lack of physical boundaries and 'perceptual challenges' – such as lack of life experience and maturity – provide ample opportunities for cyber-criminals to target young consumers (Pereira et al., 2016).

Engaging with SM provides children with many benefits, including connecting with other users, self-expression, entertainment, sharing files, as well as schoolwork, homework and information search (Bulfin et al., 2016). Yet, most discourse has explored SM usage by older children, especially teenagers (Haddon, 2015). Livingstone et al. (2014) found that although many children enjoy the Internet, they do not climb far up the 'ladder of opportunities' and instead stick to a few, repetitive tasks when using SM. This contrasts with how adults engage with SM, for whom social interaction and interpersonal connection is still a key motivation (Dutot, 2020). Adults tend to engage in a wider variety of online activities including information search, habitual diversion, fashion, and entertainment (Whiting and Williams, 2013).

2.5 The Parent/Pre-Teen and School/Pre-Teen Interfaces

Pre-teens are classified as vulnerable consumers (Sportswood and Nairn, 2016), and are therefore subject to greater surveillance than their older counterparts, with regards to online activities (Kennedy et al., 2019). Legal frameworks, such as the *Children's Online Privacy Protection Act* (1998) in the US, and *GDPR* (2016) in Europe, impose regulations on operators of websites or online services directed at pre-teens, but often provide no formal guidelines for actual usage or official age rating. Montgomery (2015) highlights the need to balance pre-teen SM usage with the commercial and governmental obligation to ensure pre-teens are not subjected to unfair, manipulative, and deceptive data collection and marketing practices. Currently, society relies heavily on parents for safeguarding children from online risks (Livingstone et al., 2017). Parenting styles in children's media usage have implications for developmental outcomes and adjusting to adolescence (Top, 2016) and the consumption of screen

media (Kowalczyk et al. 2016), necessitating positive communication activities of parents (Alt and Boniel-Nissim 2018). Thus, the parent/pre-teen interface plays an influential role on how pre-teens behave online, but has not been explored in depth by academics.

Parents are not the only external force that impacts upon pre-teen SM engagement; schools use SM to communicate with pupils and supplement classroom learning (Gibbons, 2020). Previous studies have explored how schools use SM to communicate with parents (Swindle et al. 2018), how SM may disrupt pre-teen ability to learn (van den Eijnden et al. 2018) and how SM can be used to enhance the learning experience of university students (Wells 2011). However, little research has examined how schools use SM to directly engage with, and shape the online behaviour of *pre-teen* pupils. Nevertheless, these relationships have been identified as fundamental in helping to protect pre-teens from the potential dangers of SM. A government inquiry noted that the impact of SM on children's mental health "should be certainly something that young people, their teachers and their parents are learning about" (House of Commons, 2018:12). For further details, please see Appendix: "Supplementary materials (A)".

Above all, there is a lack of research in this field owing to insufficient guidance regarding how to investigate SM usage by children (Moreno et al., 2013). Thomas and O'Kane (1998) argue that ethical problems involving direct contact with children can be overcome by using a participatory approach, which in turn assists with reliability and validity. Accordingly, prior to undertaking this research, consent was obtained from the parents and children, as explained in the next section.

Table 1, based on a selection of the literature reviewed, highlights the fragmented nature of the literature focussing on children/teens SM engagement.

3. Methodology

Expatriates were selected for this research on the grounds that expatriate family-life revolves around the social groups created through online interaction (Dey et al. 2018; Kizgin et al. 2020). The sample was purposely selected based on age and expatriate status, given that expatriate children are predisposed to adapting and socialising (Dewaele and Van Oudenhoven 2009). The Rhone-based *English-Speaking Families Group* agreed to email members about the research study, guaranteeing confidentiality and anonymity, to invite members willing to participate to contact the researchers. The parents were emailed further details of the study and notified that they could withdraw at any time. Those interested met the researchers face-to-face to give written consent for participating. The parents then asked their child for consent, after which the parents asked the child to provide written answers to a page of questions. Parents then added their comments, before returning the anonymised responses to the researchers by email. The participants were all native English-speakers (residing for at least one year outside their home country). All the pre-teen participants attend primary school.

Table 1 Summary of relevant literature focusing on children/teens and SM

Author	Age group	Theory or underpinning	Methodology	Areas of focus										
				Social identity	Self-identity	Multiplicity	Self-regulation	Being noticed online	FoMO	Overuse	Inclusion	Push/Pull Influences	Parent: Pre-Teen Interface	School: Pre-Teen Interface
This research	8-12	Social-identify and self-identify	Interviews	x	x	x	x	x	x	x	x	x	x	x
Alt & Boniel-Nissim (2018)	13-18	FoMo, PIU	Questionnaire				x		x					
Bauman & Tatum (2009)	3-12	Advantages and disadvantages of SM	Analysis of SM sites								x			
Berg (2018)	16-18	Consumer vulnerability	Questionnaire		x			x						
Boer et al. (2021)	10 - 16	Mental health	Survey						x	x	x	x		
Ferguson et al. (2014)	10 - 17	Body image and identity	Questionnaire							x			x	
Gentina & Rowe (2020)	15-18	Uses and Gratifications theory	Survey and I-PACE framework						x	x				
Hook et al. (2016)	6-14	Brand network and social identity	Ethnography	x					x					
Hou et al. (2014)	7-10	Online identity: behaviours & motivations	Ethnography & field studies		x									
Huk (2016)	10-12	UGT	Surveys and interviews	x				x	x		x			
Ilakkuvan et al. (2019)	18-24	Alcohol, tobacco & other drug (ATOD) use, symptoms of depression/anxiety re: SM use	Latent profile models	x						x				
Kennedy et al. (2019)	Children	Children's online vulnerability	Conceptual ecological paradigm	x									x	
Kim (2017)	0-17	Adolescent	Focus group,						x	x				

Author	Age	Topic	Method											
		psychopathology	interview											
Kopecký (2016)	8-17	Digital literacy and SM use	Quantitative	x			x	x	x					
Lagíňová & Fornálová (2018)	Children	Parental mediation	Secondary data analysis						x		x			
Lichy (2011)	13-15	Socio-spatial digital usage	Survey	x										x
Lin et al. (2019)	11- 17	Parental mediation	Survey	x					x		x			
Livingstone et al. (2017)	6-14	Mediation, digital literacy	Survey		x				x		x			
Mertala (2020)	3-6	Childhood perception of digital technology	Qualitative									x		
Montgomery (2015)	Children & youth	Communication	Qualitative	x	x									
Nagata (2020)	11-15	Health behaviour	Survey						x					
O'Reilly (2020)	11-18	Mental Health	Focus groups	x				x	x					
Pasquale et al. (2020)	8-13	Accessibility	Experiment					x			x			
Rosen et al. (2014)	4-18	Health and Behaviours	Survey		x				x		x			
Tomczyk & Selmanagic - Lidze (2018)	13	FoMo and addiction	Survey				x	x	x					
Top (2016)	10-17	Social Cognitive Theory	Survey								x			
van den Eijnden et al. (2018)	12-15	Compulsive & addictive behaviours	Longitudinal surveys		x			x	x					x
van der Schuur et al. (2015)	Youth	Media multitasking	Review		x				x					x

Owing to the lack of existing research, an open-ended questionnaire was adapted from the OFCOM worksheet designed for parents and teachers in the UK: https://www.ofcom.org.uk/__data/assets/pdf_file/0026/97226/Childrens-online-worksheet-2016-17.pdf. On average, it took the children 45 minutes to answer the questions and 25 minutes for the parents to annotate. The questionnaire yielded 32 completed responses from pre-teen SM consumers (8 boys and 8 girls) with parental annotation – see Table 2, which reflects the equal gender split reported in the national annual statistics (INSEE, 2021).

The parent/pre-teen interface and the school/pre-teen interface was explored by analysing the results of the interviews with children and parents. Schools were not interviewed. Data collection continued until a saturation point was reached, which is considered by some as a *golden standard* in qualitative research (Saunders and Townsend, 2016). Although saturation was achieved after analysing 13 transcripts when no further insights emerged from the data (Guest, Bunce and Johnson, 2006; Malterud, Siersma and Guassora 2016; Hennink and Kaiser 2021), an extra 6 interviews were conducted (3 children and 3 parents) to ensure no new themes emerged. The sample size is consistent with that of similar recent research focusing on children and their parents – such as Gronhoj and Gram (2020) who interviewed 11 parents regarding their children and healthy eating, and Nyberg et al. (2020) who conducted focus groups with 13 children to explore their perceptions of eating insects.

Following the Gioia method, data analysis was conducted in 3 steps, using an approach similar to Mäntymäki et al. (2019). First, each researcher acted as an independent coder, conducting first-order informant-centric analysis with open *NVivo* coding using the

Table 2: Participant Profiles

Case	Age	Country of Origin	Gender (F = female, M = Male)
C1	10	Australia	F
C2	10	Wales	F
C3	10	USA	M
C4	11	England	M
C5	11	England	M
C6	12	India	F
C7	12	Vietnam	M
C8	8	England	F
C9	9	England	F
C10	9	South Africa	M
C11	9	England	M
C12	8	India	F
C13	11	Greece	F
C14	12	England	M
C15	11	Spain	F
C16	9	England	M
C1 Parent	-	Australia	F
C2 Parent	-	Wales	M
C3 Parent	-	USA	F
C4 Parent	-	England	F
C5 Parent	-	England	F
C6 Parent	-	India	F
C7 Parent	-	Vietnam	F
C8 Parent	-	England	M
C9 Parent	-	England	F
C10 Parent	-	South Africa	F
C11 Parent	-	England	F
C12 Parent	-	India	M
C13 Parent	-	Greece	M
C14 Parent	-	England	M
C15 Parent	-	Spain	F
C16 Parent	-	Germany	F

terms used by informants to identify a large number of first-order themes. Axial coding was used to group similar themes, resulting in a smaller number of first-order concepts. In the second phase, *Iterative Thematic Inquiry* (Morgan and Nica 2020) was used to go back and forth between using prior theory to initiate the analysis process deductively and revising themes (building blocks) inductively. Codes were compared with findings from existing research to validate the resemblance of themes alongside similar studies; however, the researchers simultaneously considered the data to enable theoretical notions to emerge alongside the theories from the literature (McLeay et al. 2019).

First-order concepts were subsumed into second-order themes representing primary building blocks of SM engagement. Finally, the second-order themes were incorporated into conceptual building blocks representing aggregated theoretical dimensions, which were triangulated between researchers to ensure validity (Dineva et al. 2020). At the end of each phase, the research team scrutinized each other's results and, if necessary, revised their findings until a consensus was reached. Further details of the phases in our content analysis are provided in the Appendix B, together with selected quotes relating to each building block or theme are presented in table A3.

4. Results and Discussion

4.1 Research Framework: The building blocks of pre-teen SM engagement

In our research framework (see Figure 1), we identify 7 building blocks that drive pre-teen behaviour; self-identity and social-identity are core conceptual building blocks while

Figure 1: Pre-teen SM Engagement Holistic Research Framework: first-order concepts and building blocks
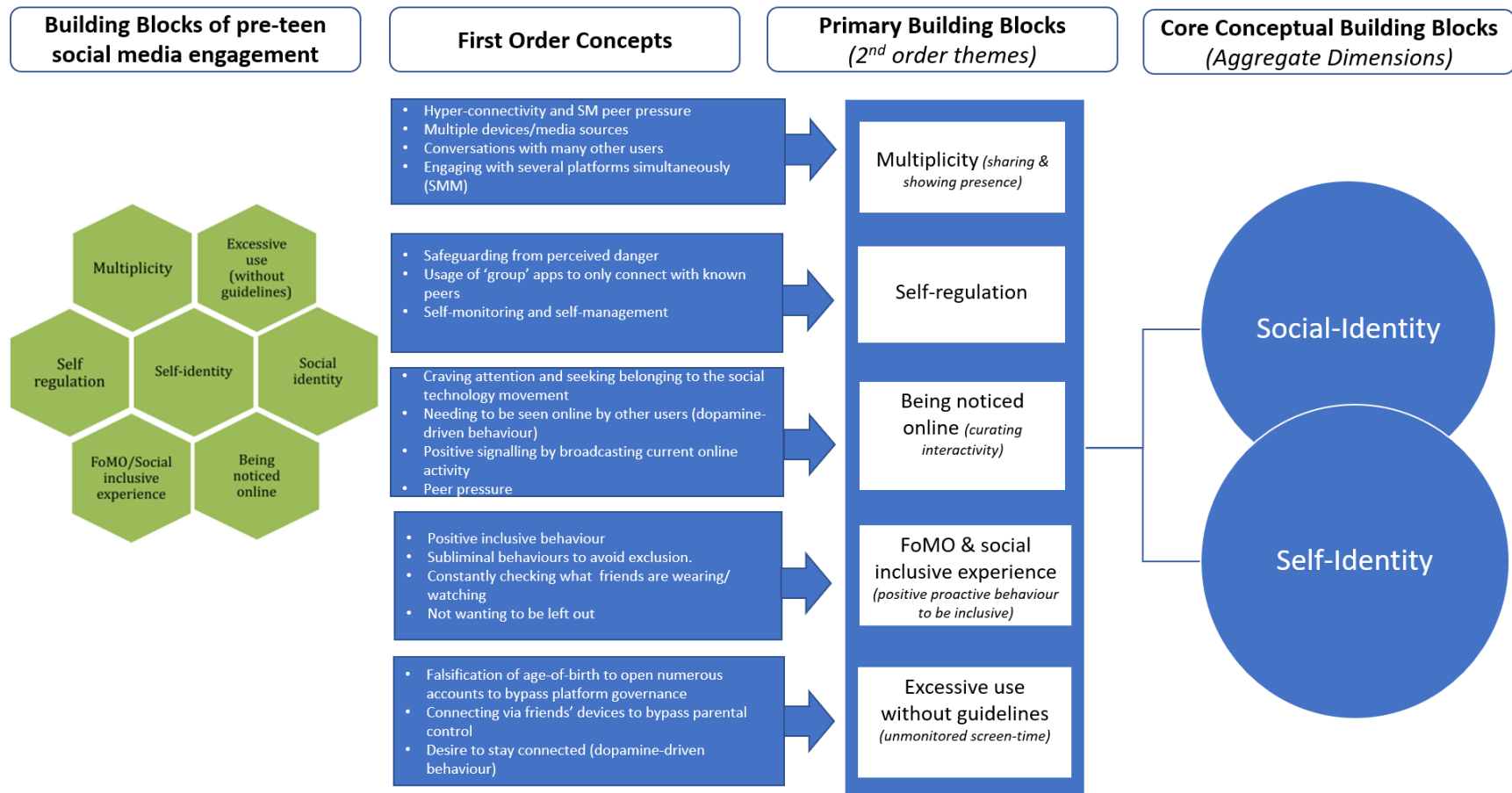
the others are primary building blocks. Further details of representative quotes associated with the framework are illustrated in table A3. Many of the primary building blocks such FoMO (Fear of Missing Out) have been highlighted in research focusing on adolescents or adults, yet some aspects (such as self-regulation) appear more specific to pre-teens. In contrast to prior research (Kietzmann et al. 2011;2012; Baccarella et al., 2018), we identify 5 data-driven primary building blocks (second order constructs) that intersect and inform each other. Self- identity and social-identity are conceptual building blocks which represent aggregate theoretical dimensions. As such, we make a strong and novel contribution to the field of SM research relating to a pre-teen context.

Our research framework resonates with the building blocks identified in the 3 conceptual papers that applied the Honeycomb Model to explore *identity, conversations, sharing, presence, relationships, reputation* and *group* (Kietzmann et al. 2011; 2012; Baccarella et al., 2018). For example, whereas *identity* was identified as a building block in earlier studies, our study suggests that *self*-identity and social identity are core aggregate dimensions of SM usage. Social-identity incorporates elements of *relationships, conversations, sharing, reputation* and *groups* which were conceptualised as separate building blocks in earlier papers. *Relationships/presence*, linked to pre-teen dopamine-driven behaviour (Macït, Macït and Güngör, 2018) and pathway to successful social interaction, and *conversation*s (pre-teens create and share content) are underlying conditions that help empower FoMO (Dhir et al., 2018) and social inclusivity. Group identity links to how pre-teens cluster together as a community, intersecting online and offline interactively (c.f., McLeay et al. 2019). In a similar way, self-regulation *(conversations)*, being noticed online *(curating interactivity)*, multiplicity *(sharing and*

presence), and excessive use without guidance *(unmonitored screen-time)* have some

links, but overall our building blocks vary considerably from those explored by

Kietzmann et al. (2011; 2012) and Baccarella et al. (2018). Each building block is

discussed in turn, in the sections that follow Figure B.

Each of the building blocks presented on the left-hand side of Figure B can have potentially positive or negative outcomes for children. Some blocks, such as 'multiplicity' and 'excessive use', are more directly related to negative outcomes, while behaviour associated with other blocks, such as 'self-regulation' and 'social/digital identity' can have either negative or positive outcomes. The pre-teen SM engagement reflects an overall desire and ability to protect oneself and peers from harmful repercussions associated with SM usage.

4.2 Self-identity is a conceptual building block that sits at the core of the behaviour manifested, providing evidence that children develop specific social skills to establish and manage their virtual relationships. Self-identity theory resonates with all of the primary building blocks identified in this paper. While our findings show that pre-teens are truthful about their identity, they are nevertheless deviant when talking openly about falsifying date-of-birth to overcome age verification for opening an account and also using friends' accounts to access SM.

Identifying with a group or group behaviour can be interpreted as a form of digital self-identity and signalling: "I normally talk about lots of different things, like discussing other people… when to go online to play games, when to go to the park to play" (C7). It resonates with the findings of Hou et al. (2014:389) that "children tend to be truthful in how they represent their identity online", focusing on each other's personal identity instead of judging or forming stereotypes towards other children. This level of online disinhibition raises concerns regarding sexual grooming and exploitation, and networking amongst offenders to propagate abusive imagery (Rashid et al., 2012). In an

undercover study of online operations against child sex abusers, MacLeod and Grant (2017) highlight criminals' online cohesion and diversity, namely Darkweb forums, organised around sharing child pornography and the use of IM as a medium for conducting probing interviews with child victims. Online disinhibition represents a hidden danger for children (Rashid et al. 2012). Raising awareness of the dangers created when children's information is not sufficiently protected (Hou et al., 2014), the negative consequences of SM can only be addressed by collectively understanding them (Montgomery, 2015).

4.3 Social-identity is also at the core of the behaviour manifested. The pre-teens in this study acknowledged social-identity and relationships. They shape their identities using self-presentation in the form of online relationships, and show awareness that spending too much time online would exclude them from the real-world. The results indicate that the older children spend noticeably more time on SM than the younger children. They recognise "You can spend too much time online because you always have computers and iPads at home" (C6).

The building blocks reflect real-world social influences in online interactions, resonating with the extended self in a digital world and deconstruction from the real-world (Fairlie and Kalil, 2017; Pan et al., 2017; Berg et al., 2018). For example, C13 notes "it excludes you from the real-life world", whilst C12 is the only child who uses no social media at all and has no access to technology other than through her parents' devices, who allow her only to play games for a specified time. SM offer both opportunities and challenges in the ways that pre-teens communicate and interact in various types of relationships (Lagíňová and Fornálová, 2018). In expatriate family-life, the social groups created

through online interaction strengthen complex social and personal ties by transcending geography (Dey et al. 2018; Kizgin et al. 2020). While children's online behaviour may appear limited when compared to the SM engagement of adults (Whiting and Williams, 2013), for many young people, SM interaction brings about desirable cognitions and behaviour, such as self-expression, sharing content, entertainment and enjoyment (Wu and Srite, 2021). Kopecký (2016) identified eight main motivations among Czech children for using Facebook (communicating with others, maintaining contact, peer pressure, playing games, meeting new people, sharing photos, Facebook as 'fashion', Facebook as an environment for developing virtual representation); four of which directly relate to communicating and maintaining contact with peers, in line with Huk's (2016) findings that children use Facebook because it arises from their natural need to build social interaction with peers. Our results complement and extend the findings of Oliveira et al. (2016) who suggest that social identity and the need for a positive relationship with other SM consumers will influence SM engagement for young adults – and of Dutot (2020) who explores how individual and collective identities influence satisfaction for French adults.

With push/pull factors intensifying digital usage (Webster, 2017), there are concerns about substituting *actual* interpersonal interactions with parents and peers for *virtual* interactions, leaving less time for development activities such as sports and social activities (Fairlie and Kalil, 2017). Digital dependency is a growing concern (Rokkum, 2014), particularly for pre-teens who are still in their developing stages of life – and possibly unaware of their addiction (Cheng and Li, 2014). Rosen et al. (2017) state that prolonged consumption of email, cell phones, IM/chat, video games and technological

toys by pre-teens can negatively impact aggression, eating habits, school difficulties and sleep patterns, potentially amplifying negativity through mediated interaction and group norms (Berg 2018; Loiacono and McCoy 2018; Celik 2019).

4.4 FoMO and social inclusive experience are interrelated. Following Lai et al. (2016) and McLeay et al. (2019), social experience involves positive proactive behaviour to be inclusive. FoMO is a psychological mind-set in which people are anxious that others in their social groups are leading more socially desirable and interesting lives (Dhir et al. 2018; 2019). The results of research on post-teens suggest that FoMO can be associated with problematic smartphone use (Gentina and Rowe 2020), low self-esteem and online vulnerability (Dutot 2020), social media fatigue (Dhir et al. 2018; Bright and Logan 2018), and decreased well-being and satisfaction (Dutot 2020).

Tomczyk and Selmanagic-Lidze (2018) in their study of younger consumers (average age 13) in Bosnia and Herzegovina, and Alt and Boniel-Nissim's (2018) research on 13-18-year-olds in Israel, drew similar conclusions regarding addiction – underscoring the need for self-regulation. In our study, those who exclude group members are held accountable for their actions – thus, "if a person deletes a member of the group, then we need a good explanation and usually we end up adding the excluded person back into the group" (C2). Studies of post-teens suggest that FoMO and social exclusion can lead to decreased self-esteem, online vulnerability and other problems (Bright and Logan, 2018) such as Internet addiction (Tomczyk and Selmanagic-Lidze 2018; Alt and Boniel-Nissim 2018). Certain responses suggest instinctive behaviour to avoid exclusion, for instance, "We talk about life in general, our secrets, what's happening at school, what's going on in the world. We have closed groups to communicate the same things to

everyone in that group" (C2). Parents were also concerned about FoMO, as highlighted by C11's comment that "my daughter is always using SM to check on what her friends are wearing and watching… she doesn't want to be left out and considered un-trendy".

4.5 Being noticed online is associated with pre-teens craving attention and being conditioned to aspire to belonging to the social technology movement: "I watch these YouTubers which helps me catch up with the latest trends at school like slime and squishies" (C1). With growing awareness of mental health issues (c.f., O'Reilly 2020), there is mounting parental anxiety regarding SM usage. The children's responses articulated a developmental aspect of being noticed, especially with sharing content, which was highly appreciated by the respondents, underscoring dopamine-driven behaviour (Macït et al. 2018). Yet, there was a latent undercurrent in the commentary that could be interpreted as the genesis of a darker side – articulated as a desire/need to belong to a specific group, acquire possessions (i.e., buying items for sale on Amazon or eBay) and envy on SM, as identified by Wu and Srite (2021). Signalling was important for the children: who is in a friendship group, and broadcasting what they are doing.

4.6 Multiplicity incorporates the variety of devices and platforms used, and the notion that pre-teens use SM for both obtaining knowledge and being entertained, enabling multiple conversations across devices with various groups or SM communities. This building block represents behaviour in line with studies of SMM that highlight the danger of concurrently using multiple sources of media (Demirbilek and Talan 2018). Many children in the sample have several SM profiles, despite most platforms' minimum age being 13. There is evidence to suggest that SM affects how children dialogue with other users, switching between apps designed for children. C9 engages with "Digigo to text,

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chat and live-stream with uncles, aunts and grandparents", and then overlays conversations with other platforms. C11 uses "parents' iPhones to go on YouTube, TikTok and Snapchat", whereas C10 will "message my friends on Snapchat and send selfies", "WhatsApp my mum" and read the weekly school newsletter via "an app on my iPad by scanning the QR code". Irrespective of country-of-origin, socialisation is taking place digitally. Some children focused solely on having online relationships, engaging with several platforms simultaneously – preferring to maintain constant presence, thus overlooking curating personal data. There is a danger that hyper-connectivity may lead to the erosion of social links between individuals, and especially for children who have a strong need to discover their identity and socialise with others. For example, one child (describing home-life) reported texting rather than talking to family members located in other rooms. While Baccarella et al. (2018) highlight the addictive use of SM and 'dark side' phenomena, the pre-teens in our study demonstrate pragmatic SM usage.

4.7 Excessive use (without guidelines) emerges from the children's comments and parental feedback. Where parents exercise control over access, children seek alternative access, via friends or falsifying information. Participants revealed: "I'm not allowed to use SM at home but sometimes I use my friends' accounts" (C9); "I had to give a fake date-of-birth so I could open a new Insta, since they're trying to stop children using it" (C3); and "I've been banned by TikTok… so I've created another account under a different identity" (C14).

The findings link with those of Fairlie and Kalil (2017) who highlight the danger of excessive usage by older children and adults, resulting in less time for sport and social activities. The dangers of excessive usage associated with digital dependency have

been widely documented (Cheng and Li 2014; Annisette and Lafreniere 2017; Dhir et al. 2021). The desire to stay connected is paramount, as illustrated by C5 who states "I like… to see what everyone is doing and to check who has responded to my posts", demonstrating dopamine-driven learned behaviour (Macït et al. 2018).

4.8 Self-regulation identifies two types of behaviour used by pre-teens to safeguard themselves from perceived danger. Firstly, participants mainly use 'group' apps such as WhatsApp, Instagram and Snapchat, which foster communication between known group members. Homophily (McPherson et al. 2001), which refers to the tendency for people to group together, helps to explain the self-regulation identified in this paper.

The second aspect relates to the use of selfies for broadcasting 'real time' situations to the groups. For example, "I use SM for posting updates like selfies of what we're doing, where we are, how we feel... to show people that we're friends with certain people by showing pictures of us together, and messages to tell people that it's someone's birthday party or a sleepover" (C4) – and "I also message my friends on Snapchat and send selfies, TikToks or bitmojis to tell them what I'm doing. I love posting reels and stories on Instagram too and do it a couple times a week. I love taking selfies" (C1). Self-monitoring and self-management behaviour of this nature leads us to believe that the pre-teens are experienced SM users, knowledgeable in regulating their online conversations and group interactivity, even though they are under the legal age for joining certain platforms. However, there is an argument in favour of including pre-teens on their parents' SM accounts, given that children would be safer if they were allowed to register officially for a platform where they would benefit from the organisation's SM policies on cyberbullying and other teen-safety policies (Montgomery, 2015).

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Self-regulation actions confirm the findings of Dey et al. (2018), Sung et al. (2018) and Berg et al. (2021), who note how selfies endorse and reinforce one's digital identity. These early signs of consciously creating an online image, conveying real or desired traits, demonstrate pre-teens' awareness of the impact of SM. Whilst their behaviour appears focused on positive signalling ("that we're friends with certain people"), the reality is that it also signals who is absent from the photo and therefore 'outside' the group. Given the nuance, it is not difficult to imagine a slip to negative repercussions of such behaviour. The results relating to the parent/pre-teen and school/pre-teen digital interface and factors that push and pull pre-teens to engage in SM are presented in Appendix A.

5. Conclusion

The diffusion of digital technologies is a phenomenon that is unparalleled in human history. However, the literature on social media (SM) engagement is disjointed – particularly for pre-teen (8-12-year old) consumers. In this paper, we address gaps in the literature by answering the research question: "*what factors drive pre-teens to engage with SM*?" In doing so, we address two specific objectives: (i) identifying the building blocks associated with pre-teen SM engagement; (ii) exploring the role played by self-identity and social-identity in pre-teen SM engagement.

Our results suggest that parents allude to feeling one-step behind whatever their children are doing online, not fully understanding how their children engage with SM. Despite the controls deployed, parents feel unable to manage their children's online

engagement, and schools incorporating SM usage for educational purposes are aggravating the confusion and anxiety. The speed with which digital technologies were introduced gave very limited time for the reflection and behaviour change needed for adequate assimilation into lifestyles, triggering many diverse changes in our social interactions and relationships, including unresolved issues such as Internet dependency and addiction.

A key contribution of this paper is the provision of a holistic research framework that, in contrast to the existing fragmented literature, identifies 5 primary building blocks of SM engagement that are represented by two core aggregate conceptual dimensions. We underscore the role of SM as an instrument for identity expression, exploration and experimentation. Pre-teens are at a pivotal age in developing their sense of self-identity. SM platforms provide a fertile environment for pre-teen consumers to experiment with their identity and express themselves through self-presentation, which enhances engagement with SM as a way for them to interact and socialise with peers and develop their sense of social-identity.

We make a second contribution by highlighting how identity constructs (self-identity and social-identity) are dissimilar (Hogg et al., 1995) – yet instrumental in driving pre-teen SM engagement and explaining push/pull influences of parents and schools in encouraging or discouraging certain behaviour. By doing so, we complement Dupot (2020) who interprets self-identity and social-identity as two different theories. We also contribute to debate over the similarities (Stets and Burke 2000) and differences (Hogg, Terry and White 1995) between self and social identity. Findings identify that parents and pre-teens are aware of SM as a source of disruption that can influence the learning

process, and, consequently, learning outcomes, as demonstrated during the lockdown (LeFauconnier, 2021). SM usage occupies free time, at the cost of real-life social interactions, playing a role as a 'crutch' or 'refuge' from real-world issues.

However, while the negative consequences are a concern to both parents and pre-teens, our results suggest that pre-teens are already engaging in self-regulatory behaviour in an attempt to offset negative consequences. To this end, we put forward 5 key practical findings/contributions (that reflect the extent to which the existing literature has overlooked emerging trends):

(i) Continued efforts by policy makers and social media companies – namely Facebook, TikTok, YouTube, Snapchat, Instagram and WhatsApp – are needed to protect pre-teens from the negative consequences of SM engagement. A better understanding of pre-teen self-regulation behaviour may enhance the effectiveness of interventions. Many pre-teens appear to be circumnavigating age restrictions; additional mechanisms for protecting children or encouraging them to use SM with AI-enabled filters, or supervision should be considered;

(ii) The top-down management of SM (by parents, school and policy makers) may not be sufficient or effective; there is an argument for a bottom-up approach to managing SM which involves dialogue with young consumers about their perceptions (to better understand how they perceive SM);

(iii) Pre-teens perceive the longer-term ramifications of using SM differently from older SM consumers – i.e., pre-teens cannot grasp the magnitude of Internet addiction, deviance and FoMO;

(iv) The peer pressure of 'joining in' outweighs individual choice;

(v) Parents, educators, community leaders and healthcare providers are generally aware of the negative effects that digital media usage can have on the lives of children, but these stakeholders lack the necessary information to recognize problematic use and foster healthy media habits.

These findings/contributions resonate with policy implications regarding the use of online platforms by schools and the time pre-teens spend connected, which may be instigating future addiction. There is scope for capitalising on the self-regulating behaviour demonstrated by the pre-teens in this study. A more holistic approach is needed for designing regulation and teaching SM literacy, to protect pre-teens from the negative consequences of SM. Top-down management is likely to be biased by media commentary on negative repercussions of SM usage, while bottom-up thinking will be driven by children's (largely positive) bricolage of online experience.

There are several limitations and areas for further research. The focus was on expatriate families living in France. Additional studies using a wider sample may enable a better understanding of SM engagement in other regions and contexts, and reveal how the building blocks may be context-specific. Exploring similarities and differences between expatriates and non-expatriates would also be useful. The children completed the survey alone (but with parental guidance, where needed); they were aware that their parents would see what they had written, and may have tempered their answers to meet their parents' expectations. Withholding the children's responses from parents may produce different data. While the school/pre-teen interface emerged as a key influence

on SM engagement, this study did not interview school teachers or managers.

Expanding the study to include school perspectives on pre-teen SM engagement would

be useful for policy-makers. Like any other small-scale exploratory qualitative study, the

results are not generalizable, but provide new insights based on rich data (Saunders

and Townsend 2016). Additional quantitative research with a larger sample size would

enable interactions between key building blocks to be empirically tested and causal

relationships confirmed, as well as identify how other factors such as social background

influence the results. Finally, this study was cross-sectional in nature. Longitudinal

research would highlight how building blocks and consumer behaviour evolve over time

in response to the changing socio-technical environment.

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Appendix A: Supplementary materials

The parent/pre-teen and school/pre-teen digital interface

Two main reasons emerge for using connected devices. One is the 'push' coming from teachers and schools who require classwork and homework to be done digitally, as noted by Bulfin et al. (2016). The other reason is individual, focusing on the 'pull', and relates to innocence and naivety, expressed by the desire to be seen to belong and be recognised as part of the crowd. This pull comes from the allure of a benefit, whether for knowledge "when you need help with homework you can always go to google or ask your friends for help" (C4) or for entertainment "watching videos and getting inspiration to try to film my own vlogs, Instagram reels or TikToks like I see others post" (C1). Pre-teen digital usage is therefore shaped by internal motivations from pre-teenagers, and external influences from their parents and schools.

All of the children in the study have access to (but not necessarily ownership of) a smartphone, tablet or iPad. Schoolwork mandates the use of technology such as iMovies (video editing software): "we also use iPads and laptops for classwork or to make an iMovie Trailer" (C4) and "for doing drama activities like making a script then filming a sketch or a clip" (C2). In addition, C3 states, "I have to use my laptop for doing homework". Likewise, many schools use a portal (or app with QR code) for communication between parents and teachers/school, driving children towards more screen-time than they might seek (Webster, 2017; Fairlie and Kalil, 2017). This interrelates with the building block of excessive use, as SM is being used by pre-teens for entertainment and by schools as an educational tool, which escalates screen-time.

Following Mustak et al. (2021), we use topic modelling (algorithms that look at a set of documents to find words that are highly co-located across documents, hence word-clouds) to visualise an overview of pre-teen and parental responses. Referring to the word-cloud presented in Figure A (in Appendix A), a term that appears more commonly in the texts appears larger, "Thus, a cursory look at the word-cloud provides a quick snapshot of the focus of written material" (Mustak et al., 2021:349). Figure A reflects the dominant discussion surrounding friends, parents, interactivity and socialising, as well as the mechanics of personal engagement expressed as gerund phrases. The choice of words such as 'school', 'homework', 'teachers' and 'study' indicates the key role that educational experience plays. In contrast, the parents' word-cloud underscores their interpretation of their children's digital lifestyle; 'use', 'time' and 'phones' were paramount. The words appearing in the secondary level – 'technology', 'iPad', 'school' and 'friends' – are the physical and digital drivers of the children's online behaviour. While there are similarities between both word-clouds, the parents articulate their concerns about the nature of digital content, impact of digital exposure and how to protect their children from the negative outcomes of social media.
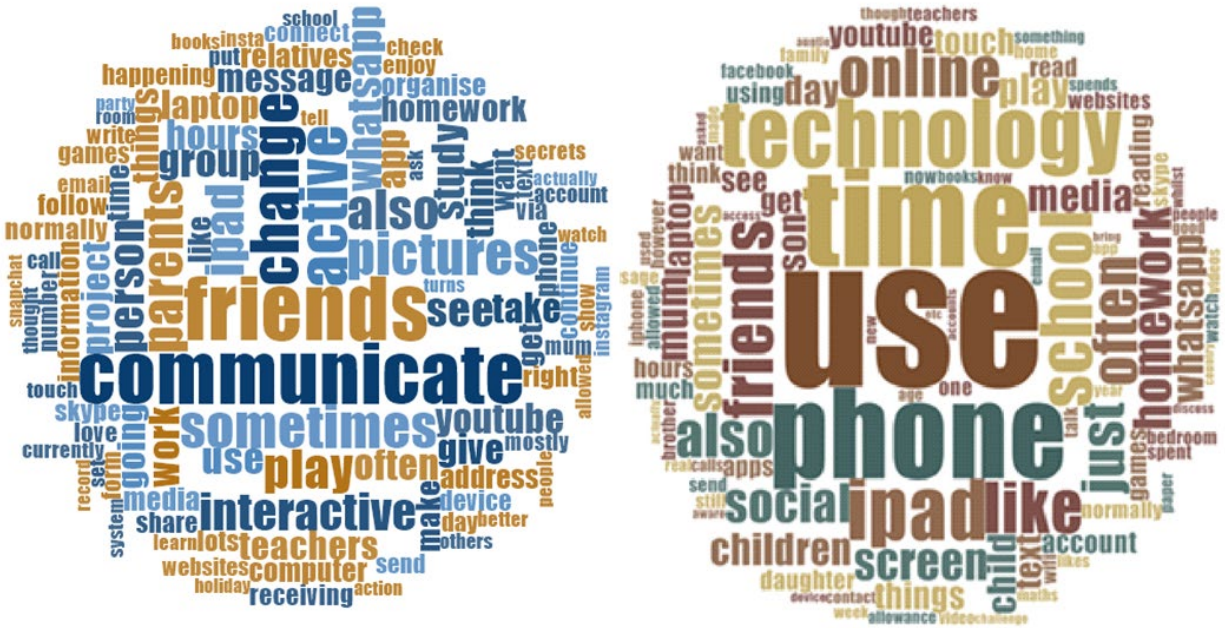
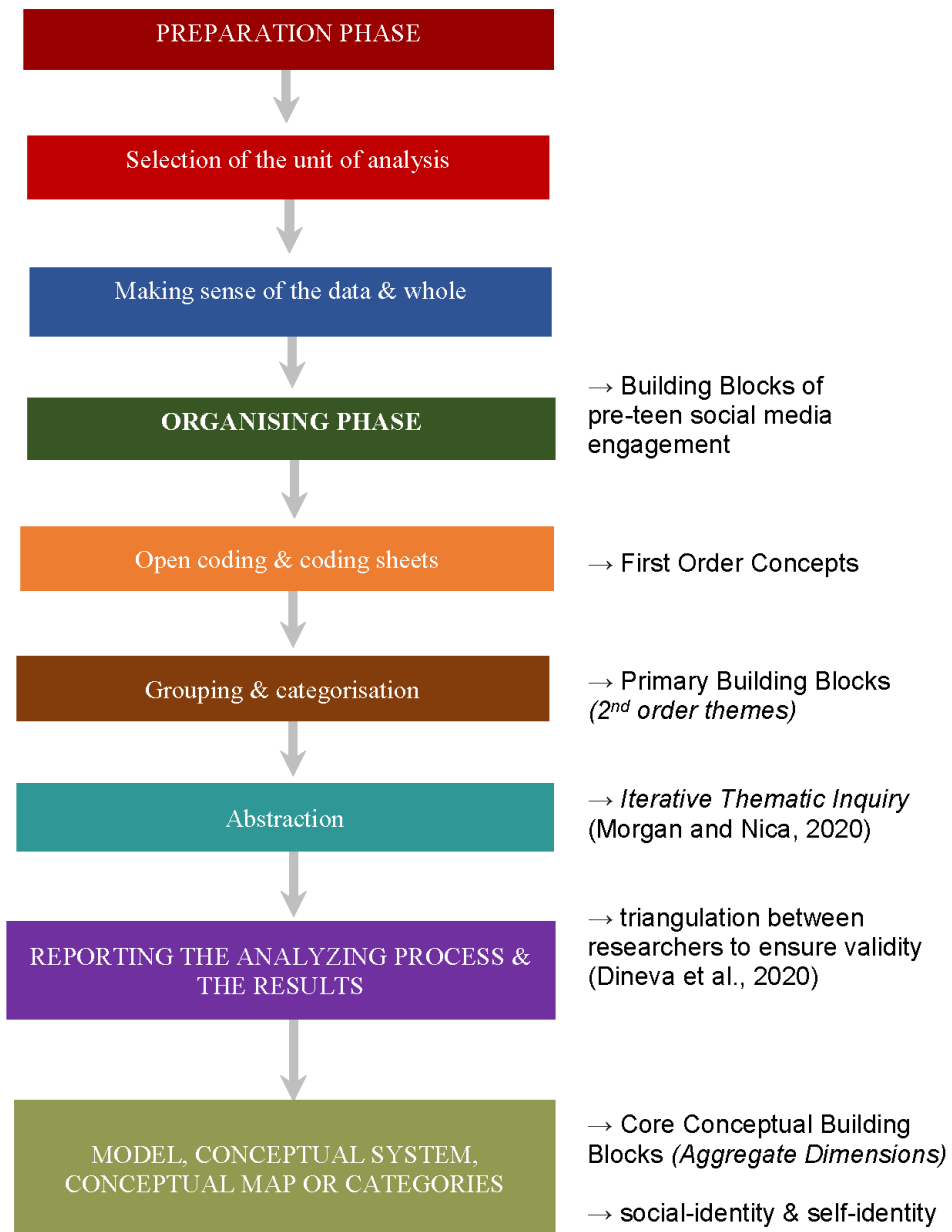**Figure A:** Word-clouds: Pre-teen (left) and Parent (right) responses

The level of multiplicity and excessive use came as a surprise to some parents: "This survey was timely, as it has made us both realise that too much time is spent on electronic gadgets" (C4 parent) and "I am disturbed when I see him simultaneously watching TV series whilst doing homework, and wish I didn't have to 'police' him in this way" (C11 parent). Underlining studies into SMM and FoMO, the results reflect the regulatory diverse behaviour of the children as they engage with SM, marked by empowerment, camaraderie and voyeuristic thrill. Seeking an inclusive experience, the children look out for each other in group situations. In contrast, parents tend to frame SM usage in relation to their own personal experience of passive/active behaviour (Lin, Vijayalakshmi and Laczniak, 2019); naturally, they are vigilant about managing screen-time, online safety and preventing their children from losing interest in offline life (Hou et al., 2014).

The findings confirm the literature that suggests children use SM for curating their own self-identity, developing social relationships and education. They also provide tangible evidence of two further forces that shape children's SM usage. Firstly, the notion of *institutional isomorphism* (i.e., processes that operate within the socio-technical environment) that explains peer pressure applied on organisations[2] has resonance for SM consumers. Individual consumer behaviour can be attributed to legal or political regulatory frameworks, such as government and school regulations for using online classrooms. Children need to use SM in order to learn in groups. Secondly, *peer pressur*e (Ilakkuvan et al., 2019) is an element that is filigree (in watermark) throughout the study, illustrating how the children use SM socially, linked with all seven building blocks – bound by conforming with peers. SM peer pressure is an emerging field of research (mostly focusing on deviance), difficult to investigate, and needs more attention.

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[2] DiMaggio, Paul and Powell, Walter (1983). The iron cage revisited: Institutional isomorphism and collective action in organisational fields. American Sociological Review, 48(2), 147–160.

Figure A1: Phases in the Content Analysis Process

PREPARATION PHASE	
↓	
Selection of the unit of analysis	
↓	
Making sense of the data & whole	
↓	
ORGANISING PHASE	→ Building Blocks of pre-teen social media engagement
↓	
Open coding & coding sheets	→ First Order Concepts
↓	
Grouping & categorisation	→ Primary Building Blocks (*2nd order themes*)
↓	
Abstraction	→ *Iterative Thematic Inquiry* (Morgan and Nica, 2020)
↓	
REPORTING THE ANALYZING PROCESS & THE RESULTS	→ triangulation between researchers to ensure validity (Dineva et al., 2020)
↓	
MODEL, CONCEPTUAL SYSTEM, CONCEPTUAL MAP OR CATEGORIES	→ Core Conceptual Building Blocks (*Aggregate Dimensions*) → social-identity & self-identity

Source: Adapted from Elo & Kyngäs, (2008), integrating Gioia methodology (Gioia, Corley and Hamilton, 2013).

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Table A3: Exemplary quotes

Primary building blocks	First-order concepts	Exemplary quotes
Multiplicity *(sharing and showing presence)*	Hyper-connectively and SM peer pressure	"I use Snap or Insta for chatting, but many different apps like *TousAntiCovid*[3], WakeTips, Netflix, Amazon Prime Video, Spotify, *TCL* ('Lyon City Transport'), Yuka, Google Maps, YouTube Music…" (C14)
	Multiple devices/media sources	"I'm always on my phone when I'm out of school, for playing games and social media – WhatsApp, Insta and Snap, Roblox – and replying to text messages, watching YouTube, Netflix, Amazon Prime videos, showing *Tous Anti Covid* – and I use my laptop for homework because I need the keyboard" (C15)
	Conversations with many other uses	"I use WhatsApp or SMS and Padlet" (C16) "Roblox, My Hero Academy, Hunter ex Hunter, Insta and Snap for talking to friends, TikTok, Netflix, Spotify, YouTube Music, *TCL* ('Lyon City Transport'), Yuka, Google Maps…" (C15)
	Engaging with several simultaneously	"I use WhatsApp most often, and Skype or text messaging. I stream Netflix and Amazon Prime. I go on YouTube to listen to music but streamed on our Stealth Air 2B hi-fi system. I also play online games such as Fortnight, PubG…. I used to like messing up websites, knowing how to use different things on the laptop and Internet – but once I knew how to do it I got bored and didn't come back to it" (C7) "it's good for killing time and having fun with friends… we have to have a phone for *TousAntiCovid*" (C15)
Self-regulation	Safeguarding from perceived danger	"I like to narrate what I'm doing when I'm doing my make-up or cooking like I'm in a YouTube video. I like that I can set my Twitter and Insta to private so not everyone can see my stuff and this keeps me safer online" (C1)
	Usage of 'group' apps to only connect with known peers	"I use SM for posting updates like selfies of what we're doing, where we are, how we feel... to show people that we're friends with certain people by showing pictures of us together, and messages to tell people that it's someone's birthday party or a sleepover" (C4)

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[3] *TousAntiCovid* app containing vaccine data and QR code for accessing public spaces.

		"I also message my friends on Snapchat and send selfies, TikToks or bitmojis to tell them what I'm doing. I love posting reels and stories on Instagram too and do it a couple times a week. I love taking selfies" (C1).
	Self-monitoring and self-management	"Some friends send vocal messages to each other if they don't want to type the message - but I wouldn't want other people to overhear my conversation so I don't do that" (C3).
Being noticed online *(curating interactivity)*	Craving attention and seeking belonging to the social technology movement	I'm not allowed to use SM at home but sometimes I use my friends' accounts" (C9) "I had to give a fake date-of-birth so I could open a new Insta, since they're trying to stop children using it" (C3)
	Needing to be seen online by other users (dopamine-driven behaviour)	"It's fun and easy to get in touch with my old school friends, and see what they're doing, and they can see what I'm doing… and I can do live-chat with my cousins to show them what I'm doing" (C16)
	Positive signalling by broadcasting current online activity	"It's good for taking photos and making clips, and sharing with different groups" (C15)
	Peer pressure	"I don't like it when a new version comes out and my version is older and older than everyone else's, I feel that I have to get a new phone or computer" (C15)
FoMO & social inclusive experience *(positive proactive behaviour to be inclusive)*	Positive inclusive behaviour	"Everyone is made 'administrator' of the group so that if someone doesn't agree with something like an image or the name of the group then that person can change it. If a person deletes a member of the group, then we need a good explanation and usually we end up adding the excluded person back into the group. In that way it's fairer because no-one is left out and everyone has a voice" (C2).
	Subliminal behaviours to avoid exclusion	"We talk about life in general, our secrets, what's happening at school, what's going on in the world. We have closed groups to communicate the same things to everyone in that group" (C2) "My accounts are set up on all my personal devices including an iPhone, an iPad and a laptop. These are all mine but my younger sister shares the iPad sometimes as her iPad is old and very slow" (C7)
	Constantly checking what friends are wearing/ watching	"It connects people, it provides entertainment, it is fun to use. I like going on my phone when I'm on the school bus (an hour into school every morning and an hour home) to see what everyone is doing and to see who has responded to my posts" (C5)

	Not wanting to be left out	"on Snap, we talk about life in general, our secrets, what's happening at school, what's going on in the world. We have WhatsApp groups to communicate the same things to everyone in that group" (C6)
Excessive use without guidelines *(unmonitored screen-time)*	Falsification of age-of-birth to open numerous accounts to bypass platform governance	"I've got four private accounts and two public accounts on Snapchat and WhatsApp; I created my own Instagram account last year and managed to fool them into accepting a fake date of birth, with a bit of help from my sister" (C13)
	Connecting via friends' devices to bypass parental control	"I'm not allowed to use SM at home but sometimes I use my friends' accounts" (C9) "I had to give a fake date-of-birth so I could open a new Insta, since they're trying to stop children using it" (C3)
	Desire to stay connected (dopamine-driven behaviour)	"social media is the best way to share information like announcing a birthday party invitation, asking if we can organise a sleepover with friends, letting parents know if we're going to be late home from school, or getting in touch with a parent who is working late in the office or working abroad" (C6) "I've been banned by TikTok for posting a violent clip, so I've created another account under a different identity… but it wasn't violent" (C14).