Attitudes and Emotions to Internet Safety: Trust and Digital Literacy in Mothers of Reception Aged Children.

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Abstract

Although there is a vast amount of literature available on child internet safety, most of this concentrates on older children over the age of eight (Holloway, Green & Livingstone, 2013). Research that has focused on younger (under seven) children often omits to include the parents' perspectives, which are pivotal to child internet safety management within the home (Livingstone, Haddon, Gorzig & Olfasson, 2011). This study focuses on this gap by exploring the views of parents of children under seven in relation to internet safety management. It provides insight into factors that affect how parents manage access to digital technologies within the home. In particular, the factors considered are, parents' attitudes and emotions to the internet, their level of digital literacy, and how trust affects parents' attitudes and emotions towards child internet safety. The research is based on a small scale study of parents' experiences and perceptions. Data was collected from six parents of younger children using in depth semi structured interviews and analysed using Interpretative Phenomenological Analysis. The study argues that the notion of trust is central to understanding younger children's internet safety. Parental levels of trust in digital systems were found to play an important role in how child internet safety was managed within the home. Bronfenbrenner's (1977) Ecological Systems Theory was used to interpret the complex relationships that surround family digital activities. The findings suggest that parental levels of digital literacy were significant in forming parents' opinions and decisions, about how they managed internet safety. In addition, findings revealed trust was subjective and complex and often elicited a need for parents to feel in control. This study proposes a model to understand how trust, digital literacy and child internet safety strategies used by parents might be understood, which has been called the Digital Trust Window.

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List of Abbreviations

BERA	British Educational Research Association
CEOP	Child Exploitation and Online Protection Centre
DTW	Digital Trust Window
EAL	English as an Additional Language
EST	Ecological systems Theory
GCSE	General Certificate of Secondary Education
GT	Generalised Trust
IPA	Interpretative Phenomenological Analysis
ISP	Internet Service Provider
OFSTED	Office for Standards in Education, Children's Services and Skills
PT	Particularised Trust
SRA	Social Research Association
STST	Socio-technical Systems Trust
WWW	World Wide Web

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1 Introduction

Digital influences increasingly affect families within the home environment with children accessing digital technologies at an increasingly early age and for longer periods of time (Livingstone & Bovill, 2001; Mekinc, Smailbegovic & Kokic, 2013). However, previous research focuses on the digital engagement of older children (over eight years of age), creating gaps within literature in how best to support parents of younger children when considering child internet safety (age five and under) (Holloway et al., 2013; Nikken & Jansz, 2011; Olfasson, Livingstone & Hadden, 2013). Child internet safety proves difficult to define; however, Duerager & Livingstone (2012) when discussing child internet safety, refer to the skills and strategies that individuals or groups use to mediate children's internet usage to promote a positive digital experience for children (2012). Child internet safety includes many different stakeholders working together, such as government, teachers, industry leaders, child welfare organisations, parents and children themselves (Duerager & Livingstone, 2012). In addition, child internet safety is suggested as a skill for life by the Metropolitan Police Service (2015), who proposes child internet safety a necessary skill to keep children safe whilst online. This research focuses on the experiences and perceptions of parents of reception aged children (aged four-five years, referred to as younger children throughout this thesis) in relation to child internet safety, and just as important, explores how the complex notions of trust affect the ability of parents to create an effective supportive environment.

The arrival of the internet within the home has affected family interactions, in relation to their leisure and social interactions, which is important because families increasingly choose to engage with digital technologies as a leisure or social activity (Livingstone & Bovill, 2001). Digital technologies are linked with the internet which is an internationally linked computer network, often including online aspects referred to as the World Wide Web (WWW), email, social media and search engines such as Google (Mekinc, Smailbegovic & Kokic, 2013).

Parents' attitudes and emotions towards the internet are a crucial element to my research. Research that considers attitudes has increasingly grown over recent decades (Albarracin, Johnson, Zanna, 2014). Attitudes can be defined as a psychological tendency that individuals express through assessing a particular entity with some level of favour or disfavour (Albarracin, Johnson, Zanna & Kumkale, 2014). Alongside attitudes this research will also consider the emotions that the participant felt when considering child internet safety. In attempting to define emotion it is necessary to understand that individuals can experience a diverse range of emotions, which are connected through thoughts and actions (Weiner, 1986). These thoughts and actions can include destruction, reproduction, incorporation, orientation, deprivation, protection, exploration and rejection (Plutchik, 2009). Emotion materialises in

different forms; these may include subjective feeling, cognitions and impulsive actions and behaviours (Plutchik, 2009). Emotions are connected to an individual's perceptions of the world, activating responses that allow people agency through their emotional responses (Godbold, 2015). This connection between perception and emotion will be used throughout this study to help address the research questions.

An overlying theme of my research is how parental digital literacy levels affect a parent's ability to effectively manage child internet safety. Digital literacy is often defined as a mastering of skills (Eshet-Alkalai, 2004). Though there is much debate surrounding the term digital literacy, Bennett (2012) also suggests that digital literacy relates to a set of skills and practices. Furthermore, Kress (2010, cited in Bennett, 2012) and Beetham and Sharpe (2011) propose that digital literacy requires a confidence in applying these skills and practices. However, Eshet-Alkalai (2004) suggests caution in singling out this mastering of skills as solely relating to technical capabilities as often skills include both cognitive and socio-emotional aspects of engaging within digital technologies. As suggested within these definitions this research considers how parents interpret their child's cognitive abilities and socio-emotional capabilities when interacting with digital technologies, and assesses how these considerations affect how parents mediate internet safety. This will be examined more within the literature review.

My study set out to explore and analyse parental levels of digital literacy and other contributing factors, using Interpretative Phenomenological Analysis (IPA). Underpinned by the work of Smith, Flowers and Larkin (2009), IPA qualitative interviews provide in-depth data surrounding the many different factors that influence child internet safety within the home, including digital literacy (see methodology). IPA sits well within the theoretical framework of my research (see methodology and literature review).

Bronfenbrenner's (1977) Ecological Systems Theory (EST) is adopted to display how an individual's development is affected by everything in their surrounding environment. EST can also be applied to the digital interactions that take place within an individual's environment, which demonstrates its suitability to help underpin my research. Bronfenbrenner (1979) suggests that child development can be categorised as a series of concentric circles. At the centre of these concentric circles is the microsystem. The microsystem directly impacts the whole family, involving different experiences and interactions (Bronfenbrenner, 1979). These interactions and experiences significantly impact on the microsystem according to how frequently they occur. More regular interactions or experiences have greater significance within the microsystem than those actions that appear infrequently (Lauricella, Wartella & Rideout, 2014). Parents who regularly role model digital behaviours within the microsystem have the

potential to substantially influence children's digital interactions. Wider parental digital activity throughout the ecological systems may lead to increased opportunities for parents to consider how they influence child internet safety within the home. My research is assisted by Bronfenbrenner's (1977) EST by considering how parental internet use and attitudes and emotions towards digital technologies may influence how they mediate child internet safety within the home.

A major theme that runs throughout my research is trust. Investigating trust relationships is a recent phenomenon within the social sciences (Freitag & Traunmuller, 2009). Family digital interactions within the microsystem require trust. In contrast to trust, the internet often elicits the need for control and security; however, the presence of trust should omit the need for control (Bierhoff & Vornefield, 2004). Similarly, individuals often seek to control the internet through how they perceive a more 'secure' digital environment, which may initially depend on the amount of trust they hold. Trust requires subjectivity through a balance between risk and individuality that requires flexibility within different situations (Yan & Holtmanns, 2007). The internet is highly objective and complex; individuals are required to attempt to reduce these complexities if subjective trust is to be gained (Bierhoff & Vornefield, 2004). The objective uncertainty of the internet is replaced by subjective certainty, which may enable a user to sustain and increase the amount of trust they display. Functionality, reliability and security are aspects that increase trust in the internet. Together these aspects can be summarised as the main components of socio-technical systems trust (STST) (Bierhoff & Vornefield, 2004). These points suggest that considerations of trust within family digital environments are important and hence my aim in this study is to understand how parents of reception aged children make choices when mediating child internet safety. Furthermore, I address the relationship that often appears between trust and control, and contextualise this within the family digital environment to assess the effect on how parents of younger children manage child internet safety.

1.1 *Aims of the Study*

My research aims to explore and understand the challenges faced by parents in their attempts to keep younger children safe online. It is intended that the findings from my research will add to current knowledge and create new possibilities in considering how specific factors affect how parents of younger children mediate child internet safety.

Research Question 1

What do parents of younger children's perceptions reveal about how they mediate child internet safety within the home?

Research Question 2

What are the effects of parent's levels of digital literacy on their attitudes and emotions towards the internet in how they choose to mediate child internet safety within the home?

Research Question 3

What is the relationship between parent's ability to trust and how they manage child internet safety within the home?

2 Literature Review

2.1 ***Introduction***

This review provides a broad overview of relevant academic literature surrounding parents of reception aged children and their experiences and perceptions of internet safety. Many different factors influence how a parent of a younger child interacts with internet safety. Although the literature explores a wide variety of factors, this review allows for two main areas of investigation to support the particular focus of my study; parental levels of digital literacy and parents' attitudes and emotions to the internet. This review explores the digital literacy levels of parents of reception aged children, as well as how these influence the home internet safety environment. This review also explores the attitudes and emotions to the internet of parents of younger children. The factors that affect parental levels of digital literacy and attitudes and emotions to the internet of parents of younger children are discussed in a variety of contexts, including through the application of Bronfenbrenner's (1977, 1979) EST. Finally, wider factors that contribute to the home internet safety environment are discussed through the relationship they have with different forms of trust and how this affects child internet safety.

Literature pertaining to experiences and perceptions of parents of younger children is limited (Holloway et al., 2013; Nikken & Jansz, 2011; Olfasson et al., 2013). Younger children increasingly engage with digital technologies; however, much of the widening literature focuses on the internet usage of older children over the age of eight (Holloway et al., 2013; Olfasson et al., 2013; Nikken & Jansz, 2011). Research paucity creates an unsupportive environment for parents of younger children. Where the literature focuses on younger children's internet safety, the protection of children rather than the perceptions of parents is usually the primary objective (Buckingham & Villett, 2013; Holloway et al., 2013). Most policy resources and initiatives are aimed at parents of higher aged children and often do not include parental viewpoints. This creates gaps within current knowledge on how best to support parents of younger children regarding internet safety (Buckingham & Villett, 2013; Holloway et al., 2013 Livingston & Haddon, 2009).

2.2 ***Digital Literacy***

Digital literacy often associates with the amount of digital literacy a person has. However, digital literacy has often proven difficult to define, yet ideas surround that of a mastering of skills that focus on the cognitive and socio-emotional aspects of interacting within a digital

environment (Eshet-Alkalai, 2004; Lankshear & Knobel, 2008) (see introduction). It is clear that all individuals have a different relationship with the internet, due to factors such as levels of digital literacy and familial attitudes and emotions towards the internet. Levels of digital literacy are often discussed; however, the commonly viewed notion that younger individuals hold higher digital literacy skills than those older should be viewed cautiously as Eshet-Alkalai and Amichai-Hamburger (2004) found that levels of cognitive skills and strategies, not age, affect how individuals are able to carry out tasks relating to digital literacy. The majority of research that discusses levels of digital literacy relies on participant's self-perceived assessments of their own skills (Hargittai, 2008). High and low digital literacy levels will be assessed through this research using self-efficiency, through interpretation of participants' interview data (Bandura, 1995). Self-efficiency utilises individual's assessment of their own skills and can be defined as the capability to organise and carry out a set of actions to manage prospective situations (Bandura, 1995; Hargittai, 2008). The use of self-efficiency within this research mirrors the methodological approach of Sonck, Livingstone, Kuiper & Haan (2011), who admits using self-efficiency to measure digital literacy may appear crude; however, self-efficiency allows individuals to reflect on their confidence with digital technologies. It is my opinion that these factors need considering with regards to child internet safety, as they are constantly affected through the ongoing advancements of digital technologies. Similarly, how the advancement of digital technologies affects families and how parents use trust when considering internet safety is also of importance.

Younger children have different developmental emotional considerations when compared with older children. Digital socio-emotional literacy requires an individual to be critical and analytical, showing a maturity within their digital engagement not often found within younger children (Eshet-Alkalai, 2004). Younger children experiencing negative encounters online typically find these more harmful and upsetting due to the immature development of socio-emotional literacy and often find talking about harmful internet incidents difficult due to decreased understanding of abstract systems (Chaudron, 2015; Livingstone et al., 2011). Children within Germany, Ireland, Poland and the UK experience similar levels of digital risk (Livingstone et al., 2011). Although German, Irish and Polish children experience similar digital risk levels as children within the UK, UK children present higher levels of socio-emotional distress in relation to digital activities (Livingstone et al., 2011). Livingstone et al. (2011) suggests that 'older' European Union countries such as UK, with a longstanding infrastructure of technical safety software should affect how safe children feel in relation to their digital activity. Livingstone et al. (2011) proposes factors such as how children feel subjective harm or how they express themselves publically may also be relevant to consider when looking at the relationship between risk and socio-emotional distress. Livingstone et al. (2011) suggests more research is needed in the area to establish the correlation between digital risk levels and

socio-emotional distress. Children access the internet from an increasingly younger age; parents need to focus on conceptualising the relationship between themselves, their children and the internet whilst within the home environment (Holloway et al., 2013; Nikken & Jansz, 2011; Olfasson et al., 2013).

2.3 ***Trust***

Parents face dilemmas when considering issues of trust and relationships in regards to child internet safety. Social spheres imply two types of trust considered within an interactional context, Particularised Trust (PT) and Generalised Trust (GT) (Freitag & Traunmuller, 2009). PT commonly resides within close familial concentric circles often extended to familiar everyday interactions such as family or friends (Freitag & Traunmuller, 2009; Uslaner, 2002; Whitley, 2008; Yamagishi & Yamagishi, 1994). GT occupies the more unfamiliar, wider relationships people encounter, such as strangers or the unknown, which can be associated to online environments (Stolle, 2002; Uslaner, 2002; Whitley, 2008, Yamagishi & Yamagishi, 1994). Within online environments STST relates to abstract systems and focuses on the guarantees of security, confidentiality and reliability, to assess individual's level of trust in the internet (Bierhoff & Vornefeld, 2004).

GT is not a constant across differing countries. Stolle and Nishikawa (2011) recently reported that UK children score lower on GT when compared to the previous generation. The level of GT decreased sharply within the United Kingdom from 44% in 1990 to just 30% in 1996 (Halpern, 2005). Other countries maintained stable trust levels, including Germany, whilst others have increased trust levels, such as Canada, the Netherlands and Sweden (Halpern, 2005). Younger cohorts of children exhibit increased erosive effects on individual trust levels where GT has been in steep decline (Stolle & Nishikawa, 2011). There is a lack of research in attempting to explain the rapid decline of GT levels (Stolle & Nishikawa, 2011). Putman (2000) suggests lower levels of GT can be explained through the influence of negative media digital influences, such as stranger abduction, child crime and social media, which have increased parental anxieties surrounding new technologies. Similarly, Stolle and Nishikawa (2011) propose increased diversity, a rise in income equality, the media and a decrease in face to face interactions often due to digital technological advancements as contributors to decreased GT levels. Trust is viewed as one of the most fundamental social attitudes to develop in childhood, with parent's influence helping to form younger children's own views (Stolle & Nishikawa, 2011). The reduced levels of GT in parents is concerning due to the influence this has on younger children's own ability to form this social trust, specifically when associated with an increase of digital activities which generally associates with reduced face to face interactions.

Contrasting views surround parental influence when considering levels of trust with their own children. Parents generally trusting in nature do not pass these characteristics onto their children (Stolle & Nishikawa, 2011). Parents affected by negative media influences, such as those connected with new technologies, warn children of the perceived dangerous world they reside in (Stolle & Nishikawa, 2011). Sturgis et al. (2007) considers GT in children a genetic transition, though Uslaner (2002) and Wuthnow (1999) suggest family experiences and interventions have noticeable psychological influence on how children develop trust. The formation of trust levels in children examined alongside effects of parental trust levels reveals a contentious area requiring more attention from researchers investigating relationships at a deeper level, specifically within a digital context (Stolle & Nishikawa, 2011). Different factors affect the level of GT and PT a child gains. Since 1960 parents spend an increasing amount of time with children, however, GT levels have decreased which questions the effectiveness of the parent child relationship for the well-being of the family (Stolle & Nishikawa, 2011). Family environments encourage high levels of PT; when outside influences, such as the internet, become involved the typical rules for displaying PT are not applied due to an overriding influence of GT (Harris, 2007).

Parental digital literacy levels and STST affect how parents mediate child internet usage (Bierhoff., & Vornefeld, 2004; Lou, Shih, Liu, Guo & Tseng, 2010). Parents demonstrating increased digital literacy levels express an increased laissez-faire autonomous attitude to child internet usage, suggesting a positive relationship with STST (Lou et al., 2010). High digital literacy parents reduce scrutiny of child digital engagement, portray more trust and suggest children self-regulate (Lou et al., 2010). Trust and independence require balance for internet safety; in addition, parents are aware of monitoring the appropriateness of children's internet activity and how this potentially undermines the PT relationship between a parent and a child (Livingstone et al., 2011).

Parents face many different relationships which surround use of the internet based on the notion of trust, when considering internet safety. School is highly influential within the microsystem of the child and the mesosystem of the parent. A trans-agency approach, where each participant understands the role they fulfil and recognises the obligations and expectations of others, results in best practice for school relationships and reform (Angelle, Nixon, Norton & Niles, 2011; Bryk & Schneider, 2003). Recent changes to school curriculums find computing and internet safety taught much earlier, which could affect the parental attitudes and emotions to internet safety, with parents putting more emphasis on schools to develop children's internet safety (Adams, 2013). School reform initiatives, including changes to computing, require a strong relational trust. Relational trust is grounded in a social respect for others in a genuine positive discursive environment (Bryk & Schneider, 2003). Relational

trust provides a supportive environment, reducing any negative correlations between trusts and reform initiatives, producing an adaptive atmosphere inclusive of progressive attitudes.

Primary schools are increasingly implementing strategies to address children's internet safety to help parents to keep children safe online (Byron, 2008). In 2008 the Byron Report recommended that all schools adopt an 'Acceptable Use Policy' which is constantly reviewed and agreed upon by parents and pupils. In addition to this the Byron report (2008) also suggests that all school use an accredited filtering service and asked the Office for Standards in Education, Children's Services and Skills (OFSTED) to hold the system to account in the delivery of child internet safety. The Child Exploitation and Online Protection Centre (CEOP) carried out research on internet related abuse related to children in the UK; they found that there are discrepancies between children's internet behaviour and their parents understanding of their child's internet behaviour (Livingstone & Bober, 2005). In 2007 the CEOP found 49% of children had given out personal information whilst in contrast only 5% of parents thought their child had given out such information (Livingstone & Bober, 2005). In addressing these issues it is important that primary schools work with a living document when addressing policy aims and objectives in relation to internet safety (Pinto & Younie, 2015). Pinto and Younie (2015) suggest that in protecting children from the risks of the internet, emphasis should be placed on considering how best to prepare children for digital activities in order to help them be safe and responsible digital users. It seems a holistic approach to children's internet safety is require where different stakeholders, including schools and parents, work together to ensure child internet safety works towards the best interests of the child.

2.4 ***Digital Status***

The ability to understand how to skilfully and safely navigate the internet contributes to the familial effect of internet safety. The arrival of the internet within the home environment and the increased access that children have is a singular event that has fundamentally changed the lives of children and their families (Prensky, 2001a). To assist in understanding how parental individuality affects internet safety, the digital experiences of a parent are often considered. Digital status of a parent considers not only the technology that parents use, but also how they use it, to help explain differences amongst a population (Zillien & Hargittai, 2009). Prensky (2001a) talks about two types of digital status, digital native and digital immigrant. Furthermore, Prensky (2001a) utilises the concept of children being digital natives, brought up surrounded by fast paced technology. Prensky (2001a) views parents as digital immigrants, interacting with the internet later in life, adapting to the new digital environment and digital language (Prensky, 2001a). This digital generational gap has been recognised by a plethora of

academic literature (Bailey & Bailey, 2013; Buckingham, 2006; Clark, 2009; Palfrey & Gasser, 2008; Papert, 1996; Prensky, 2001a; Prensky, 2001b). Younger children show less confidence in addressing personal online self-efficiency skills, revealing that as children age and gain skills, the digital generational self-efficiency skills gap between parents and children may become enhanced (Sonck, Livingstone, Kuiper & Haan, 2011). Children from an area of reduced socio-economic status may be at further risk of a generational gap due to a correlation with lower levels of parental digital literacy (Sonck et al., 2011). However, if the idea of every child being a digital native is adopted, making them different from occupants of the adult world, confidence issues can materialise for parents where child skills outpace those of the adults attempting to support children (Lewis, 2014).

The idea of the digital native is not always viewed as being robust. A more useful idea is presented by White and Le Cornu (2011), who view Prensky's (2001a) digital native and immigrant as a dying distinction and prefer the term digital visitor or digital resident. White and Le Cornu's (2011) digital status options are more particular and refer to people as individuals rather than by their age. A digital visitor uses the internet to go in and complete a task and then leave the environment (Lewis, 2014). A digital resident makes and considers themselves part of a digital community, a member of one of the many online communities that exist, more than just a digital visitor that just uses tools (Lewis, 2014). Younger children present more commonly as digital visitors rather than digital residents due to lower levels of interaction with social media sites than older children (Livingstone et al., 2011).

Level of engagement with digital technologies within the home depends on the three way relationships between children, parents and trust in the internet. Digital visitors have a less familiar relationship with the internet and therefore work with GT and exhibit low amounts of STST (see introduction). Digital residents may have a more familiar relationship with aspects of the online world; however, there is a lack of understanding in assessing if PT and GT can work concurrently (Dwyer, 2011). PT and GT are independent of each other, with neither affecting the other (Buck & Bierhoff, 1986 cited in Bierhoff and Vornefield, 2004). PT and GT impact people's relationships throughout the microsystem and beyond; yet applying them to a digital situation must be done with caution as a digital relationship exhibits different circumstances (Bierhoff and Vornefield, 2004).

Analysing trust within a digital context requires the inclusion of STST as a contributing factor. People with higher levels of digital literacy have more knowledge and show more trust in digital technologies and digital experts, which enables them to gain a higher level of STST (Bierhoff and Vornefield, 2004). Whether a parent is a digital visitor or a digital resident may affect their relationship with the internet and their interactions with child internet safety.

However, trust must be viewed as provisional, through an individualistic lens, it has shifting perimeters that cannot be contextualised or be defined absolutely in advance of situations (Dwyer, 2011).

2.5 ***Ecological Systems Theory***

There are many different factors within and outside the familial environment that can affect a parent's ability to safeguard children in regards to internet safety. Interfamilial (within the family) and extra familial (outside the family) processes influence all aspects of family life, including the ongoing development of the parent child relationship (Bronfenbrenner, 1986). The need to understand these influences is crucial to the healthy development of children (Bronfenbrenner, 1986). Utilising Bronfenbrenner's (1977, 1979) EST clearly helps to understand how parental factors, such as parental digital literacy levels and attitudes and emotions to the internet, can have when addressing child internet safety. Typically, the child is visualised centrally within Bronfenbrenner's (1977, 1979) Theory. Interpretation of Bronfenbrenner's (1977, 1979) Theory by placing the parent in the centre of the model, demonstrates the pivotal position of parents within the family; alongside how additional concentric circular influences such as socio economic status, media and the government affect the parental ability to keep children safe online (Epstien & Kazmierczak, 2007). Each of Bronfenbrenner's (1977, 1979) concentric rings influence and implement individual familial dynamics (Epstien & Kazmierczak, 2007).

Parents apply different types of trust to different areas of their lives. Situating trust within Bronfenbrenner's (1977, 1979) EST helps to understand parents' experiences and perceptions when considering child internet safety. Trust within the microsystem includes relationships with family and friends which typically suggest PT. An individualistic approach must then be taken as each parent has different influences within their lives which create a bi-directional path between the systems (Johnson, 2010). The mesosystem may contain environments such as a workplace or University; the exosystem may include the child's school. The level and type of trust a parent displays within these systems could be PT or GT depending on the individual circumstances, such as if they use the internet daily for their work, placing the internet in a close concentric circle with a deeper level of trust. The macrosystem which is involved with social ideologies and values, is usually associated with GT, and is responsible for many parental attitudes and emotions to the internet, largely due to influences from the media (Lewis, 2014). These additions to Bronfenbrenner's' (1977, 1979) theory explain the importance that digital technologies have within the home today.

A key issue when regarding parents understanding of child internet safety is how they gain support. A useful explanation of how parent's view support for internet safety is provided by Livingstone et al (2011), who found most parents chose to engage with internet safety discourse through conversations with family and friends, which increases the importance of the effect of close concentric social circles. In contrast, Nathanson, Eveland, Park and Paul (2002) suggest that parents assume the internet affects children in other families more than their own, which could disengage the effectiveness of the close concentric ring. I argue that a deeper understanding of factors, specifically affecting parents of younger children, is needed in order to contribute to new knowledge to enable a more supportive digital environment for parents.

2.6 ***Mediation***

Government increasingly recognises issues with how child internet safety is addressed. Parents employ a number of different mediation strategies in an attempt to keep younger children safe online (Lee & Chae, 2007; Livingston & Helsper, 2008; Schofield Clark, 2013). Parents implement mediation strategies including communication and targeted digital techniques with varying effectiveness at reducing digital risks to children (Lou et al., 2010). The government also makes efforts to regulate children's online activity; however, they recognise how these are becoming increasingly difficult, which raises the importance of effective parental mediation strategies (Livingstone & Helsper, 2008).

Parents of younger children increasingly employ communication strategies when mediating their child's internet usage. Parental mediation strategy reproduces desired family values in outside influences through parent and child interactions (Livingstone & Helsper, 2008). Effective parental internet mediation strategies display positive and active connotations such as commonly used discussion and explanations, however, negative and restrictive internet mediation strategies such as setting rules and boundaries may involve disagreements and criticism (Chaudron, 2015). When adopting parental mediation digital communications, parents assist in managing children's experiences online (Clark, 2011). Parental mediation theory, rooted within social and psychological concepts, provides a strong foundation for important positive familial communications (Clark, 2011). Policy makers recognise parents as mediators and increasingly suggest parental strategies for keeping children safe online (Livingstone et al., 2011).

Internet usage within families displays increased individuality, as each person creates their own relationship with digital technologies (Chaudron, 2015). Parents follow this trend and treat children as individuals when talking to them about internet safety, where digital ability takes

precedence over age (Lewis, 2014). Parents struggle in articulating the positives of the internet without focusing on the negatives, which limits the effectiveness of individual interactions creating a narrowing of opinion (Lewis, 2014). Increasingly, internet safety research focuses on familial digital communicative experiences; however, as discussed, much of the relevant literature focuses on the parents of older children (Holloway et al., 2013; Lee & Chae, 2007; Livingston & Helsper, 2008; Nikken & Jansz, 2011; Olfasson et al., 2013).

Parents and children display emotional anxieties when discussing sensitive topics, such as internet safety. Children find it difficult to talk to people in positions of authority, such as teachers, often due to a lack of trust (Livingstone et al., 2011). Family discussions involving sensitive subjects with younger children within the home environment benefit from raised trust levels. Parents display nervous tendencies when talking to children about internet safety in similar ways when talking about sex (Bailey, 2013). In discussing sensitive topics with younger children, parents use communicating mediation more often than when compared with parents of older children (Livingstone et al., 2011). This questions whether chronological age rather than an individualistic approach is best suited for effective parental mediation?

Parents often consider the age of a child when determining how to mediate a safe digital space for children. Chronological age is associated with the level of risk a child is exposed to whilst on the internet. Parents suggest older children possess more digital skills and encounter more risk, whilst younger children portray less skill and encounter less risk (Livingstone et al., 2011). Parents also consider children's cognitive levels in determining what strategies they deem appropriate for younger children. Suggestions that younger children increase their internet safety depending on their individual levels of digital literacy, requires further investigation (Lewis, 2014).

Parents face dilemmas in understanding the best way to navigate technical options to keeping their young children safe on the internet. Research investigating experiences of older children found computer based monitoring and filtering software ineffective in reducing negative risks for children online (Livingstone & Helsper, 2008). Parents of younger children often consider implementing some form of technical parental control over child internet use when compared to parents of older children; however, mediation remains constant whatever the age of the child (Livingstone, et al., 2011). The installation of these technical forms of mediation may also prove difficult for parents of younger children who have lower digital literacy skills; a targeted supportive model suited to the needs of the individual parent becomes necessary.

2.7 ***Social Capital and Responsibility***

Effective child development benefits from the presence of good role models. Furthermore, parents often view the internet as providing increased opportunities for children through increasing social capital. Moreover, attitudes to social capital presents as networking and relationships of communities that live and work together in order to be functional and beneficial to society (Livingstone & Bovill, 2001). Therefore, positive trusting parental role models secure social capital for children within a digital context, especially when considering the popularity of electronic digital gadgets that potentially reduce other social capital opportunities for children (Stolle & Nishikawa, 2011). In addition to this, parents increasingly view children's procurement of social capital through their ability to access and navigate the internet, which they believe gives them an educational advantage, leading to better prospects within the job market (Livingstone & Bovill, 2001). Alongside this, trust behaviours exhibited by parents and the influence of familial digital choices, reveals an under researched area of how young children develop trust, suggesting that more knowledge would be beneficial (Stolle & Nishikawa, 2011).

Parents increasingly take responsibility for child internet safety. Western culture attitude places emphasis on an individual outlook on the responsibility of internet safety, centrally placed within effective parenting (Lewis, 2014). Responsibility is shared with Internet Service Providers (ISP), schools and the media who have an obligation to create a safe digital environment for young children (Lewis, 2014). However, the government commissioned Byron Review (2008, 2010) suggests parents must take active responsibility regarding internet safety, arguing for no single point of editorial control in assuming that third parties protect children from digital risks. The UK government argues that this calls for a shift in parental attitudes, as parents are encouraged to take a greater responsibility for keeping children safe online (Byron, 2008, 2010). In addition to this, Byron (2008, 2010) suggests that enforced default filtering by ISP's removes responsibility from parents decreasing the potential of positive parental role models. Digital responsibility for younger children requires balance that considers opportunities and risks (Lewis, 2014). Parents must understand how younger children maintain a strong focus on their family and key adult relationships, including more knowledgeable others, such as teachers, when considering the influence of guidance (Lewis, 2014). Adult influence towards younger children diminishes as peer to peer influence grows when the child reaches approximately seven years of age (Nathanson, 2001).

2.8 ***Time Poverty***

Parents are faced with a difficult choice when balancing the financial and time aspects of being a parent. Utilising an economic lens, financial circumstances are often the primary indicator when considering poverty within the family environment (Harvey & Mukhopadhay, 2007; Joachim and Rathgen, 2014). Parents face harsh decisions surrounding allocation of their time. Busy working lives put pressure on family relationships; the average family spending just 49 minutes a day together (4Children, 2010; Pavan, 2010). Children in the UK present a higher risk of a lower sense of well-being and a higher rate of mental health problems than other children in Europe, a problem exacerbated through familial time deficiencies (4Children, 2010). Parents rate eating meals together and family outings as important, alongside educational aspects that include devoting material resources to computers and internet access, to help ensure success at General Certificate of Secondary education (GCSE) level (Goodman & Gregg, 2010).

Parents who are affected by family time poverty may develop difficulties in allocating enough time to effectively mediate their child's home digital environment (Newman and Chin, 2003). Time available to families may be a factor when choosing what internet safety strategies to adopt. Though communication strategies are common with younger children, this type of mediation, such as co-viewing, are time consuming and may produce more time poverty issues within an already stretched family environment (Livingstone & Bovill, 2001). The mobile aspect of devices such as tablets or laptops has had an effect on issues surrounding time poverty and child internet safety (Lewis, 2014). Parents can now multitask, cook tea and mediate child internet usage. Multitasking in this way can be seen as positive time management, mediating internet usage alongside family chores, or negative as family time is now shared with chores (Lewis, 2014). Parents' attitudes to time poverty are potentially interlinked with emotion as mediation strategies choices may be underpinned with feelings of guilt or fear.

2.9 ***Parental Attitudes, Emotions and Support***

Parents' own perceived digital experiences and abilities are important factors in considering how they manage child internet safety (Livingstone & Helsper, 2008). Previous positive parental digital experiences and good levels of digital literacy inspire confidence in parents when they articulate a clear awareness in assessing the risks younger children are potentially exposed to online (Livingstone & Helsper, 2008). Confidence can be defined as trusting in the correctness of an individual judgement or action (Jeffries, 2005). Confidence levels may be affected by high levels of emotion (Christie, Tett, Cree, Hounsell & McCune, 2008). Livingstone and Helsper (2008) also suggest parental socio-economic status and education affects parental

attitudes and emotions towards the internet. Parental attitudes and emotions to the internet are also suggested to affect the variation of internet mediation strategies used by parents of younger children. Parents are seen to influence the home digital space through how their attitudes and emotions are interpreted by their own children, which can be explained with the help of social cognition theory. Bandura (1991) explains how social cognition theory explains how children learn through observation; parental attitudes and emotions to the internet and how a parent mediates their own internet usage could affect how a child reacts to mediation strategies due to a mirroring of parental behaviours (Chaudron, 2015).

Many different factors influence how parents interact with safeguarding young children online. Younger children do not seek individual digital advice, which suggests that parental knowledge and abilities surrounding internet safety are increasingly important to safeguard children (Livingstone et al., 2011). In order to safeguard children, the majority of parents articulate a desire for more guidance surrounding internet safety (Valcke, Wever, Keer & Schellens, 2011). Valcke et al. (2011) concluded that parents would like outside participation, forming a joint approach that included other interested parties and aimed at younger children. Different stakeholders involved within child internet safety provide a multi-agency approach where separate agencies represent their own individual perspectives, such as parents and teachers (Soan, 2004). Bailey's (2013) publication suggests developing an inter-agency model for effective child internet safety, involving a wide variety of contributors. Trans-agency approaches represent best practice, where all agencies involved with child internet safety articulate an interconnected voice, providing support, especially to those most vulnerable (Wall, 2003). Without full representation of the child internet safety experiences and perceptions from parents of younger children, difficulties appear in applying a trans-agency model where each agency involved has a voice.

2.10 ***Conclusion***

To conclude, the paucity of research in this area has been acknowledged through recognition of the need to see younger children as a specific cohort with specific needs regarding internet safety. Alongside this, a broad lens that considers the perceptions of parents is necessary, due to the extensive circumstances of each family setting. Many of the sources cited within this review have focused their attentions on the parents of older children (above seven). With this in mind there must be caution in applying the findings of this review uncritically to parents of young children.

Parental levels of trust affect all aspects of family life and relationships, including those relating to digital technologies. Past parental experiences and influences appear to affect how future

digital interactions are underpinned by PT, GT and STST. The amount of literature that considers all these types of trust within a home digital context is limited, thus recognising a gap in the literature.

Parental digital status and digital literacy levels affect how parents manage child internet safety. Digital native or immigrant status suggests only the age of a parent as an important factor, whilst embracing the digital visitor or resident status opens up possibilities of support for parents of young children through parents' individual levels of digital literacy. The use of a parent's age as the only considered factor in how well they can manage internet safety is unhelpful. Furthermore, viewing parental digital skill sets, whether effective or ineffective in keeping children safe on the internet, takes on a more individualistic outlook. Parents are showing concerns over how and when to interact with safety strategies, whilst questioning their own abilities in keeping younger children safe. Parental levels of digital literacy are seen to affect the management of child internet safety within the home. Levels of digital literacy also seem likely to categorise parental digital status. Higher digital literacy typically associates with wider positive internet use, which links more to digital residency. Lower digital literacy is more likely to link with digital visitor status due to the nature of an individual's constrained internet activity. The literature also provides a clear link between digital literacy and trust, suggesting that those portraying higher digital literacy are more likely to exhibit greater trust in the internet. However, what the literature fails to do is to assess different possible relationships between levels of parental digital literacy and trust that may affect how child internet safety is managed within the home.

Pressures on family time have led to families having less time to actively engage within communities, which reduce GT levels. This raises questions of how trust within the family is affected by social change, as typical spheres for increased social capital have been replaced by the more solitary familial experience of digital technologies. The interconnected experiences and perceptions of parents of younger children would specifically benefit from more qualitative analysis to help in gathering an in-depth understanding of how an effective supportive environment could be best ensured in regards to child internet safety, as well as possible additional interests to policy makers.

The literature within this review suggests that parents face many different challenges when considering how to keep their child safe on the internet. Parents display willingness in taking responsibility for navigating child internet safety, which has been recognised by the government who view the parental influence as paramount. The literature also recognises the specific strength of the bond between a parent and a younger child and the increased influence that parents have over children when compared with peers at this age. This leads to questions

about whether time spent now discussing topics such as internet safety could have more positive effect on a younger child than an older child. Recognising the specific characteristics of younger children developmentally rather than chronologically would increasingly mirror the individualistic approach of other effective internet safety mediation strategies.

3 Methodology

3.1 ***Introduction***

This chapter discusses methodological strategies utilised within this research. The first section relates to theoretical perspective and provides an explanation of suitability within the chosen research paradigm in effectively addressing the research aims. Discussions include an overview of methods used and their compatibility with the research design and aims, to address issues of reliability and validity. Explanations surrounding sampling strategies used and detailed accounts of methodological procedures portray the rigour of the research process. Finally, I present discussions of the data analysis methods used and a detailed section on ethical considerations, ensuring an effective non-maleficence research environment.

3.2 ***Theoretical Perspective***

A phenomenological research paradigm provides a deep understanding of the perceptions of parents of younger children, (Smith et al., 2009). An Interpretative Phenomenological Analysis (IPA) approach enabled deep qualitative analysis, whilst representing participants well through their subjective meanings, actions and social contexts (Fossey, Harvey, McDermott & Davidson, 2002). Phenomenology utilises a philosophical lens in studying the experiences of people (Smith et al, 2009). As a prominent phenomenologist Husserl (1997) suggests removing individuals from their "*natural attitude*" (Husserl, 1997, p 172) within everyday experiences, replacing this with a "*phenomenological attitude*" (Husserl, 1997, p 110). Enabling a reflective environment for a research participant and researcher encourages the *"natural attitude"* (Husserl, 1997, p 172) through a shared process within the research environment. Subsequently, this is then replaced with a secondary account, the "*phenomenological attitude"* (Husserl, 1997, p 110) where the participant inwardly interprets the perceptions of the experience, which is then further, analysed and interpreted by the researcher.

IPA creates a sense of agency in allowing people the power, will and desire to create different constructs that affect all areas of their lives (O'Meara & Campbell, 2011). Outside phenomena that affect parental abilities; family, support networks, work, social life and ethology require consideration when assessing parental agency and structure (Bornstien & Bradley, 2012). This study investigated how external and internal phenomena affect the parental experience and how individual's interpretations affected a parent's ability to safeguard children on the internet.

Participant agency was encouraged through enabling the consciousness of the individual, to make sense of the phenomena through a semi-structured interview process (Martins & Bicudo, 2002 cited in Salada & Adorno, 2002). IPA also allows participant agency through the inclusion of emotions (Godfold, 2015). Individuals are different from each other, physically, genetically, expressively and experientially (Smith et al., 2009). In thinking about considering emotions within IPA the differences between individuals are not solely biological such as hormones, but rather they are affected by cultural and environmental factors within the physical world (Smith et al., 2009: Bruner, 1990). Emotions are central to individuals understanding of experiences and are crucial to a phenomenological perspective (Smith et al., 2009).

IPA aims to achieve depth of analysis rather than breadth (Smith et al., 2009). Creswell (2009) suggests IPA as an effective explorative tool to explore the unknown in-depth. Utilising IPA provided insight into the unknown as literature surrounding the experiences and perceptions of parents of younger children in regards to internet safety was lacking (Holloway et al., 2013; Nikken & Jansz, 2011). An IPA approach allowed focus on the parents of younger children, whilst challenging the assumption that research specifically aimed at parents of older children can be successfully applied to all children (Holloway et al., 2013; Nikken & Jansz, 2011).

Hermeneutics, the theory of interpretation, creates a strong foundation when applied to IPA (Smith et al., 2009). Schleiermacher (1998) suggests a holistic view of interpretation, through bridging the divide between experiences and discourse. Within this IPA research Schleiermacher's (1998) viewpoint is welcomed as it recognises the uniqueness of the many layers and influences that interpretative studies can take (Smith et al., 2009). IPA allowed me to produce a detailed analysis of the text whilst incorporating an additional layer of perspective that creates a strong relationship between all aspects of the text (Klien & Myers, 1999; Gadamer, 1976, as cited in Peszynski & Thanasankit, 2002). In understanding a part of the text the whole text requires analysis, whilst to understand the whole text, parts of the texts require analysis (Gadamer, 1976, as cited in Peszynski & Thanasankit, 2002; Klien & Myers, 1999). Interpretative analysis suited the data collection methods and analysis procedures that created depth from the semi-structured qualitative research methods within this small scale intensive study (Henn, Weinstien & Foard, 2013).

IPA is concerned with gaining a deep understanding through consciousness and perception. The IPA model displays parallels with Bronfenbrenner's (1979) EST framework (Uprichards, 2009). Bronfenbrenner (1979) argues that much of the psychological research available focuses on the individual, displaying links with IPA; however, these studies rarely look beyond the individual and include the effect of environment. By incorporating Bronfenbrenner (1979)

into an IPA study a bi-directional relationship allows for consideration of interview participants and their environment (Uprichard, 2009). Bronfenbrenner (1979) acknowledges that every individual has a complex set of interacting social relationships that can affect how a person develops and reacts to situations. The interpretative and semi-structured style of this research allowed a participant centred approach and a freedom to explore not only things affecting them within the micro-system but also within the wider concentric environments. Typically, within Bronfenbrenner's (1979) theory, the child is placed at the centre of the concentric circles. However, within this study the parent resided central within the nucleus, with the additional concentric circles containing interfamilial and extra familial influences such as parents' attitudes and emotions to the internet, parental levels of digital literacy and trust (Epstien & Kazmierczak, 2007).

To be consistent in addressing the aims of the research, a cross sectional design using a mixed method approach was used. The cross sectional design relates to the information being gathered from a representative subset which in this study was parents of younger children. A longitudinal study was not within the time constraints of this research. A quantitative data collection technique initially informed methodological strategies. Though quantitative data does not naturally sit within IPA, this data was used to facilitate IPA, through an initial questionnaire that informed the sampling strategy in identifying participants for IPA semi-structured interviews. It should be acknowledged that the study did not aim to develop understandings that were generalisable to the general population. Instead it analysed what this small sample of parents (all mothers) of younger children understood regarding internet safety.

3.3 ***Methods***

This section examines the methods used within this research, focusing on data collection processes and their suitability within an IPA approach. Data gathering involved two stages. Initially, approximately 40 questionnaires collecting quantitative data were completed by parents of suitably aged children. Secondly, six parents with a reception aged child within the same local authority of West Yorkshire took part in an in-depth semi-structured interview.

Research using questionnaires as a data collection method has contributed widely to academic literature (Griffiths, Schweitzer & Yates, 2011). Recently psychological based research has included more qualitative or mixed method approaches (Griffiths et al., 2011). Questionnaires are often quantitative and do not sit comfortably within the realms of IPA (Griffiths et al., 2011). The questionnaire used within this research had a forced choice format and contained a Likert scale where the options for participants to respond attempted to capture the rate of feeling that they had about a subject (appendix 1) (Twemlow, Gabbard & Jones, 1982). The

use of a more descriptive questionnaire that included open ended responses was considered due to it being more suitable within an IPA methodological approach (Twemlow et al., 1982). However, it was decided that the questionnaire environment, a school parents evening, although effective at gaining access to participants, was not conducive to lengthy written responses. Participants had other expectations on them at the time, including the presence of children, which restricted the attention they could give to the questionnaire. The questionnaires enabled a broad understanding of the research topic through this representative sample and also facilitated purposive sampling for the semi-structured interview stage of the research.

There are concerns over the quality of in-depth data that a questionnaire can provide. Using questionnaires as part of an IPA study has been shown to exhibit some of the advantages of more traditional IPA methodologies, such as in-depth interviewing, although problems often arise in applying analyses to questionnaires to create a deep understanding (Smith et al., 2009). To address issues of validity, six parents of younger children also participated in a semi-structured interview. The semi-structured interviews created a flexible environment and provided the participant and interviewer with a sense of agency, through being able to modify responses and expand upon interesting areas (Griffiths et al., 2011; Smith et al., 2009).

For the interview process to remain valid and reliable it must consistently measure what it was intended to measure (Gray, 2009). Researcher bias must be considered when interviewing; furthermore, as this research used a semi-structured format, the relationship between the questions that are asked and any conclusions reached were not straightforward (Gray, 2009; Opie, 2004). Following the foundations of IPA, the participant presented as an experiential expert on the research topic and was allowed ample opportunity to participate to encourage them to voice their opinions and perceptions (Smith & Osbourne, 2008). To enable a strong voice, it was important to build a rapport with participants in an empathetic environment that created flexibility in how rich data was produced (Smith & Osbourne, 2008). Many factors such as gender, class, socio economic status, education and any previous relationship between the interviewer and interviewee may have had an effect on data (Lavander, 2012). As a teaching assistant at one location and a mother of a pupil at the other location, most of the participants had a previous relationship with me. These personal relationships were felt to enhance and build trust. Any imbalance of a power relationship cannot be entirely abated. However, by placing myself within the new role of researcher I aimed to reduce the impact of any previous relationship power imbalance and helped to build a good rapport which was crucial in effective IPA data gathering (Opie, 2004). Any potential hierarchal issues, through the teaching assistant and parents' relationship, were addressed within the interview stage by creating an atmosphere that allowed participants to feel secure in exploring different issues (Siedman,

2013). Without feeling secure it would have been doubtful that the interviews with parents would have been productive (Siedman, 2013). As the interviews were mainly focusing on the home environment and not the school setting throughout the interviews I was aware of being non-judgemental and not assuming knowledge. Assuming knowledge, which I have previously gained through my teaching assistant's role, would have left me making assumptions which may have affected the clarity and depth of interviews (Siedman, 2013).

3.4 ***Sample***

Sampling strategies reflected the underpinning research paradigm and the aims of this study (Wilmot, 2005). The sampling strategy adopted within this research was purposive sampling, participants were selected depending on their relatedness to the research topic in offering insight into phenomena, providing the detailed data required within an IPA study (Smith et al., 2009). I deliberately selected questionnaire participants through relevant traits, such as being the parent of a younger child, thus making the research meaningful to participants (Gray, 2009; Smith et al., 2009). Questionnaire data then facilitated purposive selection of participants for the semi-structured interview stage. Participants were also chosen to reflect different family demographics in order to address any particular areas of interest that may develop through use of an open ended methodological approach such as IPA (Smith et al., 2009). Demographics included, parental age, level of education, employment status, one or two parent families and the presence or not of siblings (Appendix 10). In addition to this, information on how often their child engaged digitally and their willingness to participate within the interview stage was also collected. The small scale of this study required caution in attempting to generalise results at a population level; and it is acknowledging that a representation of a perspective from a small number of participants was achieved (Gray, 2009; Smith et al., 2009).

Different data collection methods require individual approaches. Distribution of questionnaires involved a larger sample than the semi-structured interviews in order to allow a broader analysis of the perceptions of parents, giving a wider understanding of the research topic and facilitating the sampling procedure of the interview stage. Parents at two schools, each with a child in a reception class, 14 at one school and 26 at the other, within the same local authority received a letter informing them of the opportunity to participate within this research (appendix 2). All parents understood that participation was voluntary. Targeting all parents achieved a wide range of represented demographics (Appendix 10). Semi-structured interviews involved six parents gathering a broad range of in-depth perceptions.

Providing a snap shot, semi-structured interviews with six parents took place in their child's educational setting. Snap shot research contributes widely within the field of education and social sciences, as it provides a picture of a particular group of people, focusing on relationships that could also provide information for comparative later studies (Matlay & Carey, 2007). Limiting interviews to six parents took into consideration the time limits of this research whilst being respectful of the detailed analysis required for an interpretative approach (Smith et al., 2009). Informed by the research methodology, aims and objectives to increase the validity of this research, IPA as a conversational data collection technique gathered the experiences and perceptions of parents of younger children regarding child internet safety (Gray, 2009; King & Horrocks, 2010; Smith et al., 2009). In order to encourage an equilateral environment, negative implications or power imbalances throughout both participation and data generation processes, alongside ethical considerations and respectful behaviour, were considered (Henn et al. 2013; Opie, 2004).

All the participants who engaged within the semi-structured interview stage of this research were mothers. Mothers of younger children within the UK are increasingly entering the work environment; however, mothers of younger children are more inclined (than mothers with older children) to enter the workforce when their children were older and then on a part time basis (Office for National Statistics, 2014). Although recent labour market reforms encourage fathers to be actively involved with younger children though new paternity laws, the general nature of parenting within the UK stills sees the majority of childrearing responsibilities carried out by mothers (Department for Business Innovation and Skills & HM Revenue and Customs, 2015). Furthermore, mothers are more inclined to form relationships with school staff due to their involvement in taking younger children to and from school. The selection of only mothers to participate within this research was not intentional. The majority of respondents to the questionnaire phase were mothers, which may reflect the responsibility mothers felt over their child's involvement in school. All of the participants who agreed to be involved with the interview stage were mothers, which again may reflect the presence of a pre-existing relationship with me. Therefore, this study represents mothers' views. Mothers chosen for the interview stage were selected with a range of educational and employment backgrounds to allow these factors to be discussed during the analytical process (Appendix 10). No fathers agreed to be interviewed; therefore, the views of fathers are not included within this study.

3.5 ***Procedure***

Questionnaire response rates can vary greatly depending on issues surrounding administration. Scrutiny of the design of the questionnaire within this study included questions asked,

concerns over confidentiality and the level which respondents could relate to the topic (Gray, 2009). All parents completed a questionnaire whilst attending parent's evenings. All participants either chose self-completion or interviewer-administered questionnaires, alleviating any literacy or English as an Additional Language (EAL) issues (Gray, 2009). Piloting the questionnaire revealed sensitivity about a question surrounding level of parental education. Pilot participants found the question of parental level of education may possibly be uncomfortable whilst at a school parents evening. Completing the questionnaire within an education environment, including possibilities of being overheard, especially where EAL issues were present could have made participants feel uncomfortable. As the researcher, I recognised the ethical concerns surrounding the question and I removed the question from the questionnaire phase of the research and addressed this issue within the more private environment of the interview stage (Appendix 10). Before completing the questionnaire, prospective respondents received an information sheet, this included issues of eligibility and confidentiality (Appendix 3) (Smith et al., 2009). Keeping the information sheet brief supported spontaneity of the questionnaire answers, whilst preparing respondents and providing them with an informed choice surrounding participation (Opie, 2004). I did consider an internet questionnaire; however, the size, time limits and IPA approach of this study does not require large data generation suited to this style of data collection. Online surveys may create barriers for some parents with lower digital literacy levels, alongside lower response rates (Evans & Mathur, 2005; Nulty, 2008). A detailed proposed research timetable helped in ensuring adequate time was allocated to each section of the research procedure.

A semi structured approach allowed for a deep level of interpretation and analysis. Under the influence of IPA, the questionnaire data informed and refined an interview schedule (or aide-memoire) (Appendix 4) (Coyle & Rafalin, 2000). Thematically analysing questionnaire data enabled the extraction of shared parental perceptions and interesting points for development which facilitated the semi-structured interview stage. Quantitative data is often used to focus on 'what happens', whereas a more qualitative approach, such as IPA, focuses on 'making sense of what happens' (Smith et al, 2009). The quantitative questionnaire data was primarily used to underpin the foundations of the preparation of the qualitative interview stage of the research. Utilising an aide-memoire within a semi-structured interview environment assisted in initiating discourse, created a conversational aspect without reducing the spontaneity which put the interviewer and interviewee at ease (Corbin & Morse, 2003; David & Sutton, 2004). This cross sectional model provided a strong foundation in maintaining a reliable and valid research design that provided individualistic understanding (Bryman, 2006; Cohen, Manion & Morrison, 2011; Denzin, 1978; Mathison, 1988; Marshall & Rossman, 1999). As the quantitative questionnaire data could only address the 'what happens', the benefits of this

beyond preparing for the qualitative stage of the research were limited. Limitations were due to the specific methodological approach taken and the time scale of the research.

Many different factors affect interviews within a research environment. The interviews took place as soon as reasonably possible after the questionnaire stage, maintaining familiarity with the research topic. After completed questionnaires were analysed, identified interview participants received invitations for interview. This research focused on parents' perceptions of child internet safety within the home environment and is not focused on the school environment, therefore the fact that their children had only just started in the reception class did not detract from the research. Interviews were arranged at a time and date convenient to parents. Participants have other commitments and displayed flexibility. Participating parents were asked where they would like interviews to take place. All of the participants suggested their child's school setting as an appropriate and convenient place to carry out the interviews. All interviews took place within the child's educational setting, at the end or beginning of the day, at a time proposed by the participants at their convenience (Siedman, 2013). As suggested by Siedman (2013) a quiet private room away from distractions avoided any disturbances. Moving away from a classroom setting also reduced any hierarchical issues that may have presented due to the power relationships between a school staff member and a parent. Although this research focuses mainly on the home environment all parents recommended the child's school setting as appropriate for the interview process. To increase convenience for participants the interviews took place in the educational setting. This may include some power hierarchical concerns (as discussed) which may have been removed by completing the interviews within the home environment. However, my main priority was that participants felt a sense of agency over the interview process. In allowing participants to choose the setting for the interview process, they had control over the process, which made have made a more secure environment which can increase the clarity and depth of the data (Siedman, 2013). Although interviewing participants in a different environment may have resulted in a variation of the findings.

Interview data collection techniques must be rigorous and reliable. IPA requires the use of a recording device to enable a verbatim transcription (Smith et al., 2009). An Ultradisk digital recorder and a smart phone recorded interviews simultaneously. This dual recording increased reliability; alongside both devices being inexpensive and unobtrusive whilst commonly used within qualitative research (Raenta, Oulasvirta & Eagle, 2009). Verbatim transcriptions aided my familiarity with the data and allowed verification by participants if required (Kvale, 1996).

3.6 ***Data Analysis Methods***

Data analysis methods that work well with the chosen methodological approach increase the effectiveness of research. As in this research questionnaires often inform more detailed analytical methods such as interviews (Gray, 2009; Smith et al., 2009). All raw interview data gathered underwent analysis using IPA (Smith et al., 2009). IPA's flexible approach to data analysis includes no single prescribed method for utilising data, creating flexibility (Smith et al., 2009). The first stage of my IPA analysis provided verbatim transcriptions of each individual audio-recorded interview, facilitating structured hermeneutic analysis (Langdridge, 2004).

The use of computer software in qualitative data analysis is becoming increasingly common. Following the transcription of raw data from interviews, computer software assisted with organising and coding the data that provided benefits with analysis (Smith et al., 2009). Nvivo software, alongside IPA, is often used within research (Balabanovic, Ayers & Hunter, 2012; Jirwe, 2011; Philips, Elander & Montague, 2013, 2014). Utilising NVivo in analysing detailed data can cause problems surrounding coding issues of bilinear sides of a physical transcript, typically adopted within an IPA study (Smith et al., 2009; Wagstaff et al., 2014). In acknowledging these issues, I initially employed more traditional IPA coding methods and transferred them to NVivo through application of the parent and child node functions, which facilitated further thematic analysis (Appendix 5) (Philips et al., 2013, 2014). NVivo allowed for a thematic construction to arrange a sense of meaning (Creswell, 2009), whilst improving some of the time scale issues involved with IPA research through more manageable analysis strategies (Lewis-Beck, Bryman & Futino Liao, 2004). NVivo enabled construction of a table in which to present traceable abstracts of verbatim transcriptions used within the analysis chapter, providing a retrievable research trail (Appendix 6). The digital organisational aspects of Nvivo also allowed for the possibility of effective information sharing with suitable individuals (Walsh, 2003). I found using NVivo combined with more traditional computer software such as Microsoft Word, an effective qualitative research method.

Using computer software within research to create analysed accounts of interview transcriptions allows for flexibility (Smith et al., 2009). After reading transcripts created in Microsoft Word, descriptive corresponding comments added in the right hand margin helped to explain the participant features that highlighted important assumptions, emotional responses and idiosyncratic figures of speech (Knight, Wykes & Hayward, 2003; Smith et al., 2009). This initial note taking identified structure within the participant's thoughts and experiences (Smith et al., 2009). As the analysis deepened I was able to adapt and alter notes already made within Word, becoming more interpretative and conceptual (Smith et al., 2009). Increased conceptual awareness invites the analyst to reflect and inevitably draw on personal

experiences, which shows correlations with the work of Gadamer (1990) who recognised the effect of history and traditions on the interpretive process.

The development of emergent themes within IPA attempts to reduce the data set to a manageable level (Smith, et al., 2009). Primary transcriptions now also include interpretive exploratory right hand margin comments; with the left hand margin focused on the identification of emergent themes (Knight et al., 2003; Langdridge, 2004). This stage of analysis aims at reducing the amount of data; in collectively clustering themes found within the exploratory notes a shift takes place, where analysis concentrates on notes rather than transcripts, whilst maintaining strong links to the original text (Smith et al., 2009). Patterns within the emergent themes identify and restructure the so far chronological style of the transcripts, creating super-ordinate themes with new titles and constructions (Smith et al., 2009).

Effective research methods involved individual sources receiving equal attention and consideration. Initial exploratory data and theme clustering allowed for the identification of integrating themes across all of the transcripts. Analysis at this more theoretical level includes assembled super-ordinate themes, whilst being representative of higher order concepts (Knight et al., 2003; Smith et al., 2009). Different approaches have been used within IPA studies when identifying patterns across different data sources (King & Horrocks, 2010). Either the researcher identifies themes within the primary transcription and attempts to correlate these throughout additional transcripts, or alternatively, as carried out in this research, each transcript follows the same methodological route and is treated individually (King & Horrocks, 2010). A master of themes table was then produced which showed the relationships between themes and super-ordinate themes for each participant, whilst providing an order and sense of completion to important aspects of the analysis (Appendix 7) (Smith et al., 2009). Interconnectedness must be considered when working with qualitative in-depth data. All stages of analysis included a constant bi-directional relationship between transcripts, themes and super-ordinate themes, maintaining validity to the primary source (Knight et al., 2003). Capacities within NVivo and Microsoft Word allowed the relationships between original transcripts, exploratory interpretations, identifications of themes and super-ordinate themes to be shared with others, increasing the credibility and authenticity of the study (Knight et al., 2003; King, 2007 cited in Lavender, 2012).

3.7 **Ethical Considerations**

Ethical research practice underpins many aspects of research design (Smith et al., 2009). Gorman's (2007) four ethical principles informed by the British Educational Research Association (BERA) appear within Ethical Guidelines for Educational Research (2011). These principles are autonomy, beneficence, non-maleficence and justice, which provided the basis for the ethical considerations within this study (Gorman, 2007). Autonomy concerns participant's rights and consent. Beneficence focuses on the positive aims of the research, whilst non-maleficence primarily guards against harm. Justice interprets socially, through questioning how research may impact on society in a positive way through supporting parents in safeguarding children on the internet (Gorman, 2007). The Social Research Association (SRA) (2003) highlights a voluntary respect code of conduct that reveals discourse surrounding scientific standards, the law and, as does Gorman (2007), the avoidance of harm. Participants received information regarding the research aims and intentions, to increase support for parents through the specific lens of child internet safety (Gray, 2009).

Ethical research involves a balance between risk and harm to participants. Cooperation within this study presented low risk of harm to participants; however, a differentiated individualistic lens met the needs of each participant to ensure a respectful and honest research environment (BERA, 2011). In-depth interviewing reveals intimacy between interviewer and participant (Siedman, 2013). Interviewing may cause participants to disclose sensitive information which may leave them feeling vulnerable or judged (Siedman, 2013). Assessing risks in a digital environment may cause parents to question how they mediated internet safety. Direct questioning of their child's safety could possibly be viewed as questioning their parenting skills; open ended style interviews, such as suggested in this study, encourage parents to freely express themselves within a safe environment whilst addressing good ethical research skills, and avoiding the possibility of harm. As the researcher I informed participants of the possibility of verbatim extracts being included in published reports (Smith et al., 2009). Good ethical practice issues concerning confidentiality and anonymity were re-addressed at the interview stage for each participant (Smith et al., 2009). Small and unobtrusive recording devices assisted during the interview process; all interviews took place at the interviewees' request, which alleviated any unwanted emotional anxieties (Smith & Osborn, 2008).

Effective qualitative interview data collection relies upon an effective interviewer and interviewee relationship (McConnell-Henry, James, Chapman & Francis, 2009). Pre-existing relationships between researcher and interviewee has become increasingly common (McConnel- Henry et al., 2009). This opportunistic style of collecting data involves accepting any previous knowledge you have whilst managing pre and existing relationships between the

participant and the researcher (Coghlan & Brannick, 2005). Sitting close to the data source requires a specific necessity to not assume knowledge, as this may affect the reflective ability analysing the lived experiences of individuals (Coghlan & Brannick, 2005).

Two of the most important principles of questionnaires and interviews in qualitative data generation are informed consent and confidentiality (Gray, 2009). Confidentiality means an obligation in protecting not only the participants' identity and details, but also in this case the educational setting and specific location (Silverman, 2011). All participants received information and consent forms, as well as assurances of anonymity (appendix 8 & 9). (Gray, 2009). All participants understood the importance given to their contribution, the procedures that would be used and how much time would be asked of them (BERA, 2011; Gray, 2009). Participants also understood any risks from involvement within the study and their right to revoke consent at any time (BERA, 2011; Gray, 2009). Educational settings where data gathering took place also provided informed consent. Educational settings provided the location for data collection, through gaining informed consent these settings agreed to research activity taking place on their premises (Siedman, 2013).

Through critical analysis of the identified themes the next two chapters explain the experiences and perceptions of parents of younger children in regard to internet safety. The analysis stage identified two themes for further interpretation; *Digital Literacy and Parental Attitudes and Emotions.* Themes I recognised possessed interconnectedness through the contributions of the participants alongside an overlapping of the themes themselves, which provides in-depth discussion within a wider context.

4 Findings: Digital Literacy

4.1 *Introduction*

This chapter is the first of two findings chapters each of which takes one of the study's main themes. This chapter explores the theme of digital literacy demonstrated by parents involved within the study and investigated how the range of digital literacy skills affected their child's internet safety (Research question two). All participants involved within the interview stage of this research are mothers and where the term parents have been used to describe participants it is these mothers that are being referred to. This chapter considers how parental digital status and digital literacy affected how they mediated child internet safety. Mediation strategies are discussed alongside the relationship that these have with the level of digital literacy that was exhibited by these mothers of younger children (Research question one). Participants revealed their individual perceptions of what digital literacy meant to them; this chapter provides clear evidence that these perceptions affected their decisions surrounding child internet safety. In addition, a focus on digital engagement within the family and how this affects parental attitudes and emotions to the internet, which in turn may influence how younger children develop their own digital literacy, is discussed (Research question one). To improve understanding of the relationships between parents, younger children and the internet, this chapter considers how the notions of trust and digital literacy levels affect each other and influence the decisions that these parents made when creating a safe digital environment for children (Research question three). This theme also explores digital literacy levels within the microsystem and how these affected how parents sought support for issues pertaining to child internet safety. Finally, the language that parents of younger children use to support internet safety within the home is considered, as well as how this is associated with trust.

4.2 *Digital Literacy and Digital Status*

Parental digital literacy levels are complex and affect how they interact with child internet safety issues. In addressing research question two, internet safety issues were affected by parental perceptions of their individual digital literacy; however, discrepancies were found between parents' perceptions of their levels of digital literacy (see literature review regarding self-efficiency) and the amount of digital literacy (skills) that parents articulated they could display with confidence. Confidence in parental digital literacy skills was identified through transcription evidence and language used by parents. Similarly, digital literacy (skills) was identified through my interpretation of interview data. Interview data revealed that some

parents felt their digital literacy skills lacked in some areas. Hatty explains her perceptions of her own internet use.

> *"Normally I don't use the internet, if I do its Facebook...I watch films on YouTube...Google... I don't know how to put parental controls on... I can't do anything; I can't stop them looking at things."*
> *[Hatty]*

Hatty perceived her digital literacy as lacking; she used negative language to describe her level of digital literacy. Digital literacy levels of parents vary; in contrast to Hatty, other parents used more positive language, Gayle displayed confidence in her digital literacy skills.

> *"I know my way around...I'm alright on the internet... I can find out about things, look for information like timetables, restaurant menus, social media, email, music, anything really."* *[Gayle]*

Digital status is the term used to describe the way in which parents can be categorised through their online activity and identity. The term refers to different digital statuses definitions; digital native/immigrant and digital resident/visitor, as discussed in the literature review. These help to explain how most parents involved within my study presented as digital immigrants, adapting to new digital environments and digital language (Prensky, 2001a). According to Prensky (2001a), age is the primary indicator in defining a person's status as a digital immigrant or digital native. Status as a digital visitor or resident is often achieved through investigating individual levels of digital literacy (White & Le Cornu, 2011). My findings show that individual's digital activity is linked to their digital visitor or resident status.

Different aspects of internet usage make it possible for individuals to take on aspects of a digital visitor and a digital resident status. An individual's digital literacy often affects how they may be considered a member of a particular digital status; however, caution is required in linking a digital status to how effective a parent is in creating a safe digital environment for children (Lewis, 2014). Hatty and Gayle displayed differences in their digital literacy skills. Hatty presented mainly as a digital visitor with infrequent and limited types of internet use, however, through Facebook and YouTube she also engaged with digital communities which suggested aspects of digital residency. Gayle presented mainly as a digital resident, using internet tools to maintain positive interactions within digital communities. Therefore, through my analysis it appears that the terminology of digital visitor or digital resident cannot be used to completely compartmentalise parents that display a range of digital skills. A more detailed investigation of parental digital literacy and other factors, such as trust, that influence child internet safety within the home environment is needed to understand the importance of a safe digital space for younger children.

4.3 ***Digital Literacy and STST***

Different factors appeared to affect how trust and digital literacy influenced child internet safety within the home environment (Research question three). The home environment, situated within the microsystem, includes close family and friends' influences, and typically presents high levels of trust. STST is dependent on how parents perceive their own digital interactions (Bierhoff and Vornefield, 2004). Through exploring digital interactions my analysis showed that parents who perceived that they displayed low digital literacy skills were likely to articulate a low level of STST. Charlotte, who displays low digital literacy skills, demonstrated low levels of STST.

> *"I think it has got its uses but it worries me... you hear stuff, that there's weirdo's... I tried once to find a website on internet safety and I was like what is going on? What do you do? Which one do you trust? You just don't know."* *[Charlotte]*

Similarly, my analysis illustrated how low levels of STST alongside low digital literacy were found in parents who were unable to make informed decisions surrounding child internet safety. This suggests that these parents lacked the digital literacy to be able to confidently use the internet itself as a supportive tool for tackling child internet safety, reinforced by a possible lack of STST in abstract systems.

Based on my findings I have created a model which shows the relationships between digital literacy and the amount of STST exhibited by parents. I have called this model the Digital Trust Window (DTW) (fig 1). The DTW shows how parental levels of digital literacy and STST lead to differing levels of home internet safety which I have identified as 'stagnant', 'uninformed', 'developing' and 'secure' (fig 1). These levels of home internet safety are displayed in the four quadrants of the DTW (fig 1).

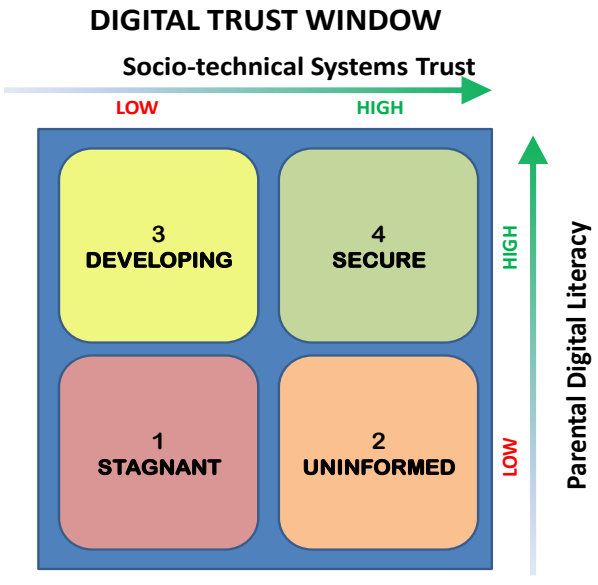

Fig 1 The Digital Trust Window

The first quadrant is 'stagnant'; a 'stagnant' home internet safety environment provides limited opportunities for family members to gain increased digital literacy or STST and often relates to restrictive mediation strategies (quadrant 1, fig 1). The second quadrant is 'uninformed'; an 'uninformed' home internet safety environment seems likely to lead to situations where low levels of digital literacy are supported by increased amounts of STST (quadrant 2, fig 1). In a 'uninformed' situation parents exhibit increased trust; when this trust is displayed alongside low levels of digital literacy, parents are more likely to show a lack of awareness of issues around use of the internet that lead to making 'uninformed' choices regarding child internet safety (quadrant 2, fig 1). The third quadrant is 'developing'; a 'developing' home internet safety environment suggests parents are steadily raising their digital literacy skills which potentially allows them to increase the amount of STST they display (quadrant 3, fig 1). The fourth quadrant of the DTW is 'secure'; a 'secure' home internet safety environment is supported by high levels of parental digital literacy which is further supported by high levels of STST (quadrant 4, fig 1). This trust allows parents to make informed decisions regarding child internet safety that leads to a 'secure' digital space for younger children (quadrant 4, fig 1).

Development of the DTW showed how parental digital literacy and STST affected their ability to act in relation to child internet safety within the home environment (fig 1). Factors influencing child internet safety were recognised through the four quadrants of the DTW (fig 1). The DTW suggested that the relationship between STST and digital literacy levels was variable (fig 1). My findings show that generally parents displaying higher levels of digital literacy were more likely to exhibit higher levels of STST (quadrant 4, fig 1); whereas parents with lower digital literacy were more likely to display lower STST (quadrant 1, fig 1). However, variable situations also applied; where parents gained higher digital literacy it enabled situations in which they were able to 'develop' increased levels of STST (quadrant 3, fig 1). High STST linked with low digital literacy sometimes produced situations where parents appear 'uninformed' in making choices surrounding the digital engagement of their child (quadrant 2, fig 1). The DTW (fig 1) model helps to address the research questions. Research question one is concerned with parental perceptions and how this affects how they mediate internet safety. Parental perceptions of digital technologies and the way parents' mediate these seem to be linked to an individual's levels of digital literacy and their levels of STST. Parent's level of digital literacy and their levels of STST also demonstrate how research questions two and three are also addressed through the development of the DTW (fig 1).

Individual digital environments affect the levels of digital literacy people possess and how they accumulate trust (Dwyer, 2011). Not all of the parents in the study that exhibited low digital literacy displayed low STST. My analysis illustrated how STST sometimes related to different types of internet activity. In addition to this, different types of internet activity lead to parents

presenting as either a digital visitor or a digital resident. My analysis outlined how it was likely that parental digital status at any given time, linked to the type of internet activity, as a digital visitor or a digital resident may have affected how they effectively applied STST. Hatty appeared to exhibit low STST in some of her internet activity, such as searching on Google, this portrayed her as a digital visitor, as she demonstrates.

> *"That happens (accessing inappropriate content) when you go on Google, not on YouTube, if you search on Google advertising things come on especially when you use Google and not on YouTube."* *[Hatty]*

When Hatty articulated her experiences with YouTube, as a digital resident, she displayed a higher level of STST as shown in the previous quote regarding YouTube. YouTube interactions suggest digital residency status that requires involvement within a digital community. The ability to choose which peers or activities to interact with increases the amount of STST a person displays due to a strengthening of the relationship between the community and the resident (Bierhoff & Vornefeld, 2004; Xiong & Lui, 2004).

Hatty transferred the high level of STST she has developed with the YouTube community to digital interactions with YouTube that involved her child. Hatty articulates her attitudes towards YouTube.

> *"It is only kid's programmes on YouTube (that her child watches) ...Yes, yes, I know I understand (about the massive range of content available on YouTube), he can't watch anything else, only his programmes."* *[Hatty]*

Younger children, when compared with older children, predominantly present as digital visitors. Digital visitor attributes are task focused when engaging with the internet and often lack engagement with digital communities such as YouTube (see literature review). Through accessing YouTube Hatty allowed her child to interact with a digital community. This suggested Hatty's child possessed aspects of digital residency. Thus it appeared that when digital residency is correlated with low digital literacy levels 'uninformed' characteristics of STST are often applied.

Some parents with lower levels of digital literacy appeared 'uninformed' in encouraging potentially harmful digital environments for children. In the quote below Hatty is uninformed in believing that YouTube is safe, even though on occasions her children have watched videos containing inappropriate swearing. Thus she would be located in quadrant 2 of figure 1.

> *"On YouTube random videos come on, boys swearing...they (her children) just copy them and I said, no you can't watch these... it was a power ranger game, some boys were making a power ranger and then swearing as a power ranger."* *[Hatty]*

Both Hatty and her child have experienced what Hatty perceived to be inappropriate digital content where her child watched a homemade Power Ranger video on YouTube. YouTube is a digital community, suggesting people who use it are acting as digital residents. Digital resident status typically presents where individuals display increased digital literacy skills. Increased digital literacy skills were generally associated with high levels of STST. I suggest that high levels of STST displayed by parents exhibiting as digital residents, through past positive experiences of a digital community, were sometimes linked with low digital literacy skills. Low digital literacy skills linked to digital residency, such as those displayed by Hatty, illustrated that 'uninformed' amounts of high STST may have affected internet safety judgements. The DTW illustrated that 'secure' and effective internet safety judgements required good level of digital literacy and STST (quadrant 4, fig 1). However, where trust was 'uninformed' discrepancies may have appeared in parental choice surrounding what was an appropriate digital space for younger children, which can be visualised through the 'uninformed' quadrant of the DTW (quadrant 2, fig 1). This lack of knowledge amongst parents with lower digital literacy was a cause for concern, because it placed younger children at risk from inappropriate sites (YouTube) that parents were 'uninformed' about and trusted (quadrant 2, fig 1).

4.4 ***Parental Mediation Strategies and Digital Literacy***

Internet mediation strategies are defined as the strategies used by parents to manage the home internet safety environment (see literature review). In order to address research question one and effectively understand the possible relationship between parent's digital literacy levels and the safety strategies they chose, I explored their different approaches to internet mediation. My analysis showed that parents who employed restrictive mediation strategies typically displayed lower levels of digital literacy to assist them in keeping children safe on the internet. In contrast, parents who exhibited a higher level of digital skills allowed children more autonomy. Charlotte and Maxine, both display lower levels of digital literacy and appear to employ restrictive mediation strategies.

> *"She is always within my eye sight in the same room as me, she is never allowed to go anywhere with anything (digital)... I don't let her do anything on the internet. I am in full control of what she can go on."* *[Charlotte]*

> *"At the moment we are just using the internet for doing maths every day, no gaming just for education... I control what he is doing at home."* *[Maxine]*

Restricting children's internet engagement suggested parents were controlling their children, as articulated by Charlotte and Maxine, which in turn suggested a lack of trust within the microsystem. This lack of trust shown by parents, potentially affected how parent's transferred trust to their children. Younger children, more so than older children, mirror parental

behaviour they observe, which can be explained using Banduras' (1991) social cognition theory. Social cognition theory suggests that learning and behaviour occur through observing different behaviours (Bandura, 1991). Similarly, Chaudron (2015) proposes that the mirroring of parental digital behaviours is common, including within the microsystem where PT is high. Therefore, the amount of trust parents displayed, including PT and STST, was likely to have more effect on younger children. The effect of parental behaviours has greater influence on younger children, mainly due to peer influence taking effect typically at an older age (Nathanson, 2001). My findings appeared to show that parents who displayed lower levels of digital literacy were also likely to exhibit lower levels of STST. According to Stolle & Hishikawa (2011) a lack of STST and digital literacy suggests some parents struggle to represent a strong digital role model for children. I support Stolle & Hishikawa's (2011) claims and further suggest that the effect of low STST and low digital literacy was demonstrated within the DTW (quadrant 1, fig 1). This assisted in highlighting how ineffective parental digital role modelling was likely to be in a 'stagnant' environment, as demonstrated in the 'stagnant' quadrant of the DTW (quadrant 1, fig 1).

Parents often presumed that their child was safe in regards to their digital interactions, and tended to take responsibility for child internet safety. Hatty spoke about other parents and how they were informed about internet safety issues.

> *"I want to know everything they do with the internet...So parents need to know as well (about internet safety), some parents (other parents) aren't educated you know, they don't even know what their kids are doing, so if they need guiding properly."* *[Hatty]*

Though most parents presumed their child was safe, they also expressed deep concerns surrounding their own digital literacy skills when applied to digitally safeguarding children. Leanne revealed concerns in her abilities to keep her child safe.

> *"I don't know how I can stop her from going on my account when it comes to Netflix. I don't think there is anything? I have no idea, I think she can just go on it, it's a case of supervising her and stuff like that."* *[Leanne]*

My findings revealed that parents with higher levels of digital literacy employed less restrictive mediation strategies than parents with lower levels of digital literacy. I propose that digital literacy skills appeared to develop where parents used the internet more frequently, leading to increased confidence when mediating children's internet usage. Confidence in mediating children's internet usage is gained through the increased knowledge and expertise displayed by parents who were exhibiting high digital literacy skills. These high digital literacy skills increased the likelihood of a rise in STST, which in turn potentially strengthened the positive affect these parents had on creating a 'secure' digital space for younger children, placing them in the 'secure' quadrant of the DTW (fig 1).

A 'secure' environment facilitated by increased knowledge and trust encourages parental confidence in allowing their child to have a more autonomous relationship with the internet (Lou et al, 2010) (quadrant 4, fig 1). In considering child autonomy on the internet, I found similarities with that of Lou et al (2010) who argue that digital literacy levels and trust affects parental attitudes and emotions to how parents mediate the internet for younger children. Gayle, as a higher digital literacy parent, exhibited higher levels of STST and portrayed a laissez-faire attitude towards her child's internet usage when compared with other parents.

> *"When she is on the PC we are mostly not with her, she wouldn't want you to sit with her when you go in she says go away... we check on her every 10 minutes or so."* *[Gayle]*

This increased laissez-faire attitude created opportunities for Gayle's child to potentially increase her own digital literacy skills through self-regulation and experimentation. However, as argued by Livingstone, et al. (2011) increased child digital literacy skills also expose the child to increased risk of harmful digital interactions.

Some parents associated risk with the type of digital activity children engaged with (Chaudron, 2015). Through exploring how parents engaged with searching activity, such as Google, I recognised that parents of younger children were concerned and viewed this type of activity as high risk. Some parents who exhibited lower digital literacy, such as Leanne and Hatty, appeared to avoid this type of internet activity for younger children, possibly due to their lower levels of STST.

> *"She doesn't even know about Google or how to search on the internet at the moment so that doesn't bother me."* *[Leanne]*

> *"He never goes into Google; he only uses YouTube."* *[Hatty]*

In contrast those parents who displayed higher digital literacy skills and increased STST, such as Gayle, encouraged children to search on Google.

> *"Whenever we have a question we can't answer, we Google it and find out about it."* *[Gayle]*

Gayle, a high digital literacy parent, displayed a positive attitude towards the internet resulting in increased STST. Gayle's high STST allowed her to display a laissez-faire attitude and adopt a co-viewing strategy for searching. This laissez-faire attitude potentially strengthened child digital literacy skills whilst creating a transferable environment for STST to pass from parent to child. Gayle's' increased levels of STST alongside high levels of digital literacy enabled her to make informed choices regarding how she mediated her child's internet usage. Mediating her child's internet use this way, Gayle showed flexibility in her attitude towards digital mediation

strategies and allowed her child autonomy. Furthermore, Gayle showed an understanding that riskier situations, such as searching online, required more stringent mediation, such as co-viewing. Livingstone et al. (2011) outline how parents who adopt a co-viewing strategy potentially scrutinise their child's digital activity less. I agree with Livingstone et al. (2011), as evidence provided by Gayle demonstrated high levels of PT within the parent child relationship, which possibly led to less scrutiny from parents.

High levels of PT, working alongside high levels of STST, appeared to lead to a strong parent child relationship. This strong parent child relationship has led to Gayle's child expressing a desire for independence whilst engaging with the internet.

> *"She wouldn't want you to sit with her she says go away go away... Every time I tell her don't do that because such and such a thing might happen or could have happened' when she has already done something she says, but it didn't! So she is always a little bit flippant about it."* *[Gayle]*

The trust relationship between Gayle and her child (demonstrated above) shows how parents may find it difficult in allowing younger children autonomy when using the internet. Autonomous younger children who gain independence and an amount of control over their internet usage potentially enter a higher risk digital environment (Stolle & Nishikawa, 2011). Some parents attempted to control this risk by differentiating types of internet usage and the mediation strategies they applied. Through my analysis I demonstrated that some mediation strategies seemed to encourage autonomous child digital literacy skills, preparing children for more digital self-regulation, whilst still considering the risks.

Balancing risk and autonomy presents difficulties for parents of younger children. Younger children progress with their digital literacy skills at an increasingly early age when their digital socio-emotional literacy is still underdeveloped in comparison (see literature review). Although younger children's digital socio-emotional literacy is underdeveloped, parents who chose mediation strategies that focused on increasing children's digital literacy skills possibly raise children's understanding of the technical complexity of the internet. Understanding the technical complexity of the internet leads to more knowledge surrounding the social complexities of the internet (Yan, 2006). Children's understanding of the social complexities of the internet is generally viewed as a development stage. Younger children are most likely to be in Piaget's pre-operational stage of development, demonstrating individualism, self-centeredness and show difficulties in accepting other people's perspectives (Piaget & Inhelder, 1969). Accepting parental perspectives is easier for younger children due to increased levels of PT within the parent and child relationship. Increased levels of PT led to younger children accepting their parent's perspective of digital technologies, which was likely to influence how children begin to form their own trusting relationships with the internet. Increased trust in the

internet, alongside higher digital literacy, leads to a better social understanding of the internet for younger children and is one of the many factors that should be individually considered when parents assess mediating the internet.

It appeared that parents considered individual factors when choosing to adopt child internet safety mediation strategies. My findings showed that parents sometimes mediated the internet according to the child's age. A child's age was likely to be used to justify the decisions that some parents made regarding internet safety. Leanne and Jane both consider their child's age when making decisions around internet safety mediation.

> *"I do often think about as she gets older that I need to make sure she is safe (technical internet safety options), but at the moment she's not going on Facebook or stuff, but it does make me think it's something that needs dealing with."* *[Leanne]*

> *"I think I'll probably be warier when he is older because then it opens up the web which is good, but also it is potentially more problematic...so I probably need to look into safeguarding a bit more now because up till now I haven't as I have always been with him."* *[Jane]*

The level of parental digital literacy appeared to affect parent's choice of when to implement internet safety strategies (Research question two). Undoubtedly, parents who portrayed lower levels of digital literacy often presented with more digital anxieties. Digital anxieties were likely to result in a more restrictive digital environment for their child within the microsystem. Increased digital anxieties generally revealed lower amounts of STST, which was often associated with low digital literacy and a digital visitor status (White & Le Cornu, 2011). My analysis demonstrated that not all parents exhibiting lower digital literacy and low STST mediated children's internet use in the same way. I propose that some parents with low digital literacy were more likely to restrict their child's type of internet use as a strategy to keep children safe online. As well as restricting children's internet usage, some parents restricted the type of mediation strategy that they currently employed. Some parents restricted mediation strategies, preferring to adopt wider forms of mediation in the future that correlated with the child's access to a wider variety of internet usage. Engaging with a wider plethora of internet usage potentially raised children's digital literacy levels; however, I found that parents who encouraged increased child digital literacy also articulated anxieties. Though still often anxious, my analysis demonstrated how these parents often spoke about safety strategies in the present tense, reinforcing the importance of these strategies for younger children (see Jane above). It is clear that most parents considered children as individuals when regarding internet safety; however, many factors were likely to affect how parents mediated in digital situations, including emotional anxieties.

4.5 ***Individual Considerations and Digital literacy***

My findings illustrated that most parents understood that an individual's digital experiences often contributed to the amount of social capital that was available to younger children, as articulated by Jane and Hatty.

> *"They are in an internet world, they have grown up in a different world... the digital world has got good things and not so good things are because that's the nature of the world isn't it... I suppose that's how I see."* *[Jane]*

> *"If he wants to play on the internet he can play phonics and alphabet games, so he can learn and play... programmes like Cbeebies they are really good they give you a message as well, it's good so I just let them."* *[Hatty]*

Parents considered social capital through recognition of the good influences digital technologies can have on their child's development. Through my analysis I suggest that parents of younger children considered general factors, alongside viewing their child as individuals, when determining what influences child internet safety (Research question one). Parents were likely to use the age of the child when considering their current attitudes to internet safety; however, they also viewed the child and their skills (digital literacy and literacy skills) individually.

Parents generally understood how new digital skills played an important role in the lives of their children, as well as raising the amount of social capital children possessed (Livingstone & Bovill, 2001). It is widely recognised that social capital is acquired through engagement with communities, including digital communities. However, I agree with Stolle & Nishikawa (2011) in recognising that the benefits of engaging with a digital community was likely to be hindered by the generally low levels of GT found in parents within the UK. Low levels of GT were in contrast to the increased levels of social capital needed to effectively network and create relationships within communities in order to be functional and beneficial to society (Livingstone & Bovill, 2001). Most parents understood the societal benefits of allowing their children to engage within a digital environment, however, some parents, generally those with lower digital literacy skills, viewed the importance of these skills in a future tense. I propose that viewing the importance of digital skills in a future tense was likely to limit present amounts of social capital available to younger children from their engagement within a digital environment, possibly 'stagnating' children's digital literacy skills (quadrant 1, fig 1). This potentially places these children in the 'stagnant' quadrant of the DTW (fig 1).

Some parents assumed that a lack of child digital literacy and literacy skills assisted in keeping young children safe on the internet. In keeping younger children safe online, some parents reduced digital risks through prohibiting searching activity, such as Google (Chaudron, 2015).

My analysis shows similarities with Chaudron's (2015) claims; I found some parents restricting children's digital activity as they perceived this would put them at less risk from online harmful experiences. However, reducing harmful experiences through employing restrictive mediation strategies can often limit the amount of digital literacy available to younger children. Digital literacy in younger children is perceived by parents as a pre-condition of children's social inclusion. Parents' attitudes surrounding social inclusion suggest a community perspective which is essential in the procurement of social capital. The procurement of social capital therefore seems an important factor that parents considered when assessing how to safeguard younger children online.

My data showed that some parents, particularly those with low digital literacy, viewed their own knowledge and abilities, or inabilities, to safeguard children as unnecessary at such a young age. One of the factors parents considered important in safeguarding children was their child's level of literacy. Charlotte and Hatty consider their child's level of literacy when they assessed their internet safety needs.

> *"It (the internet) makes me recoil and actually because they are only just learning to I don't think it's relevant yet at such a young age... if she was using the tablet more I should probably set up some parental controls or something."* *[Charlotte]*

> *"They can't type properly yet, they say mummy can you type it, so they are alright (safe)."* *[Hatty]*

Many parents noted that younger children have low literacy skills. My findings outlined how parental digital literacy appeared to determine how parents interpreted the effect of child literacy skills on the digital microsystem environment. Most parents articulated that a child's literacy level seems likely to affect a child's ability to type and complete an effective internet search. Children who were unable to type words in proficiently due to lower literacy levels would have difficulty searching. Searching activity seemed particularly concerning for parents who displayed lower digital literacy. This concern reinforced the restrictive nature of internet mediation strategies that some lower digital literacy parents adopted. In contrast higher digital literacy parents spoke about how their child's literacy skills would positively affect their child's ability to engage with the digital environment. As a higher digital literacy parent Jane also used the age of her child and their literacy skills as a way of explaining how she mediated internet use.

> *"We looked up songs together on YouTube, he is too young to do that on his own, just because he can't type yet. As soon as he is able to type I would apply parental controls, it won't be that long it doesn't take that much to type in something, I mean it's not that difficult and he is 4."* *[Jane]*

Jane accepted the limitations of her child's low literacy skills and supported her child in this through actively encouraging a co-viewing strategy when searching on the internet.

Encouragement through co-viewing demonstrated Jane's high STST in allowing her younger child to be exposed to this type of internet activity.

Most parents appeared to be considering younger children's literacy skills as an influential factor in deciding when internet mediation strategies should be employed. My findings demonstrated that implementation of mediation strategies linked to a child's literacy level seemed to depend upon the level of parental digital literacy and the current internet activity of younger children. Younger children within a high digital literacy microsystem were more likely to be encouraged to be independent and to access a wider plethora of internet activities. Independence and wider internet access is associated with higher risk. This risk was more likely to be understood effectively by parents who display higher digital literacy skills. In recognising the potential risks from the internet, these parents were contemplating how many different factors, including child literacy skills, need managing to create a 'secure' digital environment for children within the home (quadrant 4, fig 1).

Most parents attempted to control their child's digital literacy skills to assist in creating an individualised safe home digital environment. I propose that some parents, particularly those with lower digital literacy skills, were likely to find reassurance in purposefully restricting the child's digital literacy skills. Often parents restrict a child's internet use to digital activity that parents deem suitable, controlling how individual children engage with internet activity. This control often surrounds pre-determined rules between the parent and the younger child, such as what internet content the child was allowed to access (see Parental Attitudes and Emotions chapter). Here I agree with Bierhoff and Vornefeld (2004), where in contrast this element of control suggests distrust and contradicts the amount of PT shown within the parent-child relationship at times.

My analysis discussed how most parental implementation of digital meditation strategies were affected by the amount of STST they displayed. Most parents demonstrated how the amount of STST they displayed seemed to affect how they mediated issues surrounding child digital literacy levels.

> *"You just don't tell children everything at this age (about what's available online) if they don't know then they don't think about it."* *[Hatty]*
>
> *"You see I wouldn't want that (telling children how to access Google), don't teach them how to use the internet, I don't like that."* *[Leanne]*
>
> *"He sees a game icon on the desktop and he is like mummy "what is that?" I'm not happy with him playing games online. So I said he couldn't do this now."* *[Maxine]*
>
> *"Just to be quick (Gayle does some digital tasks for her child) and yeah obviously not to really show her too many things. If she knew how to do everything online, then that's too scary."* *[Gayle]*

The distrusting perception of the internet from some parents of younger children seemed to indicate low levels of STST. I agree with Lewis (2014), in considering that low levels of STST alongside restricting child digital literacy skills to be an ineffective indicator of when best to apply safety strategies. Parents applying safety strategies in this way possibly remove some of the individuality surrounding their decisions about child internet safety. Arguably they were still making their own individual decisions; however, lower amounts of STST appeared to encourage them to create a restrictive digital environment for younger children. I suggest parents, specifically those with low digital literacy, appeared to find reassurance in restricting their child's internet use and digital literacy. This however, creates a 'stagnant' environment regarding digital literacy levels for children, which can be visualised using the DTW (quadrant 1, fig 1). Some parents with higher digital literacy also restricted their child's internet usage and digital literacy. In these situations, however, there was still evidence of progression and increased autonomy, encouraging and 'developing' them digitally, which was also demonstrated in the DTW (quadrant 3, fig 1). Restricting a child's digital literacy skills typically lessened the amount of autonomy a younger child had over their own internet activity; potentially leaving children with deficient skills to help protect themselves whilst engaged with the internet.

The language that parents used to articulate internet safety to younger children may affect the child internet safety environment. Communication strategies were potentially affected by the amount of digital literacy a parent displayed. Parents of all levels of digital literacy seemed likely to show concern over talking to their younger children regarding internet safety. Jane demonstrated how some parents with increased digital literacy skills felt regarding talking to younger children about internet safety.

> *"To be honest not confident (about talking to younger children regarding internet safety). I would probably want to talk to someone about what are good ways of explaining things to a child; I wouldn't feel that confident about how to get that balance right."* *[Jane]*

Some parents displayed concerns over their confidence to achieve a balance between accessing competent support and communicating effectively to younger children. My analysis demonstrated that parents seemed likely to communicate using language that restricts, which took the form of protecting the child from the parental perspective; however, this may be viewed as limiting independence and knowledge from the child perspective. In considering how to protect children whilst engaging with digital technologies parents were possibly affected by emotional feelings (see literature review). Conversing to children through restrictive strategies was often associated with lower levels of STST, which could be viewed as a 'stagnant' (fig 1) mediation strategy. Restrictive mediation, alongside low STST, linked with lower levels of parental digital literacy, and suggests individuals are within the 'stagnant' quadrant of the DTW

(fig 1). The DTW also illustrated how more positive language that promoted a child's digital literacy skills, such as encouraging self-regulation, combined with higher levels of STST, can potentially produce a 'developing' environment, leading to increased digital security (quadrant 3, fig 1). My findings similarly illustrate that there was a link between parental levels of digital literacy and STST, which seemed likely to affect parent's decisions on how to articulate internet safety to younger children.

Younger children do not possess the skills to effectively cope with inappropriate online content. Some parents of younger children, those possessing either high or low levels of digital literacy, suggested their child has already accessed inappropriate content, as articulated by Hatty and Gayle.

> *"I just want to keep him away from stuff (inappropriate content) ...On Google it randomly comes on advertising when he just presses something, just rubbish advertising, sometimes naked girls." [Hatty]*

> *"She sees things that make her think of the world in a way that I don't want her to, all of these girls can have it all and I want it too (video of a child receiving lots of Disney frozen presents." [Gayle]*

Parents suggested, particularly parents with lower digital literacy that restricting younger children's online access helped to keep them safe. Keeping children safe using restrictive strategies was in contrast to findings within my analysis. I found that restricting the progression of child digital literacy skills as a safety strategy was ineffective in keeping younger children safe. This placed some younger children within low digital literacy home environments at an increased risk of harm from inappropriate content. Reducing the frequency of inappropriate content on younger children was challenging for some parents who did not possess the increased digital literacy skills needed to effectively manage the internet within the home.

Through effective role modelling parents can give their child the skills needed to help them cope with inappropriate content online. Coping with inappropriate content requires a combination of strong parental influence and higher digital literacy. Parents possessing good digital literacy alongside a good level of STST allowed their younger children more digital independence, portraying high levels of PT throughout the parent-child relationship. Increased PT allowed for an open family environment where communicative mediation strategies effectively assisted in managing children's internet use (Clark, 2011). In managing children's internet use I suggest parents were likely to view children through an individualistic lens when considering digital mediation strategies. More examination is needed; however, in questioning the reasoning behind some decisions those parents make surrounding the levels of both parent and child digital literacy and the mediation strategies that all parents employ, to ensure an effective home digital environment.

4.6 ***Support and Digital Literacy***

Different factors surrounding digital literacy affect how parents of younger children access support regarding child internet safety. Most parents singled out gaining support for child internet safety as requiring a different approach when compared to other family related issues they often sought support for. Primarily, parents were likely to seek support for family issues from within the microsystem where PT is high, especially between themselves and their own parents. Many parents of younger children were likely to reject the possibility of support for child internet safety issues from their own parents and suggested alternative support outside the microsystem into the wider environment of the mesosystem and beyond. Parents of younger children were not likely to access their own parents for support with child internet safety, due to the low level of their parent's digital literacy. Charlotte suggests her Dad was not an option when considering her support options.

> *"I don't think I would ask my dad because although he is quite good on the computer I'm not 100% sure how he would be about internet safety, I would have to have the conversation I suppose about what he is like with setting up parental controls."* *[Charlotte]*

As a much younger parent than the other participants, it is possible that Leanne exhibited some attributes of a digital native, due to part of her childhood involving a level of internet usage (Appendix 10). Though Leanne comes from a younger generation of parents she also explained how her typical support network was not likely to be effective for child internet safety issues.

> *"Support for the internet, I would probably Google it (Laughs)...I have no idea, I don't know if there was anywhere else you would go to see, because I know my mum wouldn't have a clue."* *[Leanne]*

Parents seemed likely to express that the perceived level of digital literacy available to support them from an older generation was insufficient. This insufficiency was likely to relate to an older generation where it was more likely that individuals would possess lower digital literacy levels (Prensky, 2001a). Regardless of digital literacy levels, I found parents of younger children clearly wanted more support in regards to child internet safety. Interestingly parents suggested the mesosystem and beyond, such as schools or the internet itself, as possibilities for digital support. Moving support from the microsystem to the wider concentric circles of Bronfenbrenner's (1979) theory facilitates a change from PT to GT. GT is typically formed with less familiar relationships than that of PT, which could inhibit the effectiveness of any support given and affect the amount of trust a parent places within these potential relationships (Stolle, 2002; Uslaner, 2002). These potential relationships have different factors that affected how parents were able to build on the digital literacy they possessed and the amount of trust they had in the digital environment. Parental levels of STST and digital status seemed to affect how parents of younger children perceived supportive environments for information on

child internet safety. Often parents seemed unsure about accessing effective support and displayed difficulty in applying trust. Leanne and Charlotte have low digital literacy skills and low levels of STST; surprisingly, both suggested the internet as a possible source of support for child internet safety. In accessing support for the internet, findings illustrated that parents who exhibited lower digital literacy and displayed digital native attributes seemed more likely to display increased amounts of STST. In contrast, some parents with lower digital literacy that were more likely to be correlated with digital immigrant attributes such as those exhibited by Charlotte, seemed to have low levels of STST when accessing the internet for support.

> *"I tried once (to access information about child internet safety online) and I was like what is going on? What do you do? Who do you trust? You just don't know."* *[Charlotte]*

Leanne's digital native attributes and high STST could have positively affected Leanne's digital literacy levels, leading to an environment for both skills and trust to 'develop' (quadrant 3, fig 1). My findings showed the relationship between digital literacy and digital status affected decisions that parents of younger children make with regards to internet safety. In the future it is likely that more parents of younger children will display digital native attributes. More digital native parents may affect how the majority of parents seek support for child internet safety. With the onset of most parents as digital natives it is possible that the digital gap between digital natives and digital immigrants may be reduced to insignificance. Though my findings were limited, due to the small sample size, this potentially raises questions as to how stakeholders, such as the UK government, review and implement a continuous supportive environment for parents of younger children with regards to internet safety.

4.7 ***Discussion***

As discussed in the literature review, there was a correlation between parental digital status and digital literacy levels which affected how some parents mediated child internet safety within the home. This chapter affirms this and also demonstrates the interconnectedness between the three research questions. The argument surrounding digital status links to research question two in suggesting a relationship between digital status and digital literacy in parents. This chapter also demonstrated that as parents increased in digital literacy their digital status was likely to be affected. As Prensky (2001a) suggests, older parents more often presented with digital immigrant attributes and younger parents were more likely to present with digital native attributes due to their exposure to digital technologies from a younger age. My analysis shows some correlation with Prensky (2001a), as age was arguably a factor in recognising parental digital status. However, my analysis showed more similarities with White and Le Cornu's (2011) topology of digital visitors and residents. I agreed with White and Le

Cornu's (2011) proposal that Prensky's (2001a) suggestions of people as digital natives or immigrants may soon appear outdated. Using a digital native or digital immigrant attributes to compartmentalise parental digital status relies on chronological data. I propose using digital visitor and digital residency attributes as more effective in describing the digital status of parents of younger children, as this was individual and linked to digital literacy levels and activity.

My research has demonstrated that it is possible for some parents to exhibit dual digital status identities. These dual identities appeared where parents displayed both digital visitor and resident attributes. Digital visitor and resident attributes often displayed different characteristics depending on the level of parental digital literacy. As identified in the DTW, misleading digital residency status supported by low levels of digital literacy and negative STST, created a 'uninformed' environment (quadrant 2, fig 1). Where digital residency was supported by good levels of digital literacy, informing positive STST, a 'developing' environment became apparent (quadrant 3, fig 1). However, this research was limited in sample size and caution must be applied in attempting to generalise any of the results to the wider population. More research is needed to investigate how parental digital status affects child internet safety management within the home.

A key aspect of this research was the development of the DTW as an effective tool for visualising the variable relationships between parental digital literacy and STST (fig 1). In helping to address research questions two and three the findings clearly showed that the amount of STST exhibited by parents was affected by the amount of digital literacy they possessed. Parental relationships with digital literacy and STST were often seen to affect child internet safety in different ways. There were many possible combinations of levels of digital literacy and levels of STST that have been presented within my findings. Parents' positive relationships between high levels of digital literacy, such as displayed by Gayle, and high levels of STST often produced aspects of a 'secure' home digital environment (quadrant 4, fig 1). However, the DTW was also able to show negative relationships, such as Hatty's relationship with YouTube due to 'uninformed' levels of STST (quadrant 2, fig 1). These and other relationships were clearly shown within the DTW (fig 1).

Analysis illustrated how most parents of younger children wanted to be responsible for child internet safety. Responsibility was based around a desire to protect the child from potentially harmful online content. Parents' perceptions of the internet, especially when considering potentially harmful content, seemed to affect how parents' used mediation strategies, which was specifically pertinent to research question one. My analysis illustrated how parents of younger children often displayed difficulties in attempting to balance between responsibility,

control and trust. The level of individual parental digital literacy affected how this balance was addressed. My analysis recognises how parents of younger children acknowledged the individuality of their children and family digital environment when considering internet safety. Furthermore, parents displaying high digital literacy levels, who were also likely to link the mediation strategy to the individual child's type of internet use, gave rise to 'secure' internet safety environments that were adaptive and constructive, falling into the 'secure' quadrant of the DTW (fig 1). By effectively linking mediation strategies to specific types of internet use, these parents asserted control over high risk activities, whilst still encouraging appropriate autonomy for their child.

Chaudron (2015) argued that parents of younger children commonly employ restrictive mediation strategies. My findings agreed with Chaudron (2015); however, my findings also demonstrated how parental digital literacy levels may have affected what type of internet mediation was used. Relating to research question two, parents exhibiting lower digital literacy were more inclined to restrict younger children's internet use than parents who displayed higher digital literacy. Parent's low levels of digital literacy helped to explain how a lack of parental digital knowledge and expertise may possibly lead to a narrowing of opinion that potentially ignored the benefits of other mediation strategies.

Demonstrating the link between research questions two and three, findings suggested that parental digital literacy and STST may have affected how parents spoke to younger children about the internet. Parents seemed confused over what form communicating about internet safety should take. Higher digital literacy parents displayed the skills and trust needed to demonstrate positive communications through encouraging child autonomy. Lack of guidance surrounding how digital literacy affected how parents choose digital mediation strategies, seems likely to place some younger children at unnecessary risk. Risk is greater where parents exhibited lower digital literacy and increased levels of STST; this can lead to 'uninformed' decision making surrounding child internet safety within the home (quadrant 2, fig 1). This falls within the 'uninformed' quadrant of the DTW (fig 1).

Family digital experiences were affected by parents' attitudes, emotions and digital literacy surrounding the internet. My data illustrated how parents exhibiting good digital literacy and higher levels of STST were more likely to mirror positive digital behaviour to younger children. This mirroring potentially raised younger children's digital literacy. Livingstone et al (2011) outlines raising younger children's digital literacy as potentially placing younger children at an increased risk from harmful internet use. My findings support the argument put forward by Livingstone et al. (2011), yet go further in suggesting that younger children who were supported by parents who displayed increased digital literacy skills were less at risk than those

supported by parents with lower digital literacy skills. It appears that parents with increased digital literacy balance the risks and benefits in this situation, as younger children were supported by the increased knowledge and experience. Similarly, parents of younger children who exhibited lower amounts of digital literacy or 'uninformed' amounts of STST, potentially placed children more at risk of negative experiences whilst online (quadrant 2, fig 1).

Low digital literacy alongside low or 'uninformed' amounts of STST, meant parents were unlikely to be good role models for younger children (quadrant 2, fig 1). These parents seemed to lack knowledge and experience when making effective decisions surrounding child internet safety within the home. This suggests that raised awareness of the safety concerns surrounding younger children's digital engagement would increase parents' understanding. Due to the sample and time limitations of this study more research is needed to understand how levels of parental digital literacy and STST affect child internet safety within the home, potentially leading to a more supportive environment for parents of younger children. Support for parents of younger children concerning child internet safety is lacking. Parents of younger children recognised they needed support, however, findings showed that some parents with lower digital literacy suggested that support should come in the future when their child's internet activity widened. Whilst these parents often wanted to be responsible for their child's current internet safety, by not acting now they were not demonstrating responsibility for their child's current internet safety. This was worrying because by suggesting that support was necessary only in a future context places children within low digital literacy environments at risk.

To effectively assess risks, parents generally agreed that there was a lack support from within the microsystem. The microsystem typically contains high levels of PT; however, my analysis outlined how these parents increasingly looked for support from the mesosystem and beyond, moving into GT. Furthermore, my findings suggested that this lower GT when combined with low STST would result in difficulties for parents in recognising and accessing support for internet safety. As younger children access the internet from an increasingly younger age, more research is needed on how parental digital literacy levels affect the internet environment for younger children and how all parents can be supported to help keep children safe.

5 Findings: Parental Attitudes and Emotions

5.1 ***Introduction***

This chapter is based on the second theme surrounding factors that influence parental attitudes and emotions towards the internet. This theme examines how pre-existing attitudes, emotions and relationships with the internet are likely to affect the amount and type of trust parents displayed. In addition, the range of attitudes and emotions towards mediation and trust exhibited by parents of younger children is explored, and how these affect internet safety decisions (Research question three). To help understanding of child internet safety, this chapter considers how the use of language, revealed through parental perceptions, affected mediation within the digital environment (Research question one). This chapter examines parents' interpretations of wider influences that affect internet safety. Negative parental digital experiences are also discussed, to determine how these affected the child internet safety within the home. Finally, this chapter considers the relationship between control, trust and child autonomy, as well as how responsibility for child internet safety was experienced by parents.

5.2 ***Attitudes and Emotions to Online Activity and Trust***

Bronfenbrenner's (1979) EST has been applied to understand familial relationships and activity within the microsystem and how these directly impact on parents and children. Some activities appeared to have less influence as they present less frequently or had less significance, whereas others had a significant effect on the behaviour of both parents and children (Lauricella et al., 2014). Some parents spend prolonged amounts of time engaging with digital technology, which is likely to affect the ecological systems of both the parent and the child. Supported by Bronfenbrenner's (1979) EST and Bandura's (1991) social cognition theory (see literature review) I propose that parental attitudes and emotions to the internet influenced how parents mediated child internet safety within the home, which assists in addressing research question one. Nathanson (2001) suggests that parental attitudes and emotions to the internet influence how children gain their own perceptions of the internet. Parents have increased influence over younger children, which I argue, supported by social cognition theory, helped to underpin the importance of parental attitudes and emotions within the home environment (Bandura, 1991).

Most parents realised there were many benefits to younger children using the internet. Similarities between my research and that of Livingstone et al (2011) identified that defining

types of internet use that were suitable for younger children was sometimes difficult for parents. Alongside parents struggling to define what type of internet use was suitable for younger children; my analysis also demonstrated how parents of younger children sometimes found it difficult to provide clear definitive boundaries of what internet enabled activity meant to them. Similarly, some parents found it difficult to recognise the type and amount of their own internet usage. In response to a question about how she used the internet Leanne says:

> *"Google, exam questions, Netflix, university, that's it... Facebook, you don't think do you I use it all the time...Oh yeah, I use it a lot for shopping, I am always sat on the phone and you don't think you are on the internet."* *[Leanne]*

> *"Not really no (have any worries about her child's internet use), it's just the film thing (Netflix), she doesn't even know what Google is so that doesn't bother me ... she wouldn't even know how to get the keypad up to type, so that doesn't bother me."* *[Leanne]*

Leanne clearly articulated how she sometimes failed to recognise her own digital activity was internet enabled. Parent's perceptions of their own internet use appeared to affect how they perceived their child's internet usage, which specifically relates to research question one. Leanne also displayed clear different opinions on her child's internet activity. She allowed her child to access Netflix, showing higher STST, whilst her low STST in Google was managed by restricting her daughters' access. It appeared that parents were likely to recognise and define children's internet enabled activity according to the level of risk posed to younger children. Levels of risk in assessing appropriate content for younger children may be affected by the amount of STST a parent displays.

My analysis demonstrated how some parents of younger children were likely to classify different types of internet activities according to their relationship with STST. In response to this Leanne shares an emotional response when articulating experiences of a past negative internet encounter.

> *"Yes (a previous negative experience has affected Leanne's attitude to the internet), because I think oh God if she (her child) just types in something wrong, if she was actually on the internet and not just sort of watching something (Netflix, Cbeebies) or playing her games, sort of searching the internet, yes she could easily find anything."* *[Leanne]*

Leanne displayed more STST in Netflix, Cbeebies and gaming applications. In contrast Leanne placed lower amounts of trust in searching activity, such as Google, viewing this as a potentially higher risk activity, possibly due to emotional anxiety and fear connected to her own past experiences with Google (as discussed in the previous chapter). Child internet activity was sometimes overlooked by these parents, who failed to associate being online with some trusted websites. Godbold (2015) proposes that it is possible to see emotions without

having to ask about them. It seems inevitable that in their desire to protect children, parents' will experience emotion; however, the level of emotion also seems to be affected by the presence of trust, suggesting a possible link between emotion and trust. Emotional anxieties and fears that produce a strong protective element appear to present more where STST is lower, which may reduce children's protection from some inappropriate online content, specifically where 'uninformed' amounts of STST are displayed. Websites such as Cbeebies and Netflix seemed to be correlated with increased amounts of STST from these parents. Increased amounts of STST were likely as some parents viewed this type of internet use differently from accessing the internet. STST was often linked with parental levels of digital literacy, which may also affect how parents defined younger children's internet use.

My analysis showed that parent's levels of digital literacy and amount of STST appeared to affect how some parents recognised different types of child internet use (Research questions two and three). Furthermore, lower digital literacy levels were likely to affect how parents choose suitable types of internet usage according to their perceived level of risk to younger children. Findings also illustrated that parents with lower digital literacy apparently viewed high risk activities, such as searching on Google, with low STST. In contrast, activities deemed low risk, because of their suitability for younger children, such as the Cbeebies website, seemed to be associated with higher levels of STST. My data appeared to suggest that low digital literacy parents, displaying high levels of STST, were likely to misinterpret their child's digital activity as internet enabled. This indicates that some parents possessing lower digital literacy may exhibit 'uninformed' amounts of STST in recognising the full risks of children accessing internet content. Not surprisingly, an 'uninformed' amount of STST fails to provide an effective safe digital environment for younger children and thus would be situated in the 'uninformed' quadrant of the DTW (fig 1). Some parents demonstrate 'uninformed' levels of STST and are not fully aware of the facts regarding the appropriateness of their child's internet use. Furthermore, 'uninformed' levels of STST may reduce levels of protective emotions in parents due to misplaced high levels of STST. This questions the role of emotions when considering internet safety, as an important factor in the protection of younger children. Parents of younger children who exhibited higher digital literacy skills were generally exposed to higher risk internet activities associated with digital residency (see previous chapter). This exposure allowed them to recognise all forms of internet usage, and the risks they entailed for younger children. The increased level of digital literacy when correlated with increased levels of STST enabled these parents to make informed decisions when assessing new possibilities for their child on the internet; leading to a more 'secure' digital environment, thus they would be located in the 'secure' quadrant of the DTW (fig 1).

The IPA approach has enabled an in-depth exploration of the internet use of parents of younger children. The questionnaires revealed that parents perceived their child hardly ever

accessed the internet. In contrast, the interviews revealed new data suggesting the same child accessed the internet more frequently. These data discrepancies reflected how important deep rich qualitative open ended methodological approaches, such as IPA, can be in gaining accurate accounts from participants (see methodology). Leanne's initial questionnaire response suggested that she perceives her child to hardly ever access the internet, whereas Leanne's interview reply suggested her child's internet activity was every day.

> *"She goes on the iPad and watches Netflix and the occasional game that's it really. Every morning whilst I get ready, she watches television on the iPad. It keeps her quiet for 15 minutes whilst I get ready."* *[Leanne]*

Discrepancies articulated by Leanne suggested a lack of understanding in what some parents perceived to constitute accessing the internet. This comparison led me to question the validity of the questionnaire method. Gaining in-depth responses from parents using a closed format such as a questionnaire did not reveal the same quality of data as the semi-structured interview process. Interviews allowed for open ended questioning and elaboration which facilitated the participants' voice in leading the conversation.

5.3 ***Attitudes and Emotions to Mediation and Trust***

Many factors influence how parental attitudes and emotions to the internet affect their choice of mediation strategies. My findings revealed how parents linked mediation strategies to the child's type of digital use when attempting to keep children safe. In an attempt to keep younger children safe, some parents often chose to adopt a co-viewing strategy. In the following quote the co-viewing strategy was evident:

> *"He is never alone using the computer, me or my husband all the time with him."* *[Maxine]*

Co-viewing is an active mediation strategy often used by parents of younger children (Livingstone & Bovill, 2001). I argue that some parents often imposed strict restrictions on what internet content was suitable for their younger child to engage with, which suggested a high level of parental control (Research question one). High levels of parental control, as demonstrated by Maxine, suggests low levels of PT within the parent-child relationship. Thus I argue that low PT within a digital home environment was likely to be affected by low amounts of STST. Maxine displays low STST alongside a protective emotional response that suggests a fear of leaving her child alone whilst engaging with online activities. Maxine seems affected by these emotions in her desire to protect her child from inappropriate online activity. Low STST appeared to be more prevalent in individuals with lower digital literacy; furthermore, I argue

that in these circumstances some parents may have displayed difficulties in presenting positive trusting digital role models for younger children when they adopted a co-viewing strategy.

Multiple factors surrounded why parents of younger children chose to employ co-viewing as a mediation strategy. However, co-viewing as a mediation strategy was often considered by parents as time consuming. My findings supported the claims of Lewis (2014) who argued that parents of younger children were likely to use a child's digital engagement as an opportunity to fulfil household tasks, relieving issues of time poverty, which co-viewing can create. According to Livingstone and Bovill (2001) co-viewing for digital educational content is a common strategy utilised by parents of younger children. My analysis found that many parents of younger children spoke about co-viewing within a past tense. Parents explained that they used to sit with their children more.

> *"Well we used to always sit with her on Cbeebies, because she couldn't things, now she can and she sends you away, so we hover and when she calls we help or check on her every now and again, but usually if she is on the computer playing Cbeebies games that gives us a chance to do something else."* *[Gayle]*

Parents articulated that they adopted co-viewing strategies due to child low literacy or digital literacy levels (Research question two). Gayle demonstrates how her emotions impact on her mediation strategies, particularly surrounding co-viewing. Gayle, who perceives she has high digital literacy and displays high amounts of STST, provides evidence that emotions affect most parents whatever their level of digital literacy or STST. Gayle displays anxiety when considering her child's internet use. Gayle's transition between a co-viewing strategy and encouraging her child to have more autonomy clearly involves an emotional response, with a desire to ensure her child is still protected. With the amount of responsibility felt by parents, I was surprised to find that co-viewing as a strategy was not primarily considered for reasons pertaining to child internet safety. The use of the past tense for co-viewing as a strategy also linked to the restrictive nature of some parents control over the digital home environment. Restricting and controlling child digital literacy skills through choosing not to adopt an active co-viewing strategy is likely to lead to an ineffective supportive environment for younger children.

Both quantitative and qualitative data collection methods were used to ascertain information regarding participants' family structure (Appendix 4 & 10). Chaudron (2015) suggests family structure is important when considering how this can affect child internet safety within the home. Furthermore, Chaudron (2015) particularly mentions the presence of older siblings, proposing that younger children mirror their digital behaviours, whilst often taking on a tutor role in helping to manage younger sibling's digital activities. Jane and Charlotte demonstrate

how some parents are considering the effect of older siblings on their younger child's digital activities.

> *"...there will be lots of households like that where there will be younger siblings and older children, so the younger siblings are likely to see more."* *[Jane]*

> *"Yes (Do you think having an older sibling will affect your younger child's internet use?). Because I think she will probably want to go on it younger. Whereas my elder one didn't have anybody to watch going on the internet. And I think it is because it just comes up so much now that everybody is big on some sort of electronic device, everywhere you go, so I think she will want to probably either watch what her sister is doing or want to do similar, probably from an earlier age."* *[Charlotte]*

Jane and Charlotte both agree that having an older sibling may affect their younger child's internet use, as they agree that younger children may be exposed to digital content at an earlier age through watching older siblings. Chaudron (2015) focuses on the affect that older siblings have on younger children's' digital activity and level of internet safety. What is surprising is how there is a lack of research that discusses the presence of younger siblings on older sibling's digital activity. Not surprisingly, my analysis found that where there is more than one child in the family, issues of time poverty become more prevalent, as demonstrated by Charlotte who has three children.

> *"To be honest because we rush around a lot because on some days we are at dancing and on other days we are at taekwondo and others swimming."* *[Charlotte]*

Hatty was the only participant whose reception aged child had younger siblings. Having younger siblings seems to have had an effect on how able she feels to mediate child internet safety.

> *"In my kids specially the one we are talking about he is using it more than everybody, because I have got 2-year-old twins and I haven't got time for him so he is always playing on that, that's my fault I accept it."* *[Hatty]*

Time poverty is potentially negatively influenced by the presence of younger siblings. Often an older sibling can take on a tutoring role for younger siblings; however, where this is not the case there may be concerns for younger children situated within this family structure, especially where there are younger siblings and time poverty issues. This research project does not have the capacity to fully discuss how the presence of older and younger siblings may potentially affect the child internet safety home environment. However, what this research does recognise is a gap in current understanding of this issue.

I propose that some parents of younger children often displayed differentiated levels of trust within specific areas of the internet, due to their relationship with relational trust (see literature review). In particular, these parents exhibited high levels of relational trust within the Cbeebies website. Cbeebies received high relational trust and high STST from most parents. Subjective beliefs surrounding Cbeebies may help to explain how parents transform relational trust into STST (Bierhoff & Vornefield, 2004). The British Broadcasting Cooperation (BBC), the creators of Cbeebies, recognises the importance parents of younger children place on specific relational trust and the safety of children when building brand confidence (Eryl-Jones, 2003). Parents, such as Gayle, also appeared to appreciate the advertisement free environment, unlike other possible digital outlets available which focus more on consumerism.

> *"It's a very consumerist thing (a video of a younger child receiving lots of frozen presents) and yeah I thought the little girl was a bit spoilt and the parents a bit self-indulgent filming and putting it on YouTube. She loved it."* *[Gayle]*

Institutions, such as the BBC, that maintain a strong heritage and are respected worldwide, achieved a high level of relational trust (Eryl-Jones, 2003). I argue that the amount of relational trust displayed by parents affected how they viewed internet content. The amount of trust a parent displayed was often linked with the amount of respect parents had for a specific website. Longstanding respect earned by the BBC was recognised by both digital immigrant and digital native parents. The age of parents, which determined digital immigrant and digital native status, appeared to be irrelevant as all parents were able to use their past experiences with the BBC to build up relational trust. Although the digital immigrant parents may lack past experience with some digital activities, their past relationship with the BBC allowed them to use trust in the BBC to facilitate trust in the Cbeebies website. This experience with the BBC strengthens the relational trust that this brand achieved, allowing most parents of younger children to trust the cooperation (Eryl-Jones, 2003). The strong relational trust associated with the BBC assisted in explaining parents increased amounts of STST in the Cbeebies website. This higher level of STST also seemed likely to reduce feelings of parental emotional guilt associated with leaving children to self-regulate on Cbeebies. Language used within conversational research methodologies, such as IPA, demonstrates how emotions, such as guilt, manifest in speech through the choices those individuals articulate and their use of words (Godbold, 2015). Hatty and Leanne both demonstrated how they can justify their child's engagement with Cbeebies.

> *"Cbeebies are really good programmes...they give you a message as well, it's not only a programme, it's good, so I just let them."* *[Hatty]*

> *"I can get ready; it gives me quiet time. She learns through what she is watching, like Cbeebies live, all the learning stuff."* *[Leanne]*

My analysis showed how parents felt less guilty in leaving younger children to self-regulate on Cbeebies. Parents choosing self-regulation as a mediation strategy were placing high PT in their children. Parent's perceptions of Cbeebies affected how they chose to mediate that particular website, which specifically relates to research question one. Parents felt increasingly able to trust their children as they perceived Cbeebies as an enjoyable and safe place for younger children, which reduced feelings of guilt associated with self-regulation. Emotions, such as guilt, are often linked to a desire to protect, especially those who you are most close to (Plutchik, 2009). Guilt associated with self-regulation was similarly reduced through parents articulating the positive educational benefits of the Cbeebies website. Cbeebies presented as a solution for some parents encountering time poverty, yet who still wanted to encourage children's internet use. Parents encouraged the Cbeebies brand as a safe space for younger children; however, some parents, specifically those who displayed increased digital literacy and experience, recognised the boundaries of placing strong relational trust within a particular website. Gayle demonstrated strong relational trust by singling out the Cbeebies website as suitable for her child to access independently, whilst at the same time expressing caution and lower levels of STST in other digital content.

> *"So that is only safe (Accessing Cbeebies independently) when she doesn't know how to navigate away from Cbeebies."* *[Gayle]*

Parents of younger children require balance between appropriate content and different types of trust that contribute to the digital home environment (see literature review). Referring back to quadrant 2 of the DTW, trust that is mistakenly placed is likely to lead to an 'uninformed' environment for parents and younger children (fig 1). An 'uninformed' (fig 1) environment appears particularly vulnerable and influenced by parents' emotions. 'Uninformed' amounts of STST seem to contribute to inappropriate emotional parental responses, which then possible affect a parent's ability to protect their child whilst engaging in digital activity.

5.4 ***Attitudes, Emotions and Language***

The attitudes and emotions of parents affected how language was used to articulate internet safety perceptions, which contributed to understanding how child internet safety was managed within the home. My findings illustrated how analysis of parents' perceptions revealed their child's digital individuality through their use of language in managing internet safety. Managing internet safety through viewing younger children's digital activity as individual is generally viewed as positive (Chaudron, 2015). Positive individual considerations were sometimes in contrast to issues surrounding the sensitivity of the topic of internet safety. Sensitive communications that include topics parents may find difficult within the microsystem should be

accessible due to the higher levels of PT. My findings display how most parents understood the high level of trust within the family environment. Furthermore, parents, such as Jane, were seen to reflect on the child's and their own emotional state, considering the effects of language surrounding internet safety.

> *"No which is bad, I should have done (talked to her child regarding internet safety). It's quite difficult because I suppose it is getting a balance between how you explain it to a young child without scaring them."* *[Jane]*

Jane clearly displays guilt when explaining that she thinks she should have spoken to her child regarding internet safety. These feelings of guilt surface through Jane's desire to protect her child; however, Jane also suggests that parents' potentially are in need of more support when considering the language used to explain internet safety to younger children. My findings demonstrated how individual factors affected how parents communicated with younger children regarding internet safety. Equally important was how parents considered the individual cognitive level of their child when accessing what form language should take when discussing internet safety. Parents of all levels of digital literacy suggested how the language they used to explain internet safety linked to their child's perceived cognitive ability to understand (Research question one).

> *"I think it would just go straight over her head. We don't go online that much, and I know 100% that the tablet is safe...I just think that she won't understand what I am talking about."* *[Charlotte]*
>
> *"Yes, my daughter would understand I'm not sure all 4 years olds are ready."* *[Gayle]*
>
> *"To a certain extent yes, she is quite clever anyway, I talk to her about strangers and 999 and we pretend to do fake phone calls and that's about keeping her safe and she does understand so she would understand about the internet... it's an individual thing, I do think more should be done anyway."* *[Leanne]*

My research supports Lewis (2014) who argues that most parents seem to consider a child's cognitive level in assessing their ability to comprehend internet safety messages. Considering a child's cognitive level when talking to younger children about internet safety takes a more individualistic approach than simply using a child's age as an indicator of when children are able to understand.

Using a child's cognitive ability identifies how parents were taking a child development approach to internet safety; speaking to children when they perceived they were ready. I propose that parents linked the understanding that younger children have of the real world to that of the digital world. The digital world is abstract and therefore requires abstract thought to understand it (Chaudron, 2015). It appeared likely that some parents did not understand the underdeveloped levels of socio-emotional digital literacy in younger children; socio-emotional

digital literacy supports the abstract thinking that is required to fully understand the digital world. Furthermore, some parents relied on their experiences of child cognitive abilities that related to the real world, as opposed to their child's cognitive abilities within an abstract environment. Low capabilities in abstract thinking are typically related to younger children; consequently, more research is needed to assess how effective language concerned with abstract environments, such as the internet, is in creating a safe digital space for younger children.

5.5 ***Attitudes and Emotions to Wider influences***

Factors from outside the microsystem affected parental attitudes and emotions towards the internet when securing a safe digital environment for younger children. Mixed perceptions include positive and negative opinions of the internet. As discussed in the previous findings chapter, parents recognised the positive influence on younger children's social capital from engaging with digital activities; however, findings displayed how negative experiences clearly undermined the positives for some parents. In response to this Charlotte articulated her concerns and reinforced parent's perception of more risk for younger children that was often fuelled by negative media coverage, leading some parents to question the suitability of their mediation strategies.

> *"You see stuff on Facebook, a programme on the TV about a paedophile hunter; there are a lot of people going undetected. Stuff happens all the time... I'm not a 100% confident to be honest (in her ability to keep her child safe)."* *[Charlotte]*

Negative opinions surrounding the internet seemed to be underpinned by parents' emotions, specifically anxiety and fear. Findings also showed how parental perceptions on their individual attitudes and emotions towards the internet led them to question how confident they were in their abilities to apply technical solutions to keep their children safe online. This is evident in quotes from Leanne and Jane.

> *"I don't think I have got any security thing on it (laptop), I wouldn't even know how to do it if I am honest, like put a lock thing on, I think I would definitely do it but I think that at this moment in time she is not searching for anything, she is just on her games."* *[Leanne]*

> *"...I don't know what you would put on an iPad as far as safeguarding, I don't know what I should do, it's not something I have looked into which I should do."* *[Jane]*

The ability to choose and adopt technical software mediation solutions to protect younger children online seems to confuse parents at times. I support Chaudron's (2015) argument that many parents of younger children do not install any technical software mediation to keep younger children safe whilst on the internet. Furthermore, I argue that parents' intent to set

up technical mediation solutions coincides with wider internet activity as children get older (see previous chapter) Moreover, Livingstone et al. (2011) carried out research with children aged 9-16 outlining that parents of younger children are more likely to install some form of technical software, such as filtering, on digital devices. Establishing when technical mediation strategies are most effective and appropriate could lead to a safer digital environment for younger children. I suggest that factors surrounding parental attitudes and emotions to the internet, alongside levels of digital literacy could affect decisions surrounding technical software mediation of the internet within the home (Research question two). Although it is clear that emotions are an important factor when parents are considering internet safety, there seems to be a lack of emotions used to describe the application of technical software safety options. Parents' view the setting up of technical safety options as their own responsibility; however, it seems this focus on their digital literacy skills, in being able to apply technical safety, has possibly detracted from the emotional protection element that benefits children. This area requires more research to investigate if this link is relevant to child internet safety. In addition to this, due to the time constraints of this study, future research is needed to assess why parents of younger children are not employing technical mediation strategies.

Parental levels of education are often considered when investigating the abilities of parents to mediate child internet use within the home. Livingstone and Helsper (2008) argue that parental level of education affects how parents mediate the child internet safety environment. Nevertheless, my findings did not support this claim; however, caution must be applied in trying to establish any generalisations from this research due to the small sample group. My findings identified that parental level of education did not correlate fully with how parents mediated the internet for younger children. The sample group included different educational backgrounds (Appendix 10); the majority of the sample group possessed degree level qualifications, however these parents were not homogeneous in how they mediated child internet safety. Yet, when a degree level of education linked with high use of the internet within a professional work environment, some parents articulated a different experience, exposing parents to filtering software (Appendix 10). However, filtering software within a work environment was sometimes suggested as negative, which is seen in quotes from Gayle and Jane.

> *"When I worked for the council I researched things and suddenly windows pop up, this website is inappropriate and this content has been blocked... it sometimes blocks things that we want to see which might be annoying because you know it's nothing terrible but that just happens."* *[Gayle]*

> *"It's slightly problematic if you do need to research a subject sometimes you have to be really careful about safeguarding but then not stop you accessing as well, it's a bit kind of getting that balance really."* *[Jane]*

Digital experiences within the work environment possibly affected how parents mediated child internet safety. Parents using the internet daily within a work environment were more likely to be interacting as digital residents, fulfilling a variety of community internet related tasks (see literature review). Findings revealed that varied internet use whilst at work meant parents were more likely to gain experience of effective filtering software. Experience of internet software increased parents understanding of technical controls; this secured more knowledge surrounding mediation strategies for the internet and seems likely to increase the amount of trust parents displayed. Dwyer (2011) explains that trust is easier to exhibit in secure situations without the risk of exposure to vulnerabilities. Vulnerabilities were possibly reduced through parents possessing experience and knowledge surrounding technical aspects of internet safety, such as parental controls. Parents displaying increased digital experiences, leading to higher levels of digital literacy and knowledge of technical parental controls were likely to gain increased STST, which places them in the 'secure' quadrant of the DTW (fig 1). Furthermore, parents increasing their digital skills in the work environment, whilst building on their perceptions of internet safety and possibly raising their levels of STST again demonstrates how the three research questions within this study are interlinked.

Reducing digital risks seemed likely to increase parents' trust in the internet. Applying EST, trust builds through communities, such as the microsystem where PT resides, through to a wider context in the mesosystem and beyond where GT forms (Bierhoff & Vornefeld, 2004; Bronfenbrenner, 1977, 1979). PT and GT are generally viewed as independent of each other, only relevant within their own systems (see literature review). Lack of interconnectedness between PT and GT reflects social boundaries in how influential these two types of trust can be across the whole EST model. STST however influences through a digital lens and is therefore not limited to a specific concentric circle within EST. My findings argue that a digital presence across all the ecological systems seemed to allow STST to reside in all those areas where individuals interacted with digital influences. Furthermore, residing in these areas, unlike PT and GT which are fixed within their locations, I suggest that due to the possibility of wider individual digital experiences, STST was also potentially transferrable between the systems. Bierhoff and Vornefield (2004) propose that STST is only marginally linked with the work environment; however, the four quadrants of the DTW displayed how the accumulation of digital literacy and the transferability of STST have the potential to affect child internet safety (fig 1).

The potential transferability of STST was an important factor when considering family digital activity. I propose that the amount of STST a parent displayed was influential in assessing family digital activity and affected how parents managed the digital environment within the home. In considering family digital activity, I agree with Adams (2013), who identifies the

microsystem accounts for most of younger children's digital activity. As younger children's digital activities primarily take place within the home, this increased parent's influence through role modelling. Furthermore, parents' wider digital experiences from outside the microsystem, such as the work environment, were just as likely to influence younger children. Moving from the microsystem to the wider concentric circles of EST facilitated a change from PT to GT. The findings illustrated that exposure to technical filtering software within the work environment had the potential to increase parents' GT in the internet. Increased GT in the internet potentially raised parental levels of STST. Buck and Bierhoff (1986, cited in Bierhoff and Vornefield, 2004) suggest GT as fixed in its location. My findings questioned Buck and Bierhoff's, (1986, cited in Bierhoff and Vornefield, 2004) argument, proposing that GT affected the level of STST which possibly then became transferrable. This led to an understanding that through raised levels of parental GT in the internet, gained through possible wider exposure within the work environment, parents potentially accumulated increased levels of STST. This STST was then transferrable back into the microsystem. This transferability of STST overrides the fixed attributes of PT and GT. Furthermore, when increased levels of trust in the internet were linked to wider positive digital experiences it possibly led to increased digital literacy for parents. As quadrant 4 of the DTW suggests, parents with higher digital literacy, alongside increased STST were more likely to create a 'secure' digital home environment for younger children (fig 1).

Individual past experiences influenced how some parents mediated the internet. My analysis identified that some parents of younger children expressed specific concerns arising from their own negative online encounters. Parent's negative online experiences appeared to affect how they mediated the internet for younger children, especially in the case of Leanne (Research question one).

> *"I did when I was younger (have a negative internet experience), I was 12, I'm dyslexic and was trying to type in Brittany but typed Britany and it came up with a porn site that just shows how easy it is, like I missed typing something and it just pops up straight away."* *[Leanne]*

Leanne then revisited these negative experiences within the context of her own child.

> *"Three letter words she can type in yes, I don't think she knows how to get the keyboard to come up, you know I don't know if it automatically comes up because I am so used to just using I will have to look into that, because otherwise she could just go onto Google type something in, she might accidently type in stuff like I did when I was younger and anything can pop up."* *[Leanne]*

The findings from my research support Bierhoff and Vornefield's (2004) argument that subjective distrust connects with past experiences. Furthermore, when past experiences are considered as harmful it potentially has a strong effect on the user's trust levels, specifically

STST (Bierhoff & Vornefeld, 2004). The emotional response to protect those close to you is evident with Leanne, which may reflect through her own negative past experiences. My findings revealed although parents generally articulate having more positive online experiences, some were affected more by negative past experiences than others. This focus on negative experiences found parents struggling to form a balanced view of the internet, leading to a narrowing of opinion and emotional anxieties such as fear that may have affected the child internet safety environment through low STST.

Parents seemed confused over recognising appropriate online content for younger children. In contrast, social networking, films, shopping websites and email, were recognised by most parents as appropriate positive adult online interactions. My data revealed some parents displayed ambiguity in assessing the appropriateness of their child's internet use. Engaging with inappropriate content is typically more upsetting for younger children than for older children or adults. Older children and adults have higher levels of socio-emotional digital literacy which prepares them for dealing emotionally with inappropriate content (see literature review). My analysis supports Chaudron's (2015) proposal that parents seem concerned about younger children accessing inappropriate activity; including, unwanted economic consequences, violence and strong language, sexual or unwanted contact. My findings went further and recognised that some parents failed to notice the inappropriate online activity of younger children. This failure to notice seemed likely to be correlated with the parental level of digital literacy. This relationship between failing to recognise inappropriate content and digital literacy demonstrates a potential correlation between research question one and two. Exploration of the findings revealed parents with lower levels of digital literacy were more inclined to be confused when attempting to recognise younger children's inappropriate internet activity. Hatty demonstrates this confusion through her dialogue concerning advertisements on YouTube. Hatty articulates that the advertisements are normally clean and that she doesn't sometimes notice the advertisements. Advertising linked to online activity aimed at children specifically uses repetition, bright colours, rapid movement and loud sound effects which appeal more to children than adults (Calvert, 2008). Younger children who are left to self-regulate online have open access to the effects of such advertising tactics (Calvert, 2008).

> *"Yes they are like clean, normally, I didn't notice these advertisements, or I just skip it, and the reception child just skips it because he wants to go on his own programme, so he just skips it."*
>
> *[Hatty]*

As discussed in the previous chapter, parents interacting as part of a digital community displayed digital resident attributes. Interacting as a digital resident within a community may have affected how much trust individuals placed within specific online content. The amount of

STST parents gained through past digital experiences may have affected how parents viewed appropriate content for younger children. Parent's perceptions of their past digital experiences linked to the amount of STST they now display shows a link between research question one and three. As demonstrated through my findings, a parent's previous positive experiences with digital communities seemed likely to lead to more STST in that community. This trust is potentially transferrable when their child mirrors parents' behaviour and accesses the same community (such as Hatty and YouTube). My analysis proposes that levels of STST appeared to affect how parents mediated child internet safety. However, in addition to this my analysis showed that 'uninformed' amounts of STST were also present through previous parental digital relationships (quadrant 2, fig 1). Quadrant 2 of the DTW provided a model to understand how parents with lower digital literacy skills were more inclined to display increased confidence alongside 'uninformed' amounts of STST in considering suitable digital communities for children (fig 1) (see Digital Literacy chapter). This potentially increases vulnerability for some children in lower digital literacy environments, as parents discount possible internet dangers due to 'uninformed' levels of trust (quadrant 2, fig 1).

5.6 ***Control, Trust and Autonomy***

Parents of younger children felt a strong sense of responsibility to keep their children safe on the internet. Responsibility for internet safety, felt by parents of younger children, mirrored the views of the UK government who similarly suggest that parents have control over internet safety within the home. Control within the home was displayed through the strong influence parents have over younger children. My findings illustrated how influence and control was recognised by parents of younger children, which potentially could make them feel more responsibility for their child's internet safety. Maxine articulates a strong sense of responsibility towards internet safety.

> *"Parents should watch children online at home... in our house it will be controlled... he is never alone using the computer, me or my husband are with him all the time."* *[Maxine]*

Responsibility, influence and control affected how confident parents feel in assuming their child was safe on the internet. My findings support Nathanson et al. (2002), who demonstrate how parents often assume that their child is safe when compared to other families. In response to this Hatty clearly articulates similar opinions.

> *"When the kids go in year 1-2 (Find out about internet safety) ...some parents aren't educated and can't do anything, they don't even know what the kids are doing, so if they are guided properly they can do something* *[Hatty]*

Parental responsibility included an undercurrent of control; where the desire to protect children suggested links with a supervisory need to establish some authority over the child internet safety environment (Research question one). In providing evidence, my analysis suggested that parents express concern surrounding the amount of control they have over different factors influencing child internet safety.

> *"Yes, as much as it would be easier for me to get her a tablet that was internet like the older ones have got, it made more sense to get one that is more child proof, I am in full control of what she can do."* *[Charlotte]*

> *"It's only hiding the iPad (How to control the time children are on the internet). Sometimes I hide it for 2/3 days; I don't know where it has gone maybe daddy took it to work (laughs)."* *[Hatty]*

> *"Yes I don't know why, I have no idea, (Her child prefers the iPad to the television) but if I want to put something on the tele she is like no I'm watching it, but I'm like well you have got the iPad. Yeah she is a nightmare, its control that she likes to have both. I say no and turn it off."* *[Leanne]*

Findings illustrated that some parents were reassured by increased amounts of control. I argue that the presence of control often suggested a lack of trust. Where STST was deemed to be lower, such as parents displaying lower levels of digital literacy, this often resulted in a 'stagnant' environment and control over the digital home environment was likely to be increased (quadrant 1, fig 1). Increased control also correlated with restrictive mediation strategies that some parents displayed, typically those who exhibited lower digital literacy (see digital literacy chapter).

My analysis revealed that within the home, parents often demonstrated high levels of PT in younger children. High levels of PT were expressed through the implementation of parental rules surrounding younger children's digital activity. These children were often expected to follow these digital rules, which regularly involve self-regulation. Gayle and Leanne both encourage some form of self-regulation.

> *"Well the children's bit definitely (Cbeebies), well I don't think she would click on any adult iPlayer content at all that wouldn't interest her at all."* *[Gayle]*

> *"No, well I suppose I have (talked about internet safety) I've told her that's adult stuff and that's kids' stuff and she says alright (Netflix), the adults stuff is boring to her so she won't go on it."* *[Leanne]*

My argument is that undeveloped digital socio-emotional literacy levels led to difficulties when parents allowed younger children to self-regulate. Self-regulation often involved younger children adhering to a set of pre-determined rules set by parents. Some parents allowed younger children to self-regulate internet activities and seemed likely to place high levels of PT in children. Parents trust children to engage with digital activities that they had deemed as

appropriate, and encouraged self-regulation through adhering to digital rules. Younger children are typically able to follow general rules within the high trust microsystem environment. However, to achieve effective cooperation from younger children, rules applied in a digital context should match emotional and social developmental capabilities (Gralinski & Kopp, 1993). Increased emotional and social developmental capabilities allow younger children to understand rules as a concept. However, understanding digital rules as a concept requires digital socio-emotional literacy. Digital socio-emotional literacy is often still underdeveloped at such a young age, which may question how effective rules within a digital context were in keeping younger children safe online. Parents attempting to control child internet safety through implementing rules could prove difficult. Though parents display high PT in children, this trust may be uninformed if it is not linked to the child's developmental capabilities.

My analysis revealed how parents view the relationship between control and trust, which appeared contradictory at times. Contradictions included how parents used control to mediate internet safety, whilst portraying increased amounts of trust in younger children to self-regulate. Self-regulation meant relinquishing some control and placing more PT in the child (Research question three). Increased PT due to self-regulation promotes child digital independence. Findings illustrate that digital independence was often promoted by parents of younger children. Digital independence was encouraged by parents through following the child's interests within a digital context, whilst still applying pre-determined digital rules. Digital rules applied to follow a child's interest suggest parents viewed this as a positive strategy, in allowing a child centred approach to help protect children online. A child centred approach encouraged child autonomy through independence. Independence is gained from including the child, through their interests, to take part in the decision making process of what is deemed appropriate content for them to access. Jane and Leanne view independence as a positive.

> *"Because research they can look things up; it gives them more independence."* *[Jane]*
>
> *"...but that's about it really, a bit of learning, a bit of independence maybe."* *[Leanne]*

Not all parents expressed their child self-regulating and becoming independent as positive. Child centeredness suggests higher trust levels, whereas parent led approaches imply more control. Responsibility for child internet safety is delegated down from the macrosystem of government through to the microsystem. Delegating down encourages parents to regulate their own child's internet use. This questions whether the downwards chain of responsibility has now passed to the child through some parents encouraging and expecting an air of self-regulation from younger children.

5.7 ***Discussion***

As discussed in the literature review, parental attitudes and emotions to the internet affected how parents managed internet safety. This chapter affirmed this and helped explain how parental attitudes and emotions to the internet affected mediation of the internet within the home. Analysis of parent's perceptions of their attitudes and emotions in relation to internet safety mediation strategies assists in addressing research question one. My analysis also revealed how these attitudes and emotions appeared to affect the decisions that parents made when assessing the appropriateness of online content for younger children. Livingstone et al. (2011) suggests parents often struggle to recognise appropriate internet content for younger children. My analysis supports Livingstone et al. (2011) as it demonstrated that some younger children had already accessed inappropriate content. However, contradictions within my analysis seemed to appear when parents considered what appropriate internet content was. Determining appropriate online content for younger children required parents to balance risk and trust, which helps in addressing research question three.

Some parents effectively considered the risk of some type of internet activities, sometimes articulated through their emotional responses. Effective internet risk management saw parents of younger children recognising the high risk of some internet activities, such as searching on Google, and lower risk, age appropriate, websites such as Cbeebies. I argue that in attempting to balance risk and trust, parents of younger children sometimes displayed confusion in creating this balance. When attempting to protect children parents experience emotions; however, these emotions seemed to be linked to the type of STST a parent displays, which seems to create confusion. I suggest confused parents that were likely to display 'uninformed' amounts of STST were also affected by a lack of emotional response due to their 'uninformed' STST. 'Uninformed' STST possible reduces the emotional response of parents' in protecting their children, which suggests a link between emotions and STST. Furthermore, 'uninformed' amounts of STST was likely to be affected by levels of parental digital literacy thereby affecting the choices parents made regarding internet safety, as visualised in quadrant 3 of the DTW (fig 1). It is clear that all parents are affected by emotions when considering child internet safety; however, it appears that emotions that are linked to low STST protect through a more restrictive approach and emotions from a parent with higher levels of STST are linked with a more progressive approach that links with child autonomy. As STST and parental digital literacy appear to have a strong correlation, there may be a need to investigate a possible link between parents' level of digital literacy and emotions in future research.

Parental attitudes and emotions to digital technologies sometimes contradict with how they mediate the internet within the home. Parents, at times chose mediation strategies due to the influence of wider factors. In helping to deal with research question one my findings identified

emotional factors such as guilt, alongside time as factors that appeared to affect how parents chose mediation strategies. Guilt was expressed by parents of younger children when speaking about internet safety. Similarly, parents felt guilty at not co-viewing whilst younger children were engaged with the internet which correlated with time poverty. Time poverty itself can lead to a necessity for children to self-regulate. This potentially creates a circular relationship between time poverty and the emotional response to protect which creates the guilt that that parents' experience which continuously influences their interpretations of how they manage the home digital environment.

My data supports Bierhoff and Vornefiled (2004) findings in recognising the relationship between relational trust and STST. However, in addressing research question three, my analysis goes further and enabled me to suggest that increased relational trust may possibly lead parents to display 'uninformed' amounts of STST in some websites, such as YouTube. Of equal importance is the fact that 'uninformed' amounts of STST may have also reduced emotions of parental guilt at leaving children to self-regulate on some websites, such as Cbeebies. In repressing emotions of guilt, parents are likely to place increased amounts of STST in specific websites that they deemed appropriate for younger children. Emotional feelings such as guilt and the effect these potentially have on STST brings together research questions one and three. Placing increased positive STST in specific websites requires knowledge and experience of the particular website. Furthermore, knowledge and experience is gained through increased digital literacy. Some parents exhibiting low digital literacy and STST can be seen to place increased amounts of PT in children through encouraging children to self-regulate on the internet. My analysis demonstrated that some parents of younger children seemed likely to choose internet mediation strategies that suit their own needs, which were not necessarily the same as the needs of the child, specifically in situations where 'uninformed' STST was present which may have affected parental emotional protective responses. Nevertheless, this in itself created a confusing environment as parents struggled to balance the amount of autonomy relinquished to younger children within the digital environment, whilst clearly desiring to stay in control. I argue that parents of younger children sometimes chose self-regulation as a mediation strategy due to issues of time poverty.

Parental attitudes, emotions and individuality affected how parents used language to manage internet safety. I suggest that parents of younger children were concerned over how they should talk to children about internet safety and in some cases felt guilty if they hadn't spoken to children. My analysis demonstrated that how language is used within the home potentially highlights how individualised parents of younger children viewed managing internet safety. In recognising individualities, I propose that parents were more likely to contemplate the cognitive abilities of children, rather than simply relying on a child's age when accessing when

and how they should talk to them regarding internet safety. Chaudron (2015) argues that talking to younger children about internet safety often requires parents to consider a child's ability to understand abstract thinking. I agree with Chaudron (2015), as my research highlighted how parents often displayed confusion in accessing the capabilities of their younger children to understand abstract environments. However, my study is limited through time and scale in assessing how younger children's understanding of abstract digital environments affects parent's ability to talk to children about keeping safe online. Consequently, more research is needed in this area to ensure parents are fully supported to confidently speak to younger children about internet safety.

Interpretation of collected data supports Livingstone and Helsper's (2008) proposal that individual negative digital experiences have the potential to affect parental attitudes and emotions to the internet. Adults display increased amounts of socio-emotional digital literacy; viewing negative past experiences differently than younger children. Adults typically possess the complex thinking that enables them to understand abstract factors that affect digital environments. This may aid in explaining how parents became unclear in recognising or admitting that their child may be at risk from inappropriate digital experiences, leaving them unable to empathise with the increased affect this may have on younger children.

In contrary to the research completed by Livingstone et al. (2011), some parents involved within this research choose not to apply technical internet safety measures. Parents articulated a lack of emotion when talking about this subject. In discussions surrounding the application of technical safety measures, parents placed an emphasis on their own digital literacy levels rather than the effect of technical safety measures for their children. This could help to explain the lack of emotion as the emphasis was placed upon them. An emphasis on them, alongside a lack of protective emotional language appears to also help to explain how parents' viewed this as a parental digital literacy issue and not a child internet safety issue. These factors require more investigation and future research in this area is recommended.

My analysis explained how some parents became able to transfer STST through different aspects of their lives, through the influence of wider digital experiences, specifically the work environment. I propose that different positive digital experiences outside the microsystem, such as a work environment, enabled parents to increase their digital knowledge and skills. Increased digital knowledge and skills potentially led to an air of flexibility that appeared to assist in transferring trust throughout the different digital areas of EST (Bronfenbrenner, 1977, 1979). However, where 'uninformed' trust was displayed, potentially parents risk a negative effect on child internet safety within the home (quadrant 3, fig 1). These circumstances again show how there is potentially a link between the researches questions, where mesosystem

experiences have contributed to parents' levels of digital literacy and STST, which have in turn affected the way that they have mediated child internet safety within the home.

Levels of digital literacy appeared to affect parental attitudes and emotions to the internet through the relationship with trust (Research question two and three). As found in the previous chapter, effective STST was likely to rely on a partnership with good levels of digital literacy (fig 1). My findings suggest that low digital literacy levels were at times correlated with parents displaying increased control over younger children's internet activity within the home, which can possibly be explained through the presence of emotions such as fear, anxiety and guilt. Analysis revealed how controlling and restrictive strategies were often used by parents who exhibited lower levels of digital literacy. Similarly, parents who displayed lower digital literacy and used more controlling strategies also do so because they feel responsible for their child's internet safety. Parents who exhibited increased digital literacy also felt responsible; however, my data demonstrated that these parents typically chose less restrictive and controlling mediation strategies and encouraged child autonomy and independence.

6 Conclusion

This study sets out to explore the experiences, perceptions, attitudes and emotions of parents of younger children in regards to internet safety, the contributing factors that affect parent's reasons for employing different mediation strategies and the relationship these have with trust. The general literature available on this subject, specifically in relation to parents of younger children, is insufficient.

Research Question 1
What do parents of younger children's perceptions reveal about how they mediate child internet safety within the home?

Research Question 2
What are the effects of parent's levels of digital literacy on their attitudes and emotions to the internet in how they choose to mediate child internet safety within the home?

Research Question 3
What is the relationship between parent's ability to trust and how they manage child internet safety within the home?

The digital literacy and parental attitudes and emotions chapters dealt with the research questions in two distinct themes; however, this conclusion demonstrates the interconnectedness between the research questions. The main empirical findings are highlighted within the two analysis chapters (Digital Literacy, Parental Attitudes and Emotions). This conclusion considers the relationship between these two themes providing a deeper level of analysis in order to answer the research questions. Analysis of parental perceptions revealed how they made decisions concerning child internet safety; in addition to this, it is clear from the literature review that parents felt responsible for child internet safety, and my research supports this. This responsibility felt by parents suggested most wanted some degree of control over child internet safety. However, in parents' attempts to control younger children's digital activity, what was particularly pertinent to this research was how parental levels of digital literacy and parental attitudes and emotions to the internet were affected by trust. Parents attempted to control children's digital literacy through a variety of mediation strategies; furthermore, the choice of mediation strategy appeared to be affected by parental digital literacy levels. Parents displaying low digital literacy often used strategies that restricted children's digital activities, whereas those displaying higher levels of digital literacy seemed

more likely to encourage children's digital literacy. Similarly, parents who exhibited increased STST were more likely to encourage children's digital literacy.

Children's digital safety is something that parents appear to care about, yet how this affects their behaviour in relation to internet safety varies. The variation seems to depend on parental levels of digital literacy and attitudes and emotions to digital technology. Higher levels of parental digital literacy appeared to affect how much STST a parent displayed which led some parents to exhibit a more positive attitude towards the internet. Similarly, parents who possessed a positive attitude towards the internet, alongside increased STST generally perceived themselves to possess high digital literacy skills. The relationship between digital literacy, attitude and trust appeared to be circular, in that each affects the other. Parents who balanced positive circular relationships between digital literacy, attitudes and trust demonstrated the interconnectedness that these three factors had in supporting effective internet safety within the home.

Parents' emotions were an important factor in my considerations of how they managed internet safety within the home. Fear, anxiety and guilt were common emotions displayed by parents' involved within this study. These emotions were not displayed by all the parents in response to the same situations. Emotions were generally increasingly displayed when a parent was more concerned about their child's level of internet safety, where their use of emotion was reflected through their intention to protect their child from inappropriate digital activity. Emotions seemed to be linked to a parent's level of STST. Some parents, such as those in the 'stagnant' quadrant of the DTW, displayed protective emotions whilst exhibiting low STST, these parents' emotions seemed to be used to protect children but mainly using restrictive mediation strategies. Parents' with high levels of STST, such as those in the 'secure' quadrant of the DTW, also felt fear, anxiety and guilt; however, these parents used more progressive mediation strategies that developed child digital literacy and self-regulation possibilities. There were also times when parents displayed a lack of emotion. Parents' regularly exhibited emotion when articulating details of children's access to inappropriate digital content; however, where the inappropriateness of the content was not recognised, through parents' displaying 'uninformed' STST, emotion seems to have been lacking or misplaced, which potentially puts children in this environment at risk through a lack of parental protective emotional responses. I also recognised a lack of protective parental emotions when discussing technical internet safety options with participants. Some parents' appeared to view technical safety application as a parental digital literacy issue, as opposed to a child internet safety issue. This placed the emphasis on them, which may have removed the effect of protective emotions when considering the safety of their child. It appears there is a possible link between parents' emotions and STST that can be used to help explain how parents'

mediate child internet safety within the home. As STST seems to be closely linked with digital literacy there potentially could also be a link between emotions and parents' level of digital literacy.

The study has suggested the notion of a Digital Trust Window (DTW) to help illustrate the relationship between parental levels of digital literacy and the amount of STST they displayed (fig 1). The argument presented here creates a visualisation of these different possible relationships. The DTW shows how different perceived amounts of parental digital literacy and STST, which were informed by parental attitudes and emotions to the internet, affected how parents perceived and managed child internet safety within the home (fig 1). Analysis of the home digital space was influenced by the DTW, which assisted in analysing different wider influences that affected child internet safety through exploring their relationships with digital literacy levels and STST (fig 1). Whilst exploring some wider factors and their relationship with digital literacy and STST, I was able to place them within a quadrant of the DTW. This led to a visualisation that helped in contextualising many issues regarding child internet safety within the home (fig 1). It is important that the relationship between digital literacy, STST, parental attitudes, emotions and other contributing wider factors is understood. Increased understanding of these relationships through the DTW creates an opportunity to visualise the possible effects of how parents of younger children manage child internet safety (fig 1).

Using Bronfenbrenner's Ecological Systems Theory (EST) (1977), wider parental influences beyond the microsystem were seen to affect child internet safety within the home. EST was especially pertinent to this research in explaining the apparent transferability of STST between the concentric circles on Bronfenbrenner's (1977) model, specifically from the work environment within the mesosystem to the microsystem. Though Bierhoff and Vornefield (2004) suggest the work environment has little effect on how people accumulate STST, my research suggests differently. The transferability of STST in parents, particularly of younger children, is an under researched area. I propose that wider parental digital experiences, such as the work environment, where parents are increasing their digital literacy and STST, are an area of research that warrants further study in order to successfully understand how parental trusts affect how they manage child internet safety within the home.

Caution must be applied in attempting to generalise any of the findings from my research to the wider population. My study allowed for only six participants due to the chosen methodological approach of IPA, requiring in-depth analysis, which is time consuming. In order to understand parental perceptions at a suitable level to address the research questions, I argue that the depth of IPA was preferable to less in-depth methodological approaches, such as questionnaires. Thus the argument presented here is that parents of younger children often

require more support if they are to effectively manage child internet safety within the home. Byron (2008, 2010) states that the UK government recognises the important role that parents make in keeping children safe online. My findings agree with Byron (2008, 2010) and further suggest a contrast between UK government understanding of how difficult the internet is to be regulated and the amount of responsibility they place on parents to regulate children (Byron, 2008, 2010; Livingstone & Helsper, 2008). This study did not have the capacity to explore current UK government policies towards child internet safety; however, the general transfer of responsibility from the macrosystem of government to the microsystem of parents was evident.

6.1 ***Limitations***

In hindsight, upon completion of this research project, a number of limitations have come to my attention. The ability to look back and reflect on the research process illustrates my critical analysis of the research process (Opie, 2004). Sonck et al. (2011) describes using Bandura's (1995) self-efficiency model to measure digital literacy as crude. Although Sonuck et al. (2011) describe self-efficiency as crude my initial methodological thinking assisted in my choice to use Bandura's (1995) self-efficiency model to measure parental digital literacy levels as this appeared to fit in more with the main IPA qualitative approach of this research. Self-efficiency involves participants assessing their own level of skill in a particular area, in the case of this research, assessing their skills at keeping children safe on the internet within the home. I then applied IPA and further analysed parents' own interpretations of these skills through the evaluation process. This process was time consuming and maybe less ineffective than a survey method, which is suggested by Sonck et al. (2011) as an effective alternative to self-efficiency.

Though not intentional, my sample only contained mothers of young children. Some fathers did complete initial questionnaires; however, all parents that agreed to take part in the interview stage were mothers. The findings from this study reflect the views of mothers; therefore, a different study reflecting the views of fathers is needed.

The chosen in-depth methodological IPA approach was limiting in the amount of participants that were able to take part. However, I recognise the depth of my analysis could not have taken place with an increased number of participants within the time framework allocated for this study. Any future research, especially using IPA, carried out as a result of the findings of this research would possible benefit from the inclusion of more participants, which would require either more time or the involvement of other researchers.

Wider opinions had the potential to add to this research. The literature review within this research recognises that there are many stakeholders involved with child internet safety;

however, this research only involved the thoughts and opinions of parents of younger children, all of which were mothers. Mothers' thoughts and opinions were a crucial element of this research; however, emitting to gain the opinions of other stakeholders, such as fathers, teachers of those involved with agencies such as the Child Exploitation and Online Protection Centre (CEOP) may possible be viewed as limiting the inclusion of important wider perspectives. The time constraints of this research did not allow the inclusion of these wider perspectives. Furthermore, I recognise that the involvement of these wider perspectives would add considerably to any future research on this topic.

Many factors were found to influence child internet safety; my study has specifically focused on digital literacy, parental attitudes, emotions and trust for which I have provided a suggested analysis model through the development of the DTW (fig 1). However, the suggested DTW has only been applied in my own research, which was limited in time, sample size and analysis capacity (fig 1). To effectively establish the validity of the DTW, further analysis of the model would be required, possibly through involvement with other larger focused studies. For the purposes of my research, the DTW was a valuable tool for analysing the effectiveness of parents of young children in regards to internet safety.

6.2 ***Recommendations***

It is clear from the findings of this research that parents of younger children want more support in managing child internet safety within the home. Most parents are unable to access their usual sources of support (their parents) from within the microsystem due to a lack of digital literacy skills. Parents of younger children look for wider opportunities for support, from the mesosystem, such as the child's school or the internet, which also means they move from particularised trust to generalised trust. This move from particularised trust to generalised trust may reduce the effectiveness of any support given to parents of younger children regarding child internet safety. Trust is an important overriding factor when parents of younger children seek support for child internet safety. The amount of STST a parent appears to display may affect their ability to trust sources on support online. The amount of relational trust parents has with support available at a child's school setting may affect how support in these environments is trusted, which may in turn affect how effective this support is. More research is needed to investigate the relationship between parents' ability to source support for child internet safety and how parents trust these sources of support, to ensure that support given is effective in keeping children safe whilst engaging with digital technologies within the home.

Findings from this research suggest a potential link between parental levels of digital literacy and parents' mediation of a younger child's digital activity within the home. Also recognised

within this research is the greater influence that parents have over younger children's digital activity within the home when compared with older children. I conclude that the digital literacy levels of parents of younger children are an important factor when considering the digital safety of younger children. Much of the relevant literature to this topic omits the effect of parental levels of digital literacy on how parents mediate internet safety. Parental digital literacy should be an important consideration for future research opportunities and when considering the effectiveness of future support for parents of younger children regarding child internet safety.

6.3 *Future Research*

There are many possible areas for future research that have been recognised within this study. This research suggests many possible links between parental levels of digital literacy, STST, parental attitudes and emotions and how these possibly related to child internet safety. This list is complex and this research did not have the scope or time to fully investigate these possibilities. More detailed evaluations in future research may establish the clarity of these links proposed within this research and may reveal new information on how best to support parents of younger children in regards to child internet safety within the home. Future research involving the use of the DTW would not only concentrate on the links between parental digital literacy and STST levels, but would also provide an opportunity for the model to be rigorously tested as an effective suitable research tool.

This research also established the potential transferability of STST from a parent's workplace back into the microsystem (home). The establishment of this transferability in itself warrants further investigation if it is to be fully understood. Furthermore, there may be the possibility to investigate if children are also able to transfer STST through their own EST (Bronfenbrenner, 1977, 1979) concentric circles, for example, between schools within the mesosystem to the home within the microsystem.

Findings from this research highlighted potential areas for further research that involved specific factors within families. These were the effect of older and younger siblings on individual children's internet safety and the increase in the number of digital native parents. Research on how siblings affect child internet safety within the home is limited (Chaudron, 2015), especially the effect of younger siblings. Younger siblings potentially cause time poverty for parents of younger children, which this research has suggested as a contributing factor to how parents choose to mediate child internet safety. There is also the potential to take parents age more into to consideration, through their digital status and their level of digital literacy skills. To investigate if younger parents firstly present more as digital natives, if and how this may affect their level of digital literacy and if this has any effect on how they manage child

internet safety. This research has potentially established that parental levels of digital literacy and trust are important factors in assessing the ability of a parent to create a 'secure' (fig 1) digital environment for younger children. I propose that any future research surrounding child internet safety would benefit from considering both parental digital literacy and trust.

7 Appendices

7.1 ***Appendix 1: Parent Questionnaire***

Parent Questionnaire

This questionnaire supports the Masters Research being carried out by Lindsey Watson at the University of Huddersfield. It aims to help increase knowledge and support for parents of young children to help keep them safe on the internet. An information sheet has been provided for you to read prior to filling in this questionnaire. Thank you for your time. Please elaborate where you feel appropriate.

Q1	**How often do you talk to your child about keeping safe on the internet?** *(Please tick one box)*	☐ ☐ ☐ ☐ ☐	More than once a week Weekly Monthly Hardly ever Never
Q2	**Who is most responsible for helping to keep children safe online?** *(Please tick one box)*	☐ ☐ ☐ ☐ ☐	School Internet Service Provider Parents All of the above Other *(Please specify)* *.....* *.....* *.....*

Q3	**Has your child had any inappropriate experiences whilst using the internet?** This could include cyber bullying, giving out personal details, buying things, looking at images or videos not age appropriate, browsing on unsuitable websites etc. *(Please tick one box)*	☐ ☐	**Yes *(Please go to question 4)*** **No *(Please go to question 5)***
Q4	**How did you react to this inappropriate experience?** *(Please tick all that apply)*	☐ ☐ ☐ ☐ ☐ ☐	Told them off Sanctions (eg took the internet away) Reduced their internet time Stayed with them whilst they were on the internet Talked to them about safety Other *(Please specify)* *……* *……* *……*
Q5	**How do you rate your own skills on the internet?** *(Please tick one box)*	☐ ☐ ☐ ☐ ☐	Very good Good Average Not very good None

Q6	**How do you rate your ability to keep your children safe on the internet?** *(Please tick one box)*	☐ ☐ ☐ ☐ ☐	Very good Good Average Not very good None
Q7	**How do you rate your child's skills when compared with your own skills on the internet?** *(Please tick one box)*	☐ ☐ ☐ ☐ ☐	A lot better Better The same Worse A lot worse
Q8	**Have you set up parental controls on any internet enabled device your child has access to?** A digital device could be a computer, laptop, tablet, smart phone, smart television etc. (Please tick one box)	☐ ☐ ☐ ☐	All of them Some of them None of them I don't know
Q9	**Which of the following have you used to help inform you how to keep your child safe on the internet?** (Please tick all that apply)	☐ ☐ ☐ ☐ ☐	School Internet service providers Websites Family and friends' advice None
The following questions are about your family.			
Q10	**Who else lives in your house?** *Please list the names and ages of the members of all your family who have their main residence with you.*	**You**.....	

			.....
			.....
			.....
			.....
			.....
Q11	**How can your child get on the internet?** (Please tick all that apply)	☐	Family computer
		☐	Laptop
		☐	Tablet or gaming device
		☐	Smart phone
		☐	Smart television
		☐	Other (Please specify) ....
Q12	**How often does your child go on the internet using the above devices?** *(Please tick one box)*	☐	Everyday
		☐	2-3 times a week
		☐	A few times a month
		☐	Hardly ever
		☐	Never
		☐	Other (Please specify) .....

			....
Q13	**Can you please tell me how many hours parents work in your household, including travelling time?**		....
Q14	**Do you feel you have the time to keep your child safe on the internet?**	☐ ☐ ☐ ☐ ☐	Lots of time Some time A little but I would like more No time Other (Please specify) ....

This questionnaire is confidential, however if you would be interested in being interviewed for this research then please would you leave your name and contact details below and you shall be contacted by the researcher. *(Optional).*

Name	.....
Telephone number	

	.....
Email	.....

Researcher contact details

Lindsey Watson

The University of Huddersfield, School of Education and Professional Development

Email .....

Thank you for taking the time to fill in this questionnaire.

7.2 ***Appendix 2: Letter to parents***

Dear Parents,

My name is Lindsey Watson; I am the parent of a child in class ... at .....School. After completing my BA Hons in Early Years last year I am now completing a Masters by Research with the University of Huddersfield.

My research title is "**The Perceptions of Parents of Reception Aged Children in relation to Internet Safety with a Focus on Trust: An Interpretive Study."** As part of my data collection I am asking parents of reception aged children to complete a questionnaire, which should take between 5-10mins.

The questionnaire will aim to find out about you, your family and how you view the internet and child internet safety within your home. To allow you to make an informed choice, an information sheet has been provided with this letter.

The head teacher has kindly allowed me to approach parents at .....School to ask if they would like to participate. Participation is entirely voluntary and all completed questionnaires will be confidential.

I will be asking if parents would be willing to fill out a questionnaire during parents evening on Wednesday 12th November and will be available to help or answer any questions.

Thank you for your time
Lindsey Watson

7.3 *Appendix 3: Information sheet*

University of Huddersfield

School of Education and Professional Development

Participant Information Sheet (E3)

Research Project Title: The Perceptions of Parents of Reception Aged Children in relation to Internet Safety with a Focus on Trust: An Interpretive Study.

You are being invited to take part in a research project. Before you decide it is important for you to understand why this research is being done and what it will involve. Please take time to read the following information and discuss it with others if you wish. Ask if there is anything that is not clear or if you would like more information. May I take this opportunity to thank you for taking time to read this.

What is the purpose of the project?

The research project is intended to provide the research focus for a Dissertation for a Masters by Research Degree. It will attempt to analyse and interpret the experiences and perceptions of parents of reception aged children in relation to internet safety. It will also focus on the available family time and circumstances that may influence the choices a parent makes in relation to internet safety. In addition to this the research will provide knowledge on how a better supportive environment for parents can be created.

Why have I been chosen?

Your involvement within this research has been requested as you meet all the necessary criteria. You are a parent of a reception aged child who is located within the .....Local Authority.

Do I have to take part?

Participation on this study is entirely voluntary, so please do not feel obliged to take part. Refusal will involve no penalty whatsoever and you may withdraw from the study at any stage without giving an explanation to the researcher.

What do I have to do?

You will be asked to fill in a questionnaire. This should take no more than ten minutes of your time. You may also be invited to take part in an interview. This should take no more than one hour of your time.

Are there any disadvantages to taking part?

There should be no foreseeable disadvantages to your participation. If you are unhappy or have further questions at any stage in the process, please address your concerns initially to the researcher if this is appropriate. Alternatively, please contact the research supervisor Dr Liz Bennett School of Education & Professional Development, University of Huddersfield.

Will all my details be kept confidential?

All information which is collected will be strictly confidential and kept anonymous before the data is presented in the Dissertation, in compliance with the Data Protection Act and ethical research guidelines and principles. Verbatim extracts from your interview may appear in the final dissertation but will be made anonymous.

What will happen to the results of the research study?

The results of this research will be written up in a Dissertation and presented for assessment in September 2015. If you would like a copy please contact the researcher.

Who has reviewed and approved the study, and who can be contacted for further information?

The research supervisor is Dr Liz Bennett. They can be contacted at the University of Huddersfield.

Name & Contact Details of Researcher:

Lindsey Watson (U1362329)

Address

Email

Telephone

7.4 *Appendix 4: Aide-memoire*

Aide-memoire

Research Questions

- **What are the experiences of parents of reception aged children when considering internet safety? What devices does your child use? How often? What are they doing on the net? Any inappropriate experiences, you or your child? Know of any other children who have? What do you do to keep your child safe on the net? What strategies do you use? Do you talk to your child about internet safety? How often? What do you talk about? Is it age appropriate for your child and every other? What do you do when your child is on the net? Any positives from your child accessing the net? Negatives? Education, social aspect, play?**
- **What are the perceptions of parents of reception aged children when considering internet safety? How good are you on the internet? How good is your child? Who is the best? Do you do enough to keep your child safe? What else could you do? Is your child safe right now? Do you think your reception aged children are old enough to understand internet safety? Does the media effect your perceptions of internet safety? How? Do you have worries about internet use in your child? Are you confident?**
- **How does family structure and available time influence how parents judge their ability to ensure their child's internet safety? 1 or 2 parent family? Siblings? Does having siblings have an effect? Do you work? How many hours? What job? Education? When is your child most likely to access devices? How much family time before bedtime in the week? What is important to you in this time? Do you have time to talk about internet safety? Do you mediate internet use? How? Eg co-viewing, filters, parental controls, according to how much time they take? Do you have time to sit with your child?**
- **How can parents be better supported? Do you need support? Why do you need support? Where do you go for support? Do you feel supported? School? Are parents of younger children supported? Does support come early enough? Who is responsible for support? What kind of support do you feel you want? What would you like to improve?**

7.5 ***Appendix 5: Example from NVivo (parent trust node)***

nternals\\transcriptions\\Transcription Charlotte> - § 14 references coded [18.00% Coverage]

Reference 2 - 0.88% Coverage

Charlotte: She is always within my eye sight, she is never allowed to go anywhere with anything, she is always in the same room as me, obviously at dancing it is all one room anyway.

Reference 3 - 1.32% Coverage

Charlotte: Yes, as much as it would be easier for me to get her a tablet that was internet enabled to get games on like the older ones have got, for me it made more sense to get that in that it is more child proof, there is no way, I am in full control of what she can go on.

Reference 4 - 1.46% Coverage

Researcher: And is that just her or her age or...?

Charlotte: I mean obviously I have the discussion regarding people in general, but I have never had the whole internet discussion. I think for it's probably just because she is not put in that scenario, so that's probably why I have not discussed it.

Reference 14 - 2.17% Coverage

Researcher: So what do you think in the Early Learning Outcomes and things where a reception aged child is meant to be able to complete a basic computer programme and to be able to know that information can be retrieved from a computer.

Charlotte; I think that's scary, that they, I just don't think that they have the life skills or any common sense as to what the potential dangers are, I really don't. I think that makes me feel ill to be honest.

<Internals\\transcriptions\\Transcription Gayle> - § 11 references coded [12.80% Coverage]

Reference 1 - 1.91% Coverage

on the tablet we have told her there are no games on the tablet but she has found out there is the playtime app and we have downloaded the app onto the tablet so she can do that on there and another thing she likes doing is following loom band tutorials on you tube and then she goes off a bit as they always come up with different suggestions on the side and clicks on different videos and watches whatever, various people, big kinder surprise eggs and demonstrating new toys and things, I'm not happy about it, that is what she has discovered.

Reference 2 - 1.70% Coverage

Researcher: So have you had any inappropriate experiences on the internet where you have come across something you shouldn't.

Gayle: Not that I remember apart from the occasional spam email, I just delete it and that's it, no, well sometimes if you search for something on google then sometimes websites come up that you didn't mean to search for, that's my fear that my daughter will come across something and clicks on something that is not for her, but it hasn't happened so far.

<Internals\\transcriptions\\Transcription Hatty> - § 11 references coded [18.12% Coverage]

Reference 1 - 0.90% Coverage

Hatty: No he doesn't, he goes on the You tube because his programme is on the You tube, he says mummy can you put Peppa Pig or can you put Fireman Sam so I just put them and then sees it himself.

Reference 10 - 1.17% Coverage

Hatty: It brought up, people put there things up there as a power ranger because of you put power ranger it comes lots of things and they know but sometimes they watch it, if I listen I am there with them and stop them, if I am not there then I can't.

Reference 11 - 1.74% Coverage

6-9pm the programmes, I hate them programmes, at this age I saw my sister in laws son, that time he is really changed, he wants to watch these programmes, his attitude has really changed, he wants to watch these programmes because he wants to use the internet, they all think we are grown up we can do anything and that time I am really sacred of, but it depends what happens.

<Internals\\transcriptions\\Transcription Jane> - § 18 references coded [24.85% Coverage]

Reference 1 - 2.03% Coverage

he looks on my ipad sometimes but usually when I am there, so I don't let him look at it on his own without me. I'm aware that sometimes that we have a front room and a kitchen, so sometimes he will be looking at cbeebies and watching something and I'll be in the kitchen. He can now find his way round the net so he will go back and

look at something that his brother might have downloaded so he has an older brother. So because he is getting a little more savvy it's not just a question of, in the past they would put the telly on and just watch it but now it is more interactive, things have changed a little bit.

<Internals\\transcriptions\\Transcription Leanne> - § 14 references coded [22.69% Coverage]

Reference 1 - 1.95% Coverage

Researcher: Has she had any inappropriate experiences has she looked at something she shouldn't have looked at?

Leanne: No.

Researcher: Okay, what about you, whilst you have been searching the net?

Leanne: I did when I was younger, I think I was about 12, I am dyslexic and I was trying to type in for my little sister and it came up with a porn site, I typed in Britany instead of Brittany and it came up with a porn site, my sister was right there I was only about 12, that just shows how easy it is, like I missed typing something and it just pops up staright away, but that's about it really.

Researcher: Maybe you would like more information from school about what that actually means?

Reference 14 - 2.09% Coverage

Leanne: I don't know, all depends what she is trying to do, 3 letter words she can type in yes, certain words she can spell, I don't think she knows how to get the keyboard to come up, you know I don't know if it automatically comes up because I am so used to just using it I don't know if it automatically come up or if you have to, I will have to look into that, because otherwise she could just go onto Google and think it is just another app or a game or whatever and type something in, because she is getting good at spelling now, she is not going on the ipad anymore that is it! (laughs).

Researcher: So if you were going to get more information where would you go to get it?

Maxine: From the internet or browsing, go to websites to see how to keep the child safe online.

Reference 7 - 1.34% Coverage

Researcher: What role do you think a school should play in all this?

Maxine: I think so maybe yes school should be telling children about how to keep safe but I think the most important are parents not school.

Reference 8 - 2.16% Coverage

Researcher: So you say it is difficult to talk to children about the real world and the dangers there.

Maxine: I think it is more difficult talking about the accidents and online stuff and things like that it is more difficult.

7.6 *Appendix 6: Example of Quotes Used (Traceable back through NVivo)*

Participant			
	Parental Attitude	**Parental Digital Literacy**	**Possible others of value**
Charlotte	Yes, as much as it would be easier for me to get her a tablet that was internet enabled to get games on like the older ones have got, for me it made more sense to get that in that it is more child proof, there is no way, I am in full control of what she can go on. L74 I think it has got it's uses but it does worry me that there potentially there is, you do hear stuff, stories going around that there is weirdo's and there is this and that put me off her from using it to be honest. L110 I don't think I would ask my dad because although he is quite good on the computer I'm not 100% sure how he would be about, I would have to have the conversation I suppose about what he is like with sort of setting up parental controls and things like that, other than that I probably wouldn't ask anybody else really. L355 I tried once and I was like what is going on! What do you do? Who do you, which one do you trust? You just don't know. L313	s does make me sort of recoil and actually because they are only just learning to read for me I don't think it has got a lot of relevance yet. Unless I can only hazard a guess that a lot of these children are using it for games, but we don't need to use it for that so for me I don't really think it is necessary at such a young age. L367 I think it has got it's uses but it does worry me that there potentially there is, you do hear stuff, stories going around that there is weirdo's and there is this and that put me off her from using it to be honest. L108 I tried once and I was like what is going on! What do you do? Who do you, which one do you trust? You just don't know. L303 She is always within my eye sight, she is never allowed to go anywhere with anything, she is always in the same room as me, L69 I don't let her do anything on it; L124 I am in full control of what she can go on. L78 I think if she was using the tablet more, or not the tablet the lap top more, I think i could probably set up some parental controls or something. L146	I think it would just go straight over her head. I really do. I think because we don't go on it that much, and I know 100% that the tablet, we have got no issue with that at all. L85 I just think that she won't understand what I am talking about. L90 Well that whole weirdo's. It's not even about for me, I don't know if it's just because of the age, it's not even about potential bullies it's about all the weird people, you don't know who that is potentially trying to talk to your child so that's like a big negative. L114 To a degree yes for the youngest one, because obviously she is not going into that whole online scenario yet. L98 Yes, well I mean you see stuff on facebook, there was a programme on the TV not so long ago, that was about a paedophile hunter and obviously although that is aimed at much older children, you are massively aware that there are a lot of people that are going undetected. And there is stuff happening all the time, on the news yesterday L175

7.7 ***Appendix 7: Master of Themes Extract***

	Guilt	
Charlotte	**Charlotte: Just because she gets fed up whilst she is waiting for her sister.**	Feelings of child. Reason for usage. Putting on the child?
	Charlotte: On my phone she tends to go on a matching pairs game or there is like a puzzle one where you move the pictures in, or she goes on like a C Beebies game app. The child's tablet that she has got has either got some cache games like Doc McStuffins or she has got some, I have downloaded some episodes of Doc McStuffin so she will be watching that. Or there is some bits where she can play with a calendar and she tends to do lots of words, just writes loads and loads of words, or types loads of words.	What doing. Reinforcement of child tablet. Educational aspect writes words.
	Charlotte: Both. When I am at work depending on when I am finishing so like I finished work at 5.30, by the time I got home it was about 6.15, so then it is bath time which I do, I don't leave them upstairs to have a bath I'm up there with them and then supper and then they go to bed at, she goes to bed at about 7.15, 7.30 ish, then the others were not long after that.	Reinforcing how much time she spends with the children, feelings of guilt?
	Charlotte: But obviously when it is not a work day, so like tomorrow I pick them up at 3.00 from school so then we have a good sort of 4 hours minimum before they go to bed.	Puts spending time with children above time allocated to jobs, guilt?
	Charlotte: To be honest because we rush around a lot because on some days we are at dancing and on other days we are at taekwondo and others swimming and sometimes it is nice to just sit down and watch a movie and all sit on the sofa. It's just more about kind of relaxing, we tend to chat at the table while we are eating, annoyingly! Gets out of hand. Yeah I think it is more about relaxing, because we are rushing round so much it's more about just sitting and having a cuddle, you know watch a movie really.	Lists child activities. Prioritising family time. Knows what she want to be doing with children, almost seems like she knows what she should be doing with the children? Guilt? Regrouping?
	Charlotte: Yes I think you should make time. I don't think it should matter how many hours you work I think you should make time.	Guilt. What you should do? Unsure?
Gayle	**Gayle: She is seeing things that I am thinking make her think of the world in a way that I don't want her to think, all of these girls can have it all and I want it too.**	Effect of what the child has viewed on the internet on the child's perceptions of the world. Parent guilt?
	Gayle: I'm always hovering in the background to monitor what is going on and if I hear or see anything and I'm thinking she or she shouldn't be watching that then I will go over and say that is not for you, but it's not been anything that's scared her or frightening her, it was just these products display demonstration things, I'm thinking she shouldn't watch that.	Strategies used. Does she trust the child, the word hovering suggests not, does the child have control over this situation? Is the child in charge of the monitoring? Reinforcing that the child hasn't seen anything scary, is this to reinforce the fact that she does not have a lot of control over this situation? Does she feel guilty for leaving the child too it?
	Gayle: Erm, Yeah well she does watch television and on top of that she does look at the computer screen, yeah it is not what I would of wanted for her to do, but it has turned out that way, she is very very interested in watching things, erm, she has learned a lot from it, first of all all the loom bands, she has been making all sorts of creatures and the other day she had a book stall and she sold some of hers, actually sold quite a few of hers which for her is brilliant, and I couldn't of taught her all these things so she has learnt about that, so techniques for making loom bands from the internet, and whenever we have a question we can't answer, we google it and find out about it and if she has heard about something like the music	Relates to television in the amount of screen time. It is not what she would have wanted for her daughter but it has turned out that way? Does this again suggest that the child is in control within the digital environment? Then the guilt maybe kicking in, is the child following her own interests? Then it is linked to creativity, suggesting the internet is filling voids that she herself could not fill, a substitute parent/teacher maybe? But then all this knowledge it turned into a negative in saying that children are growing up much quicker and are more knowledgeable about the world, which

	from like the wizard of Oz in her ballet class we can go online on YouTube and find the songs and she has seen the little bits of the film, so it's good for accessing all sorts of things and finding out about all sorts of things, negatives, yeah, I didn't know they seem to grow up much quicker than we did, more knowledgeable about the world. **Gayle: She is seeing things that I am thinking make her think of the world in a way that I don't want her to think, all of these girls can have it all and I want it too.** **Gayle: I'm always hovering in the background to monitor what is going on and if I hear or see anything and I'm thinking she or she shouldn't be watching that then I will go over and say that is not for you, but it's not been anything that's scared her or frightening her, it was just these products display demonstration things, I'm thinking she shouldn't watch that.** **Gayle: Erm, Yeah well she does watch television and on top of that she does look at the computer screen, yeah it is not what I would of wanted for her to do, but it has turned out that way, she is very very interested in watching things, erm, she has learned a lot from it, first of all all the loom bands, she has been making all sorts of creatures and the other day she had a book stall and she sold some of hers, actually sold quite a few of hers which for her is brilliant, and I couldn't of taught her all these things so she has learnt about that, so techniques for making loom bands from the internet, and whenever we have a question we can't answer, we google it and find out about it and if she has heard about something like the music from like the wizard of Oz in her ballet class we can go online on YouTube and find the songs and she has seen the little bits of the film, so it's good for accessing all sorts of things and finding out about all sorts of things, negatives, yeah, I didn't know they seem to grow up much quicker than we did, more knowledgeable about the world.**	when seen as a negative contradicts the bits above. Effect of what the child has viewed on the internet on the child's perceptions of the world. Parent guilt? Strategies used. Does she trust the child, the word hovering suggests not, does the child have control over this situation? Is the child in charge of the monitoring? Reinforcing that the child hasn't seen anything scary, is this to reinforce the fact that she does not have a lot of control over this situation? Does she feel guilty for leaving the child too it? Relates to television in the amount of screen time. It is not what she would have wanted for her daughter but it has turned out that way? Does this again suggest that the child is in control within the digital environment? Then the guilt maybe kicking in, is the child following her own interests? Then it is linked to creativity, suggesting the internet is filling voids that she herself could not fill, a substitute parent/teacher maybe? But then all this knowledge it turned into a negative in saying that children are growing up much quicker and are more knowledgeable about the world, which when seen as a negative contradicts the bits above.

7.8 ***Appendix 8: Participant Consent Form***

University of Huddersfield

School of Education and Professional Development

Participant Consent Form (E4)

Title of Research Study: The Perceptions of Parents of Reception Aged Children in relation to Internet Safety with a Focus on Trust: An Interpretive Study.

Name of Researcher: Lindsey Watson

Participant Identifier Number: U1362329

☐ I confirm that I have read and understood the participant Information sheet related to this research, and have had the opportunity to ask questions.

☐ I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason.

☐ I understand that all my responses will be anonymised.

☐ I give permission for members of the research team to have access to my anonymised responses.

☐ I agree to take part in the above study

Name of Participant: ……

Signature of Participant: ……

Date: ……

Name of Researcher: .....

Signature of Researcher: .....

Date: .....

7.9 ***Appendix 9: Setting Consent Form***

University of Huddersfield

School of Education and Professional Development

Participant Setting Consent Form (E4)

Title of Research Study: The Perceptions of Parents of Reception Aged Children in relation to Internet Safety with a Focus on Trust: An Interpretive Study.

Name of Researcher: Lindsey Watson

Participant Identifier Number: U1362329

☐ I confirm that I have read and understood the participant setting Information sheet related to this research, and have had the opportunity to ask questions.

☐ I understand that my setting's participation is voluntary and that I am free to withdraw at any time without giving any reason.

☐ I understand that all participant's responses will be anonymised.

☐ I give permission for members of the research team to have access to participant's anonymised responses.

☐ I agree for the setting to take part in the above study.

Name of Setting: ……

Name of Representative……

Signature of Representative: ……

Date: ……

Name of Researcher: ……

Signature of Researcher: ……

Date……

7.10 ***Appendix 10: Participants Attributes Table***

Participant Names	**Attributes**				
	Age	**Education**	**Employment**	**Family structure**	**Sibling**
Charlotte	36-40	GCSE	18hrs	Single parent	Youngest
Gayle	41-45	Degree	80hrs (40 Gayle)	2 parents	Only child
Hatty	31-35	Degree	55hrs (0 Hatty)	2 parents	Middle
Jane	41-45	Post Graduate	20hrs	Single parent	Youngest
Leanne	21-25	Level 3	24hrs (student)	Single parent	Only child
Maxine	26-30	Degree	37hrs (0 Maxine)	2 parents	Only child

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