Parental Mediation of Mobile and Social Media Engagement of Select Teens in Lagos State, Nigeria

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Abstract
The study was carried out to investigate how and the extent to which parents in Lagos, Nigeria, mediate their teens' use of mobile and social media. There is ample evidence in the literature of the mediation strategies used in developed countries, and our aim was to determine whether a similar pattern finds expression in developing regions like Lagos. We also conceptualised parental mediation as a form of regulation enabled by family power structures where parents feel the need to protect teenagers from what is deemed the harmful effects of mobile and social media use. Using survey and focus group discussions, the findings showed that parents in Lagos use instructive and data-limiting mediation techniques far more than other digital or technical mediation techniques. Findings further showed that parent-child relationship has not been negatively affected by parental mediation, suggestive of the fact that family orderings have not been altered.

Keywords: Parental Mediation, Mobile and Social Media Engagement, Instructive Mediation, Digital Mediation, Technical Mediation

Introduction
Research shows that social media have become a central part of teens' lives with mobile phones securing the prime position of the constant and inextricable companion (Amobi, 2010 & 2013; RideOut, Saphir, Rudd, Pai, & Bozdech, 2012; Fortune, 2015). The mobile phone is also described as the most popular device used to access the internet and to use content services (Mascheroni & Ólafsson, 2013; Shimray & Ramaiah, 2019). Several studies indicate that teenagers are the highest internet users among all demographic groups, with a significant number (94%) within ages 13 to 17 saying they go online several times a day (Lenhart, 2015). This is often made possible by a round-the-clock availability of the internet which Mazrui (2008) describes as "a slope where the sun never sets." This challenge is summarised by Amobi (2015) thus: "in our time, we saw the world through the eyes of our parents, the textbooks we were given to read, or the newspapers and television they allowed us to read and watch, unlike today when our children begin to ask questions of Google and Wikipedia from an early age, causing parents to lose some control of what they know, when and how they know it."

However, while social media can be beneficial to youths, especially when it comes to enhancing their self-development and sharpening their technological and leadership skills, the way they consume it can potentially impact their lives negatively. Parents have voiced concerns about teens' online behaviours, the people with whom they interact and the personal information they post (Livingstone, 2007). The worry is that

social media activities can render young people vulnerable to several online threats. Therefore, Amobi (2015) argues that this contemporary form of communication characterised by teenagers' constant engagement with mobile and social media has added a modern wrinkle to the global challenge of parenthood and consequently demands new strategies for regulating teens' mobile/social media use. This is in consonance with Marshall McLuhan's doctrine that the dramatic change from the old order to a new digital epoch demands a new way of parenting. Indeed, this contemporaneous communication may have altered the fabric of parent-child relationship, thus bringing into focus, the need for parents to be proficient in the use of mobile and social media.

Although, some parents admit being technologically challenged or appear helpless when their children fall victims to Internet predators or are found culpable of social media transgressions, several studies have shown varying degrees of parental mediation especially in developed countries. For example, a 2016 Pew Research Centre survey of parents of 13- to 17-year-olds in the US found that today's parents take a wide range of actions to monitor their teens' online lives and to encourage their children to use technology in appropriate and responsible manner (Anderson, 2016). Lemish (2015) also cites another large European study which shows that parents use the following five forms of mediation: *Active Mediation*- including parental participation in activities and discussion; *Specific Active Mediation*- promoting Internet safety; *Restrictive Mediation*- monitoring the amount of time and nature of activities; *Digital Mediation*- monitoring teens' activities with digital media; and *Technical Mediation* of activities which include the uploading or installing of censoring technologies to restrict access to some websites and contents. It is, however, unclear how parents in Nigeria are dealing with this novel parenting challenge; hence, the need to understand the way in which parents in developing regions like Lagos navigate the attendant challenges of domestic regulation as they mediate teenage digital media use in a technological and fast changing world.

Research Questions

The following research questions were designed to guide the study:

1. To what extent do parents in Lagos use instructive techniques to mediate their teens' mobile and social media use?
2. To what extent do parents use digital and technical tools to mediate their teens' mobile and social media use?
3. How has parental mediation of teens' mobile and social media use influenced parent-child relationship?

Research Hypotheses:

The following hypotheses were tested:

1. H1: Parents who have higher educational attainment will use instructive tools to mediate their teens' mobile and social media use.
2. H1: Parents who are significantly knowledgeable about mobile and social media will use digital and technical tools to mediate their teens' mobile and social media use.
3. H1: Parental mediation of teens' mobile and social media use will lead to positive parent-child relationship.

Domestic Regulation and Parental Mediation

The control which takes place in informal spaces between parents and teenagers can be conceptualised as domestic regulation, a normative system of managing the home. Thus, parental mediation of teenage mobile and social media use is a form of domestic regulation. Livingstone (2007) explains that parents get to define the social structure that regulates teenage use of new media technologies materially and symbolically. Material regulation involves deciding what device to purchase and refusal to purchase devices for teenagers is a potential strategy to limit access completely. Symbolic regulation however, involves the "establishment of rules and practices" regarding the use of media goods (Livingstone, 2007), which is the focus of this study. The codification, communication and enforcement of these rules and practices in the home is what we regard as domestic regulation. Although it happens in home spaces, domestic regulation draws from societal interpretations as it is largely dependent on the cultural consensus of what an ideal parent and an ideal child should be (Livingstone, 2007). This suggests that culture will be far more influential in dictating the parameters of domestic regulation in countries like Nigeria, where for instance, children are conditioned to show deference to adults. Domestic regulation also points to the establishment and negotiation of power structures between parents and teenagers. Sarre (2010) refers to this as family orderings. For instance, in Nigeria, there is a top-down relationship between parents and children, where parents assume the role of guardians by default and children are required to be submissive. The fact that parents see themselves as protectors explains why they come up with informal regulatory standards aimed at keeping their children "safe" from a "dangerous" modern age, different from the one they grew up in. As a result, parents find themselves increasingly engaged in what Sarre (2010) calls temporal regulation. This involves regulating what children do with their time, when they do it and how long they do it for. However, as children become teenagers, the boundaries of control become contested and are negotiated, and attempts by parents to enforce domestic regulation of mobile and social media use by teenagers may lead to friction, if care is not taken.

Literature shows that focus on parental mediation of teenage usage of mobile and social media is not new. In the past, for instance, there was significant policy and research attention in Western countries on children's consumption of television and how parents mediated same (Livingstone, 2007; Livingstone & Helsper, 2008). There was also considerable interest in government regulation to stem what was deemed the negative effects of children exposure to violence on television (Gerbner *et al* 2002). Given that debates on television violence are still not settled (considering the lingering contest on media effects), it is understandable that parental regulation of children use of new media has become increasingly attractive (Livingstone & Helsper, 2008).

Parental Mediation Strategies

The attempt to find a delicate balance between the desire to protect children from what parents deem to be undesirable aspects of reality such as violence on the one hand and the desire to prepare teens to handle the complexity of adult life on the other creates a dilemma for parents lacking an easy solution. Lemish (2015) submits that parents are aware of their inability to completely regulate their children's mobile and social media use and the attendant influence on them and, therefore, setting clear mobile and social media rules may not resolve the dilemma, as the issue is negotiated daily between

children and their parents and between the parents themselves. Parental mediation is not uniform as parents operate on a spectrum from liberating to controlling (Van Petegem, Zimmer-Gembeck, Soenens, Vansteenkiste, Brenning, Mabbe, Vanhalst & Zimmermann, 2017). While some parents are not interested, willing to and/or able to able to assume responsibility for deciding what is good or bad for their children to be exposed to or use and what kind of media experiences are desirable, others play more active roles in monitoring their children's mobile and social media use. There are also differences in parental mediation styles and levels as identified by Lemish to include *Awareness* and *Co-viewing, Supervision* and *Instructive Mediation*. Other scholars have further identified more than three dimensions of parental mediation and these include *Active Mediation, Specific Active Mediation, Restrictive Mediation, Digital Mediation* and *Technical Mediation* (Nikken & Jansz, 2013).

Findings of a 2016 Pew Research Centre study carried out by Anderson (2016) show that while parents monitor their teens' digital behaviour in several ways, the share of parents who use more technologically oriented methods, like parental monitoring software, to monitor their teens' digital life continues to remain comparatively low. The survey of parents of 13- to 17-year-olds finds that today's parents in the US take a wide range of actions to monitor their teens' online lives and to encourage them to use technology in an appropriate and responsible manner. The report shows a significant share of parents (65%) now employ a new tool called "digital grounding" to enforce family rules. This includes taking away children's cell phones and their Internet privileges as a way of punishing misbehaving teens (Anderson, 2016).

Anderson (2016) also reports other findings which include an average of 60% of parents following hands-on methods such as checking which websites their teens visit; their teens' social media profiles, their followings and followers. However, an average of 45% have looked through their teens' call records or text messages, know the passwords of their email accounts, social media accounts and cell phones. Conversely, the study found that even as parents use several hands-on methods to monitor their teens, they are relatively less likely to use technology-based tools to monitor, block or track them. An average of 24% of parents used parental controls for blocking, filtering or monitoring their teens' online activities restrict their teens' use of cell phones or use monitoring tools on their teens' cell phones to track their location (Anderson, 2016). Anderson (2016) also reports that in addition to taking a range of steps to check up on their teens' online behaviour, the clear majority of parents (94%) also try to take a proactive approach to preventing problems by speaking with their teens about what constitutes acceptable and unacceptable online behaviour. This indicates a clear preference among parents for the conversational mediation as against the hands-on and digital/technical mediation approach.

While there is a substantial body of literature on parents' usage of social media and parental mediation in developed countries such as the US, extensive search of similar studies in Nigeria revealed a dearth of literature; thus, presenting a gap which this study intends to bridge. The only related documented study found was a 2010 study by Stephen titled "Parents' perceptions of the influence of social media on the children of Demonstration Secondary School, Ahmadu Bello University, Zaria," which merely focused on parents' social media use and awareness and perception of their children's social media activities. While results of the study show that 56% of parents have

awareness of social media, average of 45% admitted to having negative perception of social media and have attempted to stop their children from participating on social media. Majority of the parents (84%), however, were not familiar with technological methods of monitoring their teens. Stephen's study differs from ours in both scope and focus as this study goes further to examine the complex issues of parental mediation using both hands-on and technological methods as well as its influence on parent-child relationship.

Method

We used a triangulation research approach. Survey and Focus Group Discussion (FGD) methods were employed for the study. Research on parental mediation of teens' mobile and social media use suggests teens' knowledge and use of mobile and social media and the role parents play as mediators of their digital world. To get a more complete picture, it was necessary to survey both teens and their parents to elicit primary data and enable corroborative responses. For the survey, we measured how parents mediate their teens' mobile and social media activities; and how parental mediation influences parent-child relationship. Also, separate FGDs were conducted to complement the survey questionnaire in eliciting candid opinions of parents. A thematic analysis of the FGDs was matched with the data garnered from the survey for a critical cross validation.

The population of this study comprises the parents and student population of select public and private secondary schools in Lagos state. Of the 20 LGAs, 16 are located in Lagos Metropolis and four in Rural Lagos. Five LGAs were selected from the 20 LGAs in Lagos State: one from the four LGAs in Rural Lagos and four from the 16 LGAs in Lagos metropolis, leaving us with the total number of five LGAs. Although, records were hard to come by, the names of all public and private senior secondary schools in the select LGAs were collated using internet searches. From this list, two schools were selected from each LGA: one public and one private, bringing the total to 10 schools: five public and five private schools. Table 1 contains the list of schools that formed our sample.

Table 1: Participating Schools/Population of SS1-3

School	Category	LGA	Region	Population
St. Gloria Secondary School	Private	Ikeja	Urban	57
Murtala Airport Schools	Public	Ikeja	Urban	150
Attwool College	Private	Ibeju-Lekki	Rural	140
Community Senior High School	Public	Ibeju-Lekki	Rural	302
Crystal Rock Comp. High School	Private	Alimosho	Urban	50
Tomia Community Snr. Sec. Sch.	Public	Alimosho	Urban	360
International School, Lagos	Private	Lagos Mainland	Urban	58
Birrel Avenue High School	Public	Lagos Mainland	Urban	324
Gbara Community College	Public	Eti-Osa	Urban	420
Donum Christi Schools	Private	Eti-Osa	Urban	50
Total Population of Students (N)=				**2,001**

The survey and FGDs were conducted between April and July 2019. For the survey, multi-stage cluster and stratified sampling techniques were used. Thirty-percent

of the population of 2,001students was selected, translating to a sample size of 600. The decision to use a large sample, was premised on the need to include public and private schools located in rural and urban LGAs of the state. The decision was also aimed at reducing the margin of error, as this is a funded study intended to provide information that may drive policies. Selection of the sub-samples was guided by Wimmer & Dominick (2011), who suggest the use of samples of 50, 75, or 100 subjects per group or cell. Since public schools are usually more populated than private schools, 75 teenagers were selected from each of the five public schools and 45 from each of the five private schools. Thus, copies of the questionnaire were administered to 25 students in each of the SS 1–3 classes in the public schools, while 15 copies were administered to students in similar classes in the private schools. A total of 465 copies were retrieved, translating to a return rate of 77.5% (although a few more were voided). The high return rate is attributable to researchers visiting some of them in their classrooms, with the approval of their school management. Thus, completing the questionnaire was for the teenagers a form of classwork.

Again, 15 copies of the questionnaire were administered to parents of students in each of the public schools and 10 in each of the private schools, bringing the sample size of parents to 125. Researchers collected as many emails and telephone numbers of parents as possible, and administered some of the questionnaire online, via Google Forms and others physically. Decision to select a smaller sample size and use multiple platforms was due to anticipated difficulty in reaching them. On the whole, 98 copies of the questionnaire were retrieved, constituting a return rate of 78%. Additionally, FGDs were arranged at semi-official school engagements such as parents - teachers' meetings and sporting events. Eight FGDs were held, with each comprising 10 parents, bringing it to a total of 80 participants.

Data Analysis and Demography

Fundamentally, the data gathered from the survey questionnaire were analysed using the SPSS software and reported in percentages, mean and standard deviation, while the hypotheses predicting the strengths and direction of relationships between the variables of the study were tested for significance using the Chi-Square test and correlation figures. Data from the FGD were thematically analysed and results presented in prose form.

In terms of demography, we found that parent-respondents were more female (60.2%) than male. They also tended to be older as the 50 years and above category had the highest entry (36.8%) and the other entries followed in a descending order. More parents in Ikeja (34.7%) and Ibeju-Lekki (33.7%) featured as respondents than did parents in Alimosho, Eti-Osa and Lagos Mainland. The parents also had high education with two-thirds of them having a university degree (BSc/HND, MSc or PhD). However, majority of them had low socio-economic status, earning a monthly income below N100, 000. There were more Christian respondents (72.2%) than Muslim respondents and were split between being parents of private-school or public-school teenagers, with those in the private school category leading at (55.1%).

For the teenagers, almost two-thirds of them were female (62.4%). According to age classification, more than half of the students were 14 (28.6%) and 15 (25.4%) years of age; others occupied the range between 13 and 19 years. Teenagers in Ikeja, Lagos Mainland and Ibeju-Lekki were spread rather evenly, while there were fewer numbers from Alimosho and Eti-Osa. Overall, the teenagers were more Christian (73.8%) than Muslim (26.2%), and were more in public schools (56.6%) than private schools (43.4%).

Results

Our first research question was targeted at ascertaining the extent to which parents use instructive mediation techniques. Instructive mediation here involves the use of words to guide or admonish teenagers about the use of mobile and social media. Overall, majority of parents observed that they follow their children on two social media platforms, a potent avenue for mediation. As shown on Table 2, majority of parents (70.9%) follow their children on Facebook, followed by 61.6% parents who reported that they communicate with their teens on WhatsApp. This is not surprising as Facebook is one of the most popular platforms among older adults in Nigeria, while WhatsApp remains the most popular medium of private communication among family and friends in Nigeria.

Table 2: Parents' Followership of their Teens on Social Media Platforms

Social Network	Followership rate
Facebook	61 (70.9%)
Twitter	23 (26.7%)
Instagram	25 (29.1%)
Snapchat	24 (27.9%)
WhatsApp	53 (61.6%)
YouTube	24 (27.9%)
LinkedIn	9 (10.5%)
Telegram	13 (15.1%)

Table 3 shows that nearly three-fourths (74.5%) of parents say they mediate their teens' media use. Majority of the teens (72.7%) corroborated their parents' claims, a figure significantly close to the finding for parents. This outcome indicates that parents, to a substantial extent, use instructive techniques to mediate their teens' use of mobile and social media. Additionally, 60% and 57% of parents and teens respectively, said that teens understand why parents mediate their engagement.

Table 3: Mediation of Teens' use of Mobile and Social Media

Items	Parent Response	Teenage Response
Parents using instructive mediation	73 (74.5%)	343 (72.7%)
Parents report that teens understand why their activities are mediated	59 (60%)	268 (56.7%)

Results of the FGD also supported the survey findings. All the participants acknowledged the use of instructive techniques in mediating their teens' mobile and social media usage. One of the participants explained how she uses this technique:

> I instruct my kids when to put their phones away, and when to use them again. Also, I always check on what they are doing, and most of the time, I go back to view their history, so I can see the sites they have visited. By doing this, I am able to see the footprints they left on the Internet. I can cite an example of when my son uploaded a picture on Facebook, in which he looked rough and unkempt, I quickly advised him to take down the picture and he obeyed immediately.

As to how frequently the participants mediate their teens' mobile and social media engagement, all parents agreed that they do so regularly, using counselling approach. One of them recounted an experience: "There was a particular time my son used a ridiculous name as his Facebook name. I didn't like the name he used as it looked like the name a yahoo (advance fee fraud) boy would use. I called my son and counselled him. He changed the name that day."

H1 is related to research question three and it proposes that parents who have higher educational attainment will use instructive tools to mediate their teens' mobile and social media use. This was not supported, χ^2 (4) = 4.63, p = .327, as the difference between parents with higher education and those with lower education in the use of instructive mediation was not apparent.

For the second research question, researchers were interested in finding out the extent to which parents use digital and technical media techniques. Table 4 shows that majority of parents (70.4%) say they use digital mediation compared to 43.8% who say they use technical mediation. Teenagers also reported a similar trend in the findings – 60.8% of them said their parents use digital mediation and 23.9% said they use technical mediation.

On digital mediation, parents reported that they use "limiting data use" the most (37.8%), followed by "phone lock" (32.7%) and "digital grounding" (14.3%). Teenage response also followed this order as 24.2% of teens say their parents use "limiting data use", 23.5% "phone lock," and 16.5% "digital grounding." This indicates that parents prefer regulating their children's internet access through "limiting data use." It can be argued that parents utilise minimal digital or technical mediation because they are digital immigrants, who are not familiar with mediation software and how to operate them and for whom the effort required to out-manoeuvre teenagers when it comes to the use of these technologies is substantial.

Table 4: Digital and Technical Tools used by Parents for Mediation

Mediation Techniques	**Parents' Response**	**Teens' Response**
Digital Mediation Techniques		
Digital grounding	14 (14.3%)	78 (16.5%)
Phone lock	32 (32.7%)	111 (23.5%)
Limiting data use	37 (37.8%)	114 (24.2%)

Other	1 (1%)	5 (1.1%)
Technical Mediation Techniques		
Gadget 360	17 (17.3%)	24 (5.1%)
Ifyoucan	6 (6.1%)	27 (5.7%)
MSpy	8 (8.2%)	12 (2.5%)
Spyzie	7 (7.1%)	12 (2.5%)
Digital trends	19 (19.4%)	34 (7.2%)
Bark	2 (2%)	7 (1.5%)
Pcmag	46 (46.9%)	1 (0.2%)
Famisafe	1 (1%)	3 (0.6%)
Qustodio	3 (3.1%)	5 (1.1%)
Mobicip	4 (4.1%)	5 (1.1%)
PhoneSheriff	2 (2%)	17 (3.6%)
Net nanny	4 (4.1%)	9 (1.9%)
Norton	4 (4.1%)	10 (2.1%)
Flexispy	1 (1%)	8 (1.7%)
Sypera	2 (2%)	1 (0.2%)
Eset	4 (4.1%)	6 (1.3%)
Nischint	1 (1%)	2 (0.4%)
Watchover	6 (6.1%)	26 (5.5%)
Uknowkids	46 (46.9%)	9 (1.9%)
Netgear	2 (2%)	4 (0.8%)
Family Premier	10 (10.2%)	29 (6.1%)
Other	3 (3.1%)	1 (0.2%)

For technical mediation, respondents were presented with a number of tools used to monitor and/or regulate smart phone usage. Parents were asked to identify the ones they use, and teenagers were asked to identify the ones their parents use. Parents identified Pcmag (46.9%) and Uknowkids (46.9%) as the most used mediation tool. This was followed by digital trends (19.4%), gadget 360 (17.3%) and family premier (10.2%). Others were in the single digit category, indicating little use. These results were not corroborated by the teens who in their response observed that their parents use digital trends (7.2%) and premier (6.1%) the most. Although, the reason for such a significant discrepancy in responses is unclear, it appears that having a heterogeneous group respond to a relatively wieldy list of tools accounted for it. For instance, the parents and teenagers were not matched according to relations, and the finding is the aggregation of data from different schools. It was also clear that respondents were not familiar with technical mediation tools.

This was obvious in the finding from the FGD, which did not support that of the survey. While the FGD participants identified data limiting as the only digital technique they use, they all agreed that they do not use the other digital and technical tools in mediating their teens' mobile and social media engagement. They explained that the tools were too complex and sophisticated for them and also, that their teenagers are not as vulnerable or had not engaged in the kind of safety-endangering acts that would warrant parents having to familiarise themselves with the use of digital and technical tools for

mediation to protect teenagers. Of all the mediation techniques, table 5 shows that parents use instructive and digital mediation the most, (71.4% and 70.4%) with an insignificant difference of 1% between the two responses. The response from teenagers was also consistent with this finding as 62.1% and 61% of them respectively reported that their parents use instructive and digital mediation, as against the 44% of parents and 24% of teens who acknowledged the use of technical techniques by parents.

Table 5: Mediation of Teens' Use of Mobile and Social Media

Items	Parent Response	Teenage Response
Parental mediation of teens' mobile and social media use is done	73 (74.5%)	343 (72.7%)
Instructive mediation is done	70 (71.4%)	293 (62.1%)
Digital mediation is done	69 (70.4%)	287 (60.8%)
Technical mediation is done	42 (43.8%)	113 (23.9%)

Table 6 shows the frequency with which parental mediation is done using a 5-point scale from "very often" to "never." The responses for the first four items in the table fluctuated between "often" and "sometimes." A significant number of parents (40.4%) "Often" monitor the amount of time their teens spend on mobile and social media (M = 2.35, SD = 1.22), while 39.4% of them also "often" engage with their teens' activities on mobile and social media (M = 2.48, SD = 126). However, 39.4% of them "sometimes" monitor the kinds of activities their teens engage with on mobile and social media (M = 2.53, SD = 1.15). The table also shows that when it comes to using instructive techniques to mediate their teens' mobile and social media use (M = 2.67, SD = 1.22), parents' response was closer to "sometimes." While digital (M = 3.05, SD = 1.48) and technical/censoring technologies (M = 3.06, SD = 1.47) were also closer to "sometimes" the margins were much wider. This supports earlier findings that parents use instructive mediation techniques the most.

Table 6: How Parents Mediate Teens' Mobile and Social Media Use

Items	Very often	Often	Sometimes	Rarely	Never	*Mean*	*SD*
I engage with my teens activities on their phones and social media	21 (22.3%)	37 (39.4%)	17 (18.1%)	8 (8.5%)	11 (11.7%)	*2.48*	*1.26*
I monitor the amount of time my teens spend on their phones and social media	24 (25.5%)	38 (40.4%)	17 (18.1%)	5 (5.3%)	10 (10.6%)	*2.35*	*1.22*
I use my awareness of my teen's activities online as a mediation strategy	15 (16%)	29 (30.9%)	27 (28.7%)	10 (10.6%)	13 (13.8%)	*2.76*	*1.25*

I use instructive media for my teen's mobile and social media use	16 (17.2%)	29 (31.2%)	30 (32.3%)	6 (6.5%)	12 (12.9%)	*2.67*	*1.22*
I use digital media to monitor my teens' activities on their phones and social media	18 (19.4%)	20 (21.5%)	19 (20.4%)	11 (11.8%)	25 (26.9%)	*3.05*	*1.48*
I use censoring technology to restrict my teen's access to some websites and content	16 (17.2%)	21 (22.6%)	24 (25.8%)	5 (5.4%)	27 (29%)	*3.06*	*1.47*

Teenagers were also asked similar questions and their responses are presented in table 7. Their responses showed a lower level of frequency with the outcomes between "sometimes" and "rarely." The item on how often parents monitor the amount of time teenagers spend on mobile and social media recorded the highest frequency (M = 2.8, SD = 1.33), similar to the parents' response. On the question of how often parents use instructive mediation techniques, teenage response was on the outer bend of "sometimes" (M = 3.44, SD = 1.41). However, the frequency of use of digital mediation (M = 3.8, SD = 1.31) and technical mediation (M = 3.95, SD = 1.32) was squarely within "rarely."

Table 7: Teens' Response on Frequency of Mediation of Mobile and Social Media

Items	**Very Often**	**Often**	**Sometimes**	**Rarely**	**Never**	**Mean**	**SD**
How often does your parent engage with you on social media	55 (11.7%)	70 (14.9%)	134 (28.5%)	99 (21%)	113 (24%)	3.31	1.3
How often does your parent monitor the amount of time you spend on your phone and social media	101 (21.5%)	99 (21.1%)	136 (28.9%)	62 (13.2%)	72 (15.3%)	2.8	1.33
How often does your parent monitor the kinds of activities you engage with on mobile and social media	91 (19.4%)	95 (20.3%)	125 (26.7%)	81 (17.3%)	76 (16.2%)	2.91	1.34
How often does your parent use instructive mediation	54 (11.5%)	82 (17.5%)	100 (21.4%)	70 (15%)	162 (34.6%)	3.44	1.41

to mediate your mobile and social media							
How often does your parent use digital media to monitor your activities	36 (7.7%)	45 (9.6%)	104 (22.3%)	74 (15.8%)	208 (44.5%)	3.8	1.31
How often does your parent use censoring technologies to restrict your access to some content	33 (7.1%)	45 (9.7%)	87 (18.7%)	49 (10.5%)	252 (54.1%)	3.95	1.32

H2 proposes that parents who are significantly knowledgeable about mobile and social media will use digital and technical tools to mediate their teens' mobile and social media use. Tables 8 and 9 present the items for knowledge of mobile and social media and digital and technical mediation. It should be noted that only statistically significant outcomes using chi-square were recorded – outcomes that were not significant at the $p \leq .05$ levels were not recorded. Thus, table 8 shows that out of 14 items in the social media features segment, eight were found to be significant as it concerns digital mediation; out of the five for social media benefits, one was significant; and all the six items for social media risks were significant. For mobile media knowledge, table 8 shows that for mobile media features, two out of four items were significant; one out of three items for mobile media benefits was significant; and one out of two items for mobile media risks was significant.

Table 8: Chi-square Significance for Knowledge of Media and Digital Mediation

Item	**χ^2 (1)**	***P***
Social Media Knowledge and use of Digital Mediation		
Social Media Features		
Owning your account	4.47	0.34
Chatting	5.22	0.22
Hashtag	7.58	0.006
Privacy setting	5.65	0.017
Retweet	10.24	0.001
Photo filters	4.075	0.044
Direct messaging	4.66	0.031
Tagging	12.63	0.000
Social Media Benefits		
Real time and instant communication	11.019	0.001
Social Media Risks		
Trolling	7.289	0.007

Sexual predatory acts	4.439	0.035
Addiction	4.326	0.038
Cyber-bullying	10.239	0.001
Cyber-stalking	5.485	0.019
Distraction	4.326	0.038
Mobile Media Knowledge and Digital Mediation		
Mobile Media Features		
Making calls	15.78	0.000
Taking pictures/videos	5.272	0.022
Mobile media benefits		
Useful in emergencies	11.374	0.001
Mobile media risks		
Addiction	6.929	0.008

Table 9 shows that when it comes to technical mediation, six out of 14 items were significant with regards to social media features; for social media benefits, two out of five items were significant; and for social media risks, four out of six items were significant. For mobile media features, the table shows that two out of four items were significant with regards to mobile media features; one out of three was significant for mobile media benefits and one out of two was significant for mobile media risks.

Table 9: Chi-square Significance for Knowledge of Media and Technical Mediation

Item	**χ^2 (1)**	***P***
Social Media Knowledge and use of Technical Mediation		
Social Media Features		
Owning your account	8.85	0.003
Privacy settings	5.44	0.02
Retweet	4.58	0.032
Photo filters	6.487	0.011
Likes	3.899	0.048
Tagging	9.37	0.002
Social Media Benefits		
Real time & instant communication	5.24	0.022
Conducting research	5.113	0.024
Social Media Risks		
Trolling	10.73	0.001
Sexual predatory acts	7.549	0.006
Cyber-bullying	4.43	0.035
Cyber-stalking	4.68	0.03
Mobile Media Knowledge and Technical Knowledge		
Mobile Media Features		
Making calls	6.665	0.01
Taking pictures	7.776	0.005

Mobile Media Benefits		
Useful in emergencies	7.768	0.005
Mobile Media Risks		
Addiction	4.217	0.04

On the whole, the items on mobile and social media for both digital and technical mediation sum up to 68. Out of this number, 35 were statistically significant, representing 51.5% of the items. Although, H2 is upheld, considering the average number (51.5%), it may be argued that either way, knowledge of mobile and social media does not significantly translate to parental use of digital and technical mediation.

Research question three was aimed at ascertaining the extent to which parental mediation of teenage mobile and social media use has influenced the relationship between parents and teenagers. Overall, majority of parents (75.5%) say the relationship they share with their children is open and friendly, while 26.9% say it is not open or free. For the teens, 77.7% of them said that the relationship they share with their parents is open and friendly, while 34.1% of them say it is not free. Also, 53.1% of teenagers say they can tell their parents anything and 64.5% say they believe their parents should monitor them. More than half (56.7%) of teenagers say they are happy that their parents are monitoring their media activities, compared to 67.8% of parents who say their children are happy that they are being monitored.

Table 10: Influence of Mediation on Parent-Child Relationship

Items	**Improved**	**Same**	**Negative**	**I can't say**
Manner in which mediation has affected relationship with my child	62(69.7%)	13 (14.6%)	14(15.7%)	NA
Manner in which mediation has affected relationship with my parent	182 (40.9%)	80 (18%)	36 (8.1%)	147 (33%)

To answer the question, table 10 shows that more than two-thirds (69.7%) of parents say they think that mediation has improved the relationship they share with their children, 14.6% say their relationship has remained the same, while 15.7% said that their relationship has deteriorated. On the other hand, 40.9% of teenagers agreed that mediation has improved their relationship with their parents, while 33% say they cannot tell if there is any change. Only 8.7% said that mediation has negatively influenced their relationship. Overall, the responses showed that respondents believe that mediation has had a more positive than negative influence on the relationship between parents and teenagers.

In response to research question five, data gathered from the FGD, were congruent with those of the survey. All the participants described their relationship with their children as friendly and open, with their teens sharing their thoughts and activities with them. Furthermore, they all agreed that the mediation of their teens' mobile and social media engagements, positively influenced their relations, as explained by one of them:

> I instruct and caution my children when necessary, and because I have an open relationship with them, they always obey me. Most times, I chat with my children on social media, whenever they post something on social media that I do not like, I chide them as their friend and not as a parent. Through that, I

have bought their trust. The best way of raising children these days is to treat them as your friend.

H3 proposed that parental mediation of teens' mobile and social media usage will lead to positive parent-child relationship. Again, correlation was carried out between parental mediation of mobile and social media and how this affects parent-teens relationship. The outcome was found to be low at r = 0.107 and it was not significant at $p = 0.32$. Hence, H3 was not supported.

Discussion of Findings

Findings regarding parental mediation were mixed. While majority of parents (71%) used instructive techniques to mediate their teens' mobile and social media use, the use of digital and technical techniques was low, except for the use of internet "data limiting" which 52% of the parents say they used as digital mediation technique. This claim was, however, contradicted by the teens, as only 24% of them agreed that their parents used the technique. Similarly, 17% and 24% of teens claimed that their parents used digital grounding and phone locking techniques as against 44% of parents who claimed to use them. This disparity in responses between parents and teens was also reflected in the results of the use of technical mediation, as 44% of parents claimed to use the technique as against 24% of teens. A thorough analysis of other data generated from the parents and teens, point to a much lower use of technical mediation by the parents. For example, of the 21 technical mediation tools listed in the survey research instrument, only two were claimed to have been used by 47% of parents. Again, as reflected in other results, only 1% of the teens agreed that their parents were using those tools. Results of the FGDs with the parents further strengthened the results from the teens' survey, as all the parents in the various FGD sessions identified "data limiting" as the only digital technique they use. They were unanimous that they do not use the other digital and technical tools in mediating their teens' mobile and social media engagement, due to the complex and sophisticated nature of the tools. These results apparently interfered with the overall findings as H2 which proposes that parents who are significantly knowledgeable about mobile and social media will use digital and technical tools to mediate their teens' mobile and social media use was upheld, slightly crossing the 50% mark. This is attributable to the knowledge of social and mobile media features, the claim of the use of technical mediation techniques by parents, which was disputed by teens, as well as the fairly high use of digital limiting techniques, which were all found to be statistically significant. Interestingly, H1 was not supported, since parents' educational attainment did not appear to limit their use of instructive tools to mediate teens' mobile and social media use. However, findings showed that majority (71%) of the parents used instructive mediation.

On the whole, findings of this study were confirmed by Anderson's (2016) Pew Research Centre survey of parents of 13- to 17-year-olds in the US, which found a clear preference among parents for the conversational mediation as against the digital and technical mediation approach. Results of that study indicated that even as the clear majority of parents (94%) try to take a proactive approach to preventing problems by speaking with their teens about what constitutes acceptable and unacceptable online behaviour, they were relatively less likely to use technology-based tools to monitor, block or track them. An average of 24% of parents used parental controls for blocking, filtering or monitoring their teens' online activities to restrict their teen's use of cell phones or use

monitoring tools on their teen's cell phone to track their location (Anderson, 2016). Again, results of this study are also supported by Stephen's 2010 study on parents' perceptions of the influence of social media on the children of Demonstration Secondary School, Ahmadu Bello University, Zaria, which found that majority of the parents (84%) were not familiar with technological methods of monitoring their teens (Stephen, 2010).

Regarding the influence of parental mediation on the relationship between parents and their teens, we found no significant correlation between both. Interestingly, majority of the teens did not see anything wrong with their parents moderating their use of mobile and social media. In fact, a sizeable percentage of parents (70%) and teens (41%) during the survey claimed that they think that parental mediation has had more positive than negative impact on their relationships and this was upheld by the FGDs with parents. The implication of this finding is that the disruptive nature of the social and mobile media appears not to have overwhelmed the prevalent culture of deference in Nigeria, where children treat parents with great honour and respect and are willing to carry out their wishes. In the light of Sarre's (2010) work on temporal regulation and family ordering, our finding suggests that domestic power structures between parents and teenagers in Lagos is still traditionally oriented in spite of the digital age.

Conclusion and Recommendation

Of the three major techniques– instructive (conversational), digital and technical, that were studied as tools that can be used to mediate teens' mobile and social media use, majority of the parents were found to be using the instructive and data limiting techniques, as against digital and technical techniques. The researchers conclude that the use of instructive and data limiting techniques can be attributed to their simplicity as expertise is not necessarily required, unlike the Digital and technical techniques which require a high degree of tech savviness. The researchers, therefore, suggest that as teens become savvy in new technological spaces, parents should endeavour to keep pace with them.

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