Electronic Communication Devices in African Meetings: A Study of Nigerian Professionals' Use of Mobile Phones

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Introduction

Within the past two decades, mobile phones have become mainstream devices that business professionals around the world use for workplace communication. With smart phones, business professionals in all cultures increasingly use them in meetings for many reasons. Culturally speaking, the presence of mobile phones in meetings is relatively new. Therefore, the etiquette of mobile phone use in meetings is emerging and uncertain within various cultures. Furthermore, little research exists about how the norms and etiquette associated with how mobile phone use in meetings differs across cultures (Cardon& Dai, 2014; Nakamura, 2015).

Recent research about mobile phone use in meetings has been conducted among Chinese and American professionals (Cardon& Dai, 2014; Washington, Okoro, &Cardon, 2014). Among American professionals, most mobile phone actions in formal and informal meetings were considered rude. This research showed that older professionals are far less accepting of mobile phone use in meetings. Also, women tend to be less accepting than men (Washington, Okoro, &Cardon, 2014). Mobile phone use in Chinese culture shares some similarities but many differences to that of American culture. In both cultures, women are generally less accepting of various mobile phone uses during meetings. By contrast, older Chinese professionals tend to be more accepting of mobile phone use in meetings. This research suggested that some of the differences might be attributed to the more collectivist, high-context Chinese culture (Cardon& Dai, 2014)

Together, these two studies captured attitudes among American and Chinese professionals. The two studies also showed that there were significant cultural differences. Cardon and Dai (2014) specifically recommended this research should be replicated in other cultures. So, we decided to replicate portions of these studies among Nigerian professionals. Our study had the following purposes in the context of Nigerian professionals: (a) examine attitudes toward using mobile phones in meetings; (b) examine attitudes about appropriate response time to digital messages; (c) identify targets of multicommunicating; and (d) identify functions of multicommunicating in meetings.

Literature Review

In this study, we wanted to examine the nature of mobile phone use in meetings among Nigerian professionals. Using mobile phones in meetings is a form of *multicommunication* (described in the next section *Overview of Multicommunication*), an emerging area of study about overlapping conversations. So, we developed this literature review with a focus on multicommunication research. In this literature review, we review the following: (a) an overview of multicommunication; (b) the impact of multicommunication on perceptions of civility; (c) the impact of multicommunication on performancee;
(d) multicommunication and its potentially positive impacts in teams and meetings; and (e) Nigerian and African cultural influences onmulticommunication attitudes and behaviors via mobile phones.

Overview of Multicommunication

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A small but emerging set of research has started to address the role of mobile devices in the workplace with the concept of *multicommunication*. Turner and Reinsch (2007) coined the term *multicommunicating* and defined it as "a specific form of multitasking [that] involves engaging in multiple conversations at any one time" (p. 38). Later they defined multicommunicating as "engaging in two or more overlapping, synchronous conversations" (Reinsch, Turner, & Tinsley, 2008, p. 391). They grounded their work in the idea of *polychronicity* (and its opposite *monochronicity*), which has generally referred to cultural preferences about the degree to which multiple activities should overlap with one another (Bluedorn, 2002; Hall, 1959, 1966 1983; Turner &Reinsch, 2002).

Multicommunicationwas developed theoretically primarily through three camps of researchers. Turner, Reinsch, and their colleagues are the originators of the construct through a series of research articles over the past 15 years (Reinsch& Turner, 2006; Reinsch, Turner, & Tinsley, 2008; Turner, 2011; Turner et al., 2006; Turner &Reinsch, 2002, 2007, 2010). Stephens and her colleagues have refined research about multicommunication and developed an instrument to measure it (Stephens, 2012; Stephens, Cho, & Ballard, 2012; Stephens & Davis, 2009; Stephens, Murphy, &Kee, 2012; Stephens & Pantoja, 2016). Cameron and colleagues have focused primarily on the relational outcomes of multicommunicating (Cameron, Barki, &Plante, 2012; Cameron & Webster, 2005; 2011).

No known scholarly work about multicommunication has reported differences based on cultural differences. However, previous work about polychronic time orientation—which served as the guiding theoretical development of multicommunication—has typically identified African cultures, including Nigeria, as polychronic and American culture as monochronic (Hall, 1976). Logically, this would imply more acceptance of overlapping conversations among Nigerian professionals and less acceptance by American professionals.

Multicommunication and Its Impacts on Perceived Civility

A common orientation of multicommunication communication research is civility. This vein of research emerges from the premise that members of society are increasingly disrespectful of one another, with a large part of this incivility due to mobile devices (Forni, 2008; Hoflich, 2006; Pearson &Porath, 2005, 2009; Smith, 2012). Cameron and colleagues (Cameron, Barki, &Plante, 2012; Cameron & Webster, 2005; 2011; Cameron, Webster, Barki, & Ortiz de Guinea, 2016) have conducted extensive research about the impact of multicommunication on perceptions of incivility.

Cameron and Webster's (2011) study showed that multicommunicating sometimes led to spiraling incivility and lowered trust. The researchers found that while multicommunicating can be done successfully, it is more difficult to do well than other forms of multitasking since multitasking involves juggling tasks whereas multicommunicating involves "juggling. . .multiple people and often multiple media at the same time" (p. 754). Cameron, Barki, and Plante (2012) extended this research on the outcomes of perceived incivility due to multicommunicating. They examined an analyst-user relationship in an information systems environment. They found that when analysts multicommunicated while working with users, even when it did not interfere with the conversation with the user, study participants expressed less willingness to work with or help the analysts in the future.

A variety of other studies have examined the impact of multicommunicating with mobile devices during meetings on perceived rudeness (Bajko, 2012; Bajko & Fels, 2013; Bajko & Fels, 2016; Forgays, Hyman, & Schreiber, 2014; Pinchot, Paullet, & Rota, 2011; Smith, 2012; Washington, Okoro, &Cardon, 2014). Generally, these studies show that a high percentage of North Americans consider mobile phone use as rude, inappropriate, or distracting during most meetings. Several studies show that perceptions of civility are largely determined by age and gender, with older North Americans and women far more likely to consider mobile use in meetings as rude (Forgays, Hyman, & Schreiber, 2014; Smith, 2012; Washington, Okoro, & Cardon, 2014). Washington and colleagues' (2014) study is the most detailed of these studies. It showed that professionals over 40 years old are three to five times more likely to consider checking texts and emails during meetings as rude or inappropriate. Similarly, women were about twice as likely as men to consider behaviors such as checking text messages or answering calls during informal meetings as rude behaviors. One consideration is how norms of civility change over time. It's possible that professionals will become more tolerant of mobile phone use in meetings over time. Bajko and Fels (2013) are the only known researchers to have conducted comparison studies over time about how mobile devices are perceived in meetings. They replicated their 2010 study of mobile phones in 2012.

They found that Canadian professionals had become *slightly* more accepting of mobile phone use in meetings during this period. They attributed this growing acceptance of using phones in meetings to increased functionality on smartphones. However, they showed that mobile phone use in meetings was still relatively low, with just 26 percent of

professionals saying they made important calls during meetings and 29 percent of professionals saying they sent important texts during meetings.

Multicommunication and Its Impacts on Workplace Productivity

The potential negative impacts of multicommunicating are not limited to incivility. Many studies have shown how disruptions—due to multitasking in a work environment—are counterproductive (Acquisti & Spiekermann, 2011; Rennecker& Godwin, 2005). For example, a typical office worker is interrupted on average every 3 minutes. Yet, it takes the average office worker 23 minutes to get back and completely focused on a task. Generally, workers compensate for the expectation of interruptions by working faster. Overall, this creates more stress, frustration, time pressure, and effort (Gonzalez & Mark; 2004; Mark, Gonzalez, & Harris, 2005; Mark, Gudith, &Klocke, 2008; Su & Mark, 2008).

Since multicommunicating may hinder focused and sustained communication lines, it can hinder innovation (Turner, 2011). Turner and Reinsch (2010) suggested that this frenzied focus on efficiency may even inhibit innovation. After researching successful and unsuccessful multicommunication episodes of 201 professionals, they concluded the following regarding unsuccessful multicommunicating:

What seems most troubling about multicommunicating is the lack of strategic thought associated with its practice. Most respondents seemed to view the practice as an opportunity for efficiency—to do more in less time. The frenetic pace associated with communication and managing responses may be leading to a situation where a response is valued more highly than the content of the response. In this way, conversation becomes a game of high stakes juggling where the goal is to keep as many balls in the air as possible without dropping them. Additionally, the practice of multicommunicating becomes very sender focused with little attention on the receivers. (p. 283)

Multicommunication and Its Potentially Positive Impacts in Teams and Meetings

The research about the negative impacts of multicommunicating is compelling. Most professionals have experienced the negative impacts, and for this reason, multitasking generally and multicommunication specifically are often stigmatized, particularly in the monochronic North American cultures. Yet, multicommunication is not necessarily counterproductive for workplace performance and relationships. In perhaps the seminal work on multicommunication, Reinsch, Turner, and Tinsley (2008) cited research showing that one company estimated saving up to $200 million per year due to multicommunicating within and between teams (Amin et al., 2001).

Among the first researchers to empirically examine the positive impacts of multicommunicating during meetings were Rennecker, Dennis, and Hansen (2010). They examined the many ways in which professionals use instant messaging (IM) to hold multiple conversations during meetings. Grounding their work in Goffman's (1959) terminology about interaction order (the process of regulating interactions), they identified six types of overlapping communication activities of IM during meetings: directing meetings, providing task support, seeking clarification, providing social support, participating in a parallel subgroup meeting, and managing extra-meeting activities. They found that many of these practices led to efficient and effective meetings.

Stephens (2012) built and tested a scale based on the work of Rennecker, Dennis, and Hansen (2010). Her scale contains five factors related to multicommunicating in meetings: influence (influencing the actions of other during meetings); support (coaching and encouraging others during meetings); parallel activities (distractions from meeting goals and blowing off steam); understanding (verifying and clarifying meeting content); and being available (ensuring accessibility to others not present at the meeting). She identified most of these factors as leading to positive outcomes.

The research about multicommunicating, however, is relatively limited, and many of the propositions of the original theoretical work on multicommunicating remain untested empirically. Some of these propositions state that multicommunicating becomes more challenging under the following conditions: higher number of open conversations, faster pace of open conversations, lower integration among social roles occupied in the open conversations, and higher number of topics.

Clearly, the degree of challenge associated with various forms of multicommunicating impacts workplace performance and workplace relationships (Reinsch, Turner, & Tinsley, 2008; Turner &Reinsch, 2007).

Nigerian Cultural Influences and Multicommunication via Mobile Phones

A 2015 Pew Research Center study reveals the extent of mobile phone use in Sub-Saharan Africa. Mobile phone ownership in many Sub-Saharan countries is roughly equivalent to the United States. Approximately 89 percent of American and Nigerian adults own a mobile phone. The most common mobile phone activities among Nigerians are texting (80 percent), taking pictures or video (57 percent), accessing social networks (35 percent), getting health information (23 percent), making and receiving payments (15 percent), looking for and applying for jobs (15 percent), and getting consumer information (14 percent). There are significant differences by age group. Among Nigerians, roughly 89 percent of 18-to-34-year-olds send text messages compared to 67 percent of those 35 years old and above (Poushter& Oates, 2015).

Technological change has gradually swept through sub-Saharan region over the past two decades, dramatically affecting lifestyles and work environments. Hosman and Fife (2012) noted the emergence of Africa as one of the most rapidly-growing phone markets in the world. This trend is driving an unprecedented rise in economic and quality of life experiences. Over the past decade, political leaders and elected officials in Africa have emphasized the critical need for the continent to embrace technology in order to join the information society and partake in the global knowledge economy (Alozie, Akpan-Obong, & Foster, 2011; Atchoarena, 2011).The ways in which working professionals in Nigeria and in other parts of Africa have been conducting and performing their official duties have been impacted tremendously by the advent of mobile phones. Some new studies have noted the overwhelming global impact of mobile phones and its transformation of traditional habits in formal and informal contexts. Additionally, it appears that Nigeria and other African countries embraced the use of mobile phones too quickly, resulting in mixed feelings and results because of apparent lack of decorum and impoliteness in using the device in professional settings. A number of African researchers have observed widespread use of mobile phones in business settings. They also report that mobile phone use appears both useful and disruptive in professional settings as many young Africans appear addicted to their devices or have lost control of proper use of their mobile phones in professional settings (de Bruijn, Nyamnoh& Brinkman, 2009; Porter, Hampshire, Milner, &Munthali, 2015).

Little research exists about the role of culture in determining mobile phone etiquette and behaviors. Some Western scholars have suggested that mobile phones can serve to maintain social cohesion more so in collectivist countries (Mujtaba, 2013; Pearce, 2013).Also, some research indicates that Americans are less accepting of mobile phone use in work environments and are more likely to see it as distracting compared to other cultures (Peng & Chu, 2012). We would expect that Nigeriancultures would adopt attitudes and behaviors related to mobile phone use based on the way collectivist and high-context norms. (Hall, 1959, 1966; Hofstede & Hofstede, 2005). Prior comparative research about mobile phone use compares Chinese and American norms of mobile phone use in meetings (Cardon& Dai, 2014).

Methodology

Our primary goal wasto conduct research about the nature of multicommunicating via mobile phones among Nigerians in meetings. In this process we intended to establish a comparison between Nigerian professionals in this study with American professionals in Washington and colleagues' (2014) study and Chinese in Cardon and Dai's (2014) study. We expected to see Nigerians demonstrate patterns more similar to Chinese based on the similar collectivist, high-context orientations of these cultures.We designed the study to address the following issues: (a) attitudes toward using mobile phones in meetings; (b) attitudes about appropriate response time to digital messages; (c) targets of multicommunicating in meetings; and (d) functions of multicommunicating in meetings.

Our survey contains a condensed version of the survey items in Cardon and Dai's (2014) mobile phone survey with a focus on the appropriateness of various mobile phone behaviors in meetings. Our scales of appropriateness are from Young (2008) for most of the survey items. We also replicated a survey question Cardon and Dai (2014) asked a question about appropriate response time to the following forms of digital messages: texts, emails, and phone calls. Several of the survey items address each of the multicommunicating functions identified in Stephens' (2012) scale: influence (influencing the actions of other during meetings); support (coaching and encouraging others during meetings); parallel activities (distractions from meeting goals and blowing off steam); understanding (verifying and clarifying meeting content); and being available (ensuring accessibility to others not present at the meeting).
We also included a survey item to identify the targets of multicommunicating, including options for clients, colleagues at the meeting, colleagues not at the meeting, friends and family, and others. Appendix 1 contains all the mobile phone items in the survey.

Table 1. Demographic Information of Survey Respondents.

Demographic Variable	*n*	%
Gender		
Man	80	66.7
Woman	40	33.3
Current Residence		
USA	87	72.5
Nigeria	27	22.5
Other	5	4.2
Canada	1	0.8
Age Group		
20 years or under	2	1.7
21 to 25 years	3	2.6
26 to 30 years	2	1.7
31 to 35 years	5	4.3
36 to 40 years	7	6
41 to 45 years	12	10.3
46 to 50 years	21	17.9
51 to 60 years	46	38.5
over 60 years	21	17.1
Employer		
Government	26	22.0
Nonprofit/University	16	13.6
Large Company	33	27.1
Medium Company	18	15.3
Company	19	16.1
Self Employed	3	2.5
Retired/Student	2	1.7
Other	2	1.7
Home Province		
Imo	55	46.2
Anambra	19	16.2
Enugu	8	6.8
Lagos	7	6
Rivers	5	4.3
Delta	4	3.4
Ekiti	3	2.6
Abia	2	1.7
Akwa Ibom	2	1.7
Edo	2	1.7
Ondo	2	1.7
Oyo	2	1.7
Other States	7	6.0
Total	120	100.0%

We used regression analysis to examine several sets of dependent variables: (a) attitudes toward mobile phone use in formal and informal meetings; (b) attitudes toward response time to digital messages; and (c) attitudes towardof multicommunicating. For each of these dependent variables, we used sums of related survey items, with Cronbach's α for all dimensions at .85 or above.Since we used many survey items from two other similar studies (Cardon& Dai, 2014; Washington et. al., 2014), we also were able to provide some comparative data to Chinese and American business cultures.

Altogether, we were able to survey 120 Nigerian respondents (see Table 1). Several members of the research team tapped into their broad professional contacts and worked with the Nigerian embassy in the United States to gain access to a broad range of Nigerian professionals.

Findings

Generally, the majority of Nigerian professionals reported that bringing phones and checking time with phones were generally okay in formal meetings (see Table 2). However, checking incoming texts, checking incoming texts, and leaving the meeting to take calls were viewed as moderately unacceptable behaviors—with 47.5, 53.0, and 55.1 percent, respectively, suggesting these behaviors are *rarely* or *never* appropriate.The most unacceptable behaviors in formal meetings are answering a call and browsing the Internet, with 69.5 and 74.8 percent, respectively, of Nigerian professionals suggesting these behaviors are *rarely* or *never* appropriate. By contrast, the majority of Nigerian professionals are okay with most of these behaviors in informal meetings, with the exception of browsing the Internet. (See Table 2 for more detail).

By contrast, in informal meetings, it is only browsing the Internet that a majority (63.6 percent) view as *never* or *rarely* appropriate. A very small percentage view bringing a phone to a meeting (10.1 percent), checking time with a phone (18.6 percent), checking incoming texts (22.4 percent), and checking incoming emails (33.9 percent) as *never* or *rarely* appropriate.

Table 2. Attitudes toward Mobile Phone Use in Formal and Informal Meetings.

	Formal Meetings			Informal Meetings		
	M	*SD*	%	*M*	*SD*	%
nging a Phone to the Meeting	2.69	1.35	26.5	2.13	1.10	10.1
ecking Time with Phone	2.99	1.34	35.5	2.50	1.19	18.6
ecking Incoming Texts	3.43	1.24	47.5	2.78	1.19	22.4
ecking Incoming Emails	3.48	1.33	53.0	3.07	1.30	33.9
swering a Call	3.92	1.26	69.5	3.32	1.26	44.4
aving the Meeting to Take a Call	3.64	1.22	55.1	3.12	1.21	37.3
iding Texts	3.77	1.24	60.4	3.34	1.25	45.8
owsing the Internet	4.24	1.22	74.8	3.82	1.27	63.6

Note. The scale was as follows: 1, always appropriate; 2, often appropriate; 3, sometimes appropriate; 4, rarely appropriate; 5, never appropriate. Percentage refers to how many people responded "never" or "rarely."

The strong majority—78.0 and 72.0 percent, respectively—of Nigeran professionals think texts and phone calls should be replied to immediately or within an hour. Just under half (47.0%) of Nigerian professionals think they should reply to an email immediately or within an hour (see Table 3).

Table 3. Attitudes and Behaviors for Response Time to Digital Messages.

	M	*SD*	*% Immediately/ Within 1 Hour*
Text	1.91	0.95	78.0
Email	2.76	1.15	47.0
Phone	2.09	1.06	72.0

Note. The scale was as follows: 1, immediately; 2, within an hour; 3, within two hours; 4, within a day, 5, within a few days. Percentage refers to how many people responded "immediately."

Table 4 shows the most common targets of multicommunicating with mobile phones during meetings. Just under half of Nigerians think it is at least sometimes appropriate during meetings to multicommunicate using their devices with clients (46.6 percent), colleagues at the meeting (44.9 percent), and colleagues not at the meeting. Over one third (37.8 percent) of Nigerians think it is at least *sometimes* appropriate to multicommunicate with friends and family during a business meeting.

Table 4. Targets of Multicommunicating in Formal Meetings.

	M	*SD*	%
Clients	3.47	1.13	46.6
Colleagues at meeting	3.65	1.26	44.9
Colleagues not at meeting	3.69	1.12	40.0
Friends or family	3.74	1.20	37.8
Other people	4.34	0.95	17.1

Note. The scale was as follows: 1, always; 2, often; 3, sometimes; 4, rarely, 5, never. Percentage refers to how many people responded at least "sometimes."

Table 5 shows the reasons for multicommunicating in meetings. Each of these ideas emerges from Stephens' (2012) model. Overall, Nigerian professionals report using these various multicommunicating functions *rarely* to *sometimes*. The most common multicommunicating behaviors are giving ideas or suggestions to others and asking others for information, with 67.8 and 42.0 percent, respectively, of Nigerian professionals saying they take these action with their mobile devices at least *sometimes* in meetings.

Table 5. Multicommunicating Behaviors in Formal Meetings.

	Formal Meetings		
	M	*SD*	%
Give ideas or suggestions to others	3.70	1.18	67.8
Encourage or coach others	3.90	1.14	33.9
Check with others before making comments	3.88	1.17	33.0
Ask others for information	3.74	1.15	42.0
Give immediate reactions to an idea	3.77	1.21	37.9
Discuss unrelated topics	4.26	1.10	20.7

Note. The scale was as follows: 1, always; 2, often; 3, sometimes; 4, rarely, 5, never. Percentage refers to how many people responded at least "sometimes."

Table 6 shows two regression models that focus on predictors of attitudes toward mobile phone use in meetings. Model 1 shows that current residence, gender, and age do not significantly impact attitudes about mobile phone use in formal meetings. Model 2 shows that age does have an impact on attitudes toward mobile phone use in informal meetings. Older professionals tend to be less accepting of various mobile phone behaviors.

Table 6. Regression of Attitudes towards Mobile Phone Use in Meetings.

	Model 1: Formal Meetings			Model 2: Informal Meetings		
	B	*SE*	*p*	*B*	*SE*	*p*
(Constant)	24.361	4.343	.000**	10.672	4.835	.030*
Current Residence	-1.873	1.428	.193	1.89	1.503	.117
Gender	1.705	1.659	.105	2.948	1.802	.105
Age	3.045	1.609	.195	5.917	1.743	.001**

Note. R^2= .21 for Model 1; R^2 = .35 for Model 2. The scale was as follows: 1, always; 2, often; 3, sometimes; 4, rarely, 5, never.*p<.05, **p<.01.

Table 7 is a regression of response time to digital messages (texts, emails, and phone calls). Model 3 shows that all predictors were significant. Nigerian professionals living in Nigeria, men, and younger professionals all expect quicker response times to digital messages.

Table 7. Regression of Response Time to Digital Messages.

	Model 3: Response to Digital Messages		
	B	SE	p
(Constant)	.641	1.411	.650
Current Residence	1.135	.433	.010**
Gender	1.523	.541	.006**
Age	1.379	.518	.009**

Note. R^2 = .38 for Model 3. The scale was as follows: 1, immediately; 2, within an hour; 3, within two hours; 4, within a day, 5, within a few days.*$p<.05$, **$p<.01$.

Table 8 shows that gender and current residence do not factor into variation in multicommunication behaviors. However, younger Nigerians are significantly more likely to engage in multicommunication behaviors than older Nigerians.

Table 8. Regression of Multicommunication Behaviors.

	Model 4: Multicommunication		
	B	SE	p
(Constant)	19.862	3.321	.000**
Current Residence	-1.084	1.066	.312
Gender	.371	1.282	.773
Age	3.093	1.227	.013*

Note. R^2 = .25 for Model 4. The scale was as follows: *$p<.05$, **$p<.01$.

Tables 9 and 10 show that comparisons between this study and prior studies of American professionals (Washington, Okoro, and Cardon, 2014) and Chinese professionals (Cardon& Dai, 2014). Each of the comparisons involve the percentage of professionals who view various actions *rarely* or *never* appropriate in formal and informal meetings.

In formal meetings, Nigerians share more similarities with the Chinese than the Americans as far as bringing phones to meetings (Nigerians: 26.5%; Chinese: 11.3%; Americans: 55.7%), checking time with phones (Nigerians: 35.5%; Chinese: 32.8%; Americans: 57.7%); checking incoming texts (Nigerians: 47.5%; Chinese: 32.3%; Americans: 76.0); checking incoming emails (Nigerians: 53.0%; Chinese: 40.3%; Americans: 76.0%); and sending texts (Nigerians: 60.4%; Chinese: 41.4%; Americans: 84.0%). On the other hand, the Nigerians more closely matched American norms as far as leaving meetings to take calls (Nigerians: 55.1%; Americans: 54.6%; Chinese: 29.1%). The three cultures were fairly similar as far as norms about answering calls (Nigerians: 69.5%; Americans: 87.1%; Chinese: 82.5%) and browsing the Internet (Nigerians: 72.0%; Americans: 76.0%; Chinese: 74.8%).

Table 9. Comparison between Nigerian, Chinese, and American Professionals for Attitudes toward Mobile Phone Use in Formal Meetings.

	Chinese	Americans	Nigerians
Bring Your Phone to the Meeting	11.3	55.7	26.5
Checking Time with Phone	32.8	57.7	35.5
Checking Incoming Texts	32.3	76.0	47.5
Checking Incoming Emails	40.3	76.0	53.0
Answering a Call	82.8	87.1	69.5
Leaving the Meeting to Take a Call	29.1	54.6	55.1
Sending Texts	41.4	84.0	60.4
Browsing the Internet	72.0	76.0	74.8

Note. The scale was as follows: 1, always; 2, often; 3, sometimes; 4, rarely, 5, never. Percentage refers to how many people responded "never" or "rarely."*$p<.05$, **$p<.01$.

The pattern is somewhat similar in informal meetings. Nigerians show more similarity to Chinese than Americans as far as checking time with phones (Nigerians: 22.4%; Chinese: 12.4%; Americans: 53.0%), checking incoming texts (Nigerians: 22.4%; Chinese: 12.4%; Americans: 53.1%), and checking incoming emails (Nigerians: 33.9%; Chinese: 17.8%; Americans: 53.1. Nigerians show more similarity with Americans than with Chinese as far as leaving meetings to take calls (Nigerians: 37.3%; Americans: 34.0%; Chinese: 21.0%) and browsing the Internet (Nigerians: 63.6%; Americans: 61.4%; Chinese: 45.1%).

Table 10. Comparison between Nigerian, Chinese, and American Professionals for Attitudes toward Mobile Phone Use in Informal Meetings.

	Chinese	Americans	Nigerians
Bring Your Phone to the Meeting	2.1	22.0	10.1
Checking Time with Phone	15.0	32.9	18.6
Checking Incoming Texts	12.4	53.1	22.4
Checking Incoming Emails	17.8	53.1	33.9
Answering a Call	64.0	61.4	44.4
Leaving the Meeting to Take a Call	21.0	34.0	37.3
Sending Texts	24.7	66.3	45.8
Browsing the Internet	45.1	61.4	63.6

Note. The scale was as follows: 1, always; 2, often; 3, sometimes; 4, rarely, 5, never. Percentage refers to how many people responded to "never" or "rarely." *$p<.05$, **$p<.01$.

Washington and colleagues (2014) did not include targets of multicommunication and types of multicommunication under Stephens' (2012) classifications for their sample of American professionals, yet Cardon and Dai (2014) surveyed Chinese professionals about these aspects of multicommunication. Therefore, it's possible to make some comparisons between Nigerian and Chinese professionals (shown in Tables 11 and 12).

Table 11 shows that while Chinese professionals tend to multicommunicate more often than Nigerian professionals with clients (73.5 percent compared 46.6 percent), colleagues not at the meeting (61.8 percent versus 40.0 percent), and friends or family (66.2 percent versus 37.8 percent). Chinese professionals and Nigerian professionals report multicommunicating roughly the same amount with colleagues at the meeting (44.1 percent versus 44.9 percent).

Table 11. Comparison between Nigerian and Chinese Professionals for Targets of Multicommunicating in Formal Meetings.

	Chinese %	Nigerian %
Clients	73.5	46.6
Colleagues at meeting	44.1	44.9
Colleagues not at meeting	61.8	40.0
Friends or family	66.2	37.8
Other people	39.7	17.1

Note. The scale was as follows: 1, always; 2, often; 3, sometimes; 4, rarely, 5, never. Percentage refers to how many people responded at least "sometimes."

As far as types of multicommunicating behaviors in meetings (as displayed in Table 12), Nigerian professionals are more likely to give ideas or suggestions to others (67.8 percent versus 39.2 percent). Chinese professionals are more likely to engage in other multicommunicating behaviors, including asking others for information (61.2 percent versus 42.0 percent) and checking with others before making comments (51.0 percent versus 33.0 percent).

Table 12. Comparison between Nigerian and Chinese Professionals for Multicommunicating Behaviors in Formal Meetings.

	Chinese	Nigerians
	%	*%*
Give ideas or suggestions to others	39.2	67.8
Encourage or coach others	42.0	33.9
Check with others before making comments	51.1	33.0
Ask others for information	61.2	42.0
Give immediate reactions to an idea	31.2	37.9
Discuss unrelated topics	25.8	20.7

Note. The scale was as follows: 1, always; 2, often; 3, sometimes; 4, rarely, 5, never. Percentage refers to how many people responded at least "sometimes."

Conclusions, Limitations, and Suggestions for Future Research

In this section we provide some of our major conclusions. We focus most of these conclusions as far as comparisons between Nigerian, Chinese, and American professional cultures. This is largely due to our original motivation to our study – to build on and extend the work of Washington and colleagues' (2014) study in American business culture and Cardon& Dai's (2014) study in Chinese business culture. We believed that Nigerian culture would align more closely with Chinese culture than American culture. It generally did with some major caveats and limitations.

Nigerian professionals, like Chinese professionals, are more accepting of less intrusive mobile phone use in formal and informal meetings than are American professionals. For those behaviors that are less intrusive—including bring a phone to a meeting, checking time with a phone, and checking emails and texts, Nigerian professionals closely resemble the attitudes of Chinese professionals. It's reasonable to view these attitudes as high-context and collectivist. In the highly-contexted, relational approach, professionals need to be constantly and immediately aware of the needs of those within their networks. By checking their mobile phones for incoming messages, they are able to ensure they are not responding to the urgent students. Furthermore, this fits a more polychronic tendency to attend to multiple people at once.

Nigerian professionals, like American professionals, are less accepting of more intrusive mobile phone uses in formal and informal meetings than are Chinese professionals. While Nigerian professionals appear to monitor incoming messages much like Chinese professionals, they appear much less likely than Chinese professionals to send texts or answer calls. Nigerians, in this sense, appear to align more with American professionals in their desire to avoid more intrusive interruptions to a meeting.

Many Nigerian professionals view multicommunicating via mobile phones as normal and appropriate. Clearly, multicommunicating via mobile phones in meetings is considered a fairly routine practice. In particular, roughly two thirds of Nigerian professionals report at least sometimes *giving ideas or suggestions* to others via their mobile phones while in meetings. Between 33 and 45 percent of Nigerian professional report at least *sometimes* asking others for information, giving immediate reactions to an idea, encouraging or coaching others, and checking with others before making comments. These common behaviors likely suggest that many Nigerian professionals view mobile phone use in meetings as a way to apply a relational, polychronic, even high-context approach to overlapping conversations inside and outside of physical meetings spaces.

Nigerian women, like American and Chinese women, tend to be less accepting of mobile phone behavior in meetings and less anxious to respond to digital messages quickly. With near significance ($p = .1$), Nigerian women are less accepting of various mobile phone behaviors in formal and informal meetings. Furthermore, they are significantly less anxious about rapidly responding to digital messages. This pattern is similar to that among Americans and Chinese.

Younger Nigerian professionals, like American professionals but unlike Chinese professionals, are more accepting of various mobile phone behaviors in meetings, expect faster response times to digital messages, and engage in more multicommunication in meetings. Overall, Nigerian professionals tend to multicommunicate via mobile phones more similarly to Chinese professionals than American professional; however, one clear exception involves the role of age within these business cultures. Cardon and Dai (2014) showed that within Chinese culture, younger professionals were less accepting of various mobile phone behaviors than older professionals. They suggested a Confucian influence impacted this tendency. Younger professionals in Nigeria, similar to those in the United States, were far more accepting of various mobile phone behaviors.

Summary

The purpose of this study was to examine the nature of mobile phone use in meetings among Nigerian professionals. We replicated and extended surveys conducted in North America and China in order to draw cross-cultural comparisons with Nigerian professionals. Based on survey results, we concluded the following: (a) Nigerian professionals, like Chinese professionals, are more accepting of less intrusive mobile phone use in formal and informal meetings than are American professionals; (b) Nigerian professionals, like American professionals, are less accepting of more intrusive mobile phone uses in formal and informal meetings than are Chinese professionals; (c) Many Nigerian professionals view multicommunicating via mobile phones as normal and appropriate; (d) Nigerian women, like American and Chinese women, tend to be less accepting of mobile phone behavior in meetings and less anxious to respond to digital messages quickly; and (e) Younger Nigerian professionals, like American professionals but unlike Chinese professionals, are more accepting of various mobile phone behaviors in meetings, expect faster response times to digital messages, and engage in more multicommunication in meetings. Overall, we suggest this research generally places Nigerian professionals in a relational, polychronic, even high-context approach to multicommunicating in meetings.

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APPENDIX: Survey Items about Mobile Phone Use

Section 2: Attitudes toward Various Mobile Phone Actions in Meetings

1. How often do you consider the following actions with mobile phones APPROPRIATE in formal meetings (i.e., scheduled meetings at the office)? (scale: 1, always; 2, often; 3, sometimes; 4, rarely, 5, never)
a. Bringing a Phone to the Meeting
b. Checking Time with Phone
c. Checking Incoming Texts
d. Checking Incoming Emails
e. Answering a Call
f. Leaving the Meeting to Take a Call
g. Sending Texts
h. Browsing the Internet

2. How often do you consider the following actions with mobile phones APPROPRIATE in informal meetings (i.e., a lunch meeting without an agenda)? (scale: 1, always; 2, often; 3, sometimes; 4, rarely, 5, never)
a. Bringing a Phone to the Meeting
b. Checking Time with Phone
c. Checking Incoming Texts
d. Checking Incoming Emails
e. Answering a Call
f. Leaving the Meeting to Take a Call
g. Sending Texts
h. Browsing the Internet

3. How quickly should you respond to the following types of incoming messages? (Scale: 1, immediately; 2, within an hour; 3, within two hours; 4, within a day, 5, within a few days).
a. Text
b. Email
c. Phone

4. When you are in formal meetings, how often to you contact the following via mobile phone? (scale: 1, always; 2, often; 3, sometimes; 4, rarely, 5, never)
a. Clients
b. Colleagues at the meeting
c. Colleagues not at the meeting
d. Friends or family
e. Other people

5. When you are in formal meetings, how often do you use your mobile phone to do the following? (scale: 1, always; 2, often; 3, sometimes; 4, rarely, 5, never)
a. Give ideas or suggestions to others
b. Encourage or coach others
c. Check with others before making comments
d. Ask others for information
e. Give immediate reactions to an idea
f. Discuss unrelated topics