Cell Phone Use, a Confrontational Tool between Parents and the Youths in Eastern Kenya: Implications for Academics

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ABSTRACT

While a Cell phone seems to be a confrontational tools between parents and the youths, it possesses potential opportunities in the social and academic aspects. Using case study approach, this work investigated Cell Phone Use by 187 sampled youths in Eastern Kenya. Validity of the questionnaire was ensured through expert judgment and reliability test yielding cronbach's alpha of .764 for parental support, .845 for academic use, .733 for socialization and .788 for political happenings. Descriptive and inferential statistics were used to analyze data. The order of priority in the use of cell phones was academics, socialization and political happenings. The study yielded no significant difference in the use of cell phones for academics by the youths categorized according to their gender. The higher the age, the higher the mean score for the use of cell phones for academic purposes. Parental support correlates with the use of cell phones for academics, socialization, and political happenings. It is recommended that the youths, regardless of their gender and age differences be encouraged by teachers and enabled by parents to possess cell phones since the tools are useful for academics, socialization and political updates. Parents need to increase their support in order to enhance the use of cell phones for aforementioned purposes.

Keywords: Cell Phone, parents, youths, Academics, Political Happenings, Socialization, Eastern Kenya

1. INTRODUCTION

Recent research suggests that many college youth perceive the cell phone primarily as a leisure device, and most commonly use cell phones for social networking, surfing the Internet, watching videos, and playing games (Lepp, Li, & Barkley, 2015; Lepp, Barkley, Sanders, Rebold, & Gates, 2013). With this background, questions of concern can be raised: What impact- positive or

negative, does cell phone use have on academic arena? Can the use of cell phones go beyond socialization? How can cell phone technology be adopted in academic arena?

In response to these questions, cell phones enable users to access a variety of electronic media at almost any time and any place. Popular activities such as playing video games, surfing the Internet, and monitoring social media sites are now all easily accomplished with most cell phones. Researchers have linked each of these activities, independent of cell phone use, to academic performance. For example, heavy video game playing has been associated with lower GPAs (Jackson, von Eye, Fitzgerald, Witt, & Zhao, 2011; Jackson, von Eye, Witt, Zhao, & Fitzgerald, 2011). On the other hand, low levels of Internet use have been associated with improved academic performance (Chen &Peng, 2008). Chen and Tzeng (2010) found that among heavy Internet users information seeking was associated with better academic performance, while video game playing was associated with lower levels of academic performance. This suggests that cell phone as a tool may have negative or positive implications in learning.

Several recent studies have further identified a negative relationship between social-networking site use (e.g., Facebook, MySpace, Twitter) and academic performance (e.g., Rosen, Carrier, & Cheever, 2013; Stollak, Vandenberg, Burklund, & Weiss, 2011). In particular, Kirschner and Karpinski (2010) demonstrated that Facebook users have a lower self-reported GPA and spend fewer hours per week studying than nonusers. Likewise, Junco (2012a, 2012b) found a strong, negative relationship between time spent on Facebook and actual cumulative GPA. These negative relationships have been found in youths across the world, including North America, Europe, and Asia (e.g., Chen &Tzeng, 2010; Karpinski, Kirschner, Ozer, Mellott, &Ochwo, 2013).

Further, it is important to note that although the overuse of cellphones and the internet is associated with psychological and/ or academic problems (Jenaro, Flores, Gómez-Vela, González-Gil, &Caballo, 2007), meaningful academic use of the same is considered a positive experience for youth. Distraction caused by cell phone use is what concerns most teachers (Gilroy, 2004; Obringer&Coffey, 2007), but these data show that the youth does not view cell phones as a distraction problem. If students are using their phones for academic purposes, then cell phones become a learning tool rather than a problem (Prensky,2005; Thornton & Houser, 2005).

In spite of aforementioned advantages cell phones can bring, unresolved confrontations have emerged between the youths and parents or teachers on the utility of cell phones. While this becomes a challenge in this information age, some authors have suggested that, instead of parents and teachers blaming the use of cell phones by the youth, they can shift toward a positive understanding of these ubiquitous tools, encouraging their use in an active and engaging classroom setting in which students take ownership of the knowledge they acquire (American Association for the Advancement of Science, 2009; National Research Council, 2003; Prensky, 2005; Thornton & Houser, 2005; Weimer, 2002).

Allowing the youth to access data via cellphones opens up a world of opportunities for inquiry-based teaching and learning formats in the classroom, complementing their use in laboratory settings (Phelps Walker et al., 2012;Proulx, 2004; Tessier, 2010; Tessier&Penniman, 2006).

Wireless communication has emerged as one of the fastest diffusing media on the planet, fueling an emergent mobile youth culture that speaks as much with thumbs as it does with tongues (Castells et al, 2007). Cell phone use and, in particular, the rise of texting has become a central part of teens' lives. They are using their phones to stay in touch with friends and parents. They are using them to share stories and photos. They are using them to entertain themselves when they are bored. They are using them to micro-coordinate their schedules and face-to-face gatherings. And some are using their phones to go online to browse the web, to participate in social networks and check their emails.

Studies suggest the upsides of mobile phone usage. Power and Horstmansh (2004) proposed that mobilephone usage provides young people with an opportunity to create new relationships with others and to sustain them. Researchers, Chapman and Schofield (1998); Taylor and Harper (2001); Carroll et al. (2002) emphasized on its use to increase the sense of security in case of emergency. Tjong et al. (2003) states that this technology provides means for social fulfillment of young people such as access, convenience and mobility. Frissen (2000) and Matthews (2004) suggested that mobility also put busy working parents at ease because through this technology they can better be in touch with their children. Markett (2006) observes that learning in classroom can be promoted through increased interactivity among the students during the lecture and using the short messaging service (SMS) can promote this interactivity. Chen et al. (2007) proposes that having mobile phone is necessary for college students to keep in touch with their family. Also they use mobile phones to fulfill their family roles by sharing their experiences with and getting an emotional and psychic support from their family. Ling and Yttri (2002) see mobile phone technology as having revolutionized the patterns of correspondence and coordination among peer groups, colleagues and family member. Cova (1994) proposed that youngsters seek peer group acceptance by using their mobile phones.

But researchers, Bianchi and Phillips (2005), Paragras (2003), Monk et al (2004), Palen et al. (2001), also recognized the problematic dimension of excessive usage of mobile phone in young people. James and Drennan (2005) conducted a study on Australian students and identified a higher usage rate of 1.5 hours - 5 hours a day. They also highlighted the financial costs, emotional stress, damaged relationships and falling literacy as adverse consequences of excessive usage. Matthews (2004) concluded that Australian adolescents do not make more than 5 calls a day on average and 85% of them used SMS less than 5 times a day.

Teenagers' cell phone usage encompasses all three axes, either while interacting with their friends or staying in contact with their family. In addition, a cell phone adds two completely new and innovative dimensions to the typical telephone. These are termed by the authors as 'delocation of communication' and 'embodiment of the object':

- De-location' enlightens the space-free, locus-independent nature of the kind of telephone call that constitutes for the possibility of mobile or nomadic communication.
- The idea of 'embodiment' refers to the process of integrating the object with the user's own body, making it work as a part of one's physical self (Caronia & Caron, 2004, p. 30).

Expanding on the dimension of de-location, Srivastava (2004) adds that the 'sense of belonging to place' is slowly fading away and being taken over by 'sense of belonging to the communications network' (p.7). "Mobile phones allow users to construct their own 'at-home' environment regardless of where they find themselves in physical space" (Srivastava, 2004, p. 7). The difference between an incoming call on a fixed line (landline) and an incoming call on a mobile phone is that the former is restricted to a place and not to a person, whereas the latter is restricted to a person and not to a place. Hence with mobile phones, place is no longer a portal to the person (Srivastava, 2004).

Referring to Engelstad (n.d), the 'power' and 'control' both from teenager and parent's perspective has been analyzed and proved legitimate. From a teenager's perspective it is the period that is characterized by desire for freedom and on the other side, from a parent's angle, it is the desire to instigate their offspring on a sustainable path. Hence the power of push and pull perceptions of one over the other is considered justifiable (Ling &Yttri, 2003). "Adolescence is a time in which the child is engaged in the establishment of their own identity, sometimes in the form of a revolution against the world of their parents" (Ling,2001a, p. 4). In this adolescent phase, mobile phones allow a channel for communication that is free from the supervision of one's parents, the opportunity for individualization. At the same time it leads teenagers to engage in orientation and networking with peers (Ling, 2001a).

Hence, it could be summarized that the relationships especially between parents and teenagers tend to become more informal with boundaries blurred, discussions happening two-way and restrictions such as house rules being more relaxed. Tutt's (2005) findings reveal that, "mobile phone is a key communication and performance tool with which teenagers strike a balance between abiding by and opposing house rules" (p.60).

As a result, the use of mobile phones inside a home not only defines the status of family members but also public and private spaces. Home becomes a public space wherein the teenager makes his own private space through the mobile phone, within that public space (Caronia, 2005). However, with such freedom and with the increase in communication with their peers, it is suspected and feared that there would be a dilution in the interaction within the family (Vaidyanathan&Latu, 2007). The competing attentions of peers and family, the confusions that crop up in separating public and private spaces, the contradictory household rules that interfere with one's own personality and the imbalance between independence and dependence on the family, are some of the areas where the majority of cell phone impacts are felt, both by teenagers and families (Tutt, 2005).

Parents exert some measure of control over their child's mobile phone – limiting its uses, checking its contents and using it to monitor the whereabouts of their offspring. In fact, the latter is one of the primary reasons many parents acquire a cell phone for their child. However, with a few notable exceptions, these activities by parents do not seem to impact patterns of cell phone use by teens (Pew Internet and American Life Project, 2010). This report indicates that:

About two-thirds (64%) of parents say that they look at the contents of their child's phone, including looking at the address book, call log, text messages or pictures. Another two-thirds

(62%) have taken away their teen's phone as a punishment. Many focus group teens reported parents looking through their phones and the loss of the phone as a punishment.

The flip side of parental regulation and monitoring is that teens report feeling suffocated by the constant contact with parents. "The worst thing is, I guess, like, when you don't want to get in touch with your mom, but she can always get in touch with you," said one younger high school girl. "Sometimes you want your space. But when you have your phone you can't have your space. "Girls, particularly younger girls, are much more likely to be the object of parental regulation around the cell phone than boys or older teens. Girls are more likely to have parents looking at the contents of their cell phones, have limits on the times of day they can use the phone and are more likely than boys to have their cell phone taken away as punishment for misdeeds(Pew Internet and American Life Project, 2010).

Nearly 7 in 10 girls (69%) have parents who say they have taken the phone away as punishment. A similar percentage (69%) of parents of girls report looking at the contents of their daughter's phone, compared with 55% and 59% of boys' parents, respectively. Fully 56% of parents of girls say they limit the times of day when their daughter can use her cell phone compared with 48% of boys' parents. Parents of girls and boys are just as likely to engage in other monitoring behaviors like limiting the number of minutes a teen may talk, limiting the number texts a teen may send or monitoring his or her location via the phone.

2. STATEMENT OF PROBLEM

While Cell phones seem to be confrontational tools between parents and the youths, it can possess both challenges and opportunities in the social and academic life. Amidst challenges and opportunities, this study assessed multidimensional cell phone use and parental support. The study sought to determine the extent to which parents support the use of cell phones and the extent to which the youths use cell phones for academics, socializations and political happenings. The study sought to answer three research questions namely:

- 1. What is the order of priority in the use of cell phones in terms of academics, socialization and politics by the youths of Eastern Kenya?
- 2. Is there significant difference in the use of cell phones for academics by the youths categorized according to gender, age and level of education?
- 3. Is there significant relationship between parental support and the use of cell phones for socialization, academics and political happenings?

3. RESEARCH METHODOLOGY

This study employed case study approach whereby both descriptive and inferential statistics were used in data analysis. Descriptive statistics analyzed research questions one while t-test and ANOVA analyzed research question two and three and Pearson-product moment correlation

coefficient analyzed research question three. Questionnaire items were in four-likert scale whereby 4 denoted Strong Agreement, 3 denoted Agreement, 2 denoted Disagreement, and 1 denoted Strong Disagreement. Interpretation of mean scores was as follows:

3.50-4.00 = Strong Agreement

2.50-3.49 = Agreement

1.50-2.49 = Disagreement and

1.00-1.49 = Strong Disagreement.

Convenient sampling procedure was applied in that 187 youths who attended an Education Day Event during December Festive Season Religious gathering during Christmas season filled the questionnaire. This approach is supported by Cohen and Manion (1992) who contends that the researcher can handpick cases to be included in his sample on the basis of his judgment in order to build up a sample that is satisfactory to his specific needs.

3.1 Validity and Reliability

Validity of research instrument was ensured through expert judgment in the sense that the researchers looked critically at the research questions with their subsequent hypotheses and made some adjustments to suit the need. Cronbach's alpha correlational Coefficient was employed to test reliability of the research instrument. As seen in Table 1, reliability results were .764 for parental support, .845 for academic use, .733 for socialization and .788 for political use of cell phones.

VARIABLE	ITEMS	RELIABILITY
Parental Support	8	.764
Academic	6	.845
Socialization	7	.733
Politics	6	.788

Table 1: Reliability Test of Research Variables

4. RESULTS AND DISCUSSIONS

This section was guided by three research questions which called for descriptive and inferential statistics for data analysis. The discussion is done question by question in order to come up with summary and conclusions of the study:

1. What is the order of priority in the use of cell phones in terms of academics, socialization and political happenings by the youths of Eastern Kenya?

	N	Minimum	Maximum	Mean	Std. Deviation
Academic Use	187	1.17	4.00	3.1658	.75876
Socialization	187	1.57	4.00	3.2322	.52183

Table 2: Descriptive Statistics on Priority in Cell Phone Use

Political Happenings	187	1.00	4.00	2.8316	.66352
Valid N (listwise)	187				

Table 2 indicates the order of priority in the use of cell phones in terms of academics, socialization and political happenings by the sampled youths of Eastern Kenya. The Table shows that the youths prioritize socialization (M= 3.23) over academic use (M=3.17) and political happenings (M=2.83) which are given second and third priority respectively. The mean scores in all three variables, however, were within the Agreement Zone (2.50-3.49) meaning that the youths agreed that they used cell phones for socialization, academics and political updates. This suggests that cell phones are useful tools for socialization, academics and political updates. This is in harmony with the contention of Castells et al (2007) that wireless communication is becoming one of the fastest diffusing media on the planet, fueling an emergent mobile youth culture that speaks as much with thumbs as it does with tongues.

2. Is there significant difference in the use of cell phones for academics by the youths categorized according to gender, age and level of education?

This research questions called for testing of three subsequent null hypotheses as follows:

a. There is no significant difference in the use of cell phones for academics by the youths categorized according to gender.

Male respondents were 116 while females were 71. The test of gender differences in the use of cell phones for academics was done by the use of independent sample t-test. Table 3 clearly indicates that the mean scores for males (M=3.18) and females (M=3.15) were within the agreement zone meaning that both genders agreed to be using cell phones for academics. Table 4 shows Levene's test for equality of variance with the Sig. of .103 which is greater than the critical value (.05) leading us to the option of equal variance assumed Sig. of .776 (t-test for equality of means) which is also greater than the critical value, meaning that the mean differences between males and females' use of cell phones for academics happens by chance and therefore is not statistically significant. Therefore, we accept the null hypothesis that there is no significant difference in the use of cell phones for academics by the youths categorized according to gender. Thus, although recent research suggests that many college youth perceive the cell phone primarily as a leisure device, and most commonly use it for social networking, surfing the Internet, watching videos, and playing games (Lepp, Li, & Barkley, 2015; Lepp, Barkley, Sanders, Rebold, & Gates, 2013), the tool is useful, regardless of gender, for academic affairs.

Table 3: Group Statistics of cell phone use for academics by gender

	Responde nt gender	N	Mean	Std. Deviation	Std. Error Mean
Academic Use	Male	116	3.1782	.71212	.06612
	Female	71	3.1455	.83425	.09901

Table 4: Independent Samples Testof cell phone use for academics by gender

	,	Levene's Equal Varia	•			t-test	for Equali	ty of Mea	ans	
						Sig. (2-	Mean Differen	Std. Error Differen	95% Con Interva Diffe	l of the
		F	Sig.	t	df	tailed)	ce	ce	Lower	Upper
Academ ic Use	Equal variances assumed	2.688	.103	.285	185	.776	.03262	.11462	19350	.25874
	Equal variances not assumed			.274	130.5 54	.785	.03262	.11906	20291	.26815

b. There is no significant difference in the use of cell phones for academics by the youths categorized according to age.

According to Table 5, though the mean scores of the youths in different age groupings were within the agreement zone (2.50-3.49), the youngsters of 25 and above years had the highest mean score (M=3.41) followed by those of 21-25 (M=3.29) while those of 16-20 years having the lowest mean score of 2.92. The Sig. of .002 in Table 6, which is lesser than the critical value, suggests significant differences in the use of cell phones for academics by the youths categorized according to their age. This called for a multiple comparison by the use of post hoc (LSD) test in order to determine the actual differences among the groups. Table 7 indicates significant difference between age groups of 16-20 and 21-25, and 16-20 and above 25. This implies that the higher the age of respondents, the higher the mean score for usefulness of cell phones for academic purposes. Therefore, we reject the null hypothesis that there is no significant difference in the use of cell phones for academics by the youths categorized according to age. We also argue that the adolescent youths need to be guided to increase the use of cell phones for academics as this may improve their academic performance in this digital age. This is supported by Chen and Tzeng (2010) who argue that information seeking is associated with better academic performance, while video game playing is associated with lower levels of academic performance. This suggests that cell phone as a tool may highly increase academic performance of the youths.

Table 5: Descriptives of cell phone use for academics by age

Academic Use by Age

					95% Confidence Interval for Mean			
	N	Mean	Std. Deviation	Std. Error	Lower Bound	Upper Bound	Minimu m	Maximu m
16-20	72	2.9236	.78170	.09212	2.7399	3.1073	1.17	4.00
21-25	91	3.2930	.68734	.07205	3.1499	3.4362	1.33	4.00
Above 25	24	3.4097	.78170	.15956	3.0796	3.7398	1.50	4.00
Total	187	3.1658	.75876	.05549	3.0563	3.2752	1.17	4.00

Table 6: ANOVA of cell phone use for academics by age

Academic Use					
	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	7.124	2	3.562	6.557	.002
Within Groups	99.959	184	.543		
Total	107.083	186			

Table 7: Multiple Comparisons of cell phone use for academics by age Academic Use LSD

(I)	(J)	Mean			95% Confide	ence Interval
1 /	Responde	Difference (I-			Lower	
nt age	nt age	J)	Std. Error	Sig.	Bound	Upper Bound
16-20	21-25	36943 [*]	.11625	.002	5988	1401
	Above 25	48611 [*]	.17373	.006	8289	1434
21-25	16-20	.36943*	.11625	.002	.1401	.5988
	Above 25	11668	.16913	.491	4504	.2170
Above 25	16-20	.48611 [*]	.17373	.006	.1434	.8289

21-25	11668	.16913	.491	2170	.4504
21-23	.11000	.10713	. + /1	2170	.4304

^{*.} The mean difference is significant at the 0.05 level.

a. There is no significant difference in the use of cell phones for academics by the youths categorized according to their level of education.

Table 8suggests that the higher the level of education, the higher the mean score for the use of cell phones for academic purposes. This is because University students had the highest mean score (M=3.55) followed by College students (M=3.10) while secondary school students had the lowest mean score of 2.64.

Table 8: Descriptives of cell phone use for academics by age

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Acad	emic.	LISE

					95% Confidence Interval for Mean			
	N	Mean	Std. Deviation	Std. Error	Lower Bound	Upper Bound	Minimu m	Maximu m
Secondary	49	2.6429	.80866	.11552	2.4106	2.8751	1.17	4.00
College	61	3.1038	.70459	.09021	2.9234	3.2843	1.50	4.00
University	77	3.5476	.52625	.05997	3.4282	3.6671	1.50	4.00
Total	187	3.1658	.75876	.05549	3.0563	3.2752	1.17	4.00

It is also worth noting that University students strongly agreed (M=3.50-4.00) while those in colleges and high schools simply agreed (2.50-3.49) that they use cell phones for academics.

The Sig. of .000in Table 9, which is lesser than the critical value, suggests significant differences in the use of cell phones for academics by the youths categorized according to their level of education. This called for a multiple comparison test by the use of post hoc (LSD) test in order to determine the actual differences among the groups. Table 10 indicates significant difference between Secondary and College students, Secondary and University students and College and University students. Therefore, we reject the null hypothesis that there is no significant difference in the use of cell phones for academics by the youths categorized according to their level of education.

Table 9: ANOVA of cell phone use for academics by age

Academic Use					
	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	24.860	2	12.430	27.816	.000
Within Groups	82.223	184	.447		

Table 9: ANOVA of cell phone use for academics by age

Academic Use					
	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	24.860	2	12.430	27.816	.000
Within Groups	82.223	184	.447		
Total	107.083	186			

Table 10: Multiple Comparisons of cell phone use for academics by age

Academic Use

LSD

(I) In	(J) In				95% Confidence Interval	
which	which	Mean				
class are	class are	Difference (I-			Lower	
you?	you?	J)	Std. Error	Sig.	Bound	Upper Bound
Secondary	College	46097 [*]	.12824	.000	7140	2080
	University	90476 [*]	.12216	.000	-1.1458	6637
College	Secondary	.46097*	.12824	.000	.2080	.7140
	University	44379 [*]	.11458	.000	6699	2177
University	Secondary	.90476*	.12216	.000	.6637	1.1458
	College	.44379 [*]	.11458	.000	.2177	.6699

^{*.} The mean difference is significant at the 0.05 level.

3. Is there significant relationship between parental support and the use of cell phones for socialization, academics and political happenings?

Using Pearson product moment correlational coefficient, this research question called for testing of the following null hypothesis:

There is no significant relationship between parental support and the use of cell phones for socialization, academics and political happening.

According to Morgan, Leech, Gloeckner & Barrett (2004), nature of existing relationships among variables are either positive or negative and are interpreted based on the formula below:

 \geq .70 = Much stronger

.50 = Strong

.31 = Medium

.10 = Weak

Based on this formula, and with reference to Table 11, parental support correlates with academic use (.355), socialization (.485) and political happenings (.177). This suggests that the more the parents support their children to use cell phones, the more the youths will use the tools for academics, socialization and political happenings.

It is also worth noting that academic use correlates with socialization (.500) and political happenings (.253). This suggests that the use of cell phones for socialization and political happenings influences the youth to use it for academic affairs as well.

Table 11: Correlations of parental support, academic use, socialization and political use

		Parental Support	Academic Use	Socialization	Political
Parental Support	Pearson Correlation	1	.355**	.485**	.177*
	Sig. (2-tailed)		.000	.000	.015
	N	187	187	187	187
Academic Use	Pearson Correlation	.355**	1	.500**	.253**
	Sig. (2-tailed)	.000		.000	.000
	N	187	187	187	187
Socialization	Pearson Correlation	.485**	.500**	1	.336**
	Sig. (2-tailed)	.000	.000		.000
	N	187	187	187	187
Political	Pearson Correlation	.177*	.253**	.336**	1
	Sig. (2-tailed)	.015	.000	.000	
	N	187	187	187	187

^{**.} Correlation is significant at the 0.01 level (2-tailed).

5. CONCLUSIONS OF THE STUDY

Based on results and discussion of findings, we come up with the following conclusions and recommendations:

^{*.} Correlation is significant at the 0.05 level (2-tailed).

The order of priority among the youths in the use of cell phones is academics, socialization and political happenings. The study yielded no significant difference in the use of cell phones for academics by the youths categorized according to their gender. The mean scores for males (M=3.18) and females (M=3.15) were within the agreement zone meaning that both genders agreed to be using cell phones for academics. The higher the age the higher the mean score for the use of cell phones for academic purposes. This is indicated by the fact that the youngsters of 25 and above years had the highest mean score (M=3.41) followed by those of 21-25 (M=3.29) while those of 16-20 years having the lowest mean score of 2.92.

There is a significant difference (Sig.002) in the use of cell phones by the youths categorized according to age. The higher the age of respondents the higher the mean score for the use of cell phones for academic purposes.

There is a significant difference (Sig.000) in the use of cell phones by the youths categorized according to level of education. The higher the level of education, the higher the mean score for the use of cell phones for academic purposes.

Parental support correlates with the use of cell phones for academics (.355), socialization (.485) and political happenings (.177). It is also worth noting that academic use correlates with socialization (.500) and political happenings (.253). This implies that the use of cell phones for socialization and political happenings influences the youth to use it for academic affairs as well.

6. RECOMMENDATIONS OF THE STUDY

- The youths, regardless of their gender and age differences should be encouraged by teachers and enabled by parents to possess cell phones since the tools are useful for academics, socialization and political updates.
- The youths in higher education institutions should be encouraged to possess and use cell phones for academic purposes.
- Since the use of cell phones for academics, socialization and political happenings correlates with parental support, it is recommended that parents increase their support in order to enhance the use of cell phones for aforementioned purposes.
- Further studies could look at the role cell phones play in advocating for social networking in relation to academic values.

REFERENCES

American Association for the Advancement of Science. (2009). *Vision and change: A call to action*. Washington, DC: Author.

Bianch, A, Phillips J (2005). Psychological predictors of problem mobile phone use. Cyber Psychol. Behav., 8: 39-51.

- Caronia, L. (2005). Mobile culture: An ethnography of cellular phone uses in teenagers' everyday life. *Convergence: The International Journal of Research into New Media Technologies* 11(3), 96-103.
- Caronia, L., & Caron, A. H. (2004). Constructing a specific culture: Young people's use of the mobile phone as a social performance. *Convergence: The International Journal of Research into New Media Technologies*, 10(2), 28-61.
- Carroll J, Howard S, Peck J, Murphy J (2002). A Field study of perceptions and use of mobile telephones by 16-22 years olds. Journal of Information Technology Theory and Practice, 4: 49-61.
- Castells, M., Fernandez-Ardevol, M., Qiu, J., &Sey, A. (2007). *Mobile communication and society: A global perspective*. Cambridge, MA: MIT Press.
- Chapman S, Schofield WN (1998). Lifesavers and cellular Samaritans: emergency use of cellular (mobile) phones in Australia. Sociology of the Mobile Phone Online Publications. Retrieved from http://socio.ch/mobile/index_mobile.htm.
- Chen Y, Katz JE (2007). Extending Family to School Life: College Students' Use of Mobile Phone. Paper presented at the annual meeting of the International Communication Association, TBA, San Francisco. Retrieved fromhttp://www.allacademic.com/meta/p171018_index.html.
- Chen, Y. F., &Peng, S. S. (2008). University students' Internet use and its relationships with academic performance, interpersonal relationships, psychosocial adjustment, and self-evaluation. *Cyber Psychology& Behavior*, 11, 467-469.
- Chen, S. Y., &Tzeng, J. Y. (2010). College female and male heavy Internet users' profiles of practices and their academic grades and psychosocial adjustment. *Cyber psychology, Behavior, and Social Networking*, 13, 257-262
- Cohen, L. and Manion, L.Research Methods in Education. Routledge, London, 1962 education. Routledge, London, 1962.
- Cova B (1994). Community and consumption: towards a definition of the 'linking value' of product or services. Eur. J. rk., 31, 297–316.
- Frissen V (2000). ICT in the rush hour of life.Info. Soc., 16: 65-75.
- Gilroy, M. (2004). Invasion of the classroom cell phones. *Education Digest*, 69, 56–60.
- Jackson, L. A., von Eye, A., Fitzgerald, H. E., Witt, E. A., & Zhao, Y. (2011). Internet use, videogame playing and cell phone use as predictors of children's body mass index (BMI),

- body weight, academic performance, and social and overall self- esteem. Computers in Human Behavior 27, 599-604.
- James J, Drennan J (2005). Exploring Addictive Consumption of Mobile Phone Technology, ANZMAC 2005 Conference: Electronic Marketing. Retrieved on January 21, 2011, fromhttp://smib.vuw.ac.nz:8081/WWW/ANZMAC2005/cd- site/pdfs/12-Electronic-Marketing/12-James.pdf.
- Jenaro, C., Flores, N., Gómez-Vela, M., González-Gil, F., & Caballo, C. (2007). Problematic internet and cell-phone use: Physiological, behavioral, and health correlates. *Addiction Research and Theory*, *15*, 309–320.
- Junco, R. (2012a). The relationship between frequency of Face book use, participation in Facebook activities, and student engagement. *Computers & Education*, 58, 162-171.
- Junco, R. (2012b). Too much face and not enough books: The relationship between multiple indices of Facebook use and academic performance. *Computers in Human Behavior*, 28, 187-198.
- Karpinski, A. C., Kirschner, P. A., Ozer, I., Mellott, J. A., &Ochwo, P. (2013). An exploration of social networking site use, multitasking, and academic performance among United States and European university students. *Computers in Human Behavior*, 29, 1182-1192.
- Kirschner, P. A., & Karpinski, A. C. (2010). Facebook and academic performance. *Computers in Human Behavior*, 26, 1237-1245.
- Lepp, A., Li J., Barkley J.(2015). Exploring the relationships between college students' cell phone use, personality and leisure. Computers in Human Behavior, 43: 210–219
- Lepp A., Barkley J. E., Sanders G. J., Rebold M., Gates P.(2013). The relationship between cell phone use, physical and sedentary activity, and cardiorespiratory fitness in a sample of U.S. college students. International Journal of Behavioral Nutrition and Physical Activity.
- Ling, R. (2001a). Adolescent girls and young adult men: Two subcultures of the mobile telephone. Kjeller: Telenor Research and Development. Retrieved from http://www.telenor.com/rd/pub/rep01/R34_2001.pdf
- Ling R, Yttri B (2002). Hyper-coordination via mobile phones in Norway.In J. Katz & M. Aakhus (Eds.), Perpetual contact: Mobile. communication, private talk, public performance Cambridge, UK: Cambridge University Press, pp. 139-169.
- Matthews R (2004). The Psychosocial aspects of mobile phone use among adolescents. In Psych., 26: 16-19.

- Markett C, Sánchez IA, Weber S, Tangney B (2006). Using short message service to encourage interactivity in the classroom. Comp. Educ., 46(3): 280-293.
- Monk A, Carroll J, Parker S, Blythe M (2004). Why are mobile phones annoying? Behav. Info. technol., 23: 33-41.
- Morgan, G. A., Leech, N. L., Gloeckner, G. W., & Barrett, K. C. (2004). SPSS for introductory statistics: Use and interpretation (2nd ed.). New Jersey: Lawrence Erlbaum Associates, Publishers.
- National Research Council. (2003).BIO2010: Transforming under graduate education for future research biologists. Washington, DC: National Academies Press.
- Obringer, S. J., & Coffey, K. (2007). Cell phones in American high schools: A national survey. *The Journal of Technology Studies*, *31*,41–47.
- Palen L, Salzman M, Youngs E (2001). Discovery and integration of mobile communications in everyday life. Personal Ubiquitous Comp.,5: 109-122.
- Paragras F (2003). Being mobile with the mobile: Cellular telephony and renegotiations of public transport as public sphere. Paper presented at the Front Stage/Back Stage: Mobile communication and the Renegotiation of the Social Sphere Conference, Grimstad, Norway.
- Phelps Walker, J., Sampson, V., Grooms, J., Anderson, B., & Zimmerman, C. O. (2012). Argument-driven inquiry in undergraduate chemistry labs: The impact on students' conceptual understanding, argument skills, and attitudes toward science. *Journal of College Science Teaching*, 41(4),74–81.
- Power MR, Horstmanshof L (2004). YYSSW (Yeah, yeah, sure, sure, whatever): keeping and supporting relationships through SMS text messaging. Human Communication and Technology Communication, National Communication Association Annual Convention, Chicago, Illinois.
- Prensky, M. (2005). What can you learn from a cell phone? Almost anything! *Innovate: Journal of Online Education*, *I*(5). Available at http://www.innovateonline.info/pdf/ vol1_issue5/What_Can_You_Learn_ from a Cell_Phone__Almost_Anything!.pdf
- Proulx, G. (2004). Integrating scientific method and critical thinking in classroom debates on environmental issues. *The American Biology Teacher*, 66, 26–33.
- Rosen, L. D., Carrier, M., & Cheever, N. A. (2013). Facebook and texting made me do it: Media-induced task-switching while studying. *Computers in Human Behavior*, 29, 948-958.
- Srivastava L (2004). Mobile Phones and Evolution of Social Behavior, Behav.Info.Technol.,

- 24: 111-129.
- Stollak, M. J., Vandenberg, A., Burklund, A., & Weiss, S. (2011). Getting social: The impact of social networking usage on grades among college students. In Proceedings from ASBBS Annual Conference(pp. 859-865).
- Taylor AS, Harper R (2001). Talking activity: young people and mobile phones. Paper presented at CHI 2001 Workshop: Mobile Communications: Understanding Users, Adoption and Design.
- Tessier, J. T. (2010). An inquiry based biology laboratory improves pre-service elementary teachers' attitudes about science. *Journal of College Science Teaching*, 39(6),84–90.
- Tessier, J. T., & Penniman, C. A. (2006). An inquiry-based laboratory design for microbial ecology *.Bioscience*, 32,6–11.
- Thornton, P., & Houser, C. (2005). Using mobile phones in English education in Japan . *Journal of Computer Assisted Learning*, 21,217–228.
- Tjong S, Weber I, Sternberg J (2003). Mobile, youth culture, shaping telephone use in Australia and Singapore. ANZCA03 Australian and New Zealand Communication Association: Designing communication for diversity, Brisbane, Queensland.
- Tutt, D. (2005). Mobile performances of a teenager: A study of situated mobile phone activity in the living room. *Convergence*. Retrieved from http://con.sagepub.com/cgi/content/abstract/11/2/58.
- Vaidyanathan, L., &Latu, S. (2007). *Social consequences of cellular phones*. Paper presented at the Australasian Conference on Information Systems, Toowoomba, Australia.
- Weimer, M. (2002). *Learner-centered teaching: Five key changes to practice*. San Francisco, CA: Jossey-Bass.