Full Length Research Paper

Social media and catharsis in Africa: Examining the role of WhatsApp in venting stress in women

Gregory Gondwe¹ and Evariste Some²*

¹Department of Journalism, College of Media, Communication and Information, University of Colorado, USA.
²College of Engineering and Applied Science, Technology Cybersecurity and Policy, University of Colorado, USA.

This paper investigates the role that social media, and particularly WhatsApp mobile applications plays in venting stress and other related aggressive behaviors among African couples. It seeks to examine the relationship that exists between WhatsApp usage and being happy, or rather catharsis. It leverages the existing datasets from the Afro-barometer (Africa Tracking Internet Progress-ATIP) website. Essentially the website maintains archives for all African network development and telecommunication datasets. Therefore, this study uses the aforementioned to argue that married women belonging to WhatsApp social groups in Africa have higher levels of catharsis. In other words, the finding of this study indicates that there was a strong and significant correlation between the time spent on social media (Duration-Drt) and the feeling of belonging (Bln) and therefore, catharsis (Eph).

Key words: WhatsApp, catharsis, closed-groups, Africa, women, culture.

INTRODUCTION

The proliferation of social media in Africa has chronicled a series of research focusing on various facets of the advantages of social media. Many scholars have perceived its presence as a form of civilization. The social engagement of women, for example, and other dispossessed groups is perceived as championing the perpetuated stereotypes throughout the continent of Africa (Calvert, 2015). Studies conducted in East and South Africa for example, indicate the advantages that women have benefitted through technology (Asongu, 2018; Larsson and Svensson, 2018; Rodriguez et al., 2015). The underlying arguments have been that mobile banking as well as branchless banking for women entrepreneurs suggests significant roles in connecting women to financial services. A plethora of studies continue to chart the advantages that Africa has politically and economically attained through the use of social media (Tettey, 2001; Howard and Parks, 2012).

However, there has been a growing concern about the social aspect of interactive media platforms. Despite being considered a connecting platform social media has also been considered a threat to the values of interactive societies. As Tambulasi and Kayuni (2005) would ask, “what is social about Social media?” (p. 155). Other scholars go beyond the idea of values to perceive social media as a mechanism for a new stage of capitalism (Some et al., 2019; Cukier, 2013) designed to continuously track, and offer unprecedented new
opportunities for social discrimination and behavior influence (Couldry and Mejias, 2018), therefore, enacting a new form of colonialism while normalizing the exploitation of the dispossessed minorities. These and many other authors, as a detriment to societal values and the development of a social society, argue that social media has done a lot of harm in disrupting existing social relations in Africa. The two debates underscore the way social media is perceived in Africa.

This study explores the two debates by investigating WhatsApp usage in Africa. It investigates the characteristics of WhatsApp adoption and usage, including the way in which it serves as a catharsis for venting stress and aggression among married women in Africa. Drawing it theoretical basis from Bandura (1978)’s “Social learning theory and aggression”, and Bushman (2002)’s catharsis theory, the study hypothesizes that the use of WhatsApp’s closed groups among married women in Africa has an advantage of sustaining strong relationship. The rationale behind this argument is that married women that use WhatsApp mobile applications vent their stress and anger through those groups, therefore, not taking them to their spouses. In other words, the stress and anger that women accumulate is vented through WhatsApp social groups and not in their relationships. This argument can be used for married men as well except that the current study focuses on married women.

LITERATURE REVIEW

Studies that have sought to understand and contextualize the role of social media in Africa have studied the phenomenon from a political and economic perspective. Little or no attention has been paid to other factors perpetuating the phenomenon. There is a dearth of research on “WhatsApp”, in particular, its adoption, usage and how it serves as a catharsis not only in Africa, but the entire world. Pindayi (2016) and Luescher (2016) and many other contemporary scholars highlight various contributions that social media, particularly WhatsApp mobile applications have made towards democracy and economic developments in Africa.

Scholars, for example, Luescher (2016) examine how WhatsApp was successfully used in South Africa to protest against increased school fees with a hashtag #Rhodes must fall and #Fees must fall movements of 2015. Buchanan (2016) also charts about the 2016 Kenyan case that attracted a large number of participants in protest after a #StopPoliceBrutality. Related examples have attracted some scholars like Aslama (2009) to suggest that WhatsApp had become an alternative public sphere, and in some instances, a counter public sphere, constituted by the internet and by inference social media, as users deliberate on less restricted platform and raise divergent views or anti-established sentiments (p. 119).

A few studies attempted to take quite different approaches that focus on the user-friendliness of the feature of the application. For instance, Searves and Wang (2003) and Clauderwood (2015) highlight the advantages of WhatsApp as allowing users to enjoy various features such as creating closed groups that enable them to advertise, educate and inform, form religious groups, as well as maintain relationships (O’Hara, et. al., 2014). The sustenance of relationships is not always done through communication, but by being able to freely express divergent views or anti-established sentiments to a group sharing similar opinions (O’Hare, et. al., 2014: 36).

The irony of social groups lies in the fact that relationships are maintained not through connection, but by one being able to join a group outside the people they socially respect (Searves and Wang, 2003). Berkman and Glass (2000) contend that the reason behind this ‘disjuncture’ is for individuals to be able to be free to express their views without being able to hold some feelings inside them for fear of being ridiculed. It is only through total freedom that one could vent their stress and catharsis (Bushman, 2002). This form of thought is what Bushman and Bandura considered as catharsis.

Catharsis and WhatsApp

The theory of catharsis is perceived as an authoritative statement punctuated by the argument that “venting one’s anger will produce a positive improvement in one’s psychological state” (Bushman, 2002: 724). Essentially, the theory holds that it is essential that everyone finds a way to purge their aggressive feelings. This argument is central to Sigmund Freud who believed that repressed emotions and anger were dangerous to someone’s psychology. Subsequent studies have expanded Freud’s study into what they call, “the hydraulic model of anger”. According to this model any form of aggression and frustration, do pile up in a person until it is exerted in some form (Bohart, 1980; Kennedy-Moore and Watson, 1999; Nichols, 1985; Rachman, 2001). If this is the case, how do conservative cultures purge their aggression?

The introduction of group chats on WhatsApp mobile application could arguably be an answer to the above question in Africa, where a number of social and conjugal breakup are being recorded than ever. The nature of the ‘closed groups’ on social media allows the administrator(s) of that group to approve a member before they are allowed to join. Once they join, each member sees a notification, therefore, continue to know the kind of people in their groups. For example, a closed group of only women of the same age group, classmates, priests, people with a certain ailment, professional groups, people that share the same religious faith or doctrine, etc. Such collective interests and values have led to members share explicit content and discuss sensitive issues that
defy most of the cultural values in Africa. For example, Phippen (2016) observes how WhatsApp creates a sense of belonging, and thus allow people to relieve themselves in some explicit ways without fear. In their study of health communication, for example, Neiger et al. (2012) found out that women were freer and more explicit to communicate their problems in settings where they believed they shared the same values and social status.

In a similar way, WhatsApp gives such a privilege to closed groups especially given its easy access and affordability. The groups are also self-sitting in the sense that those who feel uncomfortable of the content and discussions leave the groups and are, therefore, considered not having the qualifications of belonging to that group. Bouhnik and Deshen (2014) further observes that the ability to send such information that is less restricted enables users to boost their self-esteem in the sense that they feel that they are participating in a larger contextual framework.

Catharsis does not end with being able to freely express obscene/explicit content, but also through sharing devotional materials and other religious inspiring messages to group members. In short, unlike other social networks, WhatsApp groups interact and support each other (Pindayi, 2016: 39). Given the above arguments, we would, therefore, assert that despite the negative attributes that emerging scholars are giving to social media, WhatsApp plays a vital role in helping users vent out their stress. Overarching to this statement is the hypothesis that:

**H1a:** There is a relationship between catharsis (being happy) and belonging to a WhatsApp closed group.

**H1b:** Women that report as married will spend more time on WhatsApp than women that will report as single.

**Rationale:** The rationale behind the above hypotheses is that most married women, and especially in African relationships, live a stressful life that is brought about by the cultural norms. As Gauntlett (2008) had argued, the African belief systems provide a conservative approach, and especially to matters pertaining to sexual relationships and other related values. In many marriages, women are bound to deal with problems of sexual relationships by themselves without sharing them. The saying that ‘issues pertaining to marriage should be kept inside the house’, has a strong bearing in how women decide to handle their problems. The question of who should be trusted has always been the problem. Because of these cultural values that impede African couples, and especially women, there is barely any place for catharsis. However, the nature of WhatsApp closed groups has made it possible for like-minded people to join and freely participate in discussions that pertain to their marriages. Therefore, the emergence of social media groups such as WhatsApp closed groups, has become a panacea for women to vent their stress by being free to express whatever they are going through in an explicit way. In short, WhatsApp mobile applications have become support groups for women in Africa, and this has aided a number of relationships.

**MATERIALS AND METHODS**

**Participants**

Participants for this study were recruited from the already existing datasets in the archives of the Afro-Barometer. Particularly, the “African Tracking Internet Progress (ATIP) which incorporated a dataset “Women’s rights online: Translating access into empowerment” was leveraged. Essentially, the aforementioned study sought to find out the existing knowledge gaps among genders in Africa, and especially between men and women. The study presented enough data ranging from social to political affiliations of women in nine developing nations to technology. The survey included a standard questionnaire with 23 questions asked among more than 10 thousand participants. Since our study was a subset of the huge “women online study”, only questions pertaining to our study were leveraged. Given our hypothesis, data that did not relate to our study were considered obsolete and missing. Therefore, a total of 1,176 responses were recorded through a painstakingly manual selection of what applied for the study.

**Analytical sample characteristics**

Our purified sample of only women had an average of 24 years of age with a lower standard deviation to indicate that the age group in the sample was not very different. However, a few age differences were also recorded. 89% indicated that they were married while the remaining 21% were all in what they considered as a serious relationship.

The reason for low standard deviation could be as a result of our study only focusing on women that use social media and especially WhatsApp mobile application. We especially leveraged and cleaned the data to suit our hypothesis as well as the question at hand. Other intervening variables remained constant in the operationalization of our project. Given the number of countries studied (nine) a total of 1,176 is moderately small to represent social media usage in Africa. However, for our study, the sample is sufficient to indicate a gist of what is on grassroots.

**Measures**

In our operationalization we leveraged the already existing datasets that were designed for a different study. Our focus was only on questions that pertained to our study. Therefore, other questions were ignored and considered irrelevant for this particular study.

**WhatsApp usage**

Questions from the initial dataset that included WhatsApp usage only were employed. Such questions included issues like experience, group belongingness, duration of usage and frequency. Further questions pertaining to motives for WhatsApp usage were selected based on their analyses of why women chose to use the App. The motives for WhatsApp usage employed a 7 Likert-type items (1=never, 7=always) divided into three subscales of social connections, daily information, and stress relief. All the three items were averaged to construct a single variable. We conducted our own online Cronbach’s alpha reliability coefficient test for the generated subscales. Our results ranged between 0.79 and 0.84.
Table 1. Descriptive and factor analyses of the WhatsApp catharsis scale.

<table>
<thead>
<tr>
<th>Item</th>
<th>Mean</th>
<th>SD</th>
<th>Factor loading (EFA)</th>
<th>Path estimate (CFA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am depressed when I don’t log in our WhatsApp group chat</td>
<td>2.12</td>
<td>1.21</td>
<td>0.62</td>
<td>0.76*</td>
</tr>
<tr>
<td>WhatsApp group is the first thing I check when I wake up</td>
<td>1.34</td>
<td>0.98</td>
<td>0.66</td>
<td>0.56*</td>
</tr>
<tr>
<td>I think every woman should be a member of WhatsApp group chats</td>
<td>1.52</td>
<td>0.90</td>
<td>0.72</td>
<td>0.74*</td>
</tr>
<tr>
<td>My WhatsApp use interferes with my relationship</td>
<td>1.47</td>
<td>0.93</td>
<td>0.74</td>
<td>0.70*</td>
</tr>
<tr>
<td>Conversations on WhatsApp group are R-rated</td>
<td>2.23</td>
<td>1.44</td>
<td>0.62</td>
<td>0.47*</td>
</tr>
<tr>
<td>I am okay with family members being part of my WhatsApp closed group</td>
<td>1.69</td>
<td>1.12</td>
<td>0.78</td>
<td>0.74*</td>
</tr>
<tr>
<td>I feel missing out when I can’t log in WhatsApp group</td>
<td>1.31</td>
<td>0.89</td>
<td>0.74</td>
<td>0.55*</td>
</tr>
<tr>
<td>I have attempted to spend less time on WhatsApp</td>
<td>1.63</td>
<td>1.03</td>
<td>0.69</td>
<td>0.73*</td>
</tr>
</tbody>
</table>

Ratings for all items ranged from 1 (min) to 7 (max). *p < 0.01. EFA, Exploratory factor analysis; CFA, Confirmatory factor analysis.

WhatsApp as vent for stress

Essentially, no questions or instruments were directly targeted towards measuring WhatsApp as a vent for stress in relationships among African women. Previous studies on how social media as a whole has served as a catharsis became our criteria for assessing the catharsis. Eight items relating to symptoms of stress and psychological health were included. These items had data on issues of how WhatsApp usage has aided participants with issues of doubts in their relationships, euphoria, aggressiveness, withdrawal from community. These items are essentially the symptoms of cognitive behavior and were rated on a Likert-type scale ranging from 1 (not true), to 7 (extremely true). Hence, the total score indicated even greater levels of catharsis accompanying WhatsApp usage. Our factor analyses for the data revealed a single value of 3.97, explaining 50% of our variance, which is moderately strong and acceptable for social science studies. Table 1 indicates the results of descriptive and factor analyses (exploratory and confirmatory) of the catharsis scale with a Chi-square/df ratio of 2.63 (p<0.01).

RESULTS

WhatsApp usage

A path model of canonical correlations and multiple linear regressions were used to test our hypothesis. These were later translated and presented into a social network as indicated in Figure 1. WhatsApp mobile usage characteristic was treated as dependent variables while characteristics pertaining to catharsis indicated independent variables. Findings suggested that the duration spent on WhatsApp groups varied with a mean of 5 h daily and a standard deviation of (SD=2.40). The dominant motive for using WhatsApp mobile application was characterized by catharsis reasons. These reasons included euphoria (mean=4.96; SD=2.26), aggression calmer (mean=4.55; SD=2.32), Stress Reliever (mean=4.74; SD=2.40) and the benefits of belonging to the social groups (mean=4.51; SD=2.42). The relationship among the variables indicate a strong correlation among time spent on WhatsApp, euphoria (Eph) and stress Relief (SR) despite the negative correlations driven aggression (agg), social connections (ScC) and withdrawal (wth). Figure 1 shows the networks of correlations as indicated.

H1a: There is a positive relationship between belonging to a WhatsApp group and catharsis

Essentially, our hypothesis sought to find out whether there was a significant relationship between catharsis, euphoria or rather being happy and the use of WhatsApp. Data on African women in conjugal relationships were leveraged. To explore these relationships, we conducted a multiple linear regression analysis. The overall model showed significance with F(8,798)=1.26, p<0.001, and explaining 5.56% of the variance of catharsis. The model coefficients also suggest that both Belonging (Bln) to a WhatsApp closed group, the relief of stress (b=0.29, p<0.001; β=0.10) and euphoria (b=0.16, p<0.001; β=0.04) were significant and positive predictors of catharsis. The R² recorded a 0.78 indicating that our independent variables have the capacity to explain the dependent variable by 78%. Overall, the findings support the hypothesis that there is a positive relationship between belonging to a WhatsApp social group and catharsis.

H1b: Women that report as married will spend more time on WhatsApp than women that will report as single.

Hypothesis 1b was also supported by our findings. The results analyzed after conducting an online survey of our respondents indicated that married women spent more time on WhatsApp closed groups that unmarried women. Particularly, married women reported that they spend more than six hours on WhatsApp, while those that are unmarried indicated that they spend less than 3 h per day. By percentage, a total number of 77% married women indicated that they are administrators of the groups.

DISCUSSION

This exploratory study raises some interesting issues on
the phenomenon of social media usage, particularly, WhatsApp mobile application in Africa. Firstly, we strive to understand, contextualize and theorize the various approaches of the role of social media in Africa, and especially among women. While many studies focus on the positive contributions of social media in Africa that pertain to political and economic endeavors, this study aimed at exploring the overlooked perspective of the contributions of social media to the African society. It delves into the social and psychological lives of African women and their process of anger ventilation. Given the cultural values that impede someone (especially women) from fully expressing their anger and venting, this study hypothesized that social media has become a platform through which women come out without holding to what they believe would affect their catharsis.

In many ways, our findings support the theories highlighted earlier. Based on our finding, we argue that many respondents found it positive to vent their anger as (Bushman, 2002: 724) had asserted. Some questioned how the old generation lived when everything seemed to be restricted. Not long ago, the life span for most African countries was below 40 years. Some scholars like Freud would argue that this was the result of the “the hydraulic model of anger’ that repressed emotions and anger; slowly killing a person inside them. There is a necessity of purging that anger (Bohart, 1980; Kennedy-Moore and Watson, 1999; Nichols, 1985; Rachman, 2001).

While some would argue that the older generation purged their aggression through other related activities, such as, cultural events, others would also argue that women were still not free to fully express their feelings. Neiger et al. (2012)’s study is relevant here as it shows how women are able to vent their anger in an environment where they believe they have shared values. Such a platform could therefore be equated to WhatsApp in Africa where women have the ability to chat and boost self-esteem without being scorned by society (Gondwe, 2018; Bouhnik and Deshen, 2014).

Overall, despite the fact that social media has been criticized as corrupting and disrupting morals (Lull and Hinerman, 1997) among the Africans, results indicate that social media can act as a catharsis, therefore, serving relationships. Taken as a whole, the results suggest that

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**Figure 1.** Q-Graph network of correlation coefficients.

The overall significant differences indicate a *p*<0.001.
women who belong to WhatsApp groups express less anger and stress to their spouses. We hinge on the Bandura (1978) and Bushman (2002)'s catharsis argument which suggests the need for relieving stress in a normal relationship. For the two authors, relieving stress and anger is mostly done in a disruptive form. Unfortunately, most African culture is less accommodative of the suggested arguments, therefore, tends to harbor their aggressive behaviors. The expression of anger, sexual behaviors, cursing, and other explicit forms are considered a vice, and cannot be vented in any form. Therefore, the implications are that WhatsApp groups have become rooms for venting anger among African women. Since many African traditions have cultures that value public expressions of ideas that the theory would consider as tools for catharsis, closed groups in which people share characteristics are now a common parlance for ventilation.

CONCLUSION AND RECOMMENDATIONS

At this point, we learn much from by recalling the many former US President Barack Obama’s 2009 inaugural speech in which he argued that, “The question before us is not whether the market is a force for good or ill; it is whether it has the power to generate wealth and expand freedom for everyone”. Given the many criticism that social media has received, we stand with President Obama to argue that we could use also use social media for our own benefit. Despite the capitalistic tendencies imbedded in it, we have the power to transform it in a platform that works for us. As noted by various studies, no one had fathomed cheap and simple mobile phones to have the capacity of turning into mobile banks, and eventually financial boosters for women. It is, therefore, necessary that people take advantage of the positive contributions of social networks since “It is not from the benevolence of the butcher, the brewer, or the baker that we expect our dinner, but from their regard to their own self-interest. We address ourselves not to their humanity but to their self-love, and never talk to them of our own necessities, but of their advantages.”

Limitation of the study and future research

Our study has several limitations that should be acknowledged. First, the data we leveraged were collected from nine out of 53 countries. We cannot infer any significant conclusion but only confident estimations that are based on the data provided. Second, our study was very particular in the sense that we only focused on questions that pertained to our hypothesis. We assert that some questions we picked could only have been follow-ups from the questions we ignored. In other words, most independent variables were manipulated to fit the study. Third, we can argue that there are many other factors that would lead to catharsis. Future research should seek to accommodate all the variables and covariates that strongly explain the problem as well as generate its own dataset from either interviews or surveys.

CONFLICT OF INTERESTS

The authors have not declared any conflict of interests.

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