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Measuring Strategic Communication from the Audience's Point of View (Evidence from a Specific Sector in a Developing Economy)

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ABSTRACT

In this study we adopted a cross sectional descriptive research design to define and measure strategic communication in the Ugandan health sector organizations. We argue that strategic communication is a center piece in making or breaking organizations and thus must be well managed. And that, to manage strategic communication effectively, it must be measured effectively. We used an analytical survey design with mixed methods to measure strategic communication. We collected quantitative data in two phases. In phase one, we used a sample of 170 organizations to test and refine the designed measurement model. In phase two, we used a sample of 223 organizations in the same population to confirm the validity and reliability of the refined instrument. We collected qualitative data to compliment the quantitative data. The findings of the study revealed that strategic communication is defined as cognitive awareness and emotional attachment to the purpose for communication. The study contributes to literature by providing a valid and reliable tool for assessing the level of strategic communication in organizations.

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INTRODUCTION

The turbulent business environment of the 21st century has made strategic approach to management functions like communication, a requirement for achieving long term organizational goals and objectives (Christensen, 2014; Tindall & Holtzhausen, 2011). This is because organizations deal with increasingly fragmented audiences and delivery platforms that require a purposeful, intentional, futuristic and long-term focus on communication in order to achieve the organization's mission (Hallahan, Holtzhausen, van-Ruler, Vercic, Srirames, 2007; Mahoney, 2010). The strategic approach to communication involves building stakeholders' cognitive awareness and feelings of attachment to the purpose for communication in order to influence audiences to work towards achieving long term organizational goals and objectives (Shu & Peck, 2011; Hsiao, Hsu, Chu, & Fang, 2014). Institutions that have used a strategic approach to manage organization communications have been in position to handle the complexities of the current business environment (Florea, 2014).

A successful case of strategic communication in practice was the Ugandan health sector's ability to condense the then world's largest Ebola scourge ever in the year 2000. According to the Wall Street Journal report of 2014, unlike West Africa where the health sectors failed to condense Ebola outbreak causing 11,310 deaths in 6 months and prompting UN to declare a state of international health emergency, in the year 2001 Uganda managed to condense Ebola within 144 days. In both West Africa and Uganda, majority local communities attributed the disease to gods' misfortune and witchcraft resorting to traditional healers for treatment. In case of any death, the cultural practices of all relatives and friends preparing and touching the deceased's face as a sign of love were followed, spreading the disease further.

As an intervention in Uganda, the ministry of Health setup three coordination committees: Inter-ministerial Task Force responsible for international relations, National Task Force (NTF) for communication at national level and District Task Force (DTF) for community mobilization and communication. The NTF and DTF convinced and worked with NGOs, local, cultural and religious leaders, health workers and community members to form three interdependent teams (Mobile, ambulance and burial teams). The Mobile team moved door-to-door teaching people about Ebola. The ambulance team transported Ebola patients to isolation units and the burial team buried the diseased. At the national level, NTF patterned with media houses to provide prompt and factual information concerning Ebola. With these interventions, the general public knew how to void, detect and handle Ebola. Uganda was declared Ebola free within 144 days (Okware et al., 2002).

The above proactive successful application of strategic communication by Ugandan health sector organizations can hardly be replicated by other organizations without a good theoretical understanding and measure of the subject. Designing a measurement model of strategic communication that is theoretically founded will guide other organization in adopting strategic communication approach to managing organization communication practices in the complex business environment.

THEORY AND LITERATURE REVIEW

This study is underpinned by Social Network theory. The theory focuses on how social structures of relationships (ties) around a person, group, or organization affect beliefs and behaviors of members (actors). This comprises the feelings people have for each other, the communication structures used (formal and informal), the communication patterns (channels and media), and the communication-related roles thus affecting the exchange of information (Rogers &

Kincaid, 1981; Barnes, 1954; Granovetter, 1973). Social Network theory explains that through constant social interaction, a bond between concrete entities like persons and organizations is created leading to commonality of ideals and cognitive maps which influence the meaning attached to the message by each party.

Organization communication scholars have based on social network theory to progressively study the strategic role of communication in achieving organization goals. The focus has mainly been on three themes; communication skills, communication structures and processes and strategic communication (Johansson, 2007; Hallahan et al., 2007). Studies of communication skills date back to 1900s. The major focus was on skills required for communication effectiveness on job and system wide communication effectiveness in order to improve job performance (Tompkin, 2001; Putnam, Philips & Chapman, 1999; Greenbaum, 1974; Redding & Tompkins, 1988). Between 1950 and 1990s, communication scholars mainly studied communication structures and processes focusing on topics like communication networks, patterns of relationships, formal and informal organization structures, superior-subordinate communication and information communication technologies (Putnam et al., 1999). In the same period, other communication scholars focused on communication processes paying attention to communication behaviors in organizations, message exchange process and interactions, message flow, feedback and negotiations, information processing, political communication and public relations (Tompkins & Wanca-Thibaut, 2001). These studies were mainly descriptive basing on the rhetoric models of communication with the aim of understanding the relationship between communications and organizing (Johansson, 2007).

In the 21st century, organization communication scholars argue that the complex organizations' environment that is characterized by fragmented audiences and delivery platforms has made it hard to isolate communication topics. This calls for a holistic and multidisciplinary approach to examining organizational communication phenomena in order to achieve organization missions (Hallahan et al., 2007). Basing on these arguments, scholars coined the concept of Strategic communication which they defined in general terms as the purposeful use of communication to achieve organization mission (Zerfass & Huck, 2007; Cornish, French & Yorke, 2011). Different scholars have contributed to the theorization of strategic communication. For example Hallahan et al. (2007) argue that strategic communication involves looking at communication parties as actors (not sender/receiver) because an actor has reciprocal responsibility in communicating to one another with the emphasis of achieving organizational mission. Zerfass and Huck, (2007) added that strategic communication is a long-term orientation in which leaders, employees, and communication practitioners meet short-term needs by staying focused on the long-term issues facing organizations thus preparing an organization for uncertain future. Tindall & Holtzhausen (2011) argued that strategic communication is intentional, futuristic and emphasizes a two-way process which is interactive and participatory at all levels.

Cornish et al. (2011) looked at strategic communication as a systematic series of sustained and coherent activities conducted across strategic, operational and tactical levels of management. These series of activities enable understanding

of target audiences and identifying effective means to promote and sustain particular types of behaviors. Strategic communication requires a cultural change where everybody in the organization thinks and communicates strategically.

It requires a self-sustaining interactive system to ensure that every section of the organization communicates strategically. These arguments do not contradict with the arguments of Clampitt, Dekoch and Cashman (2000). The later had mentioned that strategic communication concentrates at the managerial level where strategies are formulated. Strategies later circulate to tactical and operational levels where they are implemented through the routine communication activities. Cornish et al. (2011) seem to agree with Clampitt et al. (2000) but emphasize that though communication as a function of management is controlled by top management, other management levels (operational and tactical levels) should also communicate strategically.

Following the above arguments, strategic communication is the holistic, multidisciplinary, long-term and futuristic approach to organization communication with a major aim of purposefully using communication to achieve organization mission (Hallahan et al., 2007; Zerfass & Huck, 2007; Mahoney, 2010; Cornish et al., 2011; Tindall & Holtzhausen, 2011). Although this theorization has gained acceptance among communication scholars, it is too general and abstract, the need to conceptualize strategic communication in a more specific and concrete form. Based on social network theory, we build on the theorization of previous scholars to measure strategic communication construct as cognitive awareness and emotional attachment, which aspects had not been directly studied by previous strategic communication scholars (Hsiao et al., 2014; Golicic, Fugate & Davis, 2012; Shu & Peck, 2011).

Previous scholars have indirectly alluded to the fact that cognitive awareness and emotional attachment are core components of strategic communication. According to Cornish et al. (2011), strategic communication is about communicating to win the heart and the mind of others. It focuses on achieving and implementing the core goals of the organization through focusing on the psychological operations of the stakeholders. Conceptually, communicating to win the heart and mind is communicating to promote cognitive awareness and emotional attachment to the subject of communication (Shu & Peck, 2011; Pierce, Kostova & Dirks, 1991, 2001 & 2002). From the marketing perspective, awareness is the level of recognition and recall of the communicated message (Golicic et al., 2012). Cognitive awareness therefore includes recognition, recall, top-of-mind awareness, knowledge dominance and recall relevance of the message.

Drawing from Hsiao et al. (2014), we categorize awareness into recognition and recall. Recognition is the ability to understand the message based on prior experiences which involved seeing and or listening to the message. Recall is the ability to retrieve the information from memory even without any further encounter with the message. When an individual is cognitively aware of a certain message, the action requirement in the message receives first priority. This is because the individual will all the time recall the relevance of acting upon the message which is on top of his/ her mind (Matthews, Son, & Watchravesringkan, 2014). This argument is in line with Nurittamont and Ussahawanitchakit's (2008) contention that top-of the mind awareness promotes the implementation of the action communicated. This is due to

arousing response expectancy (belief that a given action can achieve a specific result) and positive attitude (individuals' internal evaluations of the subject of communication) towards the message.

In this study we conceptualize emotional attachment to comprise affective feelings, self-efficacy and self-identity (Shu & Peck, 2011; Pierce et al., 2002). Affective is an individual's "gut feelings" toward an object. It's argued that people frequently value an object based on how they feel about it (Watson, Clark, & Tellegen, 1988; Shu & Peck, 2011). Self-efficacy is peoples' judgments of their capabilities to organize and execute courses of action required to attain designated types of performance (Bandura, 1977; Chen, Casper, & Cortina, 2001; Speier & Frese, 1997; Cherian & Jacob, 2013). Self-efficacy is a function of self-belief with which individuals feel they can accomplish a given task. Speier and Frese (1997) contented that self-efficacy is the magnitude, generality, and strength of the determination in the initial decision to perform a behavior, the effort expended and the persistence in the face of obstacles. An efficacy expectation is thus the feelings of meaningfulness and conviction that one can successfully execute the behavior required to produce the outcomes (Bandura, 1977; Thomas & Velthouse, 1990).

Self-identity is when people define themselves, express their self to others, and maintain the continuity of self across time (Avey, Avolio, Crossley & Luthans, 2009). An individual develops a sense of self-identity through an interactive, cyclical, and reinforcing process where he/she comes to find pleasure, comfort, and self-understanding in the relationship with certain objects. Possessions are brought into the realm of the extended self as the individual interacts with the object in search of self-knowledge and meaning. As pleasure and comfort are found in one's interactions with objects, the socially shared meaning ascribed to those objects gets internalized and becomes part of the individual's self-identity (Avey et al., 2009). Personal possessions through exploration of their environment and through experiencing an object, people learn something about it, as well as about themselves, as they are closely linked. This nearness suggests that the person and object are one. It is through our interaction with our possessions, coupled with a reflection upon their meaning that our sense of identity and our self-definition, are established, maintained, reproduced and transformed (Shu & Peck, 2011; Avey et al., 2009).

A self-identified person with an object (tangible and intangible), does some things because he/she feels supposed and by doing those activities establishes and affirms an identity for self (Avey et al., 2009). This implies that when specific targets become classified as an extension of the self, they become central to one's self-identity such that individuals define themselves by these targets. Pierce et al. (2002) add that by knowing an object (person or place) passionately, it becomes part of the self. People come to find themselves psychologically tied to things as a result of their active participation or association with those things. The more information possessed about the subject of communication, the more the self becomes attached to the message. The more the stakeholders receive/ have the information, the more they get attached to the information. Strategic communication therefore comprises of feelings of self-identity where the receiver of the message feels a responsibility of achieving the purpose for communication.

The above review of literature leads to the following research question and hypothesis;

RQ1: *Does strategic communication comprise cognitive awareness and emotional attachment?*

H1; *Strategic communication is defined and measured as cognitive awareness and emotional attachment to the purpose for communication.*

METHODOLOGY

Research Design

This study was a survey design, we triangulated both quantitative and qualitative research methods. In order to get an in-depth understanding of strategic communication in the Ugandan health sector (Saunders, Lewis & 2007; Hussein, 2009), we used between-method sequential explorative triangulation method. This involved administering a questionnaire to collect quantitative data and then conducting semi-structured interviews to collect qualitative data. We collected quantitative data in two phases. Phase one comprised of pretesting and refining the questionnaire. In phase two, we administered the refined questionnaire to a relatively larger sample to confirm the measurement model of strategic communication (Hair, Black, Babin & Anderson, 2010). We used strength based approach when collecting qualitative data (as part of phase two). This involved asking key participants to describe in detail a critical incident or incidents when they felt they had communicated strategically (Peterson, 2000). The study was cross sectional in nature. Particularly, we collected comparative, explanatory, and analytical – data in two phases, targeting a different sample of the same population in every phase (Neuman, 2007).

Population, Sample size and procedure

The study population was 40,132 health sector organizations that were involved in communicating health and wellbeing messages to the communities. These organizations were in seven (7) clusters ranging from Ministry of Health Headquarters (Public Relations Office) to Village Health Teams (VHTs) (appendix 1) (Ministry Of Health Annual Health Sector Performance Report, 2014; National Health Policy, 2009; VHT Strategy and Operational Guidelines, 2010).

Basing on Krejcie and Morgan (1970) sampling table, the study sample size was 380 health organizations for each of phase one and two. These were proportionately and in some cases subjectively (depending on relevance and total number of organizations in the strata) selected in the strata (appendix 1). We selected 3 communication officials and 3 intended message recipients from each organization as the study informants for each phase. These were purposively selected in order to choose those officials who design and or transmit health messages and opinion leaders among the target audiences. The response rate was 170 (45%) for phase one and 223 organizations (58.7%) for phase two (appendix 1). For qualitative data, we attained the circulation point at the 12th informant. These were selected from phase two sampled organizations (Saunders et al., 2009).

The unit of analysis for this study was a health organization yet communication officials in health organizations and the organizations' target audiences formed the unit of inquiry. Data from the two categories of respondents were aggregated and interpreted at organization level. This is because as informed by social network theory, communication effectiveness is understood based on the interaction between the two actors (sender and receiver of the message) (Burgoon & Hale, 1987).

Following the guidelines of Field (2009), before aggregation, the data from the two groups, we subjected the data to Analysis of Variances (ANOVA) test to confirm that the variances in the two categories of data were not statistically different. As indicated in appendix 2, the F statistic (1.955) was insignificant at $P=.163$, an indication that the mean scores of the two categories of data are the same without any statistical differences. The data were then merged and aggregated to organization level in each phase (one and two). Conclusions and recommendations were therefore made at organization level.

Sample Characteristics

Majority of respondent organizations (35.6%) had been offering health and wellbeing services for a period of 20 years and above (Appendix 3). This is an indication that data were collected from organizations that had enough experience of interacting with clients. In terms of respondents' age, majority (73.1% communication officials and 77.5% target audiences) were in the age group of 18-35 years old. This being the largest group in Uganda (Uganda census of 2014), it's an indication that data collected were representative of the study population. It also shows that data were collected from parties who understand each other's interaction expectations and interests. Data were also collected from all categories of education levels from certificate to PhD, an indication that respondents had sufficient knowledge to understand the research instrument (appendix 4).

Operationalization and Measurement of Strategic Communication

Strategic communication as a construct has been studied and used by scholars in different communication disciplines. These include organization communication, integrated marketing communication, management and technical communication, public relations among others. Scholars in these disciplines have measured strategic communication in various ways. For example public relations scholars have looked at strategic communication as a tool of building a relationship between the organization and the public. Strategic communication is therefore measured basing on trust, control mutuality, satisfaction, commitment, communal and exchange relationships (Hon & Gruning, 1999; Lindenmann, 1997). Management and Technical communication scholars have operationalized strategic communication to comprise information accessibility, information availability, communication satisfaction, communication content, communication relationships and communication outcomes. These aspects have been measured using the internal Communication Audit developed by Goldhaber, Porter and Yates (1978).

Change management scholars operationalize and measure strategic communication in terms of openness of communication, sources of change information, organizational trust, supervisory communication, workgroup cohesion, satisfaction with social rewards, influence over work activities, satisfaction with internal rewards, openness to change, active participation in the change process and acceptance of change (Thompson, Joseph, Bailey, Worley & Williams, 1999). Integrated marketing communication scholars have focused on characteristics of communication messages, unified communications for a consistent message and image, differentiated communications to target groups and bidirectional communications in order to measure strategic communication (Zavrnsnik & Jerman, 2011; Duncan & Moriarty, 1998).

The above measures do not individually measure strategic communication as operationalized in this study to comprise cognitive awareness and emotional attachment. This study drew from the above communication measures in addition to those borrowed from psychology to measure and operationalize strategic communication components. This included operationalizing cognitive awareness to comprise recognition and recall of the communicated message (Golicic et al., 2012; Hsiao et al., 2014) and measuring cognitive awareness by adopting and modifying the 5 items tool developed by Yoo and Donthu (2001). Emotional attachment on the other hand, was operationalized to comprise affective feelings, self-efficacy and self-identity (Shu & Peck, 2011; Pierce et al., 1991, 2001 & 2002). Affectiveness was measured by adopting and modifying the 30 items of the emotional scale developed by Klaus and Scherer (2005). Self-efficacy was measured by adopting the 20 item tool developed by Sherer and Maddux (1982). Self-identity was measured by modifying the 4 items tool developed by Armitage and Conner (1999) and the 6 item tool developed by Callero (1985).

After modifying all the adopted questionnaire items, the developed instrument was pretested in phase one of the study. This was to determine the validity (content, convergent and discriminant validity) and reliability of the instrument by empirically measuring strategic communication as hypothesized. Reliability of the instrument was tested using Cronbach's Alpha Coefficient (Field, 2009). Validity was tested basing on the judgments of field expert and using exploratory factor analysis (EFA). The retained items were subjected to Confirmatory Factor Analysis (CFA) to test whether the respondents' understanding of strategic communication was consistent with researcher's theoretical explanation of the construct. After refining the instrument in phase one, the new instrument was subjected to a new sample of the same population in phase two.

For the qualitative study design, semi structured interviews were used to collect data from the key informants using an interview guide. With this design, respondents were asked the same but varied questions depending on the level and perspective of their ideas. Questions were changed according to respondents' responses. The key informants included highly specialized communication officials from Ministry of health headquarters (Public Relations Office), health based Non-Governmental Organizations, regional referral hospitals and specialized bodies like AIDS Information Center, Uganda AIDS Commission, Health professional councils and Health Service Commission. In addition to the field notes that were taken during interviews, our interactions with the respondents were electronically recorded (with respondents' permission) and later transcribed into written materials. This was done in order to collect all views and meanings of respondents. Using the reductionist approach (Miles & Huberman, 1994), the field notes and transcribed data were summarized and memoed into themes for easy and logical interpretation.

Data Quality Control

We managed response bias by developing a questionnaire without a middle point (Krishnaveni & Deepa, 2013). This was done by incurring all the measurement scales at 6 point likert scale ranging from 1= very untrue to 6= very true. After administering the questionnaires in both phase one and two, the completed questionnaires were vetted to ensure accuracy, consistency and uniformity.

The questionnaires were edited to make up for incomplete information and attempts to find an explanation for the incomplete answers were made. In the cases of non-response, where possible we made call backs to the respondents. We used the Statistical Programme for Social Scientists (SPSS) version 20 to code and explore quantitative data.

The process of exploring data involved determining the percentage of missing values in the data and to test whether data was missing completely at random using Little's MCAR (Field, 2009). The Little's MCAR statistic was not significant ($P > 0.05$) an indication that data values were missing completely at random. Implying that those who did not answer some questionnaire items, did it as a result of human error (Hair et al., 2010). In order to carry out further analyses like Confirmatory Factor Analysis which requires larger samples, though the missing values were less than 2%, they were replaced using multiple imputation method (Field, 2009).

Reliability and Validity

Cronbach's Alpha Coefficient was 0.93 which is above the cutoff point of 0.7 (appendix 5). This shows that the study instrument was reliable and could be used to measure strategic communication in different samples of the same population at different periods. The Content Validity Index (CVI) for the instrument was 0.84 which is above the recommended 0.7 cutoff point (appendix 5). This implied that the communication experts and practitioners agreed that the instrument covers the content of strategic communication. As recommended by Kaiser (1974) the Kaiser-Meyer-Olkin measure of sampling adequacy (KMO) was 0.86 which is above the cutoff point of 0.7. This implied that the measurement items were sufficient to measure strategic communication construct. The Bartlett test was significant an indication that the measurement items for the variable could correlate, a condition for factor analysis to be performed meaningfully.

STUDY RESULTS

Phase One

The hypothesis of the study stated that strategic communication is defined and measured as cognitive awareness and emotional attachment to the purpose for communication. In order to test this hypothesis, we used exploratory factor analysis based on communalities to extract those items that highly converged to form the variable of study. We also used rotated component matrix to determine those factors which loaded together to form factors of strategic communication (Field, 2009). The results showed that measurement items reduced from 61 to 16. The retained items (appendix 6) had communalities of 0.6 and above which was higher than the recommended 0.5 loading. The results indicate that items loaded together to form discrete factors of cognitive awareness and emotional attachment (affective, self-efficacy and self-identity) (appendix 7).

The retained items could explain 77.8% variances in strategic communication construct, which is above the recommended 50% cutoff point (Field, 2009). This implied that the retained items could measure strategic communication. We further used the determinant of *R*-matrix to detect if there were multi-collinearity in the items measuring strategic communication. According to Field (2009), the matrix should be greater than 0.000001 to show that there is no multi-collinearity. As indicated in appendix 5, the determinant of *R*-matrix was 4.02E-006, an indication that

there was no multi-collinearity among the items used to measure strategic communication.

These results show that the hypothesis of study was supported, indicating that strategic communication is defined and measured as cognitive awareness and emotional attachment to the purpose for communication.

Phase Two

We subjected the output of study one (measurement model) to a relatively bigger sample of 223 organizations to confirm the validity and reliability of the measurement model using Confirmatory Factor Analysis (CFA). As illustrated in appendix 8 and 9, the measurement items further reduced to 13 items. However, their fit indices were above the recommended cut off points (Field, 2009; Hair et al., 2010). This means that the designed measurement model for strategic communication fits the hypothesized model and can be used to measure and draw conclusions on strategic communication in any study. The Composite reliability was 0.96 (model 1) which is greater than 0.7 cutoff point (Hair et al., 2010). This indicates that the measurement model developed was reliable. An indication that the instrument can consistently reflect the construct it is measuring among the different groups of population.

According to Field (2009), to confirm that the construct measures are associated (a measure of convergent validity), the average variance extracted (AVE) should be greater than 0.5. This would show that the variance in the measurement model is not due to measurement error but variances captured by the model. Hair et al. (2010) adds that convergent validity can be confirmed if the Composite reliability is greater than the Average Variance Extracted (AVE). As illustrated in appendix 8, the Average Variance Extracted (AVE) was 0.55 which is greater than 0.5 cutoff point. The composite reliability was 0.96, which is greater than the average variance extracted. This shows that the instrument measures for the variable are associated and converge to form strategic communication construct. This is an indication that the construct measures were valid and could correctly measure strategic communication. Appendix 8 also indicates results of discriminant validity.

Discriminant validity can be tested by combining all items in the model to form one construct and then compare its fit indices with another unfixed (items not combined) model (Hair et al., 2010). If the fit indices for the unfixed model are better than for the fixed model, it is an indication of discriminant validity. According to the results in appendix 8, the fit indices for the unfixed model (model 1) are better than the fit indices for the fixed model (model 2). This shows that the construct measures used in this study disassociated to form distinct variable components of cognitive awareness and emotional attachment (affectiveness, self-efficacy and self-identity). CFA results confirm support for study hypothesis, indicating that strategic communication is defined and measured as cognitive awareness and emotional attachment to the purpose for communication.

Qualitative Results

The qualitative study was guided by the research question which stated that "does strategic communication comprise cognitive awareness and emotional attachment?" The interviews based on communication officials interaction experiences with the community members who are their intended message recipients. Results implied that strategic communication is defined as cognitive awareness and

emotional attachment to the purpose for communication. This is illustrated by the interview extracts as follows;

"...changing people's behavior cannot be a one day activity, you have to make them aware, then they become knowledgeable then they try. When they do not try then you give them more information, build their confidence, address their concerns and fears then they try and say 'oh it has worked for me, thank you very much' and then they tell their neighbors about that positive behavior. This is why we have to use different strategies like sports, drama, peer to peer and mass media. After some time when a big number of our audiences are aware of our behavioral change messages, then we consider ourselves having communicated strategically..." (Interviewee No.10)

"...Empowering the community is the most important thing that an organization's communication campaign should offer. Mobilization without empowerment is like a person who is preaching on the main street, he is just talking and yet we need to go beyond that so that somebody can read the holy script on his own. This is why empowerment should be the key factor in communication strategy and it should start from the community having an input in the crafting of the messages..." (Interviewee No.5)

"...our organization ran a controversial campaign of male circumcision and we were able to reach 10000 men. We achieved this through constant engagement with the key influencers especially the people with authority, people in the ministry of health and religious leaders. They were very key in helping us drive the message home, for example in communities that are strong catholic, the religious leaders would inspire their followers that male circumcision is spiritual. They could say this and even refer to the holy script. It really worked, it was so strategic..." (Interviewee No.2)

"...I think the other issue is the issue of confidence which in most cases is created by communication efficiency. Usually the question is; how much information is available to make people confident that these services are there at the hospital? For instance if I have the information I need about circumcision, I would make a point to choose between going for circumcision and I get all the benefits or not to circumcise. It would not become a challenge if I wanted to circumcise, I would know where I can get the services from..." (Interviewee No.8)

We note from the above interview extracts that interviewees used a wide range of communication channels and formats to create community awareness. This can be interpreted to mean cognitive awareness which is a component of strategic communication. The interviewees argued that communication is only strategic if at the end of the interaction the audiences feel empowered. This is because an empowered audience will develop a sense of ownership of the communication objective. It is this that will encourage the audience to take the necessary action without any external forces. The concept of empowerment as used in this interview can be interpreted to mean self-identity which is conceptualized as a component of emotional attachment to the purpose for communication.

Interview respondents considered themselves having communicated strategically if the target audiences were inspired to take up the necessary action points. This is why organizations used opinion leaders in the communities to champion communication campaigns. According to the interviewees, the audiences attach importance of the message to the relevance of the communicating party in the

community. An inspired audience can easily become affectionate about the action points communicated. Affectiveness is conceptualized as a component of emotional attachment to the purpose for communication. The interviews also indicated that for any communication that is action oriented to be effective, the audience should have confidence in their ability to act upon the message and achieve the expected outcomes. This is when the organization will be considered having communicated strategically. Building audiences' confidence in the message as used in the interview can be interpreted to mean self-efficacy which is conceptualized as a component of emotional attachment to the purpose for communication. Based on these views, we argue that strategic communication is defined and measured as cognitive awareness and emotional attachment (affectiveness, self-efficacy and self-identity) to the purpose for communication.

DISCUSSION OF FINDINGS

The purpose of this study was to define and measure strategic communication in a more concrete form based on its general definition of purposive use of communication to achieve organization mission (Hallahan et al., 2007). We provide empirical evidence that strategic communication comprise cognitive awareness and emotional attachment to the purpose for communication. As Cornish et al. (2011) alluded, this is the communication that wins the heart and mind of the audience. Study findings imply that purposive use of communication to achieve organization mission means target audience being cognitively aware and emotionally attached to the reason for communication. It is this kind of communication that drives the audience to take any necessary actions that guarantees achievement of organization mission.

Results show that cognitive awareness which is operationalized as top of the mind recognition and recall is a component of strategic communication. The measurement model (appendix 8) indicates that the three retained items on cognitive awareness focus on recognition and top of the mind recall. These items loaded above the recommended 0.7 cut off point on the CFA measurement model (Hair et al., 2010). This implies that for an organization to confirm that it has communicated strategically, whenever an audience is in a situation that relates to the message received from the organization, he/she should think of the organization first and remembers the required action point that promotes organization's mission. For example if one of the health organization in the Ugandan health sector has a mission of reducing HIV/AIDS prevalence in the community. One of the messages the organization will send to the community members is encouraging the use of condoms when having sex before marriage. If one of the target audiences meets a partner and decides to have sex, he will immediately visualize his organization's message and recalls that he has to use a condom. This means that this person will take the necessary action of acquiring a condom and use it correctly. This will reduce on the prevalence of HIV/AIDS thus enabling the organization to achieve its mission.

A close analysis of this example shows that when an audience has top of the mind recognition and recall, the action points communicated by the organization receive first priority whenever the audience decides to act. This is because psychologically the mind is structured to act according to the priority list that it creates based on the memory recovery. Top of the mind recognition and recall is highly associated with knowledge acquisition.

This means that for an audience to have top of the mind recognition and recall, his/her mind is convinced that the action point in the message recalled is relevant and should always be carried out. The implication of these arguments is that strategic communication is action oriented and should be measured based on audiences' ability to take the action points communicated. This is what cognitive awareness implies, an indication that cognitive awareness (top of the mind recognition and recall) is a necessary component of strategic communication.

These findings are in line with the arguments of Matthews et al. (2014) who contended that when an individual is aware of a certain message, the action requirement in the message receives first priority because the individual will all the time recall the relevance of acting upon the message which is on his/ her top of the mind. The findings also concur with Nurittamont and Ussahawanitchakit's (2008) assertion that top-of the mind awareness promotes the implementation of the action communicated due to arousing response expectancy and positive attitude towards the message. The study findings are supported by the social network theory. This theory argues that when two actors continuously interact, a network is created where the actors are the nodes and the interactions are the ties that bind the parties together. It is this bond that warrants parties to always remember each other's interaction message thus promoting top of the mind recognition and recall. Each party will therefore take the necessary action points of the interaction and this will maintain the network bond.

The results also show that emotional attachment to the purpose for communication is a measure of strategic communication. The study operationalized emotional attachment as feelings of affectiveness, self-efficacy and self-identity. According to the results, the measurement model (appendix 8) indicate that the 10 items that were retained on emotional attachment (affective= 3, efficacy=4 and identity=3) all load above the recommended 0.7 cut off point on the CFA measurement model (Hair et al., 2010). This implies that for an organization to confirm that it has communicated strategically, the target audience should feel affectionate with the action point of the message. They should develop a feel of being capable of carrying out the action points and should develop a feel of extended self in the action point communicated.

According to the results affectionate feelings that drive an audience to carry out the necessary actions include guilty, regretful and being ashamed. This means that when the audience receives a message that makes him/her guilty, regretful and or ashamed of their inappropriate health practices, he/she will feel obliged to act accordingly. For example a health sector organization like the Cancer Institute of Uganda with a mission of reducing cancer prevalence can use a cancer patient to share his/her experience on how excessive smoking resulted into lung cancer. Any habitual smoker will feel guilty, ashamed and regretful of his past experience. This will prompt him/her to reduce or completely stop smoking thus enabling the Cancer Institute of Uganda to achieve its mission.

These results show that in the Ugandan health sector context, negative feelings aroused by negative messages drive actions more than the positive feelings. This is because the health practices of majority Ugandans and many Africans are inclined to disease treatment than wellbeing. Negative messages are usually considered to be life threatening and

audiences can easily be awakened to take any necessary action to treat and or avoid a condition that threatens life. This is an indication that when health organizations communicate change messages focusing on arousing negative feelings, they will easily attract target audience's emotional attachment to the action points communicated thus achieving organization mission. These arguments are in line with the views of Watson et al. (1988) who noted that people frequently value an object depending on how they feel about it.

Results show that Self-efficacy is important because strategic communication is action oriented. The communicating party needs to instill confidence in the audience as regards the audience's ability to carry out the action points in the message. According to the results, self-efficacy is in form of persistence, self-reliance and feeling capable. This means that for audience to carry out the necessary actions communicated, the communicating party should focus on building audiences' self-belief in their ability to persistently carry out the acts by themselves without relying on other parties. The audience needs also to feel that carrying out the action points is of great importance to his/her life. For example if a health organization's mission is to reduce malaria prevalence, it should not just distribute free mosquito nets but convince people that sleeping in a mosquito net persistently reduces malaria prevalence. And being malaria free is of great importance to the audience. The audience needs to feel that he/she has capacity and it is his/her role to fight malaria without leaving the responsibility to any other party. This will drive the audience to ensure that he/she sleeps in a mosquito net.

Self-efficacy is an important measure of strategic communication because in the Ugandan health sector there is no specific laws that force an individual to leave a health life. Yet the public health care system is not comprehensive to cater for all health aspects of individuals with majority Ugandans managing their health concerns using private means. The drive to carry out necessary health action points should be voluntary and not mandatory. Strategic communication therefore is about the feeling of meaningfulness and conviction that the receiver of the message can behave in a manner that ensures realization of the purpose for communication (Bandura, 1977; Thomas & Velthouse, 1990).

The results show that self-identity is another measure of strategic communication. In the health sector context, a self-identified person will feel concerned of improving own health, concerned of the health consequences and enjoying the pleasures of improved health. This means that through continuous interactions between the health organization and the audience, the audience starts to find pleasure and comfort in the interaction and or listening to the interaction messages. This makes the audience to identify him/herself with the meaning of the messages exchanged. It is this feeling of extended self in the message that encourages the audience to carry out the action points in the message which warrants achievement of the purpose for communication. For example in the Ugandan health sector if an organization with a mission of reducing HIV/AIDS continuously dialogues with the community members on how circumcision reduces the spread of the disease, the audiences develop a feeling that circumcision is part of their life and life is enjoyable when men circumcise.

These findings are in line with the views of Avey et al. (2009) that through continuous interaction with the object, the socially shared meaning ascribed to the object gets internalized and become part of the individual's self. With time, the individual learns something about the object, as well as about him/herself, as they are closely linked. This nearness suggests that the person and object are one. It is, therefore, through one's interaction with his/her possessions, coupled with a reflection upon their meaning that a sense of identity and self-definition are established, maintained, reproduced and transformed (Shu & Peck, 2011). The study findings are supported by Social Network Theory. This theory explains that when actors continuously interact, the patterns of interactions create social structures of relationships around the interacting parties that affect their beliefs and behaviors which forces each actor to act as per the expectations of other actors. This means that when the audience experiences psychological closeness with the communicating party and or the communicated message, he/she will feel an obligation to carry out the communicated action points thus warranting realization of the purpose for communication.

CONCLUSION AND IMPLICATIONS

In this paper we have focused on defining and measuring strategic communication from the audience's point of view. We have presented empirical evidences that strategic communication can be defined basing on how the target audience is cognitively aware and emotionally attached to the purpose for communication. Our paper has both theoretical and methodological implications. Theoretically we contribute to the development of social network theory in the discipline of strategic communication. This is because we have empirically showed that communication interactions are social interactions. These interactions have an embedded objective of creating relational ties between the communicating parties that drive actions aimed at achieving organization missions. Methodologically we have designed and empirically tested a measurement tool for strategic communication based on the target audience point of view. We tested the tool on the population of health organizations in Uganda, focusing on the interactions of communication officials with the organizations' customers as the target audiences. Further studies should test the validity and reliability of the instrument on the same and deferring populations of different settings in order to grow the discipline of strategic communication.

REFERENCES

Avey, B.J., Avolio, J.B., Craig D. Crossley, D.C & Luthans, F. (2009). Psychological ownership: theoretical extensions, measurement and relation to work outcomes. *Journal of Organizational Behavior* 30, 173–191.

Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*. 84(2), 191-215.

Barnes, J. A. (1954). Class and committee in a Norwegian island parish. *Human Relations*, 7, 39-58.

Burgoon, J. K., and J. L. Hale (1987), "Validation and measurement of the fundamental themes of relational communication," *Communication Monographs*, 54, 19-41)

Chen, G., Casper, J.W. & Cortina, M.J. (2001). The roles of self-efficacy and task complexity in the relationships among cognitive ability, conscientiousness and work-related performance: a meta-analytic examination. *Human Performance*, 14 (3), 209–230.

Cherian, J. & Jacob, J. (2013). Impact of self efficacy on motivation and performance of employees. *International Journal of Business and Management*, 8 (14) 80

Christensen, M. (2014). Communication as a strategic tool in change processes. *International Journal of Business Communication*, 51 (4) 359–385.

Clampit, G.P., DeKoch, R. & Cashman, T. (2000). A strategy for communicating about uncertainty. *Academy of Management Executive*, 14 (4), 41-57

Cornish, P., Lindley-French, J., & Yorke, C. (2011). *Strategic communications and national strategy*. London: Chatham House, The Royal Institute of International Affairs.

Field, A. (2009). *Discovering statistics using SPSS*. 3rd edition. London: Sage

Florea, V.N. (2014). Implementing a model of strategic communication to obtain organizational performance. *Social Behavior Science* 3 (75) 256- 266

Goldhaber, G., Yates, M., Porter, D., & Lesniak, R. (1978). Organizational communication: state of the art. *Human Communication Research*, 5,76–96.

Golicic, L.S., Fugate, S.B., & Davis, F.D. (2012). Examining market information and brand equity through resource-advantage theory: a carrier perspective. *Journal of Business Logistics*, 33 (1) 20–33.

Granovetter, S.M. (1973). Strength of Weak Ties. *American Journal of Sociology*, 78 (6) 1360-1380

Greenbaum, Howard H. (1974). The audit of organizational communication. *Academy of Management Journal*, 17, 739–754.

Hair, J. F., Black, W. C., Babin, B. J. & Anderson, R. E. (2010). *Multivariate Data Analysis*, 7th edition, Prentice Hall: New Jersey

Hallahan, K., Holtzhausen, D., van-Ruler, B., Vercic, D., Srirames, K. (2007). Defining Strategic Communication. *International Journal Of Strategic Communication*, 1(1), 3–35.

Hon, L. C., & Grunig, J. E. (1999). *Guidelines for measuring relationships in public relations*. Gainesville, FL: The Institute for Public Relations, Commission on PR Measurement and Evaluation.

Hsiao, Y., Hsu, Y., Chu, S. & Fang, W. (2014). Is Brand Awareness a Marketing Placebo? *International Journal of Business and Information*, 9 (1) 29-60

Hussein, A. (2009). The use of Triangulation in Social Sciences Research: Can qualitative and quantitative methods be combined? *Journal of Comparative Social Work*, 1 (1) 1-12

Johansson, C. (2007). Research on organizational communication, the case of Sweden. *Nordicom Review* 28 (1), 93-110.

Joseph F. Hair, J.F., Black, W.C., Babin, J.B., Anderson, E.R. (2010). *Multivariate data analysis*, 7th Edition. Upper Saddle River, NJ: Pearson Prentice Hall.

Kaiser, H.F. (1974). An index of factorial simplicity, *psychometrika*, 39, 31-36

Krejcie, V.R. & Morgan, W.D. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, 30, 607-610.

Lindenmann, K. W. (1997). Setting minimum standards for measuring public relations effectiveness. *Public Relations Review*, 23(4): 391-408.

Mahoney, J. (2010). Strategic communication: making sense of issues management. *Public Communication Review*, 1 (2) 33-48.

- Matthews, D.R., Son, J. & Watchravesringkan, K. (2014). An exploration of brand equity antecedents concerning brand loyalty: A cognitive, affective, and conative perspective. *Journal of Business and Retail Management Research (JBRMR)*, 9 (1), 26-39.
- Miles, M.B., & Huberman, A.M. (1994). *Qualitative Data Analysis*, Berverly Hills: Sage, London.
- Ministry Of Health. (2014). *Annual Health Sector Performance Report* (Financial Year 2013/2014). Kampala, Uganda.
- National Health Policy, (2009). *Reducing Poverty through Promoting People's Health*. Ministry of Health, Uganda
- Neuman, W.L. (2007). *Basics of social research; qualitative and quantitative approaches 2nd Edition*, Boston, USA.
- Nurittamont, W. & Ussahawanitchakit, P. (2008). The influences of brand equity in competitive advantage and performance of SPA business in Thailand. *International journal of business strategy*, 8 (2) 14-25
- Okware, S.I., Omaswa, F.G., Zaramba, S., Opio, A., Lutwama, J.J., Kamugisha, J., ...Lamunu, M. (2002). An outbreak of Ebola in Uganda. *Tropical Medicine and International Health*, 7(12) 1068-1075.
- Peterson J.E. (2000). *The magic power of appreciative inquiry, interviewing techniques*. Karuna Management, Inc. Ravi Pradhan
- Pierce, J.L., Kostova, T. & Dirks, K.T. (2001). Toward a theory of psychological ownership in organization. *Academy of Management Review*, 26 (2) 298-310.
- Pierce, J.L., Kostova, T. & Dirks, K.T. (2002). The state of psychological ownership: integrating and extending a century of research. *In Press: Review of General Psychology*
- Pierce, J.L., Kostova, T. & Dirks, K.T. (1991). Employee ownership: a conceptual model of process and effect. *Academy of Management Review*, 16 (1) 121-144.
- Putnam, L.L., Philips, N. & Chapman, P. (1996). *Metaphors of communication and organization* in Hand Book of Organization Studies, 1st Edition, London. UK. Sage Publications Ltd
- Raupp, J. & Hoffjann, O. (2012). Understanding strategy in communication management. *Journal of Communication Management*, 16 (2) 146-161.
- Redding, W.C., & Tompkins, P.K. (1988). Organizational Communication- Past and Present Tenses. In G.M.Goldhber & G.A. Barnet (Eds.), *Handbook of Organization Communication* (pp. 5-53). Norwood, NJ: Ablex.
- Rogers, E.M. & Kincaid, D.L. (1981). *Communication Networks: Toward a New Paradigm for Research*. Free Press, New York.
- Saunders, M., Lewis, P., & Thornhill, A. (2007). *Research Methods for Business Students*, 5th Edition. London, Prentice-Hall.
- Sherer, M. & Maddux, J. (1982). The self-efficacy scale: construction and validation. *Psychological Reports*, 51, 663-671.
- Shu, B.S. & Peck, J. (2011). Psychological ownership and affective reaction: emotional attachment process variables and the endowment effect. *Journal of Consumer Psychology*, 21 (1) 439-452
- Speier, C. & Frese, M. (1997). Generalized self-efficacy as a mediator and moderator between the control and complexity at work and personal initiative; a longitudinal filed study in East German. *Human Performance*, 10 (2) 171-192.
- Thomas, W.K. & Velthouse, B. (1990). Cognitive elements of empowerment: an interpretive model of intrinsic task motivation. *Academy of Management Review*, 15 (4) 666-681.
- Thompson, R.C., Joseph, K.M., Bailey, L.L., Worley, J.A. & Williams, C.A. (1999). *Organization Change: An assessment of trust and cynicism*, Springfield, VA: US Department of Transportation: Federal Aviation Administration.
- Tindall, T.J.N & Holtzhausen, R.D. (2011). Toward a roles theory for strategic communication: the case of South Africa. *International Journal of Strategic Communication*, 5 (2) 74-94.
- Tompkins, K.P. & Wanca-Thibault, M. (2001). Organizational communication: prelude and prospects. Jablin, F.M & Putnam, L.L. (Eds.) *The New Hand Book of Organization Communication: Advances in Theory, Research and Methods* (pp.17- 30). California Sage, Publication.
- Uganda Health Systems Strengthening Project, (2010). *Human Development* (1st Edition). Africa Region
- Village Health Team (VHT); Strategy and Operational Guidelines, (2010). *Health Education and Promotion Division*, Ministry of Health; Uganda
- Watson, D., Clark, A.L. & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS Scales. *Journal of Personality and Social Psychology*, 54 (6) 1063-1070.
- Yoo, B., & Donthu, N. (2001). Developing and validating a multi-dimensional consumer-based brand equity scale. *Journal of Business Research*, 52(1), 1-14.
- Završnik, B. & Jerman, D. (2011). Measuring integrated marketing communication, *Scientific Annals of the 'Alexandru Loan Cuza' University of Iasi*, 351-361.
- Zerfass, A., & Huck, S. (2007). Innovations, communication, and leadership: new developments in strategic communication. *International Journal of Strategic Communication*, 1(2) 107-122.

Appendices

Appendix 1. Population, Sample and Response Rate.

No	Health Organizations	Population	Sample	Response Rate		
				Study One	Study Two	Interview Respondents
1	Ministry of Health Headquarter (communication department)	1	1		1	1
2	Districts Local Governments (District Information officer, District Director of Health Services and the Health Team)	112	12	4	4	1
3	National Referral Hospitals (Mulago and Butabika). Each is designed to handle a population of 24 million people	2	2	1	2	2
4	Regional Referral Hospitals. Each is designed to handle a population of 2 million people	15	15	7	15	1
5	General Hospitals (56 public, 42 PNFP- Private Not-For Profit and 3 owned by PHP- Private Health Practitioners) Each is designed to handle a population of 500,000 people	101	22	28	20	
6	Health Center (HC) IV (143 public, 8 PNFP and 3 owned by PHP) Each is designed to handle a population of 100,000 people	154	38	23	28	
7	Health Center (HC) -III (650 public, 147 PNFP and 12 owned by PHP). Each is designed to handle a population of 20,000 people	809	93	62	78	1
8	Health Center (HC) -II (845 public, 362 PNFP and 262 owned by PHP). Each is designed to handle a population of 5,000 people	1469	115	16	31	
9	HC-I (Village Health Teams). Each is designed to handle a population of 1,000 people	37176	24		3	1
10	Health Non-Governmental Organizations (NGOs)	294	54	29	42	3
11	Specialized Bodies/ Government Agencies (AIC- AIDS Information Center, UAC- Uganda AIDS Commission, Health professional councils and Health Service Commission)	4	4		4	2
Total		40132	380	170	223	12

Appendix 2. Comparing means of organization communication officials and target audiences.

ANOVA					
StrategicCom	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.427	1	.427	1.955	.163
Within Groups	96.945	444	.218		
Total	97.372	445			

Appendix 3. Descriptive Characteristics of Respondent Organizations

Categories of Respondent Organizations .

Categories	Study One	Percent	Study Two	Percent
Health centre I/vht	0	0.0	3	1.3
Health centre II	16	9.4	31	13.9
Health centre III	62	36.5	78	35.0
Health centre IV	23	13.5	28	12.6
General Hospital	28	16.5	20	9.0
Regional Hospital	7	4.1	15	6.7
National Referral Hospital	1	0.6	2	.9
District Local Government	4	2.4	4	1.8
Health NGOs	29	17.1	42	18.8
Total	170	100.0	223	100.0

Age of Organizations

Age	Study One	Percent	Study Two	Percent
1-5 years	4	2.2	20	9.0
6-10 years	35	20.6	55	24.7
11-15 years	42	24.7	44	19.7
16-20 years	24	14.3	29	13.0
Above 20 years	65	38.1	75	33.6
Total	170	100	223	100.0

Appendix 4. Descriptive Characteristics of Respondents

Ages of Respondents.

Age	Communication officials				Target Audiences			
	Study One%	Study Two%	Study One%	Study Two%	Study One%	Study Two%	Study One%	Study Two%
18-35 years	202	76	464	70.1	275	75.5	303	79.5
36-50 years	61	23	187	28.2	82	22.6	66	17.3

51-69 years	5	2	11	1.7	7	1.9	12	3.1
Total	268	100.0	662	100.0	364	100.0	381	100.0

Gender of Respondents

Gender	Communication officials				Target Audiences			
	Study One	%	Study Two	%	Study One	%	Study Two	%
Male	132	49	348	52.6	179	49.2	171	44.9
Female	136	51	314	47.4	185	50.8	210	55.1
Total	268	100.0	662	100.0	364	100.0	381	100.0

Education Levels of Respondents

level of Education	Communication officials				Target Audiences			
	Study One	%	Study Two	%	Study One	%	Study Two	%
High School	87	32	222	33.5	117	32.3	123	32.3
Certificate	61	23	220	33.2	82	22.6	51	13.4
Diploma	77	29	133	20.1	105	28.8	130	34.1
Degree	22	8	46	6.9	31	8.4	23	6.0
Masters	1	1	5	.8	2	0.5	1	.3
PhD	20	7	36	5.4	27	7.4	53	13.9
Professional course								
Total	268	100.0	662	100.0	364	100.0	381	100.0

Appendix 5. Validity and Reliability Results under study one .

Fit Indices	Strategic Communication	
	Organization Instrument	Target audience Instrument
Cronbach's Alpha	0.93	0.93
Content Validity Index (CVI)	0.84	0.84
Kaiser-Meyer-Olkin (KMO)	0.86	0.87
Bartlett's Test (Sig.)	.000	.000
Total Variance Explained (%)	77.8	73.9
Determinant (R-Matrix)	4.02E-006	4.489E-005
Original No. of Items	61	61
No. of Items retained after EFA and CFA	16	16

Appendix 6a. Communalities of Strategic Communication Organization instrument.

	Initial	Extraction
Our target audiences can easily recognize our health promotion messages from those of other players whenever they see or hear them.	1.000	.614
Our target audiences are aware of the health promotion messages by our organization.	1.000	.648
Our health promotion messages come top of the target audiences' mind whenever they think of good health.	1.000	.703
Our target audiences can quickly recall our health promotion messages even without further encounter with the messages.	1.000	.758
Our health promotion messages come to target audience's mind quickly.	1.000	.720
Our target audience can quickly recall the health tips we advocated for during our health promotion campaigns.	1.000	.715
Our target audience has no difficulty in imagining our health promotion tips in their mind.	1.000	.691
Our target audience can easily figure out our health promotion messages because of our emphasis for good health condition.	1.000	.752
...guilty of their inappropriate health practices.	1.000	.832
...regretful of their inappropriate health practices.	1.000	.875
...ashamed of their inappropriate health practices.	1.000	.812
Our target audiences are self-reliant; they never consult us on means of improving their health condition. (r)	1.000	.866
Our audiences do not seem capable of dealing with most of the health problems that they face, even when we provide them with health promotion materials. (r)	1.000	.901
Our target audience seems not to have confidence in their ability to improve their health condition even when we provide them with health promotion materials. (r)	1.000	.877
Our target audiences think of themselves as health and wellbeing promoting persons.	1.000	.843
Our target audiences think of themselves as people concerned with improving their health condition.	1.000	.837

Extraction Method: Principal Component Analysis.

Appendix 6b. Communalities of Strategic Communication under Study One Audience Instrument.

	Initial	Extraction
I can easily recognize my health organization's health promotion messages from those of other players whenever I see or hear them.	1.000	.556
I am aware of the health promotion messages by my health organization.	1.000	.661
My health organization's health promotion messages come top of my mind whenever I think of good health.	1.000	.650
I can quickly recall my health organization's health promotion messages even without further encounter with them.	1.000	.730
The health promotion messages of my health organization come to my mind quickly.	1.000	.722
I can quickly recall the health tips that are advocated for by my health organization in their health promotion campaigns.	1.000	.650
I have no difficulty in imagining my health organization's health promotion tips in my mind.	1.000	.681
I can easily figure out my health organization's health promotion messages because of their emphasis for good health condition.	1.000	.734

...guilty of their inappropriate health practices.	1.000	.743
...regretful of their inappropriate health practices.	1.000	.799
...ashamed of their inappropriate health practices.	1.000	.780
I am self-reliant; I never consult any health workers on means of improving my health condition. (r)	1.000	.801
I do not seem capable of dealing with most of the health problems that I face, even when am provided with health promotion materials. (r)	1.000	.817
I seem not to have confidence in my ability to improve my health condition even when my organization provides me with health promotion materials. (r)	1.000	.846
I think of myself as a health and wellbeing promoting person.	1.000	.811
I think of myself as someone concerned with improving my health condition.	1.000	.847

Extraction Method: Principal Component Analysis.

**Appendix 7a. Rotated Component Matrix of Strategic Communication under Study One
Organization Instrument.**

	Component			
	Cognitive awareness	Self efficacy	Affective feelings	Personal identity
Our target audience can easily figure out our health promotion messages because of our emphasis for good health condition.	.828			
Our target audiences can quickly recall our health promotion messages even without further encounter with the messages.	.826			
Our target audience can quickly recall the health tips we advocated for during our health promotion campaigns.	.816			
Our health promotion messages come to target audience's mind quickly.	.807			
Our health promotion messages come top of the target audiences' mind whenever they think of good health.	.793			
Our target audiences are aware of the health promotion messages by our organization.	.791			
Our target audience has no difficulty in imagining our health promotion tips in their mind.	.786			
Our target audiences can easily recognize our health promotion messages from those of other players whenever they see or hear them.	.772			
Our audiences do not seem capable of dealing with most of the health problems that they face, even when we provide them with health promotion materials. (r)		.934		
Our target audience seems not to have confidence in their ability to improve their health condition even when we provide them with health promotion materials. (r)		.930		
Our target audiences are self-reliant; they never consult us on means of improving their health condition. (r)		.926		
...regretful of their inappropriate health practices.			.915	
...ashamed of their inappropriate health practices.			.847	
...guilty of their inappropriate health practices.			.844	
Our target audiences think of themselves as people concerned with improving their health condition.				.882
Our target audiences think of themselves as health and wellbeing promoting persons.				.840
Eigen values	5.433	2.681	2.596	1.733
% of variance	33.955	16.759	16.225	10.830
Cumulative % of variance	33.955	50.714	66.938	77.768

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

**Appendix 7b. Rotated Component Matrix of Strategic Communication under Study One
Audience Instrument.**

	Component			
	Cognitive awareness	Self efficacy	Affective feelings	Personal identity
I can quickly recall my health organization's health promotion messages even without further encounter with them.	.821			
The health promotion messages of my health organization come to my mind quickly.	.802			
I can easily figure out my health organization's health promotion messages because of their emphasis for good health condition.	.800			
I am aware of the health promotion messages by my health organization.	.798			
I have no difficulty in imagining my health organization's health promotion tips in my mind.	.791			
My health organization's health promotion messages come top of my mind whenever I think of good health.	.790			
I can quickly recall the health tips that are advocated for by my health organization in their health promotion campaigns.	.778			
I can easily recognize my health organization's health promotion messages from those of other players whenever I see or hear them.	.736			

I seem not to have confidence in my ability to improve my health condition even when my organization provides me with health promotion materials. (r)		901		
I do not seem capable of dealing with most of the health problems that I face, even when am provided with health promotion materials. (r)		.887		
I am self-reliant; I never consult any health workers on means of improving my health condition. (r)		.862		
...ashamed of their inappropriate health practices.			.854	
...regretful of their inappropriate health practices.			.851	
...guilty of their inappropriate health practices.			.813	
I think of myself as someone concerned with improving my health condition.				.895
I think of myself as a health and wellbeing promoting person.				.824
Eigen values	5.204	2.532	2.458	1.635
% of variance	32.522	15.823	15.360	10.217
Cumulative % of variance	32.522	48.345	63.705	73.922

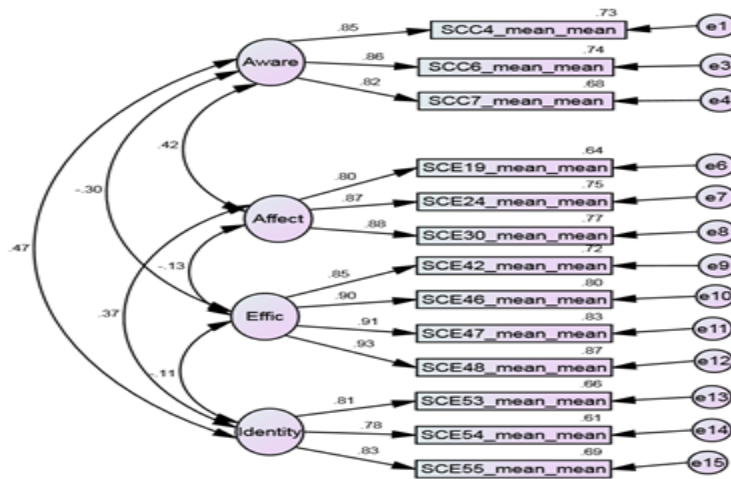
Extraction Method: Principal Component Analysis.
 Rotation Method: Varimax with Kaiser Normalization.
 a. Rotation converged in 5 iterations.

Appendix 8. Measurement Models' Fit Indices, Validity and Reliability under Phase Two.

Fit Indices, Validity & Reliability	Strategic Communication	
	Model 1	Model2
Chi-square (χ^2)	87.11	1368.92
χ^2 P-Value < 0.05	0.01	0.00
Goodness-of-fit Index (GFI>0.95)	0.94	0.48
Adjusted goodness of fit index (AGFI>0.95)	0.91	0.27
Root mean square error of approximation (RMSEA<0.08)	0.05	0.30
Standardized root mean square residual (SRMR<0.05)	0.05	0.29
Non Normed fit index (NNFI/ TLI>0.95)	0.97	0.21
Normed fit index (NFI>0.95)	0.94	0.33
Comparative fit index (CFI>0.95)	0.98	0.34
Relative Fit Index (RFI >0.95)	0.92	0.20
Incremental Fit Index (IFI >0.95)	0.98	0.34
Average Variance Extracted (AVE > 0.5)	0.55	
Composite Reliability (CR>0.7)	0.96	

NOTES: Model 1= fit indices when items are unfixed (not combined to form one construct), Model 2= fit indices when all items of different constructs of the global variables are combined to form one construct.

Strategic Communication Measurement Model



Appendix 9. Descriptive Characteristics of Strategic Communication Variable Organization Instrument.

Questionnaire items	Mean	Std. Deviation
Strategic Communication	4.08	0.36
Cognitive Awareness	4.15	0.73
I can quickly recall my health organization's health promotion messages even without further encounter with them.	3.77	0.97
I can quickly recall the health tips that are advocated for by my health organization in their health promotion campaigns.	3.97	1.03
I have no difficulty in imagining my health organization's health promotion tips in my mind.	3.83	1.01
Emotional Attachment	4.18	0.56
When I receive my health organization's health and wellbeing promotion messages I feel guilty of my inappropriate health practices.	3.59	1.39

When I receive my health organization's health and wellbeing promotion messages I feel regretful of my inappropriate health practices.	3.30	1.34
When I receive my health organization's health and wellbeing promotion messages I feel ashamed of my inappropriate health practices.	3.54	1.42
When I experience unexpected problems while implementing health promotion tips encouraged by my organization, I simply give up and resort to my past practices. (r)	4.08	1.23
I am self-reliant; I never consult any health workers on means of improving my health condition. (r)	4.19	1.35
I usually give up easily; I never persist on implementing my health organization's health promotion tips. (r)	4.13	1.28
I do not seem capable of dealing with most of the health problems that I face, even when am provided with health promotion materials. (r)	4.12	1.27
I think of myself as someone concerned with improving my health condition.	4.45	0.85
I think of myself as someone concerned with the health consequences of my practices.	4.35	0.76
I think of myself as someone who enjoys the pleasures of improved health condition.	4.46	0.88

Audience Instrument

Questionnaire items	Mean	Std. Deviation
Strategic Communication	4.19	0.50
Cognitive Awareness	4.15	0.73
Our target audiences can quickly recall our health promotion messages even without further encounter with the messages.	4.06	0.82
Our target audience can quickly recall the health tips we advocated for during our health promotion campaigns.	4.23	0.77
Our target audience has no difficulty in imagining our health promotion tips in their mind.	4.15	0.85
Emotional Attachment	4.23	0.42
...guilty of their inappropriate health practices.	4.35	0.97
...regretful of their inappropriate health practices.	3.84	1.07
...ashamed of their inappropriate health practices.	4.17	1.08
When our audience experiences unexpected problems while implementing our health promotion tips, they simply give up and resort to their past practices.(r)	4.10	1.11
Our target audiences are self-reliant; they never consult us on means of improving their health condition. (r)	4.09	1.39
Our target audience usually gives up easily; they never persist on implementing our health promotion tips. (r)	3.98	1.30
Our audiences do not seem capable of dealing with most of the health problems that they face, even when we provide them with health promotion materials. (r)	3.93	1.32
Our target audiences think of themselves as people concerned with improving their health condition.	4.45	0.67
Our target audiences think of themselves as people concerned with the health consequences of their practices.	4.41	0.65
Our target audiences think of themselves as people who enjoy the pleasures of improved health condition.	4.49	0.72