

# INTRINSIC AND EXTRINSIC MOTIVATION IN THE SELECTION AND USE OF COMMUNICATION MEDIA

*Lufumbi J. Mwaipopo*<sup>1</sup>

## ABSTRACT

The ongoing revolution in Information and Communication Technology (ICT) is necessitating a shift in emphasis from the traditional media to the use of multi-media interactive systems by business communicators, academics, and many professional vocations. In many areas that involve ICT use, individuals may be forced to adopt these systems as a matter of necessity. Basing on existing literature, this paper discusses the motives behind media selection and use by individuals targeted by business communicators or academics. A psychological perspective is considered that applies intrinsic and extrinsic motivational concepts to communication phenomena. The paper also tries to develop an analytical understanding of human communication-related behavior with respect to the two types of motives. Proposals are also put forward to communication policy makers and implementers in developing countries to develop appropriate techniques for motivating their targeted clients to engage themselves more actively in communication experiences involving the use of Internet-based ICTs.

## INTRODUCTION

The rapid and novel developments in Information and Communication Technology (ICT) have revolutionized the methods of communication in many fields of academia and business (Mbamba 1999; Nyerembe 2000). Communications in product promotion are shifting in emphasis from the traditional media where audiences are passive to modern media in which on-line real-time interactions are possible between seller and customer. Communication in academics is also shifting in emphasis from the traditional classroom lecture method using a blackboard, or traditional printed textbook referencing in libraries, to multimedia

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<sup>1</sup> Dr. Lufumbi .J. Mwaipopo is a Lecturer in the Department of Marketing in the Faculty of Commerce and Management, University of Dar Es Salaam.

interactive communication. It is now common to hear of *virtual classrooms*, *virtual libraries*, or *virtual stores* (Burke 1996; Elluminate 2002; Microsearch 2002). These developments have changed our system of living and behaviors in quite significant ways. People can have access to vast amounts of information at speeds that previously would be deemed incredible. People can also get this information and obtain knowledge at far less cost compared to the traditional methods. Developing countries like Tanzania have also been swept into this fray, although there are considerable differences in the pace of adoption, levels of sophistication, and universal franchise compared to developed countries (Tan and Teo, 1998). A prominent element in the array of facilities that collectively constitute what is referred to as ICTs (e.g. electronic data interchange, local- and wide-area computer networks, etc.), is the Internet. Internet use, of which the World-Wide-Web is the most widely used part, is growing at a fast pace globally especially for commercial and informational/educational purposes. The total number of active Internet users in the world was estimated at 130.6 million by 1999 and was expected to grow to about 400 million by 2003 (NUA, 2000). Table 1 provides data showing the continental distribution of Internet users as of March 2000. As can be observed, the entire continent of Africa accounted for less than one percent users of the world total. About 40% of the Internet accounts in Africa were in South Africa (Kassim, 2000).

**Table 1: Global Distribution of Internet Users in March 2000**

World Total	304.36 million	100.00%
Africa	2.58 million	0.85%
Asia/Pacific	68.9 million	22.64%
Europe	83.35 million	27.39%
Middle East	1.90 million	0.62%
Canada & USA	136.86 million	44.97%
South America	10.74 million	3.53%

Source: NUA Internet Survey (2000)

The literacy levels, culture, and level of economic development have made the benefits of the advances in ICTs to be enjoyed by few elites in African countries (UNDP, 1999). Nevertheless, changes are taking place that suggest that the use of these technologies is spreading at a fast pace as a result, in part, of donor countries' efforts to incorporate developing countries into the globalization phenomena. For example, computing is now part of the curriculum even at elementary school level, and access to the Internet is now possible in most urban centers of Tanzania. Recent studies show that the number of Internet Service Providers (ISPs) in Tanzania has been increasing steadily since 1996 (Mwakinyuke, 2002). Fifteen business firms and institutions were providing Internet services in the country by the year 2000. The number of Internet cafes has also been on the rise while the number of Internet users has been growing at an increasing rate from 13 in 1997 to 130 per day in the year 2000 (Ibid.).

In many areas that involve ICT use, individuals are forced to adopt these systems as a matter of necessity, but in certain areas they have some leeway to decide to participate or not. For example, people may choose the type of medium they prefer when seeking product information, or people may decide to resort to print textbook referencing instead of electronic referencing. This is

because these options still exist side by side. Business and educational planners see superior advantages in using ICT by their targeted clients, because this will facilitate a more efficient fulfillment of their missions. They, therefore, strive to encourage their customers to use these systems more frequently. An important question however is, how willing or how motivated are these customers in resorting to such methods of communication? A related question is: have studies been conducted in developing countries to establish what really moves people to engage themselves in using such media? There are extrinsic motivators such as the savings in time and the ability to access vast volumes of information, and there may be intrinsic motivators such as the need for achievement. But there are also de-motivators such as the phobia for engaging in communications involving the use of computers. These are issues that require serious study by business and academic planning authorities.

## **MEDIATED COMMUNICATION**

Communication is a complex process that involves symbolic interaction in the exchange of messages, which must be coded in order to extract meaning (Littlejohn, 1976: 25). The messages provide information and are intended to alter the behavior of the communicating participants. Examples range from political and community action group lobbying, persuasive commercial messages, educational or entertaining material, plain reporting of news events, to social conversations such as those that take place face-to-face or over the telephone. Short et al. (1976) suggest that seven levels of human communication exist which are: intra-personal, dyadic, small group, intercultural, public speaking, mass-media, and non-verbal communication. Central to most types of communication is the medium. Natural media such as face-to-face are distinguished from artificial media such as print and television. This paper is limited to a discussion of artificial media.

It is now common to classify media into traditional versus modern<sup>1</sup>. With the rise in the use of response-oriented communication media, and the computer evolving into a major communication medium, significant changes are taking place both in people's media use and choice behaviors, as well as in the study of communication (Biocca, 1993). What are the characteristics of

the contents in various types of communications via different kinds of media? Why do people engage in such activities with specific preferences? These are pertinent questions that the researcher in media selection and use needs to answer.

## **INTRINSIC AND EXTRINSIC MOTIVATION**

What drives people to behave in particular ways is referred to as a motive. Motivation has been essentially defined as the inner state that mobilizes bodily energy and directs it in selective fashion toward some goal or goals (Loudon and Della Bitta, 1979; Reeve, 1992; Solomon, 1996). Behaviors that are self-regulated are considered to be intrinsically motivated, while those that are environmentally regulated are considered to be extrinsically motivated. A person who engages in an activity may do so from either a predominantly intrinsic or a predominantly extrinsic motivational orientation. The distinction between the two is based on whether the primary focus is on rewards inherent in the interaction with the activity for the former, or whether it is on rewards that are mediated by, but are not part of, the target activity for the latter (Pittman et al., 1992a). Motivational psychologists have studied at length the impact of extrinsic motivation on intrinsic motivation that in various situations leads to a decline in the latter, such as when children are rewarded for engaging in activities they inherently enjoy and this gives rise to the 'overjustification effect'<sup>2</sup> (Ibid. 1992b).

Reeve and Deci (1996), suggest that cognitive evaluation theory can be used to explain the impact of the social environment on intrinsic motivation. In this view, intrinsic motivation is based on *organismic* needs for competence and self-determination. External events influence perceived competence via their informational aspect and influence perceived self determination via their controlling aspect. In their study they determined that an individual faced with a competitive situation will experience enhanced intrinsic motivation if positive outcome feedback is received provided that the situation is not highly pressuring in which case it will be considered as controlling, and will therefore diminish intrinsic motivation. The nature of mediated communication of present times includes many challenging experiences particularly with the rise in the use of interactive

technologies, and differential effects on motivation may arise due to variations in the use of such technologies. The content is of course another factor and the scope is expanding at ever increasing rates as firms compete to supply customers with multipurpose information.

## **MOTIVATION STUDIES IN MEDIA SELECTION AND USAGE**

People's behaviors related to the selection and use of various types of communication media may be studied from a psychological perspective. Mediated communication in general has a major experiential component, which amplifies the need for a motivational analysis. Various studies have been conducted to this effect. Such studies have, however, barely addressed in detail two types of motivational bases simultaneously, namely: intrinsic and extrinsic motivation in the preferences of specific mediated communication experiences.

Rubin (1993) explains that communication behavior such as media use is typically goal-directed or motivated. Peoples select and use communication sources and messages to satisfy felt needs, desires, or interests such as seeking information in order to reduce uncertainty, or to solve personal dilemmas. Social and psychological factors mediate communication behaviors and related responses to media are filtered through one's social and psychological circumstances such as the potential for interpersonal interaction, social categories, and personality (Rubin, 1993). He also points out that there are definite relationships between media and interpersonal communication for satisfying needs or wants, and that people are usually more influential than media in media-person relationships.

Perse and Courtright (1993) say that in person-media interactions, people are active communicators because they are aware of their needs, evaluate various communications channels and content, and select the mass or interpersonal channel that they believe will provide the gratification they seek. People are also aware of functional alternatives or different channels that can fulfill similar needs. These authors (Perse and Courtright 1999) compared twelve different communication channels in their study to determine how they rated in satisfying eleven communications

needs. These needs were to relax, to be entertained, to forget about work or other things, to have something to do with friends, to learn things about oneself and others, to pass the time away, to feel excited, to feel less lonely, to satisfy a habit, to let others know one's care for their feelings, or to get someone to do something. Their findings indicated that media which were rated high in "social presence" were found to be most useful in fulfilling personal needs.

The social presence construct was also used by Rice (1993) to study media appropriateness as rated by users in an organizational setting. The ability to overcome various communication constraints of time, location, permanence, distribution, and distance; the ability to transmit social, symbolic, and nonverbal cues of human communication; and the ability to convey equivocal information were characteristics which corresponded with subjects' preferences in his study. Preferred outcomes of such use included information exchange, problem solving and making decisions, exchanging opinions, generating ideas, persuasion, resolving disagreements or conflicts, and maintaining relationships (Rice, 1993).

More specific studies related to computer mediated communication have indicated that motivation to use electronic mail or the Internet depends to a great extent on the user's familiarity with computers (Rice, 1993; Trevino et al., 1992). While aversion may be exhibited in people who have had limited experience with computers, those who do have it are adventurous, encounter rewarding experiences which often lead to "flow" (Trevino et al., 1992). The computer's entry into mediating communication actually spurred researchers into deeper studies of more traditional media. Movie dramas played on television are known to enthrall viewers at times, a phenomenon referred to as "immersion", and such effects are often sought for by advertisers in their brief mini-dramas (Sutherland, 1993).

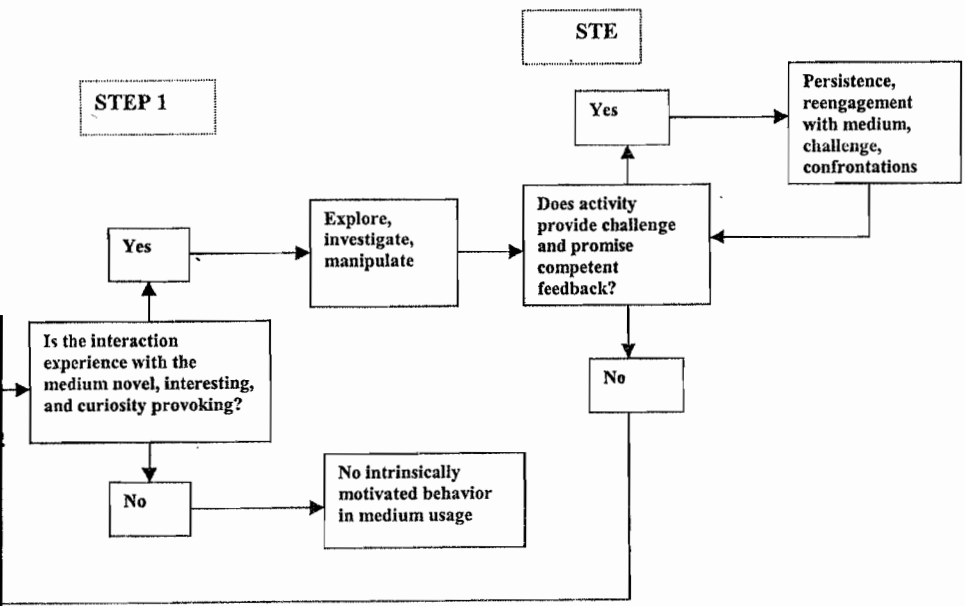
## **INTRINSIC MOTIVATION IN MEDIA SELECTION AND USAGE**

Humans are construed by neo Freudians to be inherently active creatures who continually strive to manipulate and achieve mastery of their environment, which is referred to as *effectance* motivation

(Reeve, 1992: 334). Play is characteristic of both children and adults according to Vandenberg (as quoted in Reeve, 1992: 144) and it underlies the tendency to be curious and explore the environment. In adults however, this is mostly manifested as investigative, manipulative, challenge confrontations, and, after experiences of competent feedback, persistence and re-engagement. Cognitivists talk of internalized goal setting as intrinsically motivating to the individual to engage in a particular task. In the performance of a challenging task, competent feedback that is positive enhances intrinsic motivation since the individual derives satisfaction from being able to attain mastery of his/her environment. Intrinsic motivation in media usage may be visualized as a two step process which may be represented by the schematic diagram illustrated in Figure 1.



**Figure 1: Intrinsic Motivation in Media Usage as a Two Step Process**



Adapted from Reeve, 1992: 145]

Starting with the individual's informational and entertainment needs and the tendencies to explore or accomplish these needs through some communication medium, two dimensions may be considered when analyzing intrinsic motivational dynamics in media use. One is the reward derived from interaction with the medium, and the second is in the interactions with content, which are however dependent on the medium's dissemination design. For example, if one seeks current newscasts and has access to a daily paper, a radio, and a television; putting aside the end benefit, what choice will the individual prefer? Consciously or unconsciously

(the latter being predominant if the activity is routine) the individual will evaluate the relative attractiveness of the intended experiences of either deciphering print and static visual symbols, or registering and deciphering audio together with motion stimuli on TV, or listening to audio stimuli on the radio.

The individual will no doubt match his/her verbal and visual proficiency albeit unconsciously with relevant potential stimuli, and probably combine this with an acquired operational efficiency for these media, which themselves provide mild satisfactions. As for the second dimension, the contents of the news often invoke curiosity and the individual will probably be propelled to satisfy this need more fully by going for the media which portrays the news more vividly in visual and temporal terms. This then forms part of the intrinsic motive force that will direct the individual in choosing the media<sup>3</sup>.

If an individual is considering entertainment and has access to interactive TV, and a computer, which can download a Nintendo game, he or she will probably evaluate the attractiveness of the two alternatives from several perspectives. First, personality disposition factors in relation to whether the individual is high in need for achievement or need for power (exterminating opponents). Skill in operating either of the two media also factors in, and the complexity, unpredictability and novelty of the type of games usually offered by either will affect such motivation (Reeve, 1992: 151). Using Csikszentmihalyi's (1990) concept of "flow", intrinsic motivation will arise if the individual adopts a goal-orientation for either activity and has immediate feedback, if the activity elicits voluntary focused concentration, if the user feels to be in adequate control of the situation, and if the experience results in an *autotelic* or extremely intrinsically rewarding experience. It is more likely that people high in need for achievement will opt for the computer game that requires greater skill and such games are so designed as to match the competence level of the user at different stages. An individual with a high need for power, who is probably reluctant to exercise her/his skills, will probably go for the interactive TV shooting game.

## **EXTRINSIC MOTIVATION IN MEDIA SELECTION AND USAGE**

External rewards often act as reinforcement for a particular behavior and this is most likely true for the case of media selection and usage. Rubin (1993) proposes two types of media orientations that an individual can assume. A ritualized orientation or an instrumental orientation. A ritualized orientation is more habitual and less active and involves greater exposure to the medium mainly to pass away time but with little involvement with the content. An instrumental orientation on the other hand is more goal oriented and involves active media use (Rubin, 1993). Both these orientations suggest an underlying extrinsic motive that governs use behavior.

The eleven communication needs enumerated by Perse and Courtright (1993) capture most of the external rewards' dimensions for individuals in a mostly independent setting, while Rice (1993) covers many of the rewards desired in communication objectives of organizations. Revisiting the examples discussed in the last section, the extrinsic reinforcements in the use of TV, radio, or a newspaper, include relaxation, entertainment, to pass time, satisfy habits, and/or learning. News that are broadcast on television may be more informative because of the ability to depict motion and the visual superiority effect (Miniard et al. 1991) but are constrained in time as compared to print media.

Extrinsic motives acting in this situation also include such factors as the time available to the individual and competing stimuli. If a person is a student in the final weeks of the school term, the incentive to sit and watch TV may be less attractive compared to a brief attention to a radio broadcast. The extrinsic motives that may feature in the computer games example also include available time but may also involve the cost of the activity. For example, the charge for using Nintendo time may strain one's finances not to mention the utility bill. Another extrinsic factor in the game issue is incompetence. Frequent lack of success (in itself an intrinsic de-motivator) often leads to boredom or despair. If the intention was to kill boredom, then the inability of the individual to achieve this will lead him or her to develop tendencies to avoid such activities.

## **EXTRINSIC VERSUS INTRINSIC MOTIVATION IN MEDIA USE**

Do we visualize situations where extrinsic motivators are unnecessary in mediated communication giving rise to say an over justification effect? Certainly there are extrinsic motivators which diminish intrinsic motivation but these are mainly incidental. For example, costs and time factors cannot be avoided. It is possibly true however, that media design and message dissemination styles may be extrinsic disincentives to intrinsic motives. One particular feature is the manipulative tendency of some information providers that may be interpreted as intended to control and consequently diminish intrinsic interest. Novelty and curiosity wear off with time if no changes are made, and it is up to the providers to make innovations to counter the effects of their extrinsic "reward" to users which they had bestowed on them in the form of the last exciting package.

There are however some extrinsic incentives in these experiences, which enhance their intrinsic value. Greater user participation through interactivity is one of them. More precise targeting of audiences is a second technique that message sellers use to retain contact. For the case of computer games there are extrinsic incentives in the form of scores and praise whenever an individual succeeds at any stage, and this competence feedback boosts rather than diminishes intrinsic morale. The few examples discussed are but a tiny reflection of the 'broader situation where the whole range of possible mediated communication experiences can be visualized.

## **IMPLICATIONS FOR BUSINESS COMMUNICATORS AND ACADEMICS IN DEVELOPING COUNTRIES**

Ten Internet Service Providers that were recently surveyed in Tanzania revealed that they serve all categories of customers which include business firms, Government institutions, colleges and schools, individuals, and other customers such as NGOs (Mwakinyuke, 2002). The proportion of different customer groups on the average is shown in Table 2. This is probably a typical scenario for many developing countries especially those in Africa.

**Table 2: Distribution of Customers Served by ISPs in Tanzania**

CUSTOMER CATEGORY	PERCENT AGES (%)
Business firms	50
Government institutions	15
Colleges/Schools	5
Individuals	20
Others (NGOs)	10
Total	100

Source: Mwakinyuke (2002)

It is very likely that the motives for using the Internet by these business firms are profit based and thus are extrinsic. Government institutions, schools and colleges, as well as NGOs may also be said to have extrinsically based motives that are conditioned by stakeholder interests. The interesting question should be directed at the individual customers who account for a considerable 20 percent. What do they normally use these media facilities for? Are their behaviors self-regulated and thus intrinsically motivated, or are they environmentally regulated and thus extrinsically motivated? An additional question is for the actual individual users of these modern media facilities in business, government, educational institutions, etc. What are their underlying motives in selecting and using these media?

The immediate concern of academics and business communicators in this phenomenon is to encourage as much as possible their intended audiences to engage themselves and fully utilize the multi-media facilities available in modern ICTs. More research needs to be done to determine the underlying intrinsic and extrinsic motives that drive media choice and usage. It is only after research has been done that strategies may be developed to deliver the intended information in ways that can be optimally matched to the motives of the participants.

There is also a need to conduct awareness campaigns and messages that aim at changing attitudes through uncovering latent needs in individuals. These only need to be discovered for people to realize the need-fulfilling potential of modern media of communication (Mascarenhas, 1994). More emphasis should be placed in promoting intrinsically motivated media use behavior,

since the current scenario in developing countries appears to indicate a dominance of extrinsic motives. Policy makers at the highest level should facilitate this by investing more resources in improving the communications infrastructure, because one aspect that de-motivates users is the unreliable and inefficient power and communications network system.

## **CONCLUSIONS AND RECOMMENDATIONS**

One interesting aspect of this discussion is in how the concepts of intrinsic and extrinsic motivation can be effectively applied to human experiences with mediated communication phenomenon. It is also prudent to conclude that intrinsic motivation is a very powerful factor that influences media selection and usage. All too often communicators think of increasing external incentives that sometimes decrease the intrinsic appeal of the medium. It is important to remember that exploration, discovery, and cognitive challenge lie at the heart of intrinsically motivated behaviors (Reeve, 1992: 159). Contexts that provide novel and complex environments, optimal challenges, self-determined goals, and individually based feedback, generally promote a rich display of intrinsically motivated behaviors.

Some advice to media designers and planners is that whenever they introduce new media technologies or wish to modify an existing one, they should first consider what intrinsic values would arouse the interest of users. Extrinsic incentives should then be carefully planned so as to have little negative effect on the intrinsic incentives. Traditional media owners can also benefit from this if they try to encourage response-oriented communication, work at stimulating curiosity and making frequent innovations, but of course, matching their offers/contents more appropriately to the target end-users.

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## END NOTES

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<sup>1</sup> Traditional media include radio, newspapers, television,

<sup>2</sup> Overjustification

etc., while modern media include videotex, the Web, Internet, etc.

is hypothesised to occur in situations where an activity is performed for both intrinsic interest and extrinsic reward, leading to the discounting of the intrinsic interest because the motivation is over justified

<sup>3</sup> Extrinsic motives that might act counter to some these forces are considered in a later section.