This paper examines the problem of how to reconcile the practical realities of the nature of the mass audience with the demands of personal and social development, particularly in Africa and other Third World Countries, where the demands of modernization have confronted traditional norms and values. After defining and clarifying key concepts such as development, communication, mass communication, mass society, mass audience, and types of audience participation, the paper explores the relationship between the mass media and the mass audience, and discusses the effects of the media in terms of conflict theory, social criticism, and the theories of ideological effects. The paper asserts that the agenda setting power of the mass media results in a non-spontaneous mass culture which pacifies and stupefies the masses instead of educating them, and argues that under these conditions, modernization can be achieved only in terms of physical development, and not in human and socio-cultural dimensions. The paper suggests that participation is a key element in development, and supports this idea with the positive results of a pilot project in which the Western Nigeria Broadcasting Corporation involved members of rural villages in its programming, production, and presentation. Finally, the paper advocates the Democratic-Participant Media theory which: (1) is based on the demassification of media messages and contents so that they become situation and community or group specific and directly relevant to individual communities or groups; and (2) assists in inducing critical thinking that helps ensure intelligent decisions and builds up the people's self-confidence. (Three tables are included; 23 references are attached.) (PRA)
Communication Problems in a Mass Society: Mass Audience, Mass Communication and Development

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Introduction:

One of the most difficult problems facing communication in a mass society is how to reconcile the practical realities of the nature of the mass audience with the demands of personal and social development. This is a particularly thorny problem in Africa and other Third World countries, where the demands of modernization has confronted traditional norms and values. It is a thorny problem because, for these developing countries, the crucial issue of the moment is Development. In all of these countries, virtually all activities are assumed geared towards ensuring that the behaviour of the individual, the living standard of the people and their political and economic activities improve appreciably enough to show positively tangible changes. The vehicle for creating understanding and appreciation of the development objectives (and of any other objective for that matter) and for inducing the willingness to participate both for personal and community improvement is communication. Since communication is the vehicle for any human activity, it is important to note that it, too, is expected to make positive contributions to society's development efforts. But communication, especially development communication, does not thrive in an environment in which action-decisions are based on individual whims or on uncritical compliance to imposed suggestions and regulations from above. This is why the implicit question that underscores the thrust of this chapter is this: Can the communication environment in a mass society conduce to development bearing in mind the potentials and problems of the mass media?
Conceptual Clarification:

In order to keep our perspective in focus, it is important to clarify, beyond common sense definition, the key concepts used in this chapter. This is necessary because of the finer details of the concepts that relate to the concept of development communication, and the relationship between participation and communication effectiveness.

Development is a positive change (for the better) from conditions that are no longer considered good enough for the goals and aspirations of the individual and/or society to those that are most likely to meet these goals and aspirations. Development has many facets—personal, social, economic, political and cultural. This fact finds expression in Inayatullah's (1967) definition of development as—

changes towards patterns of society that allows better realization of human values; that allows a society greater control over its environments and over its own political destiny; and that enables its individuals to gain increased control over themselves.

Development therefore happens on three different, albeit, interrelated levels. On the human (personal) level it is known as Attitude and Behaviour change; on societal level it is Social Change, that is, positive changes in the moral and social tone of society; and on the physical level it is called Materials Advancement or Modernization, that is, improvements in standard of living, infrastructures and superstructures.

Communication is the exchange of ideas and opinions between and among people. It is not the mechanical transfer of facts and figures as the mathematical model of communication (Shannon & Weaver, 1949) would appear to suggest. It is not information dissemination per se. It is not talking at people or dominantly talking to people. It is, instead, an
interactive process that works in a circular dynamic and ongoing way (Hiebert, et al, 1985). It is talking with people — a process with no permanent sender and no permanent receiver. In communication, the roles of the sender and the receiver change hands depending on who is talking and who is listening. This implies freedom, equality and shared interest.

Communication occurs at different levels: face-to-face, interpersonal (letters, telephone, etc), group and mass.

Mass Communication is a special type of social communication with distinctive characteristics of the audience, the communication experience, and the communicator (Hiebert, et al, 1985). The audience of mass communication is large, heterogeneous, anonymous and generally separated in time and space from the communicator. The communication experience is one that is fact, public in nature and transient. In mass communication, there is no one communicator of a message. What exists is the conglomerate communicator, made up of many individuals each contributing to the communication package according to their individual expertise. What is of particular importance to us here is the characteristics of mass media audience, and the ability of mass communication to travel fast and over a wide area. This indicates an ability to create a mass audience. Indeed, mass communication refers to communication activities that are intended to affect very large numbers of people who are seen, for this purpose, as more or less undifferentiated units of an aggregate or a "mass" (Sills, 1972).

Mass Society is a concept growing out of the large complex and bureaucratic nature of the modern state. It is seen as malleable mass of people in which small groupings, community life and ethnic identity are replaced by society-wide depersonalized relations (Littlejohn, 1983: 264). It is a society in which many or most of the major institutions are
organized to deal with people in the aggregate and in which similarities between the attitude and behaviour of individuals tend to be viewed as more important than differences (Sills, 1972). As Blumer (1946) has pointed out, a mass is the opposite of a class - without social organisation. no body of customs and tradition, no established rules or rituals or organized group sentiments, no structure of status roles, and without established leadership.

Mass Audience is seen as an aggregate of individuals - separate, detached and anonymous to those creating mass media content (Ball-Rokeach & Cantor, 1986:216). In a mass society, mass organization replaces communities, and mass arenas displace local arenas. Because of their scale both in size and in activities, mass arenas are managed from the centre rather than structured through social relations. They are managed primarily through the mass media of communication since only in this way can an entire population be presented simultaneously with the same objects of attention. Herein lies the origin of the mass audience - the constant presentation of 'mass' messages to a heterogenous group of people treated as undifferentiated individuals. People participate in mass arenas by selecting from among alternatives presented through the mass media. Since the alternatives are standardized in order to reach the entire population simultaneously, and since they are directed to individuals as though they were undifferentiated members of society, participation transcends the individual's social relations (Blumer, 1939). The crucial question, of course, is: what type of participation?

In a study of the use of communication for development, four types of participation were identified (Moemeka, 1987: 27-29). The first is passive participation through which we become part of the beneficiaries of the
end-product of a communication event. This is the commonest type of individual or audience participation in mass media communication. The second is vicarious participation through which we empathically put ourselves in the position of those who constructed and produced the content of a particular communication, but without engaging in any articulate follow-up action. It is purely a psychological state that gives the individual the illusion of 'true' participation, and the reality of the self-satisfaction which that illusion engenders. The third is radiational participation through which we consciously learn from those who did physically take part in the construction and production of a particular communication content, and articulately react to the specific demands of that content. Through radiational participation, the act of physically taking part, done by those socially and/or professionally related to us, is radiated on us. The fourth type of participation is active, through which we physically take part in communication activities directed at bringing about some definite and intelligent decisions that would ensure definite and positive change in attitudes and behaviour. Active participation involves taking part in discussions on communication content and structure, in the planning of communication programmes, in the production of communication content, and in decision-taking as well as in implementing approved decisions. It is the key element in development communication. But, in a mass society, it is impossible for everyone to physically participate in every communication planning and production, radiational participation is also very crucial.

We assume that when Blumer (1939) said that "people participate in mass arenas by selecting from among alternatives presented through the mass media", he was referring to passive and vicarious types of participation,
through which members of the public are involved in media events only as end-product beneficiaries. This assumption is buttressed by the fact that the scathing attacks of the Critical and Conflict theorists on the mass media for their dominating influence in a mass society is directed at the communicator-oriented nature of their content. Such contents are not based on what is intrinsically relevant to the masses vis-a-vis their true aspirations and the realities of their situation, but on what the media personnel (mass communicators) think would help in winning the compliance of the masses. Secondly, the assumption is supported by the fact that radiational and active participation do not begin and end at the reception end of the communication event spectrum. They derive from, build on and attempt to sustain social relations. Communication events based on these two types of participation do have substantial ingredients from the social and cultural environments of the masses. Invariably, facts and figures from this socio-cultural context are used to construct messages that are usually so relevant to the people’s situations, needs and aspirations that they tend to always induce positive and development-oriented reactions.

The Mass Media and Mass Audience:

In the developing world, where the basic philosophy of communalism is breaking down in the face of the onslaught of Europe’s individualism, we tend to feel excited in the illusion of the ascendancy of the ‘self’. Individuals tend to be concerned with themselves, asserting almost categorically that they want to be free to be themselves. But, in every mass society (which the developing countries are fast becoming) the individual’s desire to be his own master - to freely decide his/her own future and actions is usually undermined by the influence of the mass media. This influence which is underscored by three factors: (a) the mass media’s
ability to create mass arenas, (b) the 'avowed' neutrality of the mass media, and (c) the elite-oriented manipulation by media managers of the subtle isolation of the individual in a mass environment, has led to a quiet but sure control of the minds of individuals.

Because the mass media are generally treated as neutral technology, they are better placed to successfully manipulate people and situations. Because of their intrinsic nature (they are mass information technology) they claim the right to construct the same messages and provide the same information to everyone without distinction. It is true that one of the greatest assets of the mass media is their ability to reach millions of people at the same time, with the same messages. Unfortunately, this asset turns into a deficiency when the media see and treat society as one block of mass of people without cultural, social, economic and/or political variations or differences. When this happens, concensus is assumed and manipulation becomes the order of the day. This is why Marcuse (1964) noted that "science, by virtue of its own methods and concepts, has projected and promoted a universe in which the domination of nature has remained linked to the domination of man".

In the past twenty years, there has been a revival of the view that the mass media do exert powerful influence on the way people perceive, think about, and ultimately act in, their world. The concern is with the powerful influence which the mass media exert on the consciousness and world-view of their audiences (Gerbner & Gross, 1976; Katz, 1980). This concern followed the revival of conflict theory and social criticism. Katz (1980) calls what has emerged the theories of 'ideological effects' based on a view that the latent structure of mass media messages distorts (or selectively presents) reality in ways that perpetuate the interest of the
existing power structure. These theories see the media as hand-maidens of the establishment, arguing that news programming legitimizes managerial power (Glasgow Group, 1976); that routine news practices perpetuate existing norms, conventions and socio-political relationships (Tuchman, 1977); and that the mass media are allowed the exercise of their power by the political elite only when this exercise leads to the maintenance of the status quo or to proportional changes in the existing relationship ratio (Moemeka, 1988).

Because the mass media are able to disseminate and popularize certain opinions (usually dominant opinions) they create a situation in which the individual is generally very wary of deviating from what seems to be the accepted norm. As Noelle-Neuman (1973, 1974) has pointed out: "Because people avoid social isolation, they tend to voice opinions that support what they perceive to be the dominant opinions and to suppress perceived 'unpopular' opinions". This tends to change the "opinion environment" such that it reinforces the perceived dominance of the majority opinion and creates a "spiral of silence".

Through agenda-setting and cultivation, the mass media play a dominant role in defining this opinion environment, thereby creating a situation which inevitably leads to limiting individual selective perception, and hence, independent judgement. The result is what Jay (1973) has called Mass Culture - a non-spontaneous, reified, phony culture which Tar (19 has pointed out as having the power of pacification and stupefication of the masses. Through gate-keeping, media managers create, process, refine and preside over the circulation of images and information which determine beliefs and attitudes, and ultimately, behaviour. As individuals, groups and classes engulfed in a mass society live increasingly fragmented and
sectionally differentiated lives the mass media (Hall, 1977) are more and more responsible for:

(a) providing the basis on which groups and classes construct an image of their lives, meanings, practices, and values of other groups and classes; and

(b) providing the images, representations and ideas around which the social totality, composed of all these separate and fragmented pieces, can be coherently grasped as a whole.

The result is a mass of people who, through mass constructed social reality, reconstruct theirs and others lives into a single intelligible "world of the whole".

Generally, therefore, individuals in a mass society use the mass media not principally as channels of information to help develop critical thinking, but as a means to ensure a climate of general conformity or uniformity throughout society. When individuals consistently acts on the basis of general conformity or uniformity, they become what conflict theory has called "a big don’t-care, don’t-know and don’t-bother-me receptacle for the use of media managers and the elite. The best that can be achieved under such a malleable condition is physical development or what has been called modernization. But as the reasons for discarding of the dominant paradigm on development (Rogers, 1976) and practical everyday experience with development efforts in developing societies have shown, physical development without the foundation of human and socio-cultural dimensions of development is like an imposing skyscraper without a solid foundation. However, the necessary human and socio-cultural dimensions of development are almost impossible to obtain without the active participation and cooperation of the individuals in society who are, in reality, both the subject and the object of development.
This is not to say that the mass society is incapable of discerning behaviour or of all-round development. The mass media which tend to inhibit critical assessment in their mass audiences can also propagate critical thinking and encourage intelligent discussions within the mass audience. But to be able to do so, they must first of all provide opportunity for the people to develop their individual abilities to the extent that they can become articulately discerning, critically alert and desirous of physically participating in the planning and implementation of actions designed for their own benefit. Unfortunately, the mass media as presently constituted do not provide opportunities for such interactive communication activities or for individually based intelligent input. This is why (Moemeka, 1981) it has been pointed out that if the mass media must be used to successfully aid development activities, they must first of all be changed from being instruments of information and dissemination into being channels of communication and exchange of ideas. A basic step in this direction is making the people free and equal partners in mass media communication events both at the production and at the reception ends of the communication chain.

**Participation - A Key Element in Development:**

A practical example of adherence to this basic step (unfortunately, only as a pilot project) is found in the rural broadcasting activity of Radio 0-Y-0 of the then Western Nigeria Broadcasting Corporation (now The Broadcasting Corporation of Oyo State). The corporation purchased a mobile radio station and used it for rural broadcasting. The mobile station was moving from village to village, at intervals of one week, broadcasting live from each village using local artistes, and involving the community in its programme planning, programme content determination, production and
presentation. The content of the programmes were entirely community-based, and revolved around the welfare and better living conditions of the people - the 'why' and 'how' of their feeding habits, their health behaviour, the sanitary conditions of their environment and their general attitude to life.

In a study (Moemeka, 1987) of the mobile station's activity in the then Western Nigeria, we found evidence to strongly support the preference of communication (exchange of ideas, dialogue and discussion) over information (mere dissemination of facts and figures in a one-way direction) in ensuring effective messages. We divided the villages within the operational area of the mobile station into two distinct groups - those villages from within which the station did broadcast at least two times a year (Broadcast Villages) and those villages from within which the station did not broadcast at all but whose citizens did listen to the programmes (Listener Villages). Our hypothesis was that -

A rural audience, some of whose members participate in the programme activities of a rural radio station that broadcasts from within the community will be more willing to accept the demands for behavioural changes made in the radio programmes than a rural audience from within whose community the rural radio station does not broadcast.

Using a t-test, we wanted to find out if there was any significant difference on participation between the two groups of villages; and if there was, whether that difference did lead to differences on other variables used in the t-test.

The result unequivocally supported the hypothesis. On participation, knowledge acquisition from the programmes, and on behavioural changes in
medical care, sanitation and nutrition, there was very significant difference (p .0000) between the two groups of villages (Table I). There even was a significant difference between the non-active (radiational) participants of the Broadcast Village group and members of the Listener Village group all of whom were non-active (passive/vicarious) participants (Table II). The standardized co-efficient signifying the contribution of participation to positive changes in medical care practices, for example, was .39 at p .0001 (Table III). The support for the hypothesis strongly underscores the importance of interactive communication and equal access to participation in communications if effectiveness is to be achieved in the use of the mass media for development purposes in a mass society.

In one of its public education and exhortation announcements to induce public participation in the nation’s development efforts, Nigeria’s Department of Food, Roads and Rural Infrastructure asked: "Should government and government officials alone make all the decisions about the country’s growth and development, even when you are both the object of and the instrument for development" (Abuja Newsday, April 25th, 1990: 16). Then it answered the question by adding: "Form your own effective CDA (Community Development Association) and through it have an effective voice in the development process, including policy formulation and policy implementation".

This was definitely a recognition of the importance of participation in development efforts - participation which finds expression in freely and effectively contributing to discussions on how best to plan and implement
development projects. This is in line with the demands of the Interactive paradigm, the most comprehensive examination of which as applied to media communication in society is provided by Habermas (1987). In his discussion of the *ideal speech situation*, he assumed equality among participants, with everyone having the same access to a free market-place of ideas. Following the rules of rational discourse, public decisions are based on logical argumentation and the presentation of external evidence, instead of on the play of power. But often, rational discourse is dislodged when access to the market place of ideas is rendered meaningless "if only a subset of issues or facts is made available to the general population, whether by official or tacit censorship" or "if issues, facts or views that deviate from an established view are confined to the fringes of of the media and do not reach the bulk of the population" (Herman, 1985: 135). A free market place of ideas obtains when there is an atmosphere in which there is free expression of opinions and ideas as well as freedom and right to receive opinions and ideas from others. If such freedoms are curtailed or completely overshadowed because of the peculiarities of the mass society, then development efforts would be adversely affected.

In any type of communication, a free market-place of ideas is the true foundation of participation. It ensures that everyone has a hearing and gives his/her views; that the other side of the story is told and heard; that social control is not only reduced to the bearest minimum, but also that political support is given to participative communication, and infact used to elicit open and articulate expression of ideas. A free marketplace of ideas also implies that there is political will to use to the fullest, the views and opinions express by the people. In other words, the type of participation envisaged by free marketplace of ideas is not that for the
purposes of giving the people mere satisfaction for participating in communication events, but for the purposes of being well-educated about the people’s views and opinions with a view to using these in the planning and implementation of development actions.

It is pertinent here to recall Likert’s (1961) four systems of management in organizations because of their relevance to the four distinct perspectives which theorists have used to describe what obtains in a modern society with reference to interactivity. The Exploitative/Authoritative system which thrives on strict direction of workers is what the Critical Theorists say obtains in a mass society; the Benevolent/Authoritative system that allows the workers to express their opinions and views, but still maintains that strict decision-making authority should lie with the leaders of the organisation is equivalent to what the Conflict Theorists have called what happens between the leaders in society and the masses of the people; the Consultative system that allows the leaders to actively seek feedback from the workers and use the feedback to direct the decision making process of the organisation, is what the Functional Theorists support and would want society to adopt; and the Participative system by which the workers are encouraged to participate fully in decision-making, as they do in project implementation and in the achievement of organisational goals is what Development Communication Theorists are calling for in a society that has inevitably become ‘mass’.

If this participative or interactive communication must succeed, then there must be an effective and supportive political will, the establishment of mass communication infrastructure that are accessible to the people and a corps of media managers concerned about how the people would react to specific communication contents or what they would say about or contribute
to communication events, instead of those obsessed with what the elite want. Herein lies the importance of the Democratic-Participant Media theory (McQuail, 1983) which advocates the following:

- That individual citizens and minority groups have rights of access to the media (the Right to Communicate) and rights to be served by the mass media according to their own determination of needs;
- That the organization and content of the media should not be subject to centralised political or state bureaucratic control;
- That the media should exist primarily for their audiences and not for media organizations and professionals or for the clients of the media;
- That groups, organizations and local communities should have their own media of mass communication; and
- That small-scale, interactive and participative media forms are better than large-scale, one-way, professional media.

This theory calls for, not only accessible and available media infrastructure, but also for meaningful and relevant content of mass media messages. For the second demand to obtain, media personnel must identify communities and/or groups with identical demographic, socio-cultural and aspirational characteristics - what Cantor & Cantor (1986) have called "taste segments" of the general audience. This helps to avoid not only "shooting in the dark", but also mass or undifferentiated messages. The best way of communicating (McQuail, 1987) is situation specific, depending on the conditions under which communication takes place.

The environment of mass media communication in almost all developing countries, including Nigeria, is a far cry from the conditions demanded by the democratic-participant media theory. The environment is one that is based on another theory - Development Media - which calls on media organizations and media personnel to join the government-of-the-day in the task of national development, but gives absolute right of control and
direction to the government. It cherishes centralised media establishment as against the localised demanded by the democratic-participant media theory, and it approves of government sanctions of media organisation and media personnel "in the interest of national development".

It is easier to create, reinforce and solidify mass culture and mass society through development media theory than it is through democratic participant media theory. This is because development media theory makes everyone except the elite mere passive participants in the communication environment of the nation. For example, even though Nigeria has about 90 daily and weekly newspapers, 100 weekly magazines, 60 radio and 33 television stations, her rural population is still cut-off from the mainstream of mass media communication. All the media establishments are located in urban centres thus making access for sub-urban and rural communities very difficult if not impossible. Hence Nigerians in such communities hardly ever take part in planning and implementation of media content. The condition is not any better at the reception end. The contents of media messages are heavily elite-oriented and so they have very little or no direct relevance to the sub-urban and rural inhabitants. In addition, the language and the level of presentation are such that the lowly-educated and the illiterate find themselves always 'out-of-place' in the nation's mass media communication events, even though they constitute over 80% of the nation's population. The ultimate result of this elite-enforced media communication situation is either alienation which begets ineffective and/or dysfunctional mass media messages or blind conformity which leads people to seek facts and figures from the mass media, not to help them make some intelligent decisions but to enable them 'fit well into' the status quo - a status quo created and nurtured by the
elite who construct and control mass media content.

The emerging theory - democratic-participant media - enshrines tenets which help avoid the debilitating effects of development media theory. It is based on, not the massification of media messages and contents, but demassification of such messages and contents so that they become situation and community or group specific and directly relevant to individual communities or groups, and help in inducing critical thinking that helps ensure intelligent decisions, as well as in building up the people's self-confidence and sense of self-worth. Democratic-participant media theory recognises that although the mass audience may tend to present a picture of a single block of people without segments and differences, in reality, within that seemingly single block there are segments, each with its own peculiar situation. Unless such segments are identified, their human and socio-cultural components and peculiarities clarified, and unless their members are actively, or at least, radiationally involved in communication activities directed at their development, the principle of mass society with its fertile environment for the massification of mass media audiences, will continue to thrive. Ultimately, mass culture with its strong impact of pacification and stupefication of the people will also continue to thrive, and human and personal development, which are the bedrock of any real development, will continue to be sacrificed for material or physical modernization.
References


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Table I
The difference between the Broadcast Village group and the Listener Village group.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Group</th>
<th>Cases</th>
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<th>S.Dev.</th>
<th>T.Value</th>
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Table II

The difference between non-active (radiational) participants in the Broadcast villages and citizens in Listener villages.

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### Table III

Regression Analysis: Effect on Medical-Care
(Standardized coefficient with Metric coefficient in Parenthesis)

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<th>Independent Variables</th>
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<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participation</td>
<td>.39* (.90)</td>
<td>.25* (.57)</td>
<td>.32* (.74)</td>
<td>.25* (.57)</td>
</tr>
<tr>
<td>Age</td>
<td>-.15+ (-1.09)</td>
<td>.05 (-.34)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wife</td>
<td>.14+ (2.09)</td>
<td>.07 (.99)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Children in cities</td>
<td>-.10 (-.71)</td>
<td>-.10 (-.70)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Status</td>
<td>.13 (1.12)</td>
<td>.15+ (1.29)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td>.25* (.84)</td>
<td>.11 (.38)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Farm (Occupation)</td>
<td>-.04 (-.26)</td>
<td>.03 (.21)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Structural Relevance</td>
<td>.23* (.31)</td>
<td>.21* (.29)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Content Relevance</td>
<td>-.11 (-.13)</td>
<td>-.10 (-.12)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cognitive Effectiveness</td>
<td>.51* (2.83)</td>
<td>.47* (2.60)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>-.00</td>
<td>.03</td>
<td>-2.76</td>
<td>-3.15</td>
</tr>
<tr>
<td>R-squared</td>
<td>.15</td>
<td>.28</td>
<td>.45</td>
<td>.48</td>
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<tr>
<td>N</td>
<td>194</td>
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</tr>
</tbody>
</table>

*P .0001  +P .05

Note: Effect of Active Participation on success of medical care activities is shown in Column (1). The effect of Active Participation controlling for demographic variables (Age, Wife, Children in Cities Social Status, Education and Occupation) is shown in Column (2). The same effect controlling for mediating variables (Structural Relevance, Content Relevance and Cognitive Effectiveness) is shown in Column (3). The effect when all the variables are included in the equation is in Column (4).