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From the Chief Author’s Desk

We see a drastic momentum everywhere in all fields now a day. Which in turns, say a lot to everyone to excel with all possible way. The need of the hour is to pick the right key at the right time with all extras. Citing the computer versions, any automobile models, infrastructures, etc. It is not the result of any preplanning but the implementations of planning.

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Cultures and Social-Dynamics on Stem Cells Research in Spain

María José Miranda Suárez

Abstract-Studies of public understanding of science and technology are distributed not only in surveys, indicators, and quantitative and qualitative analysis, but also in a looser sense, which includes analysis of the understanding of the scientific community, advisory committees or even the media and virtual forums. Depending on the notion of science and technology being dealt with, we may discuss various epistemologies, policies, and processes of communication and public understanding. Thus, the main dynamics of science and technology are presented here and how studies of public understanding of stem cell research can be addressed in terms of them.

Keywords-public understanding, scientific and technological dynamics, stem cells, material agencies

I. INTRODUCTION

Studies of science and technology originate from the Anglo-Saxon world, with the movements of Scientific Literacy and Public Understanding of Science. The first is a movement of American origin which aims to measure the degree of scientific literacy of society, designing surveys in which basic scientific issues on well established facts are addressed. In other words, questions are posed about content, regardless of the complexity of the scientific activity. But as we will see later, science is not only knowledge in the sense of ‘information’ about facts or data; but also procedures, processes, and nature of knowledge based on the topics and techniques applied, as well as the social values expressed therein. The second important movement, fundamentally of British origin, aims to assess the capacity of society to understand science, its applications and its relations with society, therefore its questions are not about scientific content, but are social, political or economic. Thus, this movement calls into question the more traditional semantic component of the notion that scientific culture amounts to no more than the level of scientific knowledge. This begins to highlight a new mode of culture relative to the organizational forms of scientific production, and especially, its interactions, that also begin to form part of the processes of public understanding of science. Work on public understanding of science began to take shape thanks to the joint and parallel development of work on American and European surveys by the research groups of Jon D. Miller in the United States, and John Durant in Britain. Their emphasis on specifying precise scales of analysis in comparable questionnaires aided expansion of this research to Europe and other countries so that by the1990s they had already began to have a significant level of empirical grounding. For several decades periodical surveys have been carried on public interest, perception and opinions about science and technology in general or particular aspects of them. Within the United States, The National Science Board of the National Science Foundation (NSF) prepares the Science and Engineering Indicators report on a biannual basis. With this not only have they continued to carry out surveys on public attitudes towards science and technology since the 1970s, but they also consider promotional strategies and recommendations to incorporate into national policies. In the European experience, the role of the European Commission is important in implementing action frameworks through programmes like the Forecasting and Assessment of Science and Technology (FAST programme). This programme sought to predict and analyze the consequences of the incorporation of new technologies in the Framework Programmes of R+D. Hence, the emergence of specific analytical lines, such as robotics or biotechnology, in Eurobarometers allowed to measure questions of understanding of science at European level in recent times. The specific choice of public understanding of science as the study of opinion and attitudes from the Eurobarometer from 1992 to 2003 is essentially due to three reasons. Firstly, decisions influenced by science increasingly make up a more direct part of our everyday acts, albeit unconsciously. Moreover, for an advanced society to develop and participate in decisions that affect it effectively, it is essential that a minimum scientific culture extends horizontally across it. Finally, in the current society of knowledge, scientific training of citizens is increasingly a requirement of democracy. The first general survey carried out in Europe (Eurobarometer 35.1, 1991) had already started to investigate the attitude of European population on biotechnology, but also on science and technology in general. Since then, they have been incorporated in all successive surveys that have taken place (Eurobarometer 39.1, 46.1, 52.1, 58) without any major significant changes in the questionnaire except for the 1996 Eurobarometer (Eurobarometer 46.1). Following the fifth survey, the Europeans and Biotechnology report was edited in 2002 under the direction of G. Gaskell. Despite demonstrating a general attitude of mistrust in relation to biotechnologies, it shows greater support for biomedicine because of the potential health benefits. In this regard, and following the FAST programme proposals one must distinguish between biotechnology, based on the potential use of genetic modification of organisms, from bacteria to animals, and the area of biomedicine and health, which includes research,
treatment and prevention of disease, healthy lifestyles, etc. This area is the first priority for citizens in the third survey. As regards Spain, the Centre for Sociological Research (CIS) and other agencies such as the BBVA Foundation have promoted studies and surveys on understanding of specific technologies, such as biotechnology, since the 1990’s. Some of are of note as they challenge certain surprising or controversial results of the Eurobaromteres. In the Ibero-American area, although they have been conducting studies of understanding for more than twenty years, it is only recently that they began to conduct standardized surveys on a regular basis. In this sense, the Organization of Ibero-American States (la Organización de Estados Iberoamericanos) and the Network of Indicators on Science and Technology (la Red de Indicadores de Ciencia y Tecnología) have promoted these type of comparative studies, progressively achieving institutional support such as the Spanish Foundation for Science and Technology (FECYT) or Centro REDES of Argentina, among others. These three institutions now have a priority objective, namely, to attain an Iberoamerican standard of indicators of social understanding and scientific culture, which is in the development stage. In Spain, the FECYT has carried out national surveys on public understanding of science and technology biannually since 2002, and as in the Eurobaromteres the topics of biotechnology and biomedicine and health are covered separately. These surveys usually measure three different levels of public relationship with science: degree of interest and information on issues of science and technology, level of scientific knowledge and attitudes towards science and technology. However, in recent years, the studies of public understanding of science have been developed not only through surveys with their respective indicators, quantitative and qualitative analyses, but also distributed in analyses of understanding of the scientific community, advisory committees or even the media and virtual forums. This reflects the kind of notion of science and technology on which they are based. Now, we will address the main models or dynamics of science and technology and how the understanding of stem cell research based on them sheds light in one way or another.

II. CULTURES AND SOCIAL – DYNAMICS OF STEM CELLS RESEARCH

A. Model of Knowledge
In this model, science is the high priestess of knowledge and judges what genuine knowledge is, given that it is that which is accessible to the world, or what amounts to the same thing in this model, reality. It has a tendency to prioritize demarcation criteria of scientific knowledge. It is the vision found in positivism or logical empiricism or also referred to as the received view of science. In this, scientific products are theoretical or observational propositions, likely to form networks amongst themselves. Thus, the actors are scientists, as according to this model they are the only users with a competent command of these proposals as opposed to technicians, teachers, and it goes without saying, civil society. So, they have the moral commitment to prevent fraud and develop science, through mutual scrutiny and critical analysis of scientific community research. Thus, the discussion space consists of seminars, conferences or magazines, among others. According to Callon, there is no unanimity in considering what constitutes the decisive test, since it may be in experiments, as well as predictive capacity or the acceptance of new conventions (Callon, 1995). Traditional scientific policies can be considered as policies of promotion, in which social welfare is understood in terms of economic growth depending primarily on the processes of technological innovation, in other words, the promotion of applied science. This is the so-called old social contract for science, which occurs at a time in which science and technology project an image of excessive enthusiasm in society. One need only recall the ENIAC in 1946, the contraceptive pill in 1955, the first organ transplants in 1950, among others. In this sense, the report of Vannevar Bush, Science, The Endless Frontier is the main reference for this type of policy at the end of World War II. The main engine of social progress is basic science because it ensures the continuity of process in a linear and automatic way. In this type of model of scientific policy, technological innovation is directly supported by scientific knowledge and potential risks are perfectly calculated. The Neoclassical economy would lay the foundations for these types of policies, where funding of basic research depends primarily on public authorities. Accordingly, Federal agencies were founded, such as the National Science Foundation in 1950, which receive a great part of public funding. In fact, the latter have not only been responsible for administering much of U.S. scientific funding, but also for disseminating such policies of promotion at international level through the OECD (López Cerezo, J. A., and Luján, J. L., 2004). Communication processes are outlined in a way similar to the models of cognitive deficit of the first movements of public understanding of science. In these, scientists are the only experts, and so, are those who have the authority to transmit scientific knowledge to the media for its dissemination. Thus, reported knowledge would have an ‘inferior’ epistemological status in these models. The more traditional semantic component of the notion of scientific culture is reduced to the level of scientific knowledge. In that sense, the first indicators of scientific culture used by the American National Science Foundation, the European Union or the Institute of Scientific Policy and Technology of Japan, were indicators such as GDP spent on research or the number of scientists available in each country. Thus, scientific culture depended essentially on the number of scientific and technological resources of a society (Miller, Pardo, Niwa, 1998). In this sense, rather than public understanding, this dynamic gives priority to the sample of indicators such as those presented below.
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The type of agreements or consensuses that they form remain 'internal' or under strictly scientific criteria, but this does not mean eternal. Given the clear demarcation between 'internal' and 'external' aspects, the importance of social organization becomes clear, in this sense. In so much as the Mertonian reward system serves as the stimulus of scientific production. Quantitative analysis of this production such as that carried out by Solla Price becomes fundamental in this model. Thus, the scientific publishing system also has a central, as well as a well delimited role. It promotes the sharing of recognition, and the dissemination of scientific work. Accordingly, such mechanisms are considered fundamental in preserving the autonomy of science, since it highlights the fact that this publication system is formed by scientists. Other social institutions may grant values and uses to scientific theories, or even encourage some over others, but this does not mean that scientific knowledge is not clearly demarcated. Thus, there is more growth in those areas where higher yields are obtained.
Both this and the previous model represent the underlying dynamics of what is often referred to as macrosience or Big Science, where basic science is a key factor in disciplines such as physics, chemistry, biology and mathematics. Moreover, this model represents the preambles of the subsequent proliferation of literature on the change in production in post-industrial societies. In fact, some of these traits can already be detected, as we shall see later. Such developments are fundamentally political and economic. The excessive enthusiasm of science and technology to which we referred in model A, soon began to collapse. There were numerous scandals that took place in Europe in the 1960s: the nuclear accident in Windscale in England, the ban on Thalidomide in Europe, the sinking of nuclear submarines like USS Thresher or USS Scorpion, and so on. Not only could science lead to negative effects, but the market was insufficient to regulate them. Thus, more interventionist policies, requiring new tools of regulation, were developed. The aim was to open new spaces of regulation of technological change that incorporated public control, while still relying on scientific understanding when assessing risk and developing regulation. To do so, a legislative framework was created under which new Government agencies could be formed and support new preventive measures for risk. However, it should not be forgotten that it is also a period in which the drift of basic research in applied science began to be strengthened to foster economic growth. There were several developments that were introduced in these policy models, such as public review of regulations, as well as full access to such documents, which facilitated the possibility of generating mechanisms for citizen participation. In addition, citizens could also take legal action against agencies and industries in case of violation of their rights or public interest. And risk assessment became incorporated within scientific investigation, although it was also normally carried out also by government agencies or financed by them. Thus, what Sheila Jasanoff called ‘regulatory science’ established itself, that is, scientific research that would be of use in developing public policies in health, environment, education, economy, etc. However, perhaps one of the most striking aspects, and the reason we put such policies in this model, is the presence of a technocratic conception of public risk management. Indeed, despite attempts to point out citizen participation in decision-making, we must not ignore the dependence on scientific knowledge that regulation had and how this factor blocked any other alternatives or even the possibility of political debate. So, paradoxically, it was producing a new depoliticization of technological change (Lopez Cerezo, J. A., and Luján, J. L., 2004). The only change that scientific communication models undergo is that they become two-dimensional. They are still linear communication models although they now consider the type of reception they may have among the public. They are also called diffusion or propaganda models and retain the characteristics of communication in a top-down direction, where the scientific context where the information is generated differs greatly from the reception in the public one (Gregory Miller, 1998; Miller, Pardo, Niwa, 1998). As noted in Model A, there is a strong demarcation between scientific and reported knowledge. It probably becomes stronger in this model, since reported knowledge is politically exploited knowledge or a transmitter of ideology, as well as being distorting. Indeed, the first analyses about the type of transmission given to scientific and technological processes in the media begin to develop after the Second World War. However, no published work about it is to be found until Kriehbaum published Science and the Mass Media in 1967. Such initial studies have the demand for greater responsibility in journalism when writing news and scientific reports as a common denominator. In this model aspects relating to economic policy of the media are particularly relevant. In this sense, it is important to consider oscillations between public and commercial values in media companies. Advertising becomes important as a factor, where, for example, there can be no contradiction in the products advertised and the newspaper’s editorial line, for example (Miller, 1998). The parameters of traditionally elaborated scientific culture, as seen in model A, are transferred to civil society in this model. Something like, an individual will only be more cultured the more knowledge they accumulate. In this context, it may be worth emphasising the studies on the existing dispute over nuclear power in Sweden. Before trying to develop a national policy to promote the use of nuclear power in Sweden, the Government funded the organization of a public debate in the 1970s.

IV. SURVEYS OF PUBLIC UNDERSTANDING OF BIOMEDICINE

Next we examine the main results of the Third National Survey on Social Understanding of Science and Technology by FECYT in 2006, in collaboration, in this case, with the CIS. And we relate it to the Eurobarometer Medical and Health Research, A special Eurobarometer public survey published by the European Commission in 2007. In this regard we appreciate the institutional context which frames the public understanding of stem cell research, 2008)

The main objective of the FECYT survey, in line with preceding ones, is to analyse the way in which Spanish society understands Science and Technology as well as the evolution of this understanding over time. To make this longitudinal comparison possible, the survey maintains most of the previous indicators. The Eurobarometer, for its part, took place in a context in which biomedical research is one of the priorities of European research, as can be seen in the programme framework worked out for the period 2007-2013 approved by the European Commission on 6 April 2006. Let us not forget that the increase in investment in this area is always conceived together with the ability to successfully transform the results of research into new products, services and processes, by promoting collaboration between countries. The main objectives of the Eurobarometer have been to measure attitudes of European citizens on collaborative research projects in biomedicine, as well as the European co-funding of them. And at the same time connect it with their level of interest in science and technology in general, and biomedicine in particular. Among the results we find that the topics of interest were: nature and
environment (84%), health and medical research (71%), European and international news (70%), economic and social issues (68%), sports and outdoor activities (66%), science and technology (60%), art and literature (52%), celebrities and entertainment (42%). Analysis of these results by country shows that 62% of the Spanish population is interested in medicine and health research and 50% in science and technology. While approximately ten points lower than the European average, they are much higher figures to those shown in the third national survey of understanding of science and technology of the FECYT, where scientific and technological issues occupy a discreet position on the scale of newsworthy items of the Spanish population. 10% of respondents cite them among their news topics of interest. It is a percentage similar to that aroused by disparate issues such as terrorism or travel topics, but it is much lower than topics that head the table, such as sports (30%), medicine and health (26%) and film and shows (20%). As for the type of sources of information they use, as expected, a large majority of European citizens surveyed indicate that television is the main source of information, namely, 70% of the sample which claims to be interested in biomedical research. Some 39% say they consult newspapers, and even more, some 24%, say that medical and research personnel are a source of information too. In the national survey on understanding television appears as the main means of communication used to address issues of science and technology, while Internet is also beginning to be an increasingly used resource. Still, a critical view is generally reflected as regards the amount of information obtained from the media in general, since it is considered inadequate, both on television (45%), in daily newspapers (47%) and also radio (48%). As for confidence in the quality of information received from these sources, the Eurobarometer shows that overall most citizens trust medical and research staff (53%), although this is not directly related to the research being reported. It also shows a high degree of confidence (47%) in university or research centre staff. In any case, both are followed by specialised journalists (31%) and international institutions (25%). However, when the results are broken down by country, Spain is one of the countries that show least confidence in medical or research personnel (27%).

On observing national survey preferences on key issues around which the work of Spanish researchers needs to be targeted we again find that traditional and utilitarian image of science and technology in general, and biomedicine in particular. Medicine and health clearly stand out among all areas, with 80% of responses. Environment and energy are two other fields considered priorities by a good number of citizens. However, neither aerospace research (barely 1% of replies) nor that in transport (4%) is understood to be a priority. Nor is great importance attached (6%) to research in security and defence, despite the fact that this was an area for which the majority requested an increase in expenditure.

V. CULTURES AND SOCIAL – DYNAMICS OF STEM CELLS: MODEL OF PRAXIS

The increase in the tertiary sector or academic and professional expertise were just some of the indices that characterized what was already beginning to be called the post-industrial society. Science has become one more social practice. In this model science participates in the opening of the world, in the sense that it dilutes any possible hierarchical structuring of itself. Thus, science is not only another cultural or social practice, but it is also in a horizontal dimension, relative to others. The context becomes so important in the production of scientific knowledge that it is also involved in its construction in a direct or intrinsic way. Science is no longer exclusively discovery of the world or worldview. It is carried out and is nothing other than its use. Therefore, knowledge is more than relationships between facts and theories. It implies tacit aspects and therefore, the cultural context and its transmission come to the fore. It is in the U.S. where we find the impetus of pragmatist studies that result in social psychology and symbolic interactionism. Studies that were able to dissolve the central role of knowledge as reason (and therefore logic) into a new plurality of practices. They began to call themselves instrumentalists, developing a functionalist dimension of thought as learning essentially through solving problems. Two main levels of action in scientific praxis are proposed, and we can see them explained in the structural fracture present in social studies of science and technology: a macro dimension and a dimension micro. Therefore, the scientific community extends in this model to a plurality of actors: government agencies, media, philosophers, sociologists, feminist movements, civil society, among others; but also to laboratories, users, instruments, etc. Scientific production is above all contextual and situated. Hence, the ethnomethodology of Lynch, and the cultural anthropology of Hess are effective analyses and, like Knorr Cetina, we can even speak about epistemic cultures. The type of scientific dynamic generated in this model type does not differ from the proposed syntactic model except for the “dethronement” of science. This is no longer the only producer of scientific knowledge. Thus, scientific consensus will be mediated by this plurality of epistemic agents. This means that it can be generated by other types of actors. This model incorporates, as in model D, the main underlying dynamics behind the development of so-called technoscience, which tends to be characterised as a praxiological revolution where there is an increase in private funding in research, a greater intermediation between science and technology, techno-scientific enterprise formation, the emergence of research networks, or a greater plurality of techno-scientific agents, among others. This model proposes the need to consider the social impact of industrial restructuring, where globalisation has become the mediator, taking the place of welfare states or regulatory policies. Such types of approach are incorporated in what would be the second axon in mode 2 of Gibbons, (Nowotny, Scott Gibbons, 2001)
Both the notion of scientific culture and the processes of public understanding of science and technology already incorporate not only issues of content, but also methodological aspects, given the multiple practices to consider in scientific production. In this regard, the variability and flexibility of the source domains to be considered in the scientific publication system are also expanded (Wynne 1991). Scientific communication studies begin to consider the social groups involved in a dispute and their influence on the transmission of scientific news. This is the case of Goodell and Nelkin, who seek to expose the ability of scientists to impose their values in the media, or that of Wilkins and Patterson who try to emphasize the importance of political processes when covering technological risks. In that sense, the work of authors like Grunig, who introduces a model of situational communication, that is, one in which the social contexts in which scientific journalism occurs take centre stage.

The areas of public understanding of science and around the notion of scientific culture are considered as open and social processes of scientific construction. Indicators of understanding begin to address the diversity of roles that civil society experiences as citizens, workers, consumers, among others. Thus, they include discussion groups, interviews or citizens panels (Lewenstein, 1995)

The notion of scientific culture now incorporates communication skills and competence, which brings about a kind of three-dimensional scientific culture outline: cultural, civic and practice. While the civic is the ability to handle scientific concepts, practice requires the incorporation of a functional and contextual dimension to the first. Miller also speaks of three dimensions to consider: "a basic vocabulary of scientific terms and concepts sufficient to read divergent opinions in newspapers, an understanding of the scientific reinvestigation process, and an understanding of the impact of science and technology on individuals and society." "A reasonable command of these three dimensions would show a sufficient level of ability to understand the issues of scientific and technical policy disseminated by the media" (Gregory, Miller, 1998: 106). In fact, the incorporation of the understanding of the social impact of scientific and technological processes led to an advance in the analysis of public understanding as soon as the need to incorporate the social context, according to the country being studied could be shown. (Miller, Pardo, Niwa, 1998).

VI. ANALYSIS OF PRINT MEDIA IN SPAIN

In this instance, we use the analysis of the periodical press to address the numerous actors involved in different stem cell research. In spite of the supposed delicate nature of the Human Genome Project and the Assisted Reproduction Act 1988, there was no kind of public debate about the emergence of these technologies in Spain. In fact, press coverage in the media was neutral and not at all critical. Not only because of the lack of social actors in the biotechnology news, but also because there were no editorials or opinion articles. At the same time, the origin of assisted reproductive technologies was a media interpretation of these technologies in which sexual selection and genetic manipulation were associated concepts. In this regard, assisted reproduction technologies began to be represented as possible eugenic technology by some conservative sectors that rejected their development (Moreno, Luján, Moreno, 1996). The mode of production of biotechnological news did not stop being a linear process during the period 1988-1993. However, this type of knowledge production mode has changed rapidly in recent years. Biotechnological communication began to occur in a context where top priority was given to the various praxis involved in it. Scientific experts began to change their role in the period 1997-2004 and socio–political context began to be considered in the communication of stem cell research. This was something which led to the dissolution of scientific arguments in a social epistemology. Scientific journals were no longer resources of news production and went from being 60 % of the sources in the year 2000, to 25 % in the period 2001 to 2004. The controversy of therapeutic cloning in the years 2003 to 2004 began to be led by the opposition between conservative and religious actors versus the scientific community and left-wing policies. Hence, the latter group introduced the distinction therapeutic cloning / reproductive cloning to empower the first type of cloning. However, both sides of the controversy continue to take a stand between patriarchal dichotomies such as: reason / feeling, objectivity / subjectivity, truth / superstition. This type of discursive framework has been one of the constraints that have limited production of other alternative discourses, such as gender studies. When speaking of therapeutic cloning, fundamentally in the press, the depth of its various applications and technical possibilities are evaded. A procedure that enabled the possible emergence of legal loopholes. The most publically visible contextual values were of a legislative kind and techno-scientific nature. Only occasionally did arguments appear referring to the availability or otherwise of eggs with which to carry out nuclear transfer techniques. Considering eggs as an alternative locus of tension between cloning and stem cell research, we then did another study by collecting a sample of 98 texts from 2006 on the interface between assisted reproduction technologies - stem cells - cloning. This was the period in which the new Assisted Reproduction Law (Ley de Reproducción Asistida) was passed and the draft bill of the Biomedicine Law (Ley de Biomedicina) began to be discussed. The texts collected were from the newspapers El País and El Mundo, the two newspapers with the largest national circulation according to the “Oficina de Justificación de la Difusión”. They were encoded with Nvivo 7 qualitative analysis software, to clarify the dynamics in which eggs appeared in the news of assisted reproduction, stem cells and cloning. Analysis showed, among other things, how embryos are not the only notable biomaterials in controversies related to these technologies and how the analysis of eggs in the press shows another type of rhetoric. There is a significant difference between the representation of eggs in assisted reproduction (33 %), stem cell (22 %) and cloning technologies (11 %). The rest of the texts fluctuated between two different dynamics, with the relationship between stem cells and cloning predominating
more than assisted reproduction and stem cells. The types of actors involved in the news were divided into: scientific community, institutions, civil society, users and politicians. The analysis found how the scientific and political community expressed themselves through speech acts and declarations with which they generate interest in this research, and the users group only appeared in the context of cloning, calling for more funding.

VII. CULTURES AND SOCIAL – DYNAMICS OF STEM CELLS: MODEL OF NETWORKS

Since the interactions and relationships between the practices of various scientific players are the basis of this model, concepts such as the translation of Latour acquire a special significance here. The variety of operations that take place in the processes of scientific and technological construction are collected together through it, and potential translation networks formed in the process. In that sense, Latour introduces concepts such as 'graphic inscriptions' to refer to written marks, and through which it is capable to establish such networks and chains of translation: instruments - brands - diagrams - tables - curves - observational propositions 1 – theoretical observational propositions 2 - theoretical propositions 3 - etc. interact through networks of translations that are shaped and reconfigured in different ways in each context. Such networks are dynamic, open and contextual, which means they sometimes do not extend outside of the laboratory or the scientific community or a determined socio-cultural context, but on other occasions they may do. Hence, their dynamics are open, but above all contextual. In these networks the players are any type of entity, be it a person, a collective, a technical instrument, a proposition or the environmental elements themselves. In that sense, all scientific research depends particularly importantly on the state of the network by which it is framed, the type of translations presented and contextual dynamics it has had, namely its socio-historical courses. Thus, there will be divergent, but also converging translations in the socio-dynamics of these networks. Talk of consensus or dissent is meaningless. There is talk of alignment or dispersion of translations, the discursive aspects of science and technology production, and above all, the visibility of those features hidden in the dominant discourse.

Analysis of the organization is important even from the standpoint of internal administration. Even more so when the limits of networks come prescribed with rules of confidentiality, by possible restrictions exercised by evaluation committees, or by mechanisms to promote the appointment of legitimate spokespersons who directly influence the dynamics of translations. Thus, the dynamics of translation are diverse. We may find entrenchment of some networks, when their translations are consolidated, or what Callon calls irreversibility. It also features dynamics of extension, which are characterized by the plurality of actants involved in them; and dynamics of variety, from which the diversity of disconnected networks should encourage increased translations between them. Diversity is fostered by the diversity of built-in actants, or even the existence of mediators allowing the coexistence of mutually exclusive networks.

In comparison with the traditional approaches of the U.S. National Research Council and the British Royal Society, assessment and risk management processes begin to be set out as hybrid processes. Quantification of the likelihood of fatalities and making decisions on them are interspersed. It is not possible to talk about risk assessment, especially in domains of epistemic uncertainty, without introducing variable values in each of its processes such as risk selection, the very methodology of analysis or even its communication. In that sense, it becomes necessary to consider evaluation processes as open processes, rather than restrict them to the domain of the ideal of a pure and conclusive science. In this way, the hybridisation of regulatory science and risk management is achieved. Thus, contextualization is the guarantor of scientific reliability in these models. In that sense, the plurality of scientific and technological knowledge producers appear integrated. Nowotny et al argue that they are 'peripheral' researchers and their proliferation advocates a greater distribution of what has traditionally been seen as the core of scientific and technological production (Nowotny, Scott Gibbons, 2002). The interrelationships between these new researchers and their role in the contextualization of production, regulation and scientific and technological management take place in 'transaction spaces', or as part of the dimension explained previously, 'translation spaces'. These new spaces emerge in the interrelationships of the various actors and the communicative processes established between them. Thus, a new forum is opened, where the asymmetries in communication between actors tend to be eliminated by the translation networks themselves, which is conducive to the democratisation of decision-making. The boundaries have become borders of exchange.

Hence, the talk of the emergence of a new context of implication rather than a context of application. It speaks of socially and politically robust knowledge that occurs in a new space, sometimes called agora (Nowotny, Scott Gibbons, 2002). Within this there are dialogical contexts of open policies, market exchange, as well as social movements.

In that sense, we may find several models that incorporate these features: post-academic science (Ziman), mode-2 science (Gibbons et al.), Triple-Helix (Etzkowitz, Leydesdorff), academic capitalism (Slaughter and Leslie), post-normal science Ravetz (Funtowicv), science in the Agora (Nowotny et al.), etc. There is no doubt that there are several lines of argument which they share in that sense, some of them critical of neo-liberal market dynamics which are promoted by such changes in production systems. The processes of communication proposed in the first two models were to reflect the idea that the concepts of scientific culture and social responsibility were directly related. The idea was that existing hierarchical and asymmetrical relations between the scientific community and the public had not been broken. In that sense, this model incorporates other types of theories that seek to break that demarcation, as is the case of the culture of agencies (Agential Literacy)
proposed by Karen Barad. This theory argues that "scientific culture becomes a matter of agency culture - to learn how to interact responsibly in the world" (Barad 2000: 237). This theory proposes the analysis of the multiple interactions between the dialectical processes that exist in scientific instruments in a material and discursive sense, according to Barad. But, perhaps the most interesting thing about this proposal is the role played by its own interactions with other practices, other instruments, other disciplines... and that would lead to a transdisciplinary space comprised of numerous agents.

In that sense, the dimension relating to the organizational forms of scientific production, and especially, their interactions becomes part of the concept of scientific culture and the processes of public understanding of science. Thus, the lack of conceptual content does not compromise the concept of scientific culture, if the presence of this culture of interrelations is detected ( Wynne 1991). Talking about mediation in science means talking of a complexity in which co-operation, competition and interconnection of various groups and social factors such as institutions, media organizations, assorted public, etc. intervene. Thus, many of the criticisms raised on these new spaces of scientific communication are dissolved. Sometimes, it is considered that these network models tend to dilute any distinguishing or marked aspect in accordance with the defence of an abstract and amorphous area of interrelations. And in this, information and communication technologies and communication (ICT) have played an important role, by making these new spaces more adaptable. So, in these contexts, knowledge would be reduced to mere information or transmission of codes. Something similar to the idea of nomadic knowledge production and that is the result of an idealised conceptualisation of cyberspace. But certainly one thing is consideration of the way technology is enabling and encouraging a higher transmission of codes, and another that we reduce the processes of communication to that level, thus removing its cognitive translation. Underestimating this dimension is to circumvent the access to resources, tacit tools or own cognitive skills and interrelations that require an infrastructure that supports such dimensions. In a word, overlook the context of both collective and individual appropriation and all that it implies. Thus the defence of an amorphous and interstitial space is supported onlappropriate and all that it implies. Thus the defence of an amorphous and interstitial space is supported only under the assumption of a strong technological determinism that unifies both technical reconfigurations and contexts of appropriation. Hence, another aspect that is introduced into the concept of scientific culture is its significant appropriation (Lopez Cerezo, Luján, 2004).

VIII. MATERIAL AGENCIES IN THE PROCESSES OF PUBLIC UNDERSTANDING

In the actor - network theory, it is possible to set aside anthropocentrism, or what is the same, proceed philosophically, if we do not acknowledge that we are built and identified in processes of (self-) material agencies. The questions we ask ourselves on this occasion are: What is a stem cell? Why do we call it mother? In what sense is it (self-) agency? And if it is, what kind is it? What acts and subjectivities does it assemble? Does it shape identities? Let’s ask ourselves about the agential of a stem cell.

While images have always been part of the construction of scientific knowledge processes, the philosophy of science has not considered them relevant or as elements characteristic of this type of rational knowledge. However, there are post-structuralist currents that hold a different view where the image becomes the text. Without doubt, this is the time of disembodiment in multiple identities and disguises, that are transformed and are convertible in complex networks. Bodies flow, move on and are materialised or crystallised in implants, crops, therapies, etc., where technological development is focused on management, transportation, storage and production of such fragments. One of the changes attributed to the fragmentation of the body in post-modernity, is that it shifts the modern body from the axis. There is a post-humanism, which is really a post-anthropocentrism. And multiple, fluid, dynamic fragments with their niche markets, services and demands begin to proliferate. Cell therapies, foetal treatments, donation of biomaterials, genetic selection are some of them.

The crux of all this, is that rule, difference, denial, contradictions are still performed from institutions, practices and representations which seem apparently devoid of power relations, such as sex and gender, but show the same type of monitoring and objectification trends of “the other” (Lynch, John, 2009).

In this case, any schema representing cellular differentiation processes continues perpetuating the main premise of most theories of evolution and therefore the iconography that Gould analyses, namely the idea of progress based on a teleological directionality: "the straitjacket of linear progress goes beyond iconography to the definition of evolution: the word itself becomes a synonym for progress." (Gould, 1999: 30). Branching schemas impose a vertical hierarchy. Not only a temporal distribution, but relations of power ranging from simple to complex, or primitive to advanced. Hence, the locus dealing in time is associated with a value judgement about its complexity. They also perpetuate the representation of the exile of the mother. The necessary denial of family, of the maternal. Matricide as the step required to be autonomous. Psychological and biologically. The skill required to detach oneself from the maternal phantasmagorical environment. And the crisis posed by the radical acceptance of the loss as a first contingent step of subjectivity (Kristeva, 1982).

In this way a “diasporic space” is configured where identities are positional, unstable and contingent but supported by the requirement for negotiation while reiterating that identity is constructed in and through difference (Ahmed, 1998).

IX. CONCLUSION

The processes of communication and production of scientific and technological knowledge proposed in the first two models reflected the idea that existing hierarchical and asymmetrical relations between the scientific community
and the public had not possibilities of being broken. In that sense, the last models incorporate other types of theories that seek to break that demarcation, and improve social epistemology with its political implications. Through these different kinds of understanding stem cells research—or another kind of scientific and technological processes—we can achieve the complexity of the different epistemologies in which knowledge is produced. Depending on the context, sometimes one of the models will be the dominant and sometimes some of them will be connected and correlated. Returning to the hypothesis posed at the beginning of this study, it is now possible to state that depending on the notion of science and technology being dealt with, we may discuss various contextual epistemologies, policies, and processes of communication.

X. REFERENCES


5) Comisión Europea (2007), Medical and Health Research. A special Eurobarometer public survey.


A Causal Model for Explaining English Language Performance Using Some Psycho-Academic and School Variables at the Junior Secondary Level in Nigeria

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Abstract—This study was designed to develop a causal model involving some psycho-academic and school variables as determinants of JS 3 students’ performance in English Language in Akwa Ibom State, Nigeria. Through the construction of a nine-variable path model, significant pathways were identified that could be used to explain students’ performance in English studies. The most meaningful causal models as well as direct and indirect effects of the psycho-academic and school variables on students’ performances in English were to be established. Three specific objectives and hypotheses were formulated to guide the study. This ex post facto research employed stratified random sampling technique in selecting a total of 853 (407 males and 446 females) from 20 secondary schools in the State. The study made use of two research instruments for data collection, developed by the researchers. These were a 50-item English Studies Achievement Test (ESAT) and a Student Psycho-academic Information Questionnaire (SPAIQ). Data generated from these instruments were analyzed using the path analysis technique, and the findings generated a seventeen variable path model which could be used to explain the effect of some of the psycho-academic and school variables on students’ performance in English Language. Furthermore, school location, school proprietorship, attitude to schooling and attitude towards English Language studies had significant direct effects on performance in English Language. It was recommended that parents and teachers should consciously work on their students’ attitudes to schooling and to the different school subjects as these do directly impact their performance in school.

I. INTRODUCTION

Education has been confirmed as the vehicle for the socio-economic and technological advancement of any people the world over. With this understanding, the Nigerian government has at various times enacted policies aimed at improving the educational lot of the Nigerian child. In order to achieve the broad aims of the Nigerian National Policy on Education, as stated in the Policy document (Federal Republic of Nigeria, 2004), English Language has been classified as one of the core and School system reflects substantially the vital role it plays in contemporary society. Compulsory subjects in both the junior and senior secondary (high) school curricular. The importance accorded this subject in the In a multi-lingual society like Nigeria, the need for a lingua franca cannot be over-emphasized. Thus, for easy and effective communication, both orally and written, English language has been chosen as a common medium of expression. This has also informed the government’s decision to make a compulsory credit pass in this subject a prerequisite for admission into most programmes in tertiary institutions in the country.

Despite the importance attached to this subject, and the role it plays in admissions into tertiary institutions, a reasonable percentage of students in our secondary schools do not measure up to the expected score of a credit pass in their graduating examination. An inspection of the senior secondary school certificate examinations (SSCE) results in English Language from 2001 – 2004 shows a high rate of failure in the subject. The SSCE result in English Language for 2001, 2003 and 2004 showed a failure rate of 67.43%, 52.79% and, 41.82% respectively (Source: West African Examination Council, 2004). These poor outings have made it increasingly difficult for our students to fill their admission quota in the different colleges and universities in Nigeria. This is rather uncomplimentary when one considers the extent of investment made in the educational sub-sector by government, teachers, parents and other stakeholders.

In order to stem the tide of poor performance in this important subject, successive governments, education related agencies in both the public and private sectors have variously made relevant contributions toward the improvement of the teaching and learning of English Language. Efforts in this direction include training and retraining of teachers, improvement of learning environment by building and equipping new classrooms. Despite these concerted efforts, students’ performance is still taking a downward turn. Due to the persistent nature of this problem, educational researchers and even government agencies have tried to unravel the underlying reasons for students’ poor performance in this important subject. This study is one of such efforts.

In recent years, there has been an increasing awareness on the interrelated nature of various variables on humans; thus the need to investigate them collectively and not just looking at individual effects of these variables on the child’s performance. This has necessitated a gradual shift away from single variable studies to studies that investigate the
combined effect of related variables. Hitherto, statistical tools like the student t-test, correlation analysis and chi-square etc were in common use; latter the use of analysis of variance (ANOVA) and multiple regression and path analysis came into focus.

Path analysis is a model-building technique that uses multiple correlation and multiple regression as it statistics. To form a model, path lines are used to link one variable with another to form a network. It is this network that is referred to a path diagram or path model. The strength of these paths is determined by the values of the correlation and regression coefficients from the multiple correlation and regression analysis. This double barrel analytical method with its networking/interactive effect is more advantageous than the simple correlation analysis between single variables. Thus, the use of a comprehensive analytical tool was found to be a better option as this gives a suggestive guide to a possible causal linkage among the variables under study. This research effort, therefore, intends to proffer a possible causal model that could uncover the interactive effects of some psycho-academic and school variables on students’ academic achievement with regard to their performance in English Language at the Junior Secondary School level through the use of path analytic technique.

II. STATEMENT OF THE PROBLEM

There has been a persistent poor performance of students in English Language at both the Junior and Senior Secondary School levels of education. Several studies have been conducted on the effects, relationships or influence of various factors such as personal, psycho-social, academic, teacher and even social factors on such students’ performance. Various and varied results have been the outcome of these research endeavours, yet some gaps still exist in the area of the possible effect of some psycho-academic factors namely (study habits, test anxiety, attitude to schooling, attitude towards English studies and test wiseness) and school variables such as (school proprietorship, school type and school location) on the English Language performance of this same group of students at the Junior Secondary School level. This research intends to develop a causal model that will lend itself to explaining the possible interrelated effects of aforementioned psycho-academic and school variables on Junior Secondary School (JSS) 3 students’ performance in English Language.

III. PURPOSE OF STUDY

The main purpose of this study was to develop a causal model involving some psycho-academic and school variables to explain Junior Secondary 3 students' performance in English Language.

In specific terms, the study was designed to:

1) Estimate the strengths of the causal paths of the nine variables in the 28 hypothesized path model involving some psycho-academic and school variables in explaining JSS 3 students’ academic performance in English Language.

2) Construct the most meaningful causal model involving the nine variables (study habit, test anxiety, attitude to schooling, attitude towards English Language, test wiseness, school location, school type, school proprietorship) and JSS 3 students’ performance in English Language.

3) Identify variables with significant direct effects on the JSS 3 students’ performance in English Language.

IV. STATEMENT OF HYPOTHESES

To provide a guide for the study, the researchers formulated the following hypotheses:

1. The standardized path coefficients of the nine variables in the 28 hypothesized path model involving the psycho-academic and school variables, and JSS 3 students’ academic performance in English Language are not statistically significant.

2. There is no significant, meaningful and parsimonious causal model involving the psycho-academic and school variables for JSS 3 students’ academic performance in English Language.

3. There is no significant direct effect of psycho-academic and school variables on students’ performance in English Language.

V. REVIEW OF RELATED LITERATURE

Studies have been conducted into the effects, relationships or influence of different (student-related, school-related, psychological or psychosocial) variables individually on students’ academic achievement. In recent years, there has been an increasing awareness of the interactive nature of various variables in humans; thus the need to investigate into the composite and just not individual effects of these variables on the child’s performance. This has necessitated a gradual shift away from single variable studies to studies to look into the combined effects of related variables. Lately, the shift has moved gradually towards the use of more sophisticated analytical tool like the path analysis, especially with the extensive use of the computer. Although the use of path analysis is relatively low, there has been an increasing awareness of its advantage. Here is a review of a few studies that employed path analysis to investigate into the effects of different variables on students’ academic achievement.

In Australia, a study on the “prediction of academic achievement from some demographic family background and locus of control variables was conducted by Khayyer and deLacey (no date). Using path analysis as a statistical tool, the model used as grade, sex, family size socioeconomic status, mother’s work, locus of control and language background as independent or exogenous variables while the dependent or endogenous variable was students’ academic achievement. Results of the regression analysis indicated that all the independent variables except family size and mother’s work, had significant contribution in predicting students’ academic performance. A detailed inspection of the result showed that locus of control (0.214), socioeconomic status of family
(0.207), grade (0.178), sex (0.170), and language background (0.148) significantly contributed to the students’ academic performance with the coefficients indicated respectively. Moreso, the R² showed that 22.6% of the variance of students’ academic performance could be explained by these independent variables.

In that same study, sex, socioeconomic status, grade, language background and locus of control had significant direct effects on determination of students’ academic performance, while family size and mother’s work had indirect effects on students’ academic performance. It was observed that significant correlations with other independent variables, for instance, family size and mother’s work, had indirect effects on students’ academic performance due to their significant correlation with socioeconomic status; also mother’s work was found to be significantly associated with language background.

An abstract from another study conducted by Chadha (2005) on causal antecedents of self-concept, locus of control and academic achievement, a path analysis recursive model was proposed to determine to what extent the personality variables account for the relationship between the background variables and academic achievement and the extent to which the relationships between the personality variables and academic achievement are accounted for by the background variables. Based on the data gathered from 307 12th grade students through the use of paper and pencil tests, personality measures and collation of information from school files to measure background and personality variables, and students’ achievement, results of the path analysis carried out on the data indicated that creativity, sex and quality of family relationships accounted for 12.8% and 19.2% of the variance for self-concept and locus of control respectively, while creativity, sex, quality of family relationships, self concept and locus of control accounted for 57.8% of the variance for academic achievement.

A study by Sherry and Jessey (2005) employed path analysis to investigate into the relationship between instructional technology and student achievement. The independent variables were motivation, meta-cognition, learning processes, and students’ achievement was the dependent variable. Results from the analysis showed that motivation on learning process significantly predicted performance of students. The researchers also observed a high and significant relationship ($r = 0.75$) between inquiry learning (a type of learning process) = 0.75 and metacognition between and application of skills (a type of learning process).

It is worthy to note that from the various studies reviewed, there was an interplay of the different independent variables on the dependent variables, therefore the lopsided result from a case of a single variable effect was altered by the effects of the other variables.

VI. METHODOLOGY

This research design adopted in this study was a causal comparative (also known as ex post facto) design. On the basis of this design, the researchers constructed and tested a 28-hypothetical path model for JSS 3 students’ performance in English Language. The population for this study was made up of all the JSS 3 students from both public and private secondary schools in Akwa Ibom State of Nigeria in the year of study. There were a total of 438 secondary schools in the State by then, made up of 240 public and 198 private schools. A total of 20 schools were sampled out, on the basis of the public/private stratification, comprising 13 public schools and 7 privately owned schools, sampled by balloting for each of the groups. From the thirteen (13) public schools, eight (8) were from urban community while the remaining five (5) were in rural areas. From the seven (7) privately owned schools, four (4) were from urban areas while three (3) were located in the rural areas of the State. From each of these 20 schools, 50 students were randomly sampled to make up a study sample of 1000 respondents. Out of the 1000 students, complete and correct data were obtained from 853 students of which, 407 were males and 446 were females, representing a percentage of 47.7% and 52.3% respectively.

The instruments employed by the researchers to gather relevant information for this study were A 50-item English Studies Achievement Test (ESAT) and the Students’ Psycho-academic Information Questionnaire (SPAIQ). The ESAT was developed in accordance with the JSS 3 syllabus. Considering the cognitive level of the students, items included in the instrument were based only on knowledge, comprehension and application levels of Blooms taxonomy of educational objectives. The content areas tested on were comprehension, antonyms, structure, synonyms, spellings and register; and the SPAIQ was the researchers-developed instrument where Part A was to elicit respondents’ demographic information, while Part B consisted of 10 items for each of the five psycho-academic variables of study habit, test anxiety, attitude to schooling, attitude towards English Language and test wise-ness. For each subset, the respondents expressed their level of agreement or otherwise to each statement based on a 4-point Likert type scale of Strongly Agree (SA), Agree (A), Disagree (D) and Strongly Disagree (SD).

To ascertain the face validity of the instruments, the items on the questionnaire were vetted and reviewed by Measurement and Evaluation experts, while secondary school teachers currently teaching English studies vetted the achievement tests items. The instruments were pre-tested using 100 JSS3 students in four secondary schools within the study area. To make the final fifty item on ESAT, items with negative discrimination indices were discarded, while those with low discrimination indices between 0.2 and 0.45 were restructured. The English studies achievement test had a reliability coefficient of 0.92. The reliability of the Students’ Psycho-Academic Information Questionnaire was calculated on the basis of the subsets in the instrument using the Cronbach alpha statistical procedure. The reliability coefficient for each subset is shown in Table 1.
TABLE 1
Results of reliability analyses of research instruments

<table>
<thead>
<tr>
<th>Variables</th>
<th>No. of items</th>
<th>Mean</th>
<th>SD</th>
<th>Cronbach alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test Anxiety</td>
<td>10</td>
<td>17.15</td>
<td>5.03</td>
<td>0.72</td>
</tr>
<tr>
<td>Test Wiseness</td>
<td>10</td>
<td>29.92</td>
<td>2.74</td>
<td>0.59</td>
</tr>
<tr>
<td>Study Habits</td>
<td>10</td>
<td>33.46</td>
<td>0.68</td>
<td>0.87</td>
</tr>
<tr>
<td>Attitude to Schooling</td>
<td>10</td>
<td>32.61</td>
<td>5.08</td>
<td>0.91</td>
</tr>
<tr>
<td>Attitude towards English</td>
<td>10</td>
<td>31.60</td>
<td>4.67</td>
<td>0.77</td>
</tr>
</tbody>
</table>

The researchers with the assistance of English Language teachers in the sampled schools administered the instruments. These teachers were enlisted by the researchers as research assistants for the proper and speedy collection and collation of the relevant data from the respondents. Each instrument was administered within a day in each school. So, data collection in each school lasted for two days. For the demographic data the following are the scoring pattern:

**Sex:**
- Male = 1
- Female = 2

**School Location:**
- Urban = 1
- Rural = 2

**School type:**
- Boys = 1
- Girls = 2
- Mixed = 3

**School Proprietorship:**
- Government owned = 1
- Privately owned = 2

For the English Language achievement test, correctly answered items had a score of 1 while incorrectly answered items were scored 0. For the path analytic aspect of the data processing, the variables used in the study were labeled as shown:

- \( X_1 \) = School location
- \( X_2 \) = School type
- \( X_3 \) = School proprietorship
- \( X_4 \) = Study habit
- \( X_5 \) = Test anxiety
- \( X_6 \) = Attitude to Schooling
- \( X_7 \) = Attitude towards English studies
- \( X_8 \) = Test wisdom
- \( X_9 \) = Performance in English studies

The students involved in the study were assigned numbers from 1 – 853. This was to aid in the proper tracking of individual scores for the different variables.

VII. PRESENTATION OF RESULTS

This study involved a total of 853 respondents out of which 407 representing 47.7% were males and 446 representing 52.3% were females. The demographic information on school location indicates that 409 (47.9%) of the respondents where in urban schools while 444 (52.1%) of the subjects were from schools located in the rural areas. Only 60 (7%) boys came from all-boys’ school while 121 girls representing 14.2% of the whole sample were girls from all-girls’ schools. The remaining 672 (78.8%) of the respondents were drawn from mixed schools. On school proprietorship, 505 (59.2%) were drawn from public schools while 348 (40.8%) of the respondents came from privately owned schools. The psycho-academic variables in the study had mean scores ranging from 17.95 to 32.72 and standard deviations ranging between 3.54 and 5.05. The mean score for the English studies achievement test was 44.10 with a standard deviation of 17.26.

Hypothesis 1

The standardized path coefficients of the nine variables in the hypothesized path model involving the psycho-academic and school variables, and JS 3 students' academic performance are not statistically significant.

To test this hypothesis, path analysis method of data processing was employed to determine the path coefficient of each of the hypothesized paths in the model. The outcome of the analysis is presented in Table 2.
Table 2 shows the different path coefficients for the causal model on students’ English Language performance. The beta weights of the hypothesized paths ranged from 0.001 for P92 to 0.517 for P76. On testing the significance of the path coefficients in the hypothesized recursive model, out of twenty-eight (28) paths hypothesized, thirteen (13) paths were retained because their beta weights were statistically significant. On the basis of this analysis, it implies that the hypothesized model through which the predictor variables determined students’ performance in English studies is not statistically significant for all the 28 paths. Therefore the null hypothesis is rejected for 13 out of the 28 possible pathways.

**Hypothesis2**

There is no significant, meaningful and parsimonious causal model involving the psycho-academic and school variables for JSS 3 students’ academic performance in English Language. The data gathered from the respondents were analyzed to obtain the original correlation coefficients of the variables in the study. Also, the path coefficient for each hypothesized pathway in the recursive model was determined.
Of the 28 hypothesized paths, thirteen (13) paths were retained because their beta weights were statistically significant, while additional four pathways were retained for their meaningfulness. Pedhazur (1982) proposed that paths whose beta weights are up to 0.05 and above could be considered strong enough to be retained in a meaningful model even if they are not statistically significant. Therefore, on the basis of meaningfulness, the following paths; P53, P61, P72 and P81, although not statistically significant, were not deleted. In all, 17 pathways were retained from the original 28 in the hypothesized model. Fig. 1 shows the parsimonious causal model, with the 17 surviving paths for students’ performance on English Language. On a closer inspection of Fig. 1, the numbers found on each pathway represent the original correlation coefficients, while the numbers in bracket represent the beta weight of each pathway. The directions of the causal paths of the variables in the model are the pathways which are significant and meaningful, as well as have a link with the dependent (criterion) variable.

Hypothesis 3
There is no significant direct effect of psycho-academic and school variables on students’ performance in English Language.
To test this hypothesis, the data analysis results of Table 2 (earlier presented) and Table 3 were used.
Table 3

Variables with direct effects on students’ English Language performance

<table>
<thead>
<tr>
<th>VARIABLE</th>
<th>Beta Weight</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>School location</td>
<td>-0.154</td>
<td>S*</td>
</tr>
<tr>
<td>School type</td>
<td>-0.001</td>
<td>NS</td>
</tr>
<tr>
<td>School proprietorship</td>
<td>0.515</td>
<td>S</td>
</tr>
<tr>
<td>Study habit</td>
<td>0.039</td>
<td>NS</td>
</tr>
<tr>
<td>Test anxiety</td>
<td>0.015</td>
<td>NS</td>
</tr>
<tr>
<td>Attitude to schooling</td>
<td>0.124</td>
<td>S</td>
</tr>
<tr>
<td>Attitude toward English studies</td>
<td>0.131</td>
<td>S</td>
</tr>
<tr>
<td>Test wiseness</td>
<td>0.035</td>
<td>NS</td>
</tr>
</tbody>
</table>

*S means Significant, and NS means Not Significant

Table 2 shows the nature of the effect of each path on the criterion variable. Out of the 28 pathways outlined on Table 2, nine pathways (P43, P51, P63, P64, P65, P71, P73, P76, and P84) were found to have indirect but significant effects on the dependent variable, while the other four paths (P91, P93, P96, and P97) were found to have direct and significant effects. Table 3 shows that four out of the eight direct paths (criterion /independent) variables had significant direct effects on students’ English Language performance. These variables are: school location, school proprietorship, attitude to schooling and attitude towards English Language. It is worthy to note that school proprietorship has the most direct causal effect on students’ academic performance in English Language. On the basis of this therefore, the null hypothesis of no significant direct effect of school and psycho-academic variables on students’ performance in English Language was rejected for school location, school proprietorship, attitude to schooling and attitude towards English Language, while the null hypothesis was retained for school type, study habit, test anxiety and test wise-ness.

VIII. DISCUSSION OF FINDINGS

Statistically, the magnitude of the beta weights is considered to be directly proportional to the strength or the degree of effect of the independent variable on the dependent variable. From Tables 2 and 3, it could be seen that four variables (school location, school proprietorship, attitude to schooling and attitude to English Language) had direct significant causal effects on students’ performance in English studies with school proprietorship (X3) having the most causal effect with a beta weight of 0.515. This result goes in concert with previous research works by Figlio and Store (1997) and Kim and Placier (2004). Furthermore, school proprietorship still had some significant but indirect effect on performance due to its significant correlation with test anxiety and attitude towards English Language. The variable with the next highest direct causal effect on students’ performance in English Language was school location with a beta weight of 0.154. Apart from its direct causal effect on students’ performance on English Language, school location also pulled over its strong correlation effects on test anxiety and attitude towards the subject to have a combined indirect effect on students’ academic performance in English Language.

Attitude towards English Language as the third variable on the continuum was directly followed by attitude to schooling. The attitude variables also harnessed the cumulative/inter-related effects of study habits and test anxiety to pull over a significant indirect effect along with their direct effects on students’ performance in English Language. The significant effects of these attitude variables reaffirm the importance of attitude in the child’s academic pursuit as confirmed by previous works of Maduabum (1993) and Thompson (2001).

IX. CONCLUSION

The findings of this study have indicated that a meaningful causal model with 17 pathways involving the nine variables can be used to explain students’ performance in English Language. Four variables (school location, school proprietorship and attitude to schooling and attitude towards English Language) had direct significant causal effects on students’ performance in the subject under study.

X. RECOMMENDATIONS

Based on the findings of this study, the researchers recommend that government, teachers, parents and all stakeholders in the educational sector should:

1. Put the necessary mechanism in place to improve the teaching/learning conditions in public and rural
schools to enable students in these schools compete favourably with their counterparts in private schools.

2. Consciously and deliberately work on their students’ attitudes towards schooling and the different school subjects as these do directly impact their performance in the school subjects.

XI. REFERENCES


Eco-Tourism as a Viable Option for Wildlife Conservation: Need for Policy Initiative in Rajaji National Park, North-West India

Ritesh Joshi

Abstract—The concept of eco-tourism in protected areas and their implications for the conservation of flora and fauna are of global significance. In north-west India, as most of the protected areas are surrounded by number of villages, therefore, the involvement of local communities in nature’s conservation is now-a-days widely acknowledged. Uttarakhand Himalaya in recent times harbours a good increase in eco-tourism specially in protected areas (Biosphere Reserves, National Parks and Wildlife Sanctuaries) besides, efforts done by state government in building ‘tourism state’ have promoted the tourism industry in general. This study aims at exploring the potential of eco-tourism in Rajaji National Park and the local people’s perceptions towards the local tourism, conservation of wildlife and substitutes for their livelihood. Additionally, study provides an out sketch of potential sites already developed or can be developed for increasing options for enhancing eco-tourism besides, providing information about various tools, which can attract the tourists from various disciplines. Many historical evidences are currently hidden inside the Rajaji National Park, which includes presence of antiquities at some places, tales of rehabilitated villages and efforts done by Britishers during early 20th century, should be explored and documented. Besides, jeep safari, elephant safari, if continued and bird watching are another key features present within the park.

Famous temples of goddess Mansadevi, Chandidevi and Suveshwaridevi are also situated in this forest stretch and currently Gajjar rehabilitation programme have had a prime impact on wildlife conservation, which can be involved in eco-tourism coordination. Additionally, study has provided an outline for upliftment of tourism in adjoining protected areas and the management measures i.e. how to minimize the man – animal conflict with community participation and perceptions. Study suggested that the government should keep on emphasizing the wildlife conservation by taking into account the improvement of local people’s livelihood. This study provides an insight into understanding the eco-tourism potential in the Rajaji National Park and how they relate to wildlife conservation and man – animal conflict minimization. All of these findings may have wider implications for developing predictive models of man – animal interactions and also establishes a basis for decision-making in protected area management and in policy making specially for conflict-full protected areas.

Keywords—Eco-tourism, protected area, Rajaji National Park, man–animal conflict, community participation, wildlife conservation.

I. INTRODUCTION

Indian Himalaya with a rich biological diversity and tourism potential, categorizing under international tourism hotspot. On one hand religious places, mountaineering and expedition has raised the number of foreign and national tourists and on the other hand various national parks and wildlife sanctuaries has boosted up the tourism industry. In Uttarakhand, world famous Corbett and Rajaji National Parks has strengthened the tourism potential in lesser-Himalayan belt. The protected area network in the Himalayan region comprises three biosphere reserves, 18 national arks and 71 wildlife sanctuaries occupying 9.2% area of Indian Himalaya. It is now widely acknowledged that the integrity of protected areas can not be sustained without taking into account the views and needs of the people living adjacent to that area [1, 2]. Unless these people recognize the importance of protected areas and take a genuine interest in its conservation, it is likely that illegal activities such as poaching and logging will occur [3].

Rajaji National Park (RNP) is one of India’s major destinations for nature-based tourism, with rich floral and faunal diversity. Presence of Asian elephant (Elephas maximus) is a prime feature, which attracts the tourists to stay connect with this area. Besides, this area is a witness to huge man – elephant conflict as most of the villages are situated adjoining to the park area and man – elephant encounter rate is also very high as rural communities are dependent upon forest resources like fuelwood and fodder. But communication gap between locals and park managers and non-involvement of local communities have created a big problem as far conservation of wildlife is concerned. The Shivalik foothills (lesser Himalayan zone) are one of the world’s most spectacular landscapes, encompassing the tall grasslands and the Shorea robusta (Sal) forests. From tourism point of view RNP appears to be India’s one of the most successful national park and increasing rate of tourists has helped to boost the infrastructure of the park. This landscape is having huge potential for eco-tourism activities and if some other potential ranges may be included in respect to enhance the tourist’s flow domestic and foreign both. Protected area tourism depends on maintaining a high quality environment and cultural conditions within the area and this is essential for sustaining the economic and quality of life benefits brought by tourism besides, planning should occur within, and acknowledge, the regional context of a particular protected area [4]. This study aims at exploring the potential of eco-tourism in Rajaji National Park and the
local people’s perceptions towards the local tourism, conservation of wildlife and substitutes for their livelihood. Data was collected using a questionnaire survey in the villages adjoining the park and through documentation of tour operator’s and jeep driver’s perceptions. Besides, favourable views of tourists both from domestic and foreign were also incorporated. Villages were randomly selected and were interviewed about the conservation of the park, its resource exploitation and the local people’s perception towards betterment of their livelihood.

II. HISTORY OF RAJAJI NATIONAL PARK

Rajaji National Park [29015’ to 30031’ North Latitude, 77052’ to 78022’ East Longitude] is spread over an area of 820.42 Km2 in and around the Shivalik foothills, which lies in the lesser Himalayas and the upper Gangetic plains (Fig. 1). RNP was notified in 1983 by amalgamating three erstwhile wildlife sanctuaries namely, Rajaji, Chilla and Motichur on the name of first Governor General of India and famous freedom fighter Late Shri C. Rajgopalachari, popularly known as Rajaji. Spread across Hardwar, Dehradun and Pauri districts of Uttarakhand state, RNP has been designated as a reserved area for the “Project Elephant” by the Ministry of Environment and Forests, Government of India with the sole aim of maintaining the viable population of Asian elephants in their natural habitat. The Shivalik foothills offer the most prominent geomorphic features of this tract. The river Ganges has cut across these hills at Hardwar. The Chilla forest area of the RNP lies in the east of the river Ganges and is attached by the Garhwal Forest Division. The altitude lies between 302 and 1000 meter above sea level.

RNP is the second largest protected area of the Uttarakhand state. Park is a magnificent eco-system nestled in the Shivalik ranges and the beginning of the vast Indo-Gangetic plains, thus representing vegetation of several distinct zones and forest types like riverine, broad-leaf, mixed forest, chirpine forest, scrub land and grassy pasture lands. It possesses as many as 25 species of mammals and 315 avifauna species. Besides, park also comprises of numerous Flora and Fauna

<table>
<thead>
<tr>
<th>Status of Flora and Fauna in the RNP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trees : 128</td>
</tr>
<tr>
<td>Shrubs &amp; herbs : 63</td>
</tr>
<tr>
<td>Climbers : 33</td>
</tr>
<tr>
<td>Grass : 38</td>
</tr>
<tr>
<td>Mammals : 25</td>
</tr>
<tr>
<td>Reptiles : 08</td>
</tr>
<tr>
<td>Amphibians : 06</td>
</tr>
<tr>
<td>Fishes : 09</td>
</tr>
<tr>
<td>Birds : 315</td>
</tr>
</tbody>
</table>

Source: Management Plan, Rajaji National Park

III. ECO-TOURISM POTENTIAL IN RAJAJI NATIONAL PARK AND WILDLIFE CONSERVATION

Every year RNP is opened for tourists from 15th of November to 15th of June and since last six years only three forest tracks remained open for tourists, one at Chilla and another at Motichur and Ramgarh. However, some of the areas inside the RNP have number of tracks, which have huge potential for eco-tourism (Table 1, Fig. 2&3). Presence of mega-fauna like tiger, leopard and elephants further ensures the feasibility of area for tourism. As most of the sites of RNP have typical diversity of species as per geographical locations (variations in landscape, vegetation and fauna), therefore, some sites can be selected and diverted for eco-tourism purpose with controlled activities (Table 2, Fig. 4 A,B,C,D&E).  Currently Chilla forest is only the central attraction for tourists and about 90% of the tourists visit annually to Chilla forest only to enjoy wildlife safari, whereas only few tourists takes interest to move across the Motichur forest. One of the main reason behind this is very short track remained open for tourists and improper information about the tourism at Motichur forest. Besides, the fact that tiger sighting is only possible at Chilla forest. Elephant is one of the key attraction for tourists and during the period when park remained open for tourists, elephants sighting is more common and just after that at the

This protected habitat in India’s lesser Himalayan region falls under sub tropical moist deciduous forest type with extensive stands of Shorea robusta (Sal), Mallotus phillipinensis (Rohini), Acacia catechu (Khair), Adina cordifolia (Haldu), Terminalia bellirica (Bahera), Ficus bengalensis (Bar) and Dalbergia sissoo (Shisham) in its premise besides several other important fodder plant species. This entire belt is natural home of Asian elephants (Elephas maximus) besides many other wild animals like Panthera tigris (tiger), Panthera pardus (leopard), Melursus ursinus (Sloth bear), Hyaena hyaena (Hyaena), Muntiacus muntjak (Barking deer), Nemorhaedus goral (Goral), Axis axis (Spotted deer), Cervus unicolor (Sambar), Sus scrofa (Wild boar) and Ophiophagus hannah (King cobra). Additionally, this protected area is the western-most limit for distribution of tiger, elephant and king cobra.

Fig.1. Map of the Rajaji National Park

This entire belt is natural home of Asian elephants (Elephas maximus) besides many other wild animals like Panthera tigris (tiger), Panthera pardus (leopard), Melursus ursinus (Sloth bear), Hyaena hyaena (Hyaena), Muntiacus muntjak (Barking deer), Nemorhaedus goral (Goral), Axis axis (Spotted deer), Cervus unicolor (Sambar), Sus scrofa (Wild boar) and Ophiophagus hannah (King cobra). Additionally, this protected area is the western-most limit for distribution of tiger, elephant and king cobra.

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onset of monsoon elephants starts migration towards higher elevations.

A. Religious Places within the Protected Area

Religious places like Goddess Mansa devi, Chandi devi, Sureshwar devi and Bilkeshwar temples are situated in forest areas. The visiting devotees and workers of the above-mentioned temples hinder elephant’s movement. Several times it was also seen that many people enter the prohibited areas of the park and indulge in nefarious activities. Sometimes they were reported to play cards, roam here and there, burst crackers and throw stones to shoo away the elephants or other wild animals. There are many instances when religious events on large scale are organised. Hoards of visitors disturb elephants that come to drink water in the after noon hours. As during last decades the general economic condition of people has bettered, this has led to increase in the purchase power, social interactions, tourists and religious activities of the people at all levels [5].

More than 6-7 lacs people visit Mansa devi temple every year. In other temple more than 50,000 people visit annually. The crowd is seen especially on the occasion of Shivratri and Sawan Purnima fairs. As per news paper reports more than forty lakh people visited Hardwar area during Sawan Purnima and Kanwar Mela and in 2008, which happens to fall in the months of July and August. Many other religious places are also situated within the park area and it can be easily inferred from present investigation that frequent movement of elephant was hindered by presence of local as well as outside people. During the present investigation it was also observed that in a few places elephant’s time budget has changed causing irregularity in their natural activities.

B. Historical Places

Many places of historical interest are present inside the park area like presence of memorial of a female elephant (Rampyari) at Kansrao, which was constructed during 1922, presence of antiquities at Gohri forest (Amla shroath), historical tale of Sonar Kothi hilltop and the history of various villages, which were once situated inside the park and the historical wells, which were constructed before 1877 (Fig. 4 F&G). All of these should have to be explored and publicized, which may be helpful in conservation. As far antiquities are concerned, there is an urgent need for conservation as some of them are slowly obliterated and this aspect should be taken seriously, so that we can conserve our natural heritage. Besides, proper documentation of such sites have also to be ensured and included in management plan, which could be helpful in knowing the history of the park with importance of our cultural heritage and diversity. The natural and cultural environment within the protected area should form the basis for all other uses and values affecting the park and its management and these fundamental assets must not be put at risk [4].

C. Elephant Safari

Despite jungle tour on jeep as major, wildlife safari on elephant is one of the key attraction among tourists (specially international tourists) (Fig. 4 F&I). In Chilla zone before 2007 elephant safari was conducted on two elephants named Arundhati (she died in October 2007) and Raja (an 18 year old tusker) but after the death of Arundhati elephant safari was entirely discontinued as Raja was observed to be aggressive sometimes with the increase in age. During 2007 (November) – 2008 (June) and 2008 (November) – 2009 (June), tourists could not enjoy the elephant safari and many of them diverted towards Corbett National Park as a number of elephants are there and are managed by forest department and some tour operators / managers. Keeping the view, park officials brought three female elephants from Delhi Zoo Authority (named Radha, Rangili and Mamta), but all of them are below the age of 20 years and very unfit for safari as they are first time experiencing the jungle life. Training is ongoing to educate them for safari and a male elephant (Yogi, aged 08 years) is also under training but it will take time to prepare them completely for tourism activities. It can be concluded that elephant safari have a huge potential to attract the tourists and in generating the revenue.

D. Bird Watching

RNP has huge potential for bird-watchers as number of migratory birds arrives inside the park every year specially from October to March. Available literature estimated that of the species, which breeds in Europe and northern part of Asia, about 40 percent are migrants. Some bird species from higher elevation (greater than 2500 meters) also visit here during winter as part of their migration. Most of the birds arrives from Europe, Russia, south-east China, Northern part of America and some other countries having extreme cold climatic conditions during winter (polar regions / north polar regions). Besides, several birds also arrive and stay here from late October to March from higher Himalayan regions of country (Jammu & Kashmir, Himachal Pradesh and high altitude areas of Uttarakhand state). During the last one decade the large flocks of migratory is continue to decrease and in last two years small flocks were observed in this area. It may be due to climatic change scenario or any other factor is influencing their migration; need to be studied and documented on annual basis.

Mystery leucocephale (Painted Stork), Cicinia nigra (Black Stork), Tadorna ferruginea (Ruddy Shelduck), Anas plathyrynchos (Mallard), Netta rufina (Red Crested Poachard), Larus argentatus (Herring Gull), Muscicapa strophianta (Orange Gorgetted Flycatcher), Gyps himalayensis (Himalayan Griffon Vulture), Ceryle lugubris (Himalayan Pied Kingfisher), Anhinge rufe (Darter), Tringa glareola (Wood Sandpiper), Zootthare daune (Golden Mountain Thrush) and Motacilla flave (Yellow Wagtail) are some common migrant birds seen inside the RNP area. River Ganges is flowing through the park area and several islands are situated in between it, and therefore, favourable environment attracts number of birds to stay within. In RNP, Dudhia, Jhabargarh and Gohri forest are supposed to be best
places for observing bird in natural environment besides; riparian corridors inside the park are other favourable habitats for birds, where their different behaviours can be observed proficiently specially during dawn and late evening hours. Because RNP is having typical topography spread from 250 – 1100 m asl, therefore, altitude-wide distribution of migratory birds is another important feature, which attracts the bird-watchers to stay connect with this protected area. Several islands situated in between river Ganges and few of its tributaries are the prime habitat for most of the migratory birds and their large flocks can be observed specially during late winters.

E. Gujjar Rehabilitation Programme

In view of the provision of Wildlife (Protection) Act, 1972 and after a long strenuous effort done by government Gujjars are resettled outside from the RNP area and they are relocated to two rehabilitation sites namely Gaindikhatta and Pathri and still this programme is ongoing in few of the forests. Generally all of the Gujjar deras were mostly situated near to the water sources inside the forest area. Besides, they are responsible for lopping of many important fodder plant species like Ficus bengalensis, Ficus religiosa, Ficus rumphii, Emblica officinalis, Bridelia retusa, Anogeissus latifolia, Aegle marmelos, Dendrocalamus strictus, Bauhinia variegata, Grewia oppositifolia Lagerstroemia parviflora, Ooegenia oogenensis, Garuga pinnata, Schleichera oleosa, and Lannea coromendelica. All of these reasons have restricted the wildlife to some extent to move frequently within their home range. One important point, which was observed during the study period is that animals are currently utilizing all of the internal corridors, which passes through the abandoned deras of Gujjars. Besides, wild animals are currently utilizing all of the available waterholes to fulfill their routine requirements through out the day. Regeneration potential of forest has got strengthen just after the relocation of Gujjars as lopping and grazing by their cattle's was completely stopped after this programme.

As per the observations of our previous surveys (before the resettlement of Gujjars) it was observed that the Gujjars children used to make loud noise during day time while playing nearer to their deras. Besides, they also kept their surroundings cleared from trees or shrubs for better visibility of wild animals. Sometimes it was also reported that if elephant came nearer to their deras they used to burn the fire woods and screamed to deter the animal. Gujjars generally used all of the rough routes present inside the park for their entire day activities and few routes among them are the internal corridors for elephants to cross the forest beats in which elephant's had faced difficulties to pass on during the day hours. Their presence throughout the day brought in outsider on foot, by bicycle and motorcycle (where rough route is available) for various transactions, leading to enormous disturbance in the wildlife habitat throughout the year. A noticeable effect on the forest was seen just after the relocation programme.

The major changes primarily comprises of enhancement of wilderness in those places, which were used by Gujjar as their deras. It was inferred from the results of the study that their abandoned deras are presently replaced by huge variety of vegetation like Saccharum spontaneum, Saccharum munja, Holarrhena antidysenterica, Trewia nudiflora, Murraya spp., Cynodon dactylon, Syzygium cumini etc. Besides, the water holes are presently completely recharged with natural water and are being used by wildlife. Before the commencement of Gujjar rehabilitation programme elephants must scarify the feeding grounds in order to feed on the short grasses due to domestic buffaloes being grazed and looping of trees by Gujjars besides, during the day time wild animals are unable to drink water as most of the natural water sources are present near to their shelters [6].

This drastic favourable change in Rajaji’s ecosystem need to be exposed and can be used as a model demonstration site for capacity building of wildlife professionals, locals, NGOs, stakeholders and officials staff too. In connection to this regular monitoring of areas, where abandoned shelters are present is highly required so that the current status of habitats (flora and fauna) could be known. On the other hand Gujjar rehabilitation site has to be monitored properly time to time keeping their livelihood requirements point of view and should be documented respectively.

IV. STATUS OF MAN – ANIMAL CONFLICT

After establishment of the RNP in 1983, all interferences of local villagers were banned besides, restriction on many traditional rights have created a huge problem regarding to their livelihood. In RNP elephants are prime cause of conflicts as elephants raid crops during night and still there is not a single successful strategy with forest officials, which can control this phenomenon. The factors that contribute to the killing of humans by elephants are the presence of people into elephant’s habitat to collect firewood and fodder, conflict over water and cultivation of palatable crops near the forest boundary. In between years 1986 to 2008, elephants have killed approximately 70 persons and injured 43 persons in and around the Rajaji National Park area. On the other hand from 1987 to 2004, more than 134 elephants succumbed in the wild to various reasons (train accident, poaching, electrocution, fallen through hillock, disease, bull fight and natural). In RNP, still leopard attack on livestock is not the major problem as far as conflict is concerned. Besides, till today no incident has occurred regarding to tiger attack on livestock outside the park area whereas, sometimes tiger attacks on cattle of Gujjars (which are living in Haridwar forest division adjoining to Chilla area)

- Elephants must scarify the feeding grounds in order to feed on the short grasses due to domestic buffaloes being grazed and looping of trees by Gujjars besides, during the day time wild animals are unable to drink water as most of the natural water sources are present near to their shelters. This drastic favourable change in Rajaji’s ecosystem need to be exposed and can be used as a model demonstration site for capacity building of wildlife professionals, locals, NGOs, stakeholders and officials staff too. In connection to this regular monitoring of areas, where abandoned shelters are present is highly required so that the current status of habitats (flora and fauna) could be known. On the other hand Gujjar rehabilitation site has to be monitored properly time to time keeping their livelihood requirements point of view and should be documented respectively.

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was observed when their movements were inside the park area.
Crop depredation by wild animals (blue bull, wild boar, monkey, elephants, spotted deer, sambar etc.) was another major conflict observed in this area. Besides, delay in compensation, big communication gap and restriction of local people to collect fuelwood and fodder are another factor, which has enhanced the conflict among park managers and local people. It is suggested that meetings should be organized properly in each village on regular basis, so that their views and perceptions can be achieved and their indigenous knowledge could be implement in preparation of management / action plan. Currently non involvement of local villagers at all levels is acting as a barrier in forest management practices and conservation. Villagers living on the fringes of the national park area entirely dependent upon local forest resources and keeping this in mind, there is an urgent need for activities that provide alternative livelihood opportunities for locals, promote biological diversity conservation and simultaneously address the combined problems of conservation efforts.

V. APPROACHES FOR PROMOTING COMMUNITY-BASED ECO-TOURISM

Eco-tourism requires participation and cooperation among various stakeholders. An effective and appropriate management plan for eco-tourism in protected areas requires an understanding and appreciations of all stakeholder groups. Local community participation is another major factor, which is supposed to be a central component of sustainable eco-tourism. Looking into the current scenario of eco-tourism in RNP following recommendations has been proposed.

1. Involvement of various stakeholders (local communities, park managers, tourists – national and international, hotel owners, travel and tour operators, guide, NGOs, research institutions, education / university departments, media and tourism department) is highly required during policy making or during structuring any management plan for park or for local people (like construction of electric fencing or wall on the outskirts of villages).
2. Training should be provided to tour operators time to time (jeep owners) regarding to risk factors and safety measures.
3. Forest department rest houses may be provided to tourists easily at different locations of the park, if required. It may be ensure that all the required basic facilities should be given to tourists during their stay with park.
4. A basic training about wildlife conservation should be given to tourists during their visit inside the forest and for this 2 to 3 instructors should be kept by park authorities. Sometimes, it was also observed that some tourists (Indian & Foreigner) are unaware of timing of wildlife / bird sighting and that could be one of the disadvantages and for resolving this all the tourists should be instructed by the authorities.
5. Trained guide should be deputed with each and every vehicle so that each tourist can enjoy the wilderness and can know more about the geographical conditions, wildlife and vegetation components. It was observed during our talks with tourists that they want to know in details about various components of the park (flora, fauna, avian diversity and wildlife distribution) but due to lacking of resource persons they can’t receive such information. Besides, training should be provided time to time to guides. At the time of appointments of guides preferences should be given to locals or the person from nearby village and with the consultation of village community and village pradhan (head).
6. Sometimes it was also observed that some tourists stay for longer while watching the elephants in jungle, which could be dangerous and for that guide should be responsible to controlled tourism. It may also be ensured that tourist complete whole of the track within the proper / given time (maximum 03 hours).
7. Some important historical places like presence of gravestone of Rampyari (an female elephant) at Kansrao forest, presence of evidences of abandoned shelters of Gujjars and impact of Gujjar rehabilitation programme, historical records of presence of various villages, historical wells, watch towers etc. should be explored and communicated to tourists (providing information about the incident). It should be helpful in documenting the historical database of the park – our natural heritage, which is important too.
8. Safari charges / rates should be fixed by park authorities with consultation of jeep owners and should be monitored properly and if possible rates should be displayed on notice board, so that tourists can know all with full transparency. In this process tour managers have to assist the park managers, which will be beneficial for them also.
9. All the basic primary facilities regarding to hospital service should be organized near to tourist zones so that at the time of emergency primary treatment can be given to tourists.
10. Currently only one canteen is running at Chilla entry gate, and at peak tourist season it alone can not provide better hospitality, therefore, it is recommended that at least two canteen should be maintained, which can accommodate and facilitate tourists properly at reliable government approved rates.
11. A small document, which consists knowledge of local region, flora and fauna of the park, special features, best season, accommodation, about area and basic information about park is highly required, which was several times demanded by visitors.
VI. PRIORITY INTERVENTIONS FOR PROMOTING ECO-TOURISM

1. Still no any policy is present, which confirm the tourist’s tracks and open areas for tourism, therefore, appropriate conservation - favour policy is required to ensure the controlled tourism activities.

2. Provide information and resource network for visitors, tour operators, park managers, planners, educators, GOs, NGOs etc. about different issues of eco-tourism.

3. Codes of conduct must be implemented and properly monitored.

4. All the stakeholders and concerned people must be involved in policy making and the planning need to be fully community-based and transparent.

5. As currently park officials are facing huge conflict with local villagers, and for resolving that community participation is highly required so that direct benefits will be shared with them.

6. To undertake capacity building work with local communities in order to facilitate their active participation at all levels of the eco-tourism activities. Suggestions of various stakeholders and subject experts should be taken for that.

7. Promoting local markets and providing contractual employment to locals.

8. Providing accurate information to the tourists about various forest area and the opportunities they can enjoy.

9. Jeeps should be released inside the park area at an interval of 15 – 20 minutes, so that traffic pressure can be reduced to some extent.

10. Day specific events like world environment day (05th June), world tourism day (21st September), wildlife week (01-07th October) should be celebrated among local people (villagers, school children and stakeholders) so that interactions can be made more comfortably and with the aim of community participation.

Code of Ethics

A. Dos
1. Visit in small groups, 4-5 persons in a jeep
2. Dress in favour of forest (green/blue) and always wear shoes
3. Pay respect to local culture and religion
4. Avoid noise while traveling through the forest
5. Keep non-biodegradable wastes with vehicle and deposit it outside the park at proper place
6. Friendly behaviour with assisting staff
7. Buy local products, promote local market
8. Follow rules and regulations of the protected areas
9. Respect our natural heritage – the forest
10. Pay proper fees while visiting to the park area

B. Don’t
1. Smoke and drink alcohol
2. Bring fire-arms inside the forest
3. Leave vehicle nor walk here and there
4. Give any eatable item to wild animals
5. Throw candy wrappers, chips wrappers and cold-drink or water bottles
6. Speak loudly
7. Tease wild animals
8. Go in wrong trails
9. Stay longer in front of wild elephants
10. Burn match (match-box) inside the forest
11. Leave the rest house during night and pollute the surroundings while stay inside the forest
12. Throw the eatable items while passing / traveling through Haridwar – Dehradun railway track as 16 kilometers (from Motichur to Kansrao) of this track passes in between RNP area and this is home to several wild animals and one of the crucial corridors for elephant movement towards Chilla area
13. Compel the jeep driver to move fast or to stop for a long while traveling through the forest
14. Be disappointed even if you do not see any animal. It is a matter of chance and always remember that you are inside animal’s habitat

VII. RISK MANAGEMENT

All wildlife safaris involve some level of risk specially in potential elephant’s habitats and management of such risk is an important component of eco-tourism coordination. Elephant charging on tourist vehicle, blockade of track due to movement of elephants, fear among tourists due to elephant’s voice and close encounter with elephants are some incidence observed inside the park area and sometimes it can cause a negative impact to achieve objectives. In RNP, encounter with elephants is only the risk for tourists and for management following recommendations should be considered.

- Guides get trained entirely, be properly equipped, and if required they communicate the situation to nearby forest field station through wireless sets.
- Don’t make close encounter with elephants, if elephants are on the track, wait silently at appropriate distance until elephants moved away.
- It was observed during long-term studies, that only few bulls and cow elephants are attempting aggressiveness towards humans while their movements was in the tourist zone and who are recognized too, therefore, if we displayed information about their movements with known physical features (with the help of photographs) that will help the
jeep drivers to alert and drive cautiously at the particular spots.

- If necessary (when charging attempts of bulls increases during musth period); particular tracks must be closed for tourists.
- During the encounter with elephants or when passing / traveling along the elephants, guides / tour operators must ensure the critical situations and converse the tourists properly so that tourists don’t create threat in their mind and enjoy the journey comfortably.
- Seek scientific advice from subject experts / researchers working with the park area and tour operators concerning risks and how to prepare for them.

Looking into the tourist’s influx, it can be concluded that tourism status in RNP is enhancing day-by-day (Table 3), whereas during 2008-2009 due to Bombay tragedy (Taj hotel blast) and Lok Sabha elections the increasing rate of tourists was found to be decreased to some level. Comparatively dualism in policy like allowing tourism in Chilla area but not in Ranipur – Dholkhand – Kansrao area and Motichur – Kansrao area is another dimension, which has declined the eco-tourism aspect from conservation efforts. In-effective policy regarding to tourism (non-fixation of rate list for jeep safari, entry timings and returning timings) is making negative impact among visitors as they invest enormous money to enjoy wilderness and learn from nature. Ecotourism zones may be planned in such a way so that tourists can grasp a maximum knowledge on the area at the same time besides, the aim of eco-tourism can be achieved by creating a healthy environment among all its stakeholders [7].

The area around the RNP has a number of natural attractions, which have high potential for eco-tourism. Jhilmil Jheel Conservation Reserve (Swamp deer conservation reserve), Rishikes city, Dehradun city, Neelkanth temple, world famous Gayatri teeth – Shantikunj, Har ki Pauri at Haridwar, Mussoorie Wildlife Sanctuary, Patanjali Yogpeeth / Vishwavidhyalaya of Honorable Yog Guru Baba Ramdev, Mansa Devi temple (inside the RNP area), Chandi Devi temple (inside the protected area), Daksh Mahadev temple and Sati Kund are some of the places of tourist interest. In RNP, tourists have been visiting more commonly since 1991, whereas in Corbett National Park tourism activities started nearly at the dawn of 1960 and out of seven, three forest zones (Dhikala, Bijrani and Jhirna) has been opened for tourists every year. As tourists are only aware of Chilla zone in RNP, therefore, setting up of tourist information center at Haridwar city and tourist guidance, in particular areas like Motichur and Kansrao has a clear potential of diverting some of the tourists who currently only have the option of safari in Chilla. This lacking of alternatives already shows signs of over-crowding in peak tourism season at Chilla zone (March-June).

RNP, Haridwar and Lansdowne forest division also consists of various forest tracks [Kaudia – Bindhvasini (08 kms.), Kaudia – Kimsaar – Dharkot (24 kms.), Shyampur – Pili village (04 kms.) and Laldhang – Kotidwar (24 kms.)], which need to be publicized and may be explored to tourists. Ensuring participation of school students through organisation of small awareness camps is another conservation effort, which can be done. The implementation of community – based eco-tourism projects to enhance nature conservation in RNP will be beneficial to conserve forest as well as wildlife. Rajaji and its adjoining protected habitat in general, can’t be based on the assumption of wildlife conservation and community – based eco-tourism. This link has to be developed based on a detailed analysis of the existing local resources and the wider socio-economic context. Participation of local communities in policy making further ensures the long-term survival of wildlife besides, based on appropriate strategy if we provide substitutes to local people, the commitment will be useful in reducing anthropogenic pressure from forest specially from the crucial wildlife corridors.

Table 1: Some potential ranges and tracks for promoting eco-tourism in Rajaji National Park (some routes may be constructed and opened for tourists).

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Routes/Tracks</th>
<th>Distance (Kms.)</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Forest road from Chilla hydro-electric power house [Jhabargarh] to Dogadda rau⁴ [Gohri forest] along river Ganga</td>
<td>03</td>
<td>Huge potential for migratory bird watching during November to March and wildlife sighting</td>
</tr>
<tr>
<td>2.</td>
<td>Khara - Dayara rau track via Luni / Rawasan forest</td>
<td>13</td>
<td>Natural habitat for tiger, sloth bear, elephant and leopard besides barking deer, sambar, spotted deer and wild boar sighting is very common</td>
</tr>
<tr>
<td>3.</td>
<td>Mundal (Gara shroath) - Soni shroath / dogadda shroath</td>
<td>05</td>
<td>Habitat for tiger, leopard and elephants besides, barking deer, sambar, spotted deer and wild boar sighting is very common</td>
</tr>
<tr>
<td>4.</td>
<td>Chilla - Rawasan / Luni forest Chowki track</td>
<td>23</td>
<td>Ideal Habitat for tiger and sloth bear, migratory routes for elephants towards Lansdowne forest</td>
</tr>
<tr>
<td>5.</td>
<td>Khara (Patthar Ghati) – Rawasan / Luni forest</td>
<td>14</td>
<td>Ideal Habitat for tiger and sloth bear, migratory routes for elephants towards Lansdowne forest</td>
</tr>
</tbody>
</table>
Motichur Forest

1. Forest motor road from Motichur to Kansrao 14 Sal dominant area, ideal habitat for elephant, leopard and barking deer
2. Forest road from Motichur to Beribara via Beribara ghata 17 Dense forest with rich fodder species, elephant’s movement is quite frequent during early summer
3. Motichur - Kansrao - Cherring cross track 22 Long stretch, which open at Mohand forest, RNP.
4. Motichur - Danda track 04 Elephant’s habitat with typical topography
5. Kansrao - Satyanarayan [Motichur forest] track, which runs parallel to Haridwar – Dehradun railway track 08 Ideal habitat for elephants and barking deer, elephant’s movement is more common during dry season

Haridwar Forest

1. Ranipur - Dholkhand track 22 Unique forest stretch with rich wildlife. One of the most important elephant’s habitat besides, leopard, barking deer, sambhar, spotted deer, wild boar and langur are common species found
2. Haridwar – Kharkhari by pass track (if maintained and controlled) 06 Elephant’s movement has been restricted to some extent. Species like spotted deer, sambhar, barking deer are very common
3. Ranipur chowki to Sureshwari devi temple track 0.5 Elephant’s movement is very common during monsoon and early winter besides, leopard and several deer species are commonly found
4. Rawli - Hathi kund track 02 Ideal habitat for elephants but under anthropogenic pressure. Leopard, blue bull, spotted deer, sambhar, barking deer and primates are very common species found
5. Chirak to Chirak rao’s grasslands 02 Ideal habitat for elephants but under anthropogenic pressure. Leopard, blue bull, spotted deer, sambhar, barking deer and primates are very common species found

* rau term is used to define seasonal water streams.

Table 2: Some potential sites where watch towers (machans) can be constructed for promoting eco-tourism in Rajaji National Park.

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Location of watch towers</th>
<th>Forest</th>
<th>Distance from range headquarter (Kms.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Jhabargarh [in between power plant and soni shroath, adjoining to river Ganges]</td>
<td>Chilla</td>
<td>0.5</td>
</tr>
<tr>
<td>2.</td>
<td>Ghasiram [already constructed, need to be maintained regarding visibility point of view]</td>
<td>Chilla</td>
<td>01</td>
</tr>
<tr>
<td>3.</td>
<td>Mundal [situated, need to be re-constructed at more height]</td>
<td>Chilla</td>
<td>08</td>
</tr>
<tr>
<td>4.</td>
<td>Khara [near to forest chowki]</td>
<td>Chilla</td>
<td>13</td>
</tr>
<tr>
<td>5.</td>
<td>Luni [near to forest chowki]</td>
<td>Chilla</td>
<td>19</td>
</tr>
<tr>
<td>7.</td>
<td>Koyalpura chowki [adjoining to Motichur river]</td>
<td>Motichur</td>
<td>06</td>
</tr>
<tr>
<td>8.</td>
<td>Koyalpura water hole [already constructed, need to be maintained]</td>
<td>Motichur</td>
<td>09</td>
</tr>
<tr>
<td>10.</td>
<td>Ranipur [existing, need to be re-constructed at more height]</td>
<td>Haridwar</td>
<td>0.3</td>
</tr>
<tr>
<td>11.</td>
<td>Chirak [just 1.5 kms. towards south from chowki near to chirak rau]</td>
<td>Haridwar</td>
<td>5.5</td>
</tr>
</tbody>
</table>
Table 3: Number of national and international tourists visited to Chilla forest of the RNP since 2004 and revenue generated through tourism.

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Year</th>
<th>Number of tourists visited</th>
<th>Number of students visited</th>
<th>Total number of tourists visited</th>
<th>Revenue (INR)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>National (Indian)</td>
<td>International (Foreigner)</td>
<td>National (Indian)</td>
<td>International (Foreigner)</td>
</tr>
<tr>
<td>1.</td>
<td>2004-2005</td>
<td>9090</td>
<td>1100</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2.</td>
<td>2005-2006</td>
<td>13185</td>
<td>1651</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>3.</td>
<td>2006-2007*</td>
<td>13593</td>
<td>2155</td>
<td>718</td>
<td>43</td>
</tr>
<tr>
<td>4.</td>
<td>2007-2008*</td>
<td>15957</td>
<td>1940</td>
<td>963</td>
<td>04</td>
</tr>
<tr>
<td>5.</td>
<td>2008-2009</td>
<td>15525</td>
<td>1888</td>
<td>1875</td>
<td>NIL</td>
</tr>
</tbody>
</table>

* separately during 2006-2007, 201 Indian tourists and 206 Foreigner tourists enjoyed elephant riding / safari for six months whereas during 2007-2008, 09 Indian and 06 Foreigner tourists enjoyed elephant riding/safari only for one month and just after that safari on elephants has been discontinued.

Source: Office, Chilla forest range, RNP.

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**Fig. 2. Benefits from eco-tourism in Rajaji National Park**
Fig. 3. Applications and framework for eco-tourism potential and promotion in Rajaji National Park.
Fig. 4 A. A beautiful view of dawn inside Rajaji National Park. B. Elephants during sunset at Rajaji National Park. C. Sunset at Chilla forest, Blue bulls are standing near to river Ganges. D. Dayara rau: a magnificent ecosystem inside the Rajaji National Park. E. Elephants at Luni river in the Rajaji National Park. F. Historical Monument of a female elephant named ‘Rampyari’ at Kansrao forest constructed to the memory of Major Stanley Skinners during 1922.
tourists enjoying the wilderness on elephant back during 2007 at Chilla tourist zone.

VIII. ACKNOWLEDGEMENTS

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IX. REFERENCES

Influence of Gender, School Location, and Temperament on Values of Secondary School Students in Cross River State, Nigeria

Dr. (Mrs.) Akon M. Joshua¹ Professor Monday T. Joshua²

Abstract—The purpose of this study was to determine the influence of gender, school location and temperament on values (particularly Edward Spranger’s theoretical and religious values) of secondary school students in Cross River State of Nigeria. The study was a survey. The sample consisted of one thousand and eighty (1080) senior secondary school students, drawn from a population of 51,979 senior secondary school students from 18 out of 227 public schools. The instrument used for data collection was a questionnaire titled “Temperaments and Values Inventory” (TAVI). For the analysis of data, 3-way analysis of variance (ANOVA) was used. The major findings of the study were that (i) gender does not significantly influence values (theoretical and religious) of secondary school students; (ii) school location has significant influence on theoretical value with those in urban areas having higher theoretical value (knowledge) than their rural counterparts; and (iii) temperament influences values (theoretical and religious) of secondary students, with the melancholic and phlegmatic persons showing higher measures of values studied than the sanguines and choleries. It was recommended, among other things, that parents, teachers, counsellors and other youth handlers should seek to know the temperament and values of their children/clients for proper counselling.

I. INTRODUCTION AND LITERATURE REVIEW

The adolescents are found in our homes, schools, churches and in many social gatherings. The behaviour of these young people constitutes some great concern to many handlers of young people today. The behaviours of the adolescents are many and varied. Many people wonder what could be responsible for the various characteristic behaviours of the adolescents. Secondary school students, especially those in the senior classes, are mostly those aged 13–19 years. The adolescence period sometimes could be a turbulent one, for both boys and girls found in both rural and urban settlements. According to Jeslid, quoted in Chauchan (1991), adolescence refers to the period or span of years during which boys and girls move from childhood to adulthood, mentally, emotionally, socially and physically. By implication, the period is loaded with developmental complexes of the total individual. Isangedighi (1994) sees the period of adolescence as a time of growth spurt, caused by increased self-awareness and development. Temperament is an inherited trait (Lahaye, 1984). According to Santrock (1999: 179), temperament is defined as “an individual’s behaviour style and characteristic way of responding”. Temperament is generally said to be an individual’s mode of responding emotionally and behaviourally, to environmental events that often include activity level, which is the pace or vigour of one’s activities. Other responses include irritability, which is how easily or intensely upset one could become over negative events. Soothability (the ease with which one calms after becoming upset), and sociability (response to social stimuli) are all important components of temperament (Shaffer, 1999). According to Lahaye (1984), temperament makes one outgoing (extroverted) or shy (introverted), sets broad guidelines for everyone’s behaviour pattern, and influences a person as long as he/she lives. Lahaye (1984) and other proponents have identified or clearly marked out four basic temperaments, namely phlegmatic, melancholic, sanguine and choleric temperaments. The phlegmatic person is an introvert. She is calm, quiet, easy going and never-get-upset individual. She is dependable, effective and organized. She does not like to accept leadership, but when forced on her, she is a very good leader since she gets along with other people. A phlegmatic person is said to have high value system. However, the phlegmatic person is slow in making decisions, often moody and procrastinates a lot.

A person with melancholic temperament is an introvert. She is gifted in many areas. She is self-disciplined, self-sacrificing and analytical. She is quiet and has inclination to reflection, her thoughts being far reaching. She is neither penetrating nor satisfied with the superficial. A melancholic loves silence and solitude, and is inclined to introspection. She looks at life from a serious side. Occasionally, she is passive, slow and is not easily moved into quick action. The melancholic person is said to be reserved, and she reluctantly reveals her innermost thoughts. If this is done, it is to those she trusts. She does not easily find the right word to express and describe her sentiments. The person with melancholic temperament thinks slowly, and so she often stuffers, leaving her sentences incomplete, although she can work carefully and reliably. On the other hand, the melancholic person is a critic, negative, resentful and excessively sensitive in the face of even small humiliations. The melancholic person is revengeful, persecution-prone, touchy and unsociable.

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The person with sanguine temperament is an extrovert. She is outgoing, warm, friendly and fun-loving. She is a talkative, and loves social settings. She values tradition and security. She is impulsive and pushful; she is given to elation of spirit and is not easily worried or anxious. A sanguine person is carefree and eager to express herself before a group of people. In fact, she likes to be heard; she is unstable, egocentric and unproductive; and she exaggerates a lot.A person with choleric temperament is an extrovert. She is hot-tempered, quick, active, strong-willed, independent, productive and bossy. She can make decisions easily for herself and other people. A choleric person thrives well in activities. She is domineering and externally focused; and she values traditions. The choleric person is cold, unemotional, angry, cruel and often very sarcastic. According to Whitmont (1972), introverts generally have their predominant sense of reality derived from their inner world of thoughts, intuitions, emotions and sensations; while extroverts are individuals concerned with material objects, environment and peoples.Value, the dependent variable in this study, is an important concept in human life. Value means different things to different people. Value is an important aspect of developmental psychology. According to Mckinney, Fitzgered, and Strommen (1982), value could refer to “matters of importance”. Therefore value could serve as a guide in the direction of an individual’s behaviour. Hodggetts (1980) sees value as something that has worth or is of importance to an individual, and it helps to shape human behaviour. An individual’s philosophy is found upon values, which are basic convictions about what is and is not real importance in life (Hjelle & Ziegler, 1981). Hodgett (1980) sees Edward Spranger’s classification of values as the most complete. Spranger, a European psychologist, has outlined six major types of values. These are theoretical, economic, social, religious, aesthetic and political values. For this study, only theoretical and religious values are considered, while research into influence of gender, school location and temperament on other value types is on-going.A person with theoretical value, as presented by Edward Spranger, and cited in Joshua (2005), has discovery of truth as overriding interest. He looks for identities and differences; and this is a common characteristic during the adolescence stage of development, particularly for those living in the urban cities who are being exposed to electronic and printed media. The person with economic value is concerned with what is useful, self-preservation, production of goods and services, as well as accumulation of wealth. The person is thoroughly practical, and conforms to the business environment for generation of money either through honest or dishonest means. The person with social value has love for people. He is kind, sympathetic and unselfish. He regards love as the only suitable form of human relationship, his interest being close to those with religious value. For the person with religious value, what is vital is unity. He seeks to relate with his creator; has self-denial; and always loves meditation. He likes to work among those who attend same church services or those with same religious beliefs. The person with political value is interested in power, while one with aesthetic value is interested in form and harmony in the environment. Lahaye (1984) posits that people with melancholic temperament always look for facts, statistics and details. Therefore, they have higher theoretical value than people with the other temperament types (phlegmatics, sanguines and choleries). People with sanguine and choleric temperaments are extroverts who care less about details, the sanguine temperament being the least in possessing theoretical value. The same author studied adults and their bible study habits and found that the phlegmatics and melancholics concentrate more in their religious activities of bible studies and prayers than the people with sanguine and choleric temperaments. Therefore, for the author, the people who have phlegmatic and melancholic temperaments have higher religious values than those with sanguine and choleric temperaments. Empirical works in relationship between temperaments and values, and how this relationship is moderated by gender and geographical location are rare and hard to come by. That is the gap that this study seeks to fill.

II. STATEMENT OF THE PROBLEM

In contemporary times, the behaviours of adolescents have been of great concern to parents, teachers, counsellors, pastors and other handlers of youths in the society. The adolescents, whether males or females, found in the rural or urban areas, seem to have one thing in common, which is misbehaviours that seem to put a great gap between them and the adults. Due to the various misbehaviours of adolescents presently, there seems to be eroding of values among the young people. Certain posers, therefore, become pertinent: Are values held or exhibited by the youths dictated by their temperament types? How do gender and geographical location affect the values exhibited by young people? Is there any interactive effect of these variables on the value system of youths? There are no readily available answers to these posers, especially in Cross River State of Nigeria. Therefore this study was

III. PURPOSE OF THE STUDY

The purpose of this study was to determine the individual and interactive effects of gender, school location and temperament types on values (theoretical and religious) of secondary school students in Cross River State of Nigeria.

IV. RESEARCH QUESTION

Only one research question was formulated to guide the study. This was: How do gender, school location and temperament type influence the values (theoretical and religious) of secondary school students in Cross River State, Nigeria individually and interactively?
V. HYPOTHESIS

Only one hypothesis was formulated and tested in the study. This was: Gender, school location and temperament type do not significantly influence the measure of values (theoretical and religious) of secondary school students in Cross River State, Nigeria.

VI. METHODOLOGY

The research design for this study was a survey. It is a type of design that allows for studying the opinions, beliefs, behaviours and attitudes of a sample, and drawing inferences and generalizations to the population. The research area was Cross River State, which is one of the thirty-six (36) States that make up the Federal Republic of Nigeria. It is situated in the South-South geo-political Zone of Nigeria. Cross River State is in the tropical belt and has many natural resources and tourist sites, some of which are “Tinapa” business resort, Agbokim water falls, the seven streams waterfalls, Portea Resort, National wild Life Park, Canopy Walkway and the ‘Cable Car’ located in Obudu Cattle Ranch, and other attractive and interesting sites.

The population of the study was 51,979 senior secondary school students made up of 27,497 males and 24,482 females in 227 secondary schools organized under three (3) Education Zones of Calabar, Ikom and Ogoja. Only the students of the senior secondary classes were used for their maturity in understanding the questionnaire items. The sample consisted of one thousand and eighty (1080) students drawn using stratified random sampling technique from the three (3) Education Zones. In each zone, six (6) schools were randomly selected, making a total of eighteen (18) schools. In each school, thirty (30) male and thirty (30) female students were randomly selected, giving a total of sixty (60) students per school, and 1080 students were gotten from the eighteen (18) schools.

The instrument used for data collection in the study was a questionnaire constructed by the researchers and validated by experts in Educational Measurement and Evaluation in the Faculty of Education, University of Calabar, Calabar, Nigeria. The instrument was titled “Temperaments and Values Inventory” (TAVI), and had three (3) sections of ‘Personal Data’, ‘Temperaments’ (with 40 items), and ‘Values’ (with 8 items) to measure two value types selected for the study. Total items on the questionnaire were forty-eight (48). The reliability estimates (Cronbach alphas) for the section on temperaments was 0.83, and that for the section on values was 0.86. These were considered high enough to warrant the use of the instrument for the study. Copies of the questionnaire were administered by the researchers personally, with the help of research assistants and class teachers in the sampled schools. A total of one thousand and sixty (1060) usable copies of the questionnaire were retrieved from respondents, and used for the study. For data analysis, three-way analysis of variance (3-way ANOVA) was applied on the data.

VII. DATA ANALYSIS AND RESULTS

One hypothesis was formulated and tested in this study and is re-stated here: “Gender, school location and temperament type do not significantly influence the measure of values (theoretical and religious) of secondary school students in Cross River State, Nigeria”. The independent variables in this hypothesis are three, namely, gender (with 2 categories), school location (with 2 categories) and temperament type (with 4 categories). The dependent variable in this hypothesis is values of secondary school students, and there were two (2) different types (theoretical and religious) focused in the study. The statistical analysis technique to test this hypothesis was 3-way analysis of variance (3-way ANOVA). The hypothesis was tested on each of the two value types under study. The results of the analyses are presented in Tables 1 and 2.

Table 1

Result of 3-way analysis of variance of the influence of students’ gender, school location and temperament type on their theoretical value

<table>
<thead>
<tr>
<th>Variable</th>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Males</td>
<td>540</td>
<td>16.16</td>
<td>2.74</td>
</tr>
<tr>
<td></td>
<td>Females</td>
<td>520</td>
<td>16.42</td>
<td>2.70</td>
</tr>
<tr>
<td>School Location</td>
<td>Urban</td>
<td>530</td>
<td>16.57</td>
<td>2.57</td>
</tr>
<tr>
<td></td>
<td>Rural</td>
<td>530</td>
<td>16.00</td>
<td>2.84</td>
</tr>
<tr>
<td>Temperament</td>
<td>Phlegmatics</td>
<td>332</td>
<td>16.48</td>
<td>2.68</td>
</tr>
<tr>
<td>Type</td>
<td>Melancholics</td>
<td>311</td>
<td>16.53</td>
<td>2.68</td>
</tr>
<tr>
<td></td>
<td>Sanguines</td>
<td>176</td>
<td>16.09</td>
<td>2.61</td>
</tr>
<tr>
<td></td>
<td>Cholerics</td>
<td>241</td>
<td>15.84</td>
<td>2.88</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Source of variation</th>
<th>Sum of squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F-ratio</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corrected model</td>
<td>289.49</td>
<td>15</td>
<td>19.30</td>
<td>2.66*</td>
<td>.001</td>
</tr>
<tr>
<td>Intercept</td>
<td>259451.64</td>
<td>1</td>
<td>259451.64</td>
<td>35747.11*</td>
<td>.000</td>
</tr>
<tr>
<td>Gender</td>
<td>10.06</td>
<td>1</td>
<td>10.06</td>
<td>1.39</td>
<td>.239</td>
</tr>
<tr>
<td>School location</td>
<td>55.96</td>
<td>1</td>
<td>55.96</td>
<td>7.71*</td>
<td>.006</td>
</tr>
</tbody>
</table>
The results presented in Table 1 indicate that the F-ratios for school location (F = 7.71; p < .05) and temperament type (F = 3.88; p < .05) are significant at .05 level. Thus, the null hypothesis is rejected for these two independent variables. The null hypothesis is not rejected for gender because the associated F-ratio (F = 1.39; p > .05) is not significant. The interpretation is that each of school location and temperament type has a significant influence on students’ measure of theoretical value, while gender has no such significant influence. Given the group mean values presented in Table 1, it implies that the measure of theoretical value of students in urban areas (X = 16.57) is significantly higher than that of students in urban areas (X = 16.00). The table also shows that among the temperament types, the melancholics have the highest measure of theoretical value (X = 16.53), closely followed by the phlegmatics (X = 16.48). The group with the least measure of theoretical value is that of the choleric (X = 15.84), closely followed by that of the sanguines (X = 16.09).

On the interaction effects of the three independent variables, it is seen in the table that the F-ratios for the three possible 2-way interactions (3.75 for gender by school location, 1.36 for gender by temperament type and 1.94 for school location by temperament type) are not significant at .05 level. The null hypothesis (of no significant interaction effects) was not rejected. The result of hypothesis testing on religious value type follows in Table 2.

Table 2

Result of 3-way analysis of variance of the influence of students’ gender, school location and temperament type on their religious value

<table>
<thead>
<tr>
<th>Variable</th>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Males</td>
<td>540</td>
<td>15.54</td>
<td>3.17</td>
</tr>
<tr>
<td></td>
<td>Females</td>
<td>520</td>
<td>15.68</td>
<td>3.22</td>
</tr>
<tr>
<td>School</td>
<td>Urban</td>
<td>530</td>
<td>16.00</td>
<td>3.10</td>
</tr>
<tr>
<td></td>
<td>Rural</td>
<td>530</td>
<td>15.22</td>
<td>3.25</td>
</tr>
<tr>
<td>Temperament type</td>
<td>Phlegmatics</td>
<td>332</td>
<td>15.84</td>
<td>3.08</td>
</tr>
<tr>
<td></td>
<td>Melancholics</td>
<td>311</td>
<td>15.81</td>
<td>3.21</td>
</tr>
<tr>
<td></td>
<td>Sanguines</td>
<td>176</td>
<td>15.26</td>
<td>3.17</td>
</tr>
<tr>
<td></td>
<td>Choleric</td>
<td>241</td>
<td>15.61</td>
<td>3.32</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Source of variation</th>
<th>Sum of squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F-ratio</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corrected model</td>
<td>438.47</td>
<td>15</td>
<td>29.23</td>
<td>2.94*</td>
<td>.000</td>
</tr>
<tr>
<td>Intercept</td>
<td>238090.43</td>
<td>1</td>
<td>238090.43</td>
<td>23943.96*</td>
<td>.000</td>
</tr>
<tr>
<td>Gender</td>
<td>1.94</td>
<td>1</td>
<td>1.94</td>
<td>0.20</td>
<td>.659</td>
</tr>
<tr>
<td>School location</td>
<td>147.03</td>
<td>1</td>
<td>147.03</td>
<td>14.79*</td>
<td>.000</td>
</tr>
<tr>
<td>Temperament type</td>
<td>81.42</td>
<td>3</td>
<td>27.14</td>
<td>2.73*</td>
<td>.043</td>
</tr>
<tr>
<td>Gender by Location</td>
<td>1.34</td>
<td>1</td>
<td>1.34</td>
<td>0.14</td>
<td>.714</td>
</tr>
<tr>
<td>Gender by Temperament</td>
<td>79.56</td>
<td>3</td>
<td>26.52</td>
<td>2.67*</td>
<td>.047</td>
</tr>
<tr>
<td>Location by Temperament</td>
<td>45.58</td>
<td>3</td>
<td>15.20</td>
<td>1.53</td>
<td>.206</td>
</tr>
<tr>
<td>Gender by location by temperament</td>
<td>78.64</td>
<td>3</td>
<td>26.21</td>
<td>2.64*</td>
<td>.049</td>
</tr>
<tr>
<td>Residual</td>
<td>10381.17</td>
<td>1044</td>
<td>9.94</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>269187.00</td>
<td>1060</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The results presented in Table 2 indicate that while the F-ratio for gender (0.20) is not significant at .05 level, the F-ratios for school location (14.79) and temperament type (2.73) are significant at .05 level. With these results, the null hypothesis (of no significant influence) is not rejected for gender, but is rejected for school location and temperament type. The interpretation is that while gender has no significant influence on the measure of the students’ religious value, there is a significant influence of each of school location and temperament type on the measure of students’ religious value. The group means in Table 2 indicate that the measures of male students’ religious value (with X = 15.54) and that of female students (with X = 15.68) are not significantly different. Also, the measure of religious value of urban dwellers (with X = 16.00) is significantly higher than that of rural dwellers (with X = 15.22). Table 2 also shows that among the temperament types, the group with the highest measure of religious value is the phlegmatics (with X = 15.84), closely followed by the melancholics (with X = 15.81), and the choleric (with X = 15.61). The sanguines (with X = 15.26) are the ones with the least measure of religious value.

On the interaction effects of the three independent variables, the results in Table 2 indicate that while F-ratios for gender by school location (0.14) and school location by temperament type (1.53) are not significant at .05 level, the F-ratio for gender and temperament type (2.67) is significant at .05 level. Thus, the null hypothesis is not rejected on the two 2-way interactions (gender by location and location by temperament), but is rejected on the gender by temperament type interaction. This implies that while the effects of the interactions of gender and school location, and school location and temperament type on students’ religious value are not significant, the effect of the interaction of gender and temperament type on the measure of students’ religious value is significant. The pattern of this significant influence of gender by temperament type is explored further in the plot of cell means in Fig 1. For the plot, the cell means were as follows: for males, phlegmatics had 15.85 (N = 164), melancholics had 15.44 (N = 161), sanguines had 15.08 (N = 92), and choleric had 15.63 (N = 123); and for females, phlegmatic had 15.83 (N = 168), melancholics had 16.21 (N = 150), sanguines had 15.56 (N = 84), and choleric had 14.88 (N = 118).

**FIG. 1** Plot of cell means showing influence of gender by temperament type interaction on students’ religious value

### VIII. DISCUSSION OF FINDINGS

The findings of this study show that all human beings do have some measures of values, particularly theoretical value (knowledge) and religious value studied. The major finding of this study was that gender had no significant influence on values (theoretical and religious), although the female melancholics showed higher religious value than their male
counterparts. It was found that the students residing in the urban areas had higher theoretical value (knowledge) than their rural counterparts. This finding is not surprising since urban dwellers are more exposed to both print and electronic media than their rural counterparts.

It was also discovered in this research that the youths with melancholic temperament (introverts) have the highest theoretical value, closely followed by phlegmatics (also introverts), compared to the choleric and sanguine types. The choleric and sanguine types were found to have the least measure of theoretical value. The result of this study also interestingly highlighted the fact that human beings (blacks and whites) are not too different as per geographical location and temperaments (inherited traits). This assertion is made because the result agrees with Lahaye’s (1984) report who presented people with melancholic temperament as being critical and analytical in their thinking or cognitive ability. In addition, the melancholics and phlegmatics were found to be deep thinkers as was show in their ability to concentrate on bible studies and prayers (religious value). On the other hand, Lahaye as well this finding, agree that the people with sanguine and choleric temperaments care less about details.

IX. CONCLUSION

Arising from the findings of this study, it is hereby concluded that gender does not have significant influence on values (theoretical and religious) of secondary school students. The students living in the urban areas have higher theoretical value (knowledge) on issues surrounding them than their counterparts residing in the rural areas. People with melancholics and phlegmatics temperaments show higher theoretical value (knowledge) and religious value than those with sanguine and choleric temperaments. On the whole, it is concluded that a person’s temperament and geographical location do affect his/her values.

X. RECOMMENDATIONS

Based on the findings and conclusion of this study, the following recommendations were made:

1) Youth handlers including parents should seek to understand the temperament and values of the young people as this knowledge will enhance their work in giving proper counselling to their clients.

2) The social and youth development sectors of the different tiers of government should plan enlightenment programmes on various issues for the rural dwellers, particularly the youths in schools.

3) The government should help the rural dwellers, particularly students to imbibe the reading culture by providing well equipped libraries in schools to increase their theoretical value (knowledge).

4) The church leaders and workers should be trained through seminars and workshops on temperaments and values, and the factors associated with these. This will help them to meet the various needs of members of their congregations, particularly the adolescents.

5) Temperament and values should be included as units in formal secondary school subjects such as social studies, civic education and citizenship education to be taught to students at that level.

6) More professional guidance counsellors should be employed in secondary schools located in both the rural and urban areas and given free hand to really counsel students, both individually and in groups.

XI. REFERENCES


Determining Factors in Preferences for Counselling Mode by Noun Students

Dr. Fidel O Okopi

Abstract - The research is to determine factors for influence preferences for counselling mode (informing, counselling and academic advising) by NOUN Students at pre and post admission stages of programmes of their studies. The following objectives were stated: to determine the preferred counselling medium by NOUN students at their pre-admission and post admission stages of their programmes of study; to determine whether age and gender would be significant factors in choice of preferred medium of counselling among NOUN students at pre admission and pre admission stages of their programmes of study. The Null hypotheses were that; there would be no significant difference in the preference for counselling mode (informing, counselling and advising) among NOUN students at pre-entry and post admission stages of their programmes of study; Gender and age would not be significant determinants for preference of counselling mode (information, advising and counselling) among National Open University of Nigeria at pre enrolment stage of their programme of study. The following finds were arrived at: counselling medium was the most preferred counselling mode at both pre and post entry stages of their programmes of their studies, followed closely by informing, and academic advising respectively. Age and gender were found to be not significant determinants of preference for counselling mode among NOUN at both pre and post entry stages of programmes of their studies. Inclusions, the objectives of the study were achieved and some incisive suggestions were made.

I. INTRODUCTION

Open and Distance Education as expressed in the National Policy on Education by the Federal Government of Nigeria, is the mode of teaching in which learners are removed in time and space from the teachers. It uses a variety of media and technologies to provide and/or improve access to good quality education for large number of learners wherever they may be (FGN 1981, 2004 p). In line with the National Policy on Education, the Federal Government of Nigeria resuscitated National Open University in 2002 which is now known as National Open University of Nigeria. NOUN has its mission statement of providing functional cost-effective, flexible learning which adds life-long value to quality education for all who seek knowledge. On one hand, the Open and Distance Education is anchored by the provision of quality support services to the learners. Learner Support is a term used to subsume all of the guidance in form of informing, advising and academic supporting. For the purpose of this research, the focus would be on the preference of counselling mode (counselling, informing and academic advising).

II. COUNSELLING AND GUIDANCE NEEDS OF OPEN AND DISTANCE LEARNERS

In realisation of the importance of counselling in open and distance education, Kearsley, (1998, p49) opined that without the continuous interpersonal interactions and feedback found in the traditional classroom, the learner in Open and Distance Education can find himself or herself unfocused on the lesson, unaware of his or her progress, and less motivated than the learner in conventional institution. He further observed that Distance learners typically needed a lot of counselling and guidance in order to complete a programme.

The objectives of this research is in line with Brown (1987) argument that for guidance system to be effective, it may be wise to have some diagnostic facility either by the use of formal or informal tests to enable students to assess their needs. He further reasoned that, assessing the guidance needs of the students in ODL becomes necessary because not all students have the same needs even where they are following the same programme. He noted that to provide appropriate answers required by students will need to cover the full range of guidance in form of informing, advising, counselling, assessing, enabling and advocating from the pre-course stage to graduation. Therefore Brown’s (1987) proposal forms the bases for assessment of the guidance needs of students (in form of informing, advising and counselling) in this research.

III. THE OBJECTIVES OF THE STUDY

The general objective is therefore to identify the counselling needs of the students and constantly monitor how these needs are being met. The specific objectives of the study are:

- Determine the preferred counselling medium by NOUN students at their pre and post admission stages of their programmes of study.
Determine whether age and gender would be significant factors in choice of preferred medium of counselling among NOUN students at pre and post admission stages of their programmes of study.

IV. THE PURPOSE OF THE STUDY
To identify the NOUN students preferred counselling mode at pre-enrolment and on-course stages of their programmes of study with the aim of meeting their academic and socio-psychological needs at every stage of their programmes of studies. By providing the students with appropriate and correct information, suggesting appropriate course of action, clarifying their needs, feeling or motivation so that they can make an appropriate decision that will go a long way in reducing to the barest minimum the rate of drop out associated with ODL

V. RESEARCH DESIGN
The study was a descriptive survey research and designed on the platform of causal comparative techniques. As a descriptive research, the causal comparative technique is used when the need to discover how and why a particular phenomenon occurs and what factors contribute to the occurrence of such phenomenon. Survey method was used in this study so as to describe the current status of students of NOUN preference for counselling mode (information, counselling and advisory services) at pre-admission and on course stages of their programmes of study.

VI. POPULATION AND SAMPLE
The population of the study included all registered students in National Open University of Nigeria as of December, 2009 is 54,168. The break down of the figure shows that 4,158 students registered for 2003/2004 session, while 17,523 registered for 2005/06. Also 19,637 students registered, for 2007/2008 session and 12,850 students registered for 2008/2009.

VII. SAMPLE AND SAMPLING TECHNIQUE
The sample of 1,300 registered students was stratified randomly selected from 18 study centres in the six geopolitical zones of Nigeria. The total of 1440 questionnaire was distributed to students of the 18 stratified randomly selected centres (three study centres in each zone) from the six geopolitical zones but 1,300 were returned and filled correctly.

VIII. RESEARCH INSTRUMENT
A self designed questionnaire was used for the study. Before use, the questionnaire was distributed to experts in test and measure and pilot tested for content and face validity and reliability. Test- retest technique was used to determine the reliability of the questionnaire. Reliability coefficient of .75 was obtained using spearman rho
Plan for data analysis
Since the scale of measurement for the study is nominal, Chi square statistics and Friedman Rank test were used to analysis the data. Also Mann-Whitney U would be used for two independent samples test

Research findings
Preference profile of counselling mode (information, counselling and academic advice) among Students of the NOUN at Pre-admission stage of their programmes of study

NULL HYPOTHESES
Hypothesis 1:
Ho: There would be no significant difference in the preference for counselling mode (informing, counselling and advising) among NOUN students at pre-entry stage of their programmes of study

Table 1 Preference profile of counselling mode of NOUN students at Pre-admission stage programmes of their study

<table>
<thead>
<tr>
<th>S/N</th>
<th>Counselling Mode</th>
<th>No. of samples</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>counselling</td>
<td>15040</td>
<td>46.28</td>
</tr>
<tr>
<td></td>
<td>Information</td>
<td>12840</td>
<td>39.51</td>
</tr>
<tr>
<td></td>
<td>Academic advising</td>
<td>4620</td>
<td>14.21</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>32,500</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 1.1 Chi square Test statistics

<table>
<thead>
<tr>
<th>Test Statistics</th>
<th>INFORM</th>
<th>COUNSEL</th>
<th>ADVISING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi-Square</td>
<td>3.120</td>
<td>5.600</td>
<td>13.000</td>
</tr>
<tr>
<td>df</td>
<td>18</td>
<td>16</td>
<td>9</td>
</tr>
<tr>
<td>Asymp. Sig.</td>
<td>.992</td>
<td>.163</td>
<td></td>
</tr>
</tbody>
</table>

A19 cells (100.0%) have expected frequencies less than 5. The minimum expected cell frequency is 1.3. B17 cells (100.0%) have expected frequencies less than 5. The minimum expected cell frequency is 1.5. C10 cells (100.0%) have expected frequencies less than 5. The minimum expected cell frequency is 2.5.

Table 1.2 Friedman Test Ranks

<table>
<thead>
<tr>
<th>Mean Rank</th>
<th>INFORM</th>
<th>COUNSEL</th>
<th>ADVISING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test Statistics</td>
<td>2.20</td>
<td>2.52</td>
<td>1.28</td>
</tr>
<tr>
<td>N</td>
<td>25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chi-Square</td>
<td>20.720</td>
<td></td>
<td></td>
</tr>
<tr>
<td>df</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asymp. Sig.</td>
<td>.000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

A Friedman Test
The table 1 shows that 46.28% of NOUN students preferred counselling while 39.51% of them preferred information and 14.21% of them preferred academic advising at pre-admission stage of their programmes of study.

Table 1.1 Using SPSS 11 the Chi-Square test statistics indicated the following results 3.12, 5.600 and 13.00 more
than 1, .992 and .162 level of significant respectively, therefore the null hypothesis 1 is rejected.

Table 1.2 Friedman rank test also indicated a significant difference in the ranking of preference for counselling, information, and academic advising at pre admission stage of their programmes of study. The counselling was the most preferred, while academic advising was the least preferred at pre-admission stage of their programme of study and there

Hypothesis 2:
Ho: There would be no significant difference in the preference for counselling mode (informing, counselling and advising) among NOUN students at post admission stage of their programmes of study

<table>
<thead>
<tr>
<th>S/N</th>
<th>Counselling Mode</th>
<th>No. of samples</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Information</td>
<td>13020</td>
<td>40.06</td>
</tr>
<tr>
<td>2</td>
<td>counselling</td>
<td>15720</td>
<td>48.37</td>
</tr>
<tr>
<td>2</td>
<td>Academic advising</td>
<td>3760</td>
<td>11.57</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>32,500</td>
<td>100</td>
</tr>
</tbody>
</table>

Chi square statistics

<table>
<thead>
<tr>
<th></th>
<th>INFORM</th>
<th>COUNSEL</th>
<th>ADVICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi-Square</td>
<td>3.120</td>
<td>2.720</td>
<td>3.400</td>
</tr>
<tr>
<td>df</td>
<td>18</td>
<td>20</td>
<td>9</td>
</tr>
<tr>
<td>Asymp. Sig.</td>
<td>1.000</td>
<td>1.000</td>
<td>.946</td>
</tr>
</tbody>
</table>

a  19 cells (100.0%) have expected frequencies less than 5. The minimum expected cell frequency is 1.3.
b  21 cells (100.0%) have expected frequencies less than 5. The minimum expected cell frequency is 1.2.
c  10 cells (100.0%) have expected frequencies less than 5. The minimum expected cell frequency is 2.5.

A Friedman Test
The table 2 shows that 48.37% of NOUN students preferred counselling while 40.06% of them preferred information and 11.57% of them preferred academic advising at pre-admission stage of their programmes of study.

Table 2.1 Using SPSS, the Chi-Square test statistics indicated the following results 3.12, 2.720 and 3.40 more than 1.000, 1.000 and .946 level of significant respectively, therefore the null hypothesis 1 is rejected.

Table 2.2 Friedman rank test also indicated a significant difference in the ranking of preference for counselling, information, and academic advising at pre admission stage of their programmes of study. The counselling was the most preferred, while academic advising was the least preferred at pre-admission stage of their programme of study and there

Hypotheses 1&2
There is no significant difference of preference for information, counselling and academic advising among NOUN students at pre admission stage when compared to post admission stage of their programmes of study

<table>
<thead>
<tr>
<th></th>
<th>INFORM</th>
<th>COUNSEL</th>
<th>ADVICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi-Square</td>
<td>.000</td>
<td>.0000</td>
<td>.000</td>
</tr>
<tr>
<td>df</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Asymp. Sig.</td>
<td>1.000</td>
<td>1.000</td>
<td>1.000</td>
</tr>
</tbody>
</table>

A 2 cells (100.0%) have expected frequencies less than 5. The minimum expected cell frequency is 1.0.

Ranks

<table>
<thead>
<tr>
<th></th>
<th>Mean Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>INFORM</td>
<td>2.00</td>
</tr>
<tr>
<td>COUNSEL</td>
<td>3.00</td>
</tr>
<tr>
<td>ADVICE</td>
<td>1.00</td>
</tr>
</tbody>
</table>

Test Statistics

<table>
<thead>
<tr>
<th></th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2</td>
</tr>
</tbody>
</table>
Chi-Square 4.000

df 2

Asymp. Sig. .135

a Friedman Test

The table 4

Table 4.1 Using SPSS, the Chi-Square test statistics indicated the following results .000, .000 and .000 less than 1.000, 1.000 and 1.00 level of significant respectively, therefore the null hypothesis1 is accepted.

Table 4.2 On the other hand, Friedman rank test indicated a significant difference in the ranking of preference for counselling, information, and academic advising at pre admission when compared to post admission stages of their programmes of study. The counselling was the most preferred, while academic advising was the least preferred at both pre-admission and post admission stages of their programme of study. There was significant relationship between the ranking of preference for information, counselling and advice at the pre admission and post admission stages of their programmes of study.

Hypothesis 3

Ho: Gender would not be a significant determinant for preference of counselling mode (information, advising and counselling) among National Open University of Nigeria at pre enrolment stage of their programme of study.

Gender Information % Counselling % Academic Advising %

<table>
<thead>
<tr>
<th>Gender</th>
<th>Information</th>
<th>%</th>
<th>Counselling</th>
<th>%</th>
<th>Academic Advising</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>7760</td>
<td>38.8</td>
<td>9400</td>
<td>47</td>
<td>2840</td>
<td>14.2</td>
</tr>
<tr>
<td>Female</td>
<td>5460</td>
<td>43.08</td>
<td>5600</td>
<td>44.80</td>
<td>1440</td>
<td>11.52</td>
</tr>
</tbody>
</table>

Chi square Test statistics

Test Statistics

INFORM COUNSEL ADVISING

Chi-Square .000 .000 .000

df 1 1 1

Asymp. Sig. 1.000 1.000 1.000

a 2 cells (100.0%) have expected frequencies less than 5. The minimum expected cell frequency is 1.0.

Friedman Ranks Test

Mean Rank

INFORM 2.00

COUNSEL 3.00

ADVISING 1.00

Test Statistics

N 2

Chi-Square 4.000

The table 5 shows that 47% of NOUN male students preferred counselling while 38.8% of them preferred information and 14.20% of them preferred academic advising at pre-admission stage of their programme of study while 44.80 of the female counterpart students preferred counselling while 43.08% of them preferred information and 11.52% of them preferred academic advising at pre-admission stage of their programmes of study.

Hypothesis 4

Ho: Gender would not be a significant determinant for preference of counselling mode (information, advising and counselling) among National Open University of Nigeria at post admission stage their programmes of study.

Gender Information % Counselling % Academic Advising %

<table>
<thead>
<tr>
<th>Gender</th>
<th>Information</th>
<th>%</th>
<th>Counselling</th>
<th>%</th>
<th>Academic Advising</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>8320</td>
<td>41.60</td>
<td>8680</td>
<td>43.40</td>
<td>3000</td>
<td>15.</td>
</tr>
<tr>
<td>Female</td>
<td>5020</td>
<td>40.16</td>
<td>5600</td>
<td>47.68</td>
<td>1520</td>
<td>12.16</td>
</tr>
</tbody>
</table>
Chi Square Test Statistics

<table>
<thead>
<tr>
<th></th>
<th>INFORM</th>
<th>COUNSEL</th>
<th>ADVISING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi-Square</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>df</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Asymp. Sig.</td>
<td>1.000</td>
<td>1.000</td>
<td>1.000</td>
</tr>
</tbody>
</table>

2 cells (100.0%) have expected frequencies less than 5. The minimum expected cell frequency is 1.0.

Friedman Ranks Test

<table>
<thead>
<tr>
<th></th>
<th>Mean Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>INFORM</td>
<td>2.00</td>
</tr>
<tr>
<td>COUNSEL</td>
<td>3.00</td>
</tr>
<tr>
<td>ADVISING</td>
<td>1.00</td>
</tr>
</tbody>
</table>

Friedman Ranks Test

Statistics

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Chi-Square</td>
<td>4.000</td>
<td></td>
</tr>
<tr>
<td>df</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Asymp. Sig.</td>
<td>.135</td>
<td></td>
</tr>
</tbody>
</table>

The table shows that 43.40% of NOUN male students preferred counselling while 41.60% of them preferred information and 15% of them preferred academic advising at pre-admission stage of their programmes of study while 47.68% of the female counterpart students preferred counselling while 40.16% of them preferred information and 12.16% of them preferred academic advising at pre-admission stage of their programmes of study.

Table 6.1 Using SPSS, the Chi-Square test statistics indicated the following results .000, .000 and .000 less than 1.000, 1.000 and 1.00 level of significant respectively, therefore the null hypothesis is accepted.

Table 6.2 Friedman rank test also indicated a significant difference in the ranking of preference for counselling, information, and academic advising at pre-admission stage of their programmes of study. The counselling was the most preferred, while academic advising was the least preferred at pre-admission stage of their programme of study.

Hypothesis 5

Ho: Age would not be a significant determinant for preference of counselling mode (information, advising and counselling) among National Open University of Nigeria at pre-enrolment stage of their programme of study.

<table>
<thead>
<tr>
<th>Age Range</th>
<th>Information</th>
<th>%</th>
<th>Counselling</th>
<th>%</th>
<th>Academic Advising</th>
<th>%</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>15-24</td>
<td>640</td>
<td>18.28%</td>
<td>2120</td>
<td>60.57%</td>
<td>740</td>
<td>21.14%</td>
<td>3500</td>
</tr>
<tr>
<td>25-34</td>
<td>600</td>
<td>5.71%</td>
<td>7640</td>
<td>72.76%</td>
<td>2260</td>
<td>21.53%</td>
<td>10500</td>
</tr>
<tr>
<td>35-44</td>
<td>3980</td>
<td>41.89%</td>
<td>4160</td>
<td>43.79%</td>
<td>1360</td>
<td>14.32%</td>
<td>9500</td>
</tr>
<tr>
<td>45-54</td>
<td>3540</td>
<td>47.20%</td>
<td>2880</td>
<td>38.40%</td>
<td>1080</td>
<td>14.40%</td>
<td>7500</td>
</tr>
<tr>
<td>55 &amp; Above</td>
<td>340</td>
<td>22.67%</td>
<td>660</td>
<td>44%</td>
<td>500</td>
<td>33.33%</td>
<td>1500</td>
</tr>
</tbody>
</table>

Chi square Test Statistics

<table>
<thead>
<tr>
<th></th>
<th>INFORM</th>
<th>COUNSEL</th>
<th>ADVISING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi-Square</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>df</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Asymp. Sig.</td>
<td>1.000</td>
<td>1.000</td>
<td>1.000</td>
</tr>
</tbody>
</table>

5 cells (100.0%) have expected frequencies less than 5. The minimum expected cell frequency is 1.0.

Friedman Ranks Test

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean Rank</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Friedman Ranks Test

Statistics

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>5</td>
</tr>
<tr>
<td>Chi-Square</td>
<td>6.000</td>
</tr>
<tr>
<td>df</td>
<td>2</td>
</tr>
</tbody>
</table>
Asymp. Sig. .050

a Friedman Test

The table 7 shows that 60.57% of NOUN students within the age range 15 to 24 years preferred counselling while 18.28% of them preferred information and 21.14% of them preferred academic advising at pre-admission stage of their programmes of study. 72.76% of NOUN students within the age range 25 to 35 years preferred counselling while 18.28% of them preferred information and 21.14% of them preferred academic advising at pre-admission stage of their programmes of study. 72.76% of NOUN students within the age range 35 to 44 years preferred counselling while 18.28% of them preferred information and 21.14% of them preferred academic advising at pre-admission stage of their programmes of study. 72.76% of NOUN students within the age range 45 to 54 years preferred counselling while 18.28% of them preferred information and 21.14% of them preferred academic advising at pre-admission stage of their programmes of study. 72.76% of NOUN students within the age range 55 and above preferred counselling while 18.28% of them preferred information and 21.14% of them preferred academic advising at pre-admission stage of their programmes of study.

Table 7.1 Using SPSS, the Chi-Square test statistics indicated the following results .000, .000 and .000 less than 1.00, 1.000 and 1.00 level of significance respectively, therefore the null hypothesis is accepted.

Table 7.2 Friedman rank test also indicated a significant difference in the ranking of preference for counselling, information, and academic advising at pre admission stage of their programmes of study. The counselling was the most preferred, while academic advising was the least preferred at pre-admission stage of their programme of study.

Hypothesis 6

Ho: Age would not be a significant determinant for preference of counselling mode (information, advising and counselling) among National Open University of Nigeria at on-course stage their programmes of study.

<table>
<thead>
<tr>
<th>Age Range</th>
<th>Information</th>
<th>%</th>
<th>Counselling</th>
<th>%</th>
<th>Academic Advising</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>15-24</td>
<td>900</td>
<td>25.72%</td>
<td>2000</td>
<td>57.14 %</td>
<td>600</td>
<td>17.14%</td>
</tr>
<tr>
<td>25-34</td>
<td>3880</td>
<td>36.45%</td>
<td>5020</td>
<td>47.81%</td>
<td>1600</td>
<td>15.24%</td>
</tr>
<tr>
<td>35-44</td>
<td>4160</td>
<td>43.79%</td>
<td>3940</td>
<td>41.47%</td>
<td>1400</td>
<td>14.74%</td>
</tr>
<tr>
<td>45-54</td>
<td>3000</td>
<td>40%</td>
<td>3000</td>
<td>40</td>
<td>1500</td>
<td>20</td>
</tr>
<tr>
<td>55-ABOVE</td>
<td>320</td>
<td>21.33%</td>
<td>680</td>
<td>43.34%</td>
<td>500</td>
<td>33.34%</td>
</tr>
</tbody>
</table>

Chi square Test Statistics

<table>
<thead>
<tr>
<th></th>
<th>INFORM</th>
<th>COUNSEL</th>
<th>ADVISING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi-Square</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>df</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Asymp. Sig</td>
<td>1.000</td>
<td>1.000</td>
<td>1.000</td>
</tr>
</tbody>
</table>

a 5 cells (100.0%) have expected frequencies less than 5. The minimum expected cell frequency is 1.0

Friedman Ranks Test

Mean Rank

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>INFORM</td>
<td>1.60</td>
<td></td>
</tr>
<tr>
<td>COUNSEL</td>
<td>2.80</td>
<td>L</td>
</tr>
<tr>
<td>ADVISING</td>
<td>1.60</td>
<td></td>
</tr>
</tbody>
</table>
them preferred information and 33.34% of them preferred academic advising at pre-admission stage of their programme of study.

Table 8.1 Using SPSS, the Chi-Square test statistics indicated the following results .000, .000 and .000 less than 1.000, 1.000 and 1.00 level of significant respectively, therefore the null hypothesis1 is accepted.

Table 8.2 Friedman rank test also indicated a significant difference in the ranking of preference for counselling, information, and academic advising at pre-admission stage of their programmes of study. The counselling was the most preferred, while academic advising was the least preferred at pre-admission stage of their programme of study and there

IX. DISCUSSION

From the above findings, the students of NOUN indicated that they preferred counselling, information, and advice services in that order, at the pre-entry stage of their programme of studies. At the pre-entry stage the prospective learner needs mixture of information, advice and counselling GNOU 2001). Prospective learner would want to know about the programmes and courses available, entry requirements, the teaching-learning process, the recognition of the award, employment prospects etc. his preferences. According to McNickle 2004), at the pre-enrolment stage the learner requires access to a full range of services to enable them to select the best courses for their needs and ensure they have a thorough understanding of what employment opportunities and skills they will have on completion, what the course entails and also their expectations as learners. She further stated that, at the pre-admission stage, the learner would requires information, counselling and information in order to be aware of the skills required often in technology or how to use specific software in order to undertake the course. They also The characteristics of the Open and Distance Learners, the institution and learning processes make the students vulnerable to personal and emotional problems, and drop out problem therefore need guidance and empathy as they go through the process and procedures at pre admission stage (McNickle, 2004)

X. PRE-ADMISSION STAGE

The preference for counselling above other guidance processes (information and academic advising) at pre-admission stage could be attributed to the lack of understanding of Open and distance system since most of them are coming from the conventional face-face classroom system couple with the fact that single mode ODL is new in Nigeria. With the lack of understanding of the mode of educational system, they are embarking on; prospectus students are likely to perceive themselves as not having innate abilities and capabilities that could carry them through programme. This apprehension, may likely make them prefer counselling to information and academic advising since counselling offers the individual, a relationship based on trust and acceptance within which he or she can explore issues relevant to development, clarify their real needs, reconciling the conflicting demands of home and work, and coming to terms with isolation and with problems resulting from previous experiences and take informed decisions.

Another point is that that since the majority of the students are adults who are busy with family and work commitments, and are rejoining academic after a long time, they may to seem lack confident in their abilities and capabilities to cope effectively with demands of their work and studies and therefore would likely to prefer counselling to other aspects of guidance. Moreover, the findings corroborate the report of study of Arav (1989) which indicated that most of the students in open system are badly in need of academic counselling before the pursuit of their courses of study. Brown (1987) went further to explain that information should be provided to answer the students inquires; the students would require advice to choose appropriate options and counselling should be provided for the students to discover, clarify, assess and understand their learning needs. The probable means that the guidance needs could provided in Open and Distance as succinctly put by Hefferman, (1981), the objectives behind meeting the needs of information, advising and counselling of Open and Distance Learners are intended to develop confidence, enable learners to make personal choice particularly for adult learners who face a myriad of personal and special problems which role conflicts, financial pressures, learning difficulties and confusion about their goals.

XI. POST ADMISSION

In contrast to the conventional face-to-face classroom, in an ODL system, the individual learner studies most of the time alone, isolated in a remote place, from the institution and other students, his only contact with the institution and other students are the occasion face to face facilitation and counselling, In National Open University which is, single mode, a learner must develop an effective set of appropriate learning strategies or study skills. Some learners may already posses these skills while some others may need help. The process of acquiring such skills may be difficult for those who have previous history of educational failure. Counselling may be an effective process, for such learners coming to terms with their previous failure. (IGNOU,2001) Also from the findings above, differences in age and gender of the students of National Open University of Nigeria were not significant determinants of their preference for counselling information, advice and counselling needs at pre admission and post admission stages of their programmes of study.

This is in congruence with Tail (2000) observation that at certain level of the learning process, all open and distance learners need support beginning with obtaining information about learning opportunities and continuing through completion of the learning objective and perhaps employment assistance on one hand. He further explained that the level of support needed by an individual student in any step within the process depends on many things including age, gender, social class etc. on the other hand
(Tail, 2000). Though the influences of gender and age were not significant on the preference for counselling mode among NOUN students, the concept of no two Open and Distance learners have the same guidance needs as proposed by Brown (1987) partly forms the frame work for the research. Education include written document, telephone calls, media output and personal (face-to-face) contact. The findings of this study clearly indicated that the students of NOUN are dare needs of counselling, information, academic advising and counselling in order to be successful their studies.

In conclusion therefore, the intended objective of determining most preferred aspect of counselling (information, advising and counselling) needs of different age and gender categories of NOUN students has been achieved. This is in line with COL (2003) observation, that though most adult learners are highly motivated, motivation along with communication and problem solving skills encourage developing strategies for coping with difficulties that affect their learning.

XII. REFERENCES

1) Ariav, R (1989) Student support services in the University of Israel. Paper presented at the international conference of the International Council for Distance Education and British Open University. Regional academic services on interaction and independence. Student support in distance learning. Dowing College Cambridge England


4) COL (2002) An Overview of Open and Distance Learning, a Training Toolkit produced by COL in co-operation with the Asian Development Bank and the International Extension College in the UK.


10) IGNOU (2001p15) ES-313 Learner support services: Needs and mechanism (Block1


Ifabiyi, I.P¹ B.A. Usman;² I.O.Orire³ Aledare, A.⁴

Abstract-The study assessed productive time of women and water supply in Ijumu L.G.A. of Kogi state, Nigeria. Two hundred questionnaires were administered in the LGA and 32 socio-economic variables were generated altogether. Principal component analysis and stepwise regression analysis were used to interpret the data. The result of the principal components reduced the 32 variables to seven orthogonal components. The factor defining variables underlying the explanation are: water borne diseases, marital status and distances to the nearest water points. Others are: number of days lost to treatment, family size, and age of respondent. These components offered 95.5% explanation to the variance. Furthermore, the result of the stepwise regression analysis showed that all variables entered into the equation and they together contributed 98% to the equation. The paper concludes that water use characteristics at the household level differ from place to place and therefore there is need for caution on result interpolation. The paper recommends the need for provision of more public water points in the local government area in other to improve access to water supply and release more time for productive activities in the community. This results calls for further studies particularly on water chemistry, gender, poverty and on determination of efficient distances to water points

Keywords-productive time, women, water supply, water use components

I. INTRODUCTION

The average time spent in fetching water is an important indicator of the level of efficiency of rural water supply within the rural communities. In the developing countries, women and girls spend hours every day walking many kilometres to collect water from different water sources. As reported by UNPF (2001) women in developing countries walk an average of 6 kilometres per day to collect drinking water. Meanwhile, it has been discovered that these statistics vary according to countries. For example, in Cameroun women spend an average of 6 hours per day (NISC, 2004). In Kenya, it is about 4 hours in dry season and 2hours in wet season. Averages of 4-6hours have been reported in Burkina Faso, Botswana and Ivory Coast. About 17 hours a week has been estimated for Senegal (UN, 2000). On the whole, the average time lost by children and women in a day has been put at 200million hours in search of water. Meanwhile, the time spent to search for water could be diverted for economic activities that could be of financial gain to these poor rural families. According to Whittington, et al (1990) a study in Kenya among rural dwellers of Ukanda showed that household in the village place a surprisingly high value on the time they spend collecting water. Finally, Coasta, et al (2009) in a recent study in Ghana discovered that the time spent on remunerated job increases when household are provided with electricity and also that the supply of water reduces the time burden faced by rural women. There are recorded indications that a strong association exist between poor access to water, in particular, time spent in collecting water and material poverty across the world (WDR, 2000; GWSSAR, 2000). Poor access to water is an implication that women and children have less time to engage in income generating economic activities, as they spend more time caring for their sick children and relatives due to unhygienic living standard (David, 1998). Poor access to water and the amount of time spent collecting water may also result in female child illiteracy and perpetration of female poverty (UNESCO, 2005). Already 2/3 of illiterates in the world are women (UN, 2000). Across the world one of the approaches of resolving the issue of time wastage in water resources management is by improving access to water. According to World Bank (2003) Morocco successfully reduced time spent in collecting water by girls and women by between 50-90%. The project also raised female attendance in schools by 20% within four years. A study in India reported that combining improvement in access to water supply with income generating projects for women results in higher income for women and improved relations; a condition that has reduced rural poverty and improved status of women in India (Verhagen, et. al 2004; Sybessima, et. al. 2009). Saskia (2000) observed that accessibility to water improve female health, increased dignity, less exposure to both gender related hazards and water borne diseases. It also enhances school attendance and performance of female children. A notable feature of studies of water supply and demand at the household level is that it is always complex and their results cannot be interpolated for other areas. Hence, this present paper will attempt a study of the pattern of water supply and productive time of women in the Ijumu, L.G.A. of Kogi state, Nigeria.

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II. THE STUDY AREA.

Ijumu Local Government area is located between latitude 7° 30’ and 8° 10’ and longitude 5° 45’ and 6° 15’ with Iyara as the headquarters (Fig. 1). According to 2006 population census it has a population of 119,929 with women forming 50% of this.

The climate of Ijumu L.G.A. belongs to the humid tropical climate with distinct seasons. The wet season starts from April and ends in October. Rainfall is about 1,500mm with relative humidity of about 75%. The rate of evaporation is high about 75mm per annum. This will impact on the amount of water requirement in the LGA.

The local government is underlain by Basement Complex rocks and this suggests that drainage pattern will be dendritic. The major principal drainage line is River Oyi which originated from the Yoruba highland and drains Northeast into River Niger (Fig. 1). The depth of weathered regolith has been discovered to be between 15-25meters thick across the L.G.A. this has been found to support a number of boreholes and hand dug wells tapping different regolith aquifers which dotted the villages.

The relief is generally undulating with series of inselberg ridges. The relief is prominently dominated by Okoro-Agbo mountain in Ogidi. A number of rock outcrops are also visible throughout the local government.

The vegetation is that of deciduous forest and southern guinea savanna, thick gallery forest is found all over the LGA. Rainforest species of mahogany, iroko and several hard woods are common. The coming of exotic species such as *tectona grandis* and pulp wood in the local government have encouraged the growth several sawmills industries which supply many markets in the northern parts of Nigeria. Economic trees such as cocoa, kola nuts, citrus species, cashew nuts, etc are also found in large quantity.

The dominant ethnic group is Yoruba, whose major occupation is farming. Farming is done by both men and women. Farming is mainly rain fed. The major tree crops are coffee, cocoa, oranges, cashew nuts. Annual crops are very common and they include: yam, maize, guinea corn, beans, cassava which are grown extensively. Indeed apart from when helping their spouses on the farms, women are also reputed to have large cassava farms.

The major sources of water are mainly from hand dug wells and a few public hand pumps and open streams; which most of the time dry up in the 5-6 months of dry season; in some cases, the hand pumps are broken down for months only waiting for maintenance crew from Lokoja the state capital. In the dry season water is generally scarce and it is a period when women and children which traditionally fetches water are greatly tasked searching for water as some shallow wells and stream would have dried up.

III. METHODOLOGY.

The data required in this study are mainly on the water use characteristics and socio-economic characteristics of women in the study area. This information were obtained from structured questionnaire. The study adopts a systematic stratified, random sampling method in which the LGA was divided into 10 districts wherein 20 women were sampled randomly in the communities of each of these districts. This translates to administration of 20 copies of questionnaires per districts. Altogether 200 copies of questionnaires were administered in this study.

The generated socio-economic indices were subjected to principal component analysis procedure in other to reduce them to few orthogonal variables which could be used to explain the pattern of water supply in the area. The multiple regression analysis was later used to study the relationship between time and water use variables.

IV. RESULTS OF FINDINGS SOME PRIMARY ATTRIBUTES OF RESPONDENTS

Generally 20% of the respondents were less than 20 years old. In Araromi district 60% of the respondents were between ages of 41-60, at Iffe district 30% of the respondents were above 61 years old. According to Table I majority of the respondents have relatively large household sizes with most of the household within the range of 6-8 people. As depicted in Table 1, distances to most respondents water points lies between 0-50 meters and 51-100 meters. Indeed, it was also discovered that most respondents obtain their water from hand dug wells which are scattered within the communities of the study area. Further analysis also showed that most of the respondents spend about 10-30 minutes and between 30 minutes to 1 hour before collecting water. All these will affect water supply and productive time of women in the study area.

V. DETERMINANTS OF WATER USE IN IJUMU LGA.

The results of the principal component analysis after vari-max rotation show some underlying factors. These components are seven in number. They altogether explained 95.5% of the explanation (Table2).

a) Component 1:

It has the strongest loading on diarrhoea, suggesting that diarrhoea is a common disease in Ijumu. This component is also strongly loaded on typhoid fever, 2 days of treatment and on treatment more than 3 days. Component 1 is an *index of water borne diseases*. The component defining variable is diarrhoea. It offered 20.3% contribution to the variance. Component I has the greatest contribution to water use in the LGA. This suggests that water borne diseases affect dispassionately the productive time of women as days are taken off for treatment.

b) Component 2:

This component contributes 18.0% to the variance. It has the highest loading on divorced women. It is equally loaded of three variables: single women, women spending up to 1hr before obtaining water, women trekking up to 100 meters distance. It has it strongest loading on percentages of divorced women. It is a *measure of marital status*. A close affinity exists between the demographic statuses of being single and divorced as the two connotes a state of
being single. It therefore suggest that single and divorced women are trekking relatively long distances to water points and are therefore spending much of their productive time fetching water.

c) Component 3:
It contributes as much as 14.5% to the explanation. The highest loading is on women covering less than 50 meters to water points. This component is equally strongly loaded on two educational variables: secondary and tertiary educational levels; suggesting that the level of education affects distance covered to water points as educated women, are likely to be more enlightened, more economically empowered to provide water within (hand dug wells) their houses. This trend was noticed on the field. This component is an index of distance to water point.

d) Component 4:
Offered 12.7% explanation with highest loading on stream water. This component equally has high loadings on hand dug wells and time spent collecting water. This component point to the fact that high level of association exist between sources of water and time spent in collecting water. This is expected as women collecting from streams covers more distance than those collecting water from hand dug wells. Component 4 is an index of water source. This is expected as time spent in fetching water depends on the sources of water.

e) Component 5:
It contributes 11.51% with highest loading on time spent in treatments, particularly on respondents that lost 3 days to treatment. It equally loaded highly on respondents who fetch water from wells and women with primary school education. This implies that in the study area there is a relationship between times spent receiving treatment, source of water, level of education and women’s productive time. This is expected because educated women are expected to have higher level of hygiene compared to the illiterate ones. Hand dug wells are expected to provide hygienic water compared to stream water. This component is an index of days lost to treatment.

f) Component 6:
Offered 10.9% to the explanation. The highest loading is on family size 6-8people. It is also strongly loaded on age 41-60 and age greater than 60 years. This point to the relevance of household demography to water use behaviour and women’s productive time at the household level. This component shows that women within the age range of 41-60 years and women older than 60 years of age are likely to have relatively large family sizes. Hence, women within this age grade are likely to be grandmothers who have under them various relatives, including their grand children. This component measures family size.

g) Component 7:
This component loaded strongly on age variable of less than 20 years. It also loaded strongly on category of women without any education. This association indicates that women of less than 20 years are likely to be victims of early marriage and therefore may be less informed and therefore will exhibit a peculiar water use habit. It has 7.58% contribution to the variance. This component is an index of women’s age. According to the above, seven important variables underlie water use behaviour in Ijumu LGA. These include: water borne diseases, marital status, distance to nearest water points, sources of water, days lost to treatment, size of the family, and age of respondents. Water use characteristics can therefore be summarized. The implication of this is that in Ijumu LGA, women, particularly singles, divorced, and widows are all involved in water collection. These women have relatively large family sizes of between 6-8 people. These women do cover relatively long distances to the nearest water points before collecting water mainly from streams and hand dug wells. Water borne diseases such as diarrhoea are the most common with patients losing about 3 days while receiving treatment. However, women of age 20 and below have unique water use behaviour of all other category of women. This results calls for further studies particularly on water chemistry, gender, poverty and on determination of efficient distances to water points.

VI. RELATIONSHIP BETWEEN TIME AND WATER USE VARIABLES
The result of the principal component analysis was later subjected to regression analysis in other to predict the relationship between time of women and socio-economic components. The results (Table 3 and equation 1) showed that all the seven components were important in the explanation and they both explained 98% of time spent in fetching water in the area. This relationship can be predicted with equation 1.

\[ Y = 30.300 + 3.846D_{sce} + 3.453M_{tus} - 0.412D_{stc} + 25.275S_{orc} + 2.195N_{dlt} + 0.337D_{voc} - 770A_{gew} \] ................................. (eq.1)

\[ R^2=98%; \ SE=8.5 \]

Equation 1 show that for a period 30.3 minutes spent collecting water, there shall be 3.8% incidences of water borne diseases, 3.453% of this time frame will be determined by the marital status of the respondents, 0.412% will be depending on distance to water points, 25.27% will be due to the source of water Also, 2.99% will depend on time taken off for treatment, 0.337% will be due to family size, and finally age of women will determine 0.770% of this period.

This analysis will be used for the production of water supply models for rural water supply in the LGA.
VII. SPATIAL PATTERNS OF WATER USE DETERMINANTS IN IJUMU LGA.

‘Water borne diseases are most prominent in Ohakiti, Iyamoye, Ijumu I and Ijumu II districts but least prominent in Iyara, Aiyegunle and Ilupa districts. This point to the fact that these later sets of communities have better access to potable water compared to the former districts. For example, Iyara district, the local government headquarters has more hand pumps than other districts (Fig. 2a). The impact of marital status is mostly felt positively in Iyara, Ikoyi, Iffe, and Ijumu I districts (Fig. 2b), while it does not have much impact in other areas. At Ilupa, Ohakiti, and Iffe districts, longer distances to water points translate to increases in the lost of women productive time. While, at Ijumu I, Aiyegunle, Araromi, Iyamoye, and II districts long distances do not really matter. This may be due to the use of auto mobiles (cars and okada (motor cycles)) in fetching water (Fig. 2c). At Iyara, Aiyegunle, Ilupa, Ohakiti, and Ijumu I districts the sources of water affect positively time spent, while in other areas the sources reduces women productive time (Fig. 2d). Further in Aiyegunle, Ohakiti, and Iffe districts the productive time is affected by the numbers of days lost to treatment while for other areas, productive time is not really affected positively (Fig. 2e). Large family sizes have affected productive time in Aiyegunle, Ilupa, Ohakiti, Ikoyi, Araromi and Ijumu I districts (Fig 2f) while it has reduced productive time in other districts. Age of respondent increased productive time lost in Ilupa, Araromi, Iffe, and Ijumu I, while in other districts it does not matter (Fig. 2g).

VIII. DISCUSSION OF RESULTS.

Diarrhoea an oral faecal disease is a prominent disease in Ijumu LGA. Diarrhoea is mainly caused by E. coli. High coliform has been recorded in drinking water in many rural areas in Nigeria. It is responsible for 90% death in children under the age of five. The symptoms of diarrhoea include: fatigue, running stomach, stomach pain, dizziness and dehydration. These will keep the victims indoor and render them unproductive. The high dominance of diarrhoea is because many of the respondents collect water from contaminated shallow wells and streams.

Household demographic characteristic such as marital status is an important factor in water management. For example, families that are together (not divorced) have tendencies of large household sizes compared to single and divorced respondents. Hence, for large household more water will be required and more time will be spent in water collection. Nkang, et al., (2006) in a study in Calabar, Nigeria reported that farmers’ income, number of plots, collection time for water and marital status were found to be significant determinants of water demand. This also agreed with the findings of NBWRT, (1993) in Nigeria and Jayasundara (1999) in India. The source of water is a variant that will directly affect time spent in fetching water and the productive time of women.

Most of the respondents do not have water in their houses, therefore, they do trek some distance to get to the water points. Where the distance is short less time is spent before getting water. It was reported in Mozambique that a reduction in the length of water collection journey from 5hrs to 10 minutes has significant impacts on household water use and other activities (Cairncross and Cuff; 1987).

The numbers of days spent receiving treatment will affect individual productive time and water demand. For example, Buor (2004) observed in Ghana while studying the impact of water collection on the health of women reported that quality of water, hours spent in fetching water are some of the factors influencing women health in Kumasi.

The size of the family is a direct bearing of the amount of gallons of water required at the household level. Where the family is large water demand will be high and more time will be spent in fetching water. In a study in India Jayasundara (1988) also observed similar result.

In the study area collection of water is definitely the duty of woman and children and therefore age 20 and below are mostly sighted fetching water. It is a common thing early in the morning to sight pupils and students fetching water before preparing for school in the morning. This agrees with previous work that women and children play dominant role in water collection globally (WBWRT, 1993; Briscoe and deFerranti, 1988).

Explanations of water supply at the household level in Ijumu land can therefore be based on these seven factors.

IX. CONCLUSION AND IMPLICATION OF STUDY

Water demand at the house level is a complex discussion as the variables involved differ from one case study to the other. Hence, explanation on water management should be based on empirical studies rather than interpolation of results. The 32 variables investigated in this study were reduced to seven with little loss in explanation (4.5% loss). This also confirms that high redundancies exist in such analysis. In Ijumu LGA, water resource policies should take into cognisance such variable as water borne diseases, reduction in distances to water points, and source of water. Others are days spent in treatment, family size, and age of the inhabitants. It is imperative from this result that there is the need to improve access to water in order to overcome some problems, particularly with a view to reducing the problems of water borne diseases, reduction in distances to water points and reduction of the time spent at water points. Improved assess will assist large family sizes and the young girls from the burden of water fetching such that they would be able to go to school and participate in other productive activities.

This results calls for further studies particularly on water chemistry, gender, poverty and on determination of efficient distances to water points.
X. References


Table 1: Selected characteristics of respondents

<table>
<thead>
<tr>
<th>District</th>
<th>Age</th>
<th>Size Of Household</th>
<th>Distance To Water Points</th>
<th>Time Spent Collecting Water</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>&lt;20</td>
<td>21-40</td>
<td>41-64</td>
<td>&gt;60</td>
</tr>
<tr>
<td>1.Iyara</td>
<td>10</td>
<td>40</td>
<td>20</td>
<td>30</td>
</tr>
<tr>
<td>2. Aiyegeunle</td>
<td>20</td>
<td>40</td>
<td>40</td>
<td>0</td>
</tr>
<tr>
<td>3.IIupa</td>
<td>20</td>
<td>20</td>
<td>50</td>
<td>10</td>
</tr>
<tr>
<td>4.Ohakiti</td>
<td>10</td>
<td>30</td>
<td>40</td>
<td>10</td>
</tr>
<tr>
<td>5.Ikoyi</td>
<td>0</td>
<td>40</td>
<td>50</td>
<td>10</td>
</tr>
<tr>
<td>6.Aroromi</td>
<td>20</td>
<td>20</td>
<td>60</td>
<td>0</td>
</tr>
<tr>
<td>7.Iyamoye</td>
<td>10</td>
<td>60</td>
<td>10</td>
<td>20</td>
</tr>
<tr>
<td>8.Iffe</td>
<td>20</td>
<td>40</td>
<td>10</td>
<td>30</td>
</tr>
<tr>
<td>9.Ijumu I</td>
<td>20</td>
<td>70</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>10.Ijumu II</td>
<td>0</td>
<td>70</td>
<td>20</td>
<td>10</td>
</tr>
</tbody>
</table>

#All responses have been converted to percentage
Table 2: Factors controlling water use

<table>
<thead>
<tr>
<th>Variables</th>
<th>Components</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<tr>
<td>Age</td>
<td></td>
</tr>
<tr>
<td>&lt;20</td>
<td>-.084</td>
</tr>
<tr>
<td>21-40yrs</td>
<td>.578</td>
</tr>
<tr>
<td>41-60yrs</td>
<td>-.372</td>
</tr>
<tr>
<td>&gt;61yrs</td>
<td>-.238</td>
</tr>
<tr>
<td>Marital Status</td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td>-.339</td>
</tr>
<tr>
<td>Married</td>
<td>.400</td>
</tr>
<tr>
<td>Divorced</td>
<td>.008</td>
</tr>
<tr>
<td>Widowed</td>
<td>.096</td>
</tr>
<tr>
<td>Level Of Education</td>
<td></td>
</tr>
<tr>
<td>Primary</td>
<td>-.246</td>
</tr>
<tr>
<td>Secondary</td>
<td>-.166</td>
</tr>
<tr>
<td>Tertiary</td>
<td>.165</td>
</tr>
<tr>
<td>None</td>
<td>.428</td>
</tr>
<tr>
<td>Family Size</td>
<td></td>
</tr>
<tr>
<td>&lt;5 People</td>
<td>-.606</td>
</tr>
<tr>
<td>6-8 People</td>
<td>.003</td>
</tr>
<tr>
<td>9-11 People</td>
<td>-.083</td>
</tr>
<tr>
<td>12-15 People</td>
<td>.616</td>
</tr>
<tr>
<td>Sources Of Water</td>
<td></td>
</tr>
<tr>
<td>Well</td>
<td>.112</td>
</tr>
<tr>
<td>Rivers</td>
<td>.447</td>
</tr>
<tr>
<td>Distance To Nearest Water Point</td>
<td></td>
</tr>
<tr>
<td>0-50 Meters</td>
<td>-.123</td>
</tr>
<tr>
<td>51-100 Meters</td>
<td>.307</td>
</tr>
<tr>
<td>101-150 Meters</td>
<td>.425</td>
</tr>
<tr>
<td>151-200 Meters</td>
<td>-.700*</td>
</tr>
<tr>
<td>Time Spent In Fetching Water</td>
<td></td>
</tr>
<tr>
<td>&lt;10 Min</td>
<td>-.316</td>
</tr>
<tr>
<td>10-30 Min</td>
<td>.147</td>
</tr>
<tr>
<td>30-60 Min</td>
<td>.459</td>
</tr>
<tr>
<td>&gt;60 Min</td>
<td>.525</td>
</tr>
<tr>
<td>Common Diseases</td>
<td></td>
</tr>
<tr>
<td>Typhoid</td>
<td>-.936*</td>
</tr>
<tr>
<td>Cholera</td>
<td>-.106</td>
</tr>
<tr>
<td>Diarrhoea</td>
<td>.939*</td>
</tr>
<tr>
<td>Time spent in Treatment</td>
<td></td>
</tr>
<tr>
<td>2 Days</td>
<td>.877*</td>
</tr>
<tr>
<td>3 Days</td>
<td>.012</td>
</tr>
<tr>
<td>Others</td>
<td>-.700*</td>
</tr>
</tbody>
</table>

Component Defining variable: Water borne diseases (diarrhoea a) Marital status (divorced women) Distances to water points (50 metres) Source of water (stream s) Days lost to treatment (3 days of treatment) Family size (6-8people) Age (Women less than 20 years)
A. Eigen Value | 6.48 | 5.77 | 4.64 | 4.07 | 3.68 | 3.49 | 2.43
B. % Variance | 20.25 | 18.03 | 14.5 | 12.7 | 11.5 | 10.9 | 7.58
C. % Cumulative Variance | 20.3 | 38.3 | 52.8 | 65.5 | 77.0 | 87.9 | 95.5

- Key *= Variables greater than 0.70 and were used in the interpretation of principal component analysis result.

Table 3: Multiple regression between time and water use variables

<table>
<thead>
<tr>
<th>Model and components of productive time and water supply</th>
<th>Unstandardized Coefficients</th>
<th>T</th>
<th>% R² Explained</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>30.300</td>
<td>2.693</td>
<td>11.252</td>
</tr>
<tr>
<td>1 Water borne diseases (Dsce)</td>
<td>3.846</td>
<td>2.838</td>
<td>1.355</td>
</tr>
<tr>
<td>2 Marital status (Mtus)</td>
<td>3.453</td>
<td>2.838</td>
<td>1.217</td>
</tr>
<tr>
<td>3 Distance (Dstd)</td>
<td>-0.412</td>
<td>2.838</td>
<td>-0.145</td>
</tr>
<tr>
<td>4. Source of water (Sorc)</td>
<td>-25.275</td>
<td>2.838</td>
<td>-8.905</td>
</tr>
<tr>
<td>5. No of days lost to treatment (Ndlt)</td>
<td>2.195</td>
<td>2.838</td>
<td>.773</td>
</tr>
<tr>
<td>6. Family size (Famz)</td>
<td>.337</td>
<td>2.838</td>
<td>.119</td>
</tr>
<tr>
<td>7. Age of women (Agew)</td>
<td>-0.770</td>
<td>2.838</td>
<td>-0.271</td>
</tr>
</tbody>
</table>

Fig 2(a): Water borne diseases
Fig 2(b): Marital Status
Fig 2(c): Distance to water point
Fig 2(d): Sources of Water
Fig 2(e): No of days lost to treatment
Fig 2(f): Family size
Legend
1. Iyara
2. Aiyegunle
3. Ilupa
4. Ohakiti
5. Ikoyi
6. Araromi
7. Iyamoye
8. Iffe
9. Ijumu I
10. Ijumu II

Fig. 1: Hydrographic Map of Ijumu LGA, Kogi State
Purchase Behaviours of Pop Music Consumers: A Survey from Istanbul

Assoc. Prof. Dr. Osman YILDIRIM¹ and Assoc. Prof. Dr. Selcuk HUNERLI²

Abstract- with its young population, Turkey is a favorable market place for music consumers. Despite the growing importance of Turkish music sector and its rapid developments; sufficient number of surveys, which have been conducted on music sector and music consumers in academic sense, are lacking in our country. Accordingly, in this study, the purchase behaviours of music consumers have been aimed to be examined within the scope of the best seller pop music consumption of Turkey. Results of the survey indicate that especially the love towards pop music videos and musical artists are the essential factors for album sales.

Key Words- Consumer Behaviours, Music Consumption, Pop Music, Music Market

I. INTRODUCTION

By virtue of being a developing country, Turkey hasn’t been able to complete its industrialization process yet, especially in the fields related to art. The music sector is at the top of the list. However, with its population of 70 millions, it is regarded as a substantial market by international record companies. Although its level of income per capita is low (gross national product per capita was $3500 in 2007), more than half of the population consists of people under 25 years of age, who constitute the target audience of the record companies. Being located geographically between Asia and Europe, and accordingly its proximity to the markets are the other factors enhancing the importance of Turkey in this field. Turkish music sector displays a backward image in comparison to the standards of Western countries, due to lack of a chart system and its poor retail background. (Higgs1997:2). Although the Association of Music Producers (MU-YAP), a member of International Federation of the Phonographic Industry (IFPI), has a chart at national level; the reliability of that chart is being damaged because of the fact that the data are collected from wholesalers, and the data delivered by wholesaler do not match up with retail sales. (Higgs1997:2). As for the retail substructure, it is not strong enough due to the fact that only a few major retailers are able to purchase goods directly from the producers. Apart from these companies; smaller retail companies, whose numbers are around 4-5 thousand, most of which are family companies are able to purchase products only from wholesalers since their financial powers are not sufficient. (Clark-Meads and Higgs1997:5). Besides, important positive developments were experienced particularly in the 90s, in consequence of the entrance of big international record firms into the Turkish music sector. (Clark-Meads and Higgs, 1997:6) Sony Music, Universal and EMI, some of those companies, are already operating in Turkey. The music sector in Turkey works mainly on domestic repertory. A great majority of the album sales (95% according to 2003 data) are the performances containing music with Turkish words. Whereas the foreign albums are able to sell maximum 150 thousand pieces in Turkey, the albums of domestic artists are able to sell between 250-400 thousand in case of being approved moreover; some albums are able to exceed 1 million. (Clark-Meads ve Higgs1997:6). Therefore, the international recording companies are mainly concentrated on local repertory as well. (Higgs 1997:2). Pirated album sales pose an important problem for Turkish music market as such throughout the world. Pirated sales, which were estimated to be around 16% of total sales for 1996 (Clark-Meads and Higgs, 1997:7), are supposed to be 10% to 25% for today. However, the case is exactly opposite in the other pirated markets of the world. (Higgs1994:51). As the digital piracy in Turkey is on the rise, the fact that use of computer and internet is not widespread enough, keeps this type of piracy in the background. It is clear that the settlement of piracy issue will make a positive contribution to the development of Turkish music sector. The talent contests, which have come in sight especially in the recent period, indicate that interest in pop music in our country is at a nonignorable level. Despite the growing importance of the sector and its rapid development, sufficient number of surveys are lacking in our country, which have been conducted on music sector and music consumers in academic sense. Accordingly, in this study, the purchasing behaviours of music consumers have been aimed to be examined. By considering the fact that local repertory constitutes the great majority of album sales in Turkey, a survey has been carried out, by selecting the topic as the best selling albums in pop music.

II. METHOD

Participants

The research was carried out in various shopping centers of Istanbul. The questionnaires were delivered in empty envelopes to the people who were sitting in the cafeterias of shopping centers; and were collected back as closed 15 minutes later. During delivery of the questionnaires, elementary school students and kids who don’t go to school were excluded. Consequently, 170 of the 400 surveys delivered came back (coming back rate %43). It was assumed that the shopping centers in the research scope...
could bring together different kinds of social-cultural people and so, it would reflect the general of Istanbul, and as a matter of subject, the music consumers. Research was made about pop music albums. As pop music albums are sold so much, the subject time was assumed sufficient to reveal buying behaviors of the consumers. Among the consumers in the scope of research, the number of the buyers of pop music albums was 73 (%43). %25 of these people bought the counterfeit of the album, whereas the rest bought the original. When demographic profiles of the participants were examined, it was seen that almost half of the participants (%49) were under 25 years old, as suitable to the demographic profile of Turkey. Among the participants of the research, the youngest was 10 and the oldest one was 47 years old (average age 26.1, standard deviation 9.0). Distribution of the participants of the research according to the genders was balanced (male's%48, females%52).

Almost half of the participants (%49) who joined the research were composed of university graduate people (including master degrees). The rate of elementary school graduate people was %18 and the rate of high school graduate people was %26. %43 of the participants was composed of people who have a job (employees, employers and pensioners); %21 of the participants was housewives, and the rest %36 was students. When they were examined according to their level of income, it was seen that most of the participants (%76) were composed of low-income people. Among them, the students and housewives who don't have any income take an important place. The rate of the ones whose income can be considered well (three times higher than bottom wage and more) is %14. The rest %10 didn't declare their level of income.

III. Measurement

In the research, the behavior of the music consumers were examined in the scope of their frequency of listening to music kinds (foreign pop, local pop, local rock, Turkish folk music, Turkish art music, arabesque/fantasy, classical west music), their listening preferences of the music they like (from radio, from cd/cassette player, from TV, from computer as mp3), their ways of awareness of new songs, (by listening from radio, by watching the video clip in TV, from TV programs, from friends, from TV/newspaper commercials, from news in press), their frequency of watching music channels, their ways of obtaining music they like (by buying the original cd / cassette, by buying the counterfeit cd/ cassette, by downloading from internet, by copying someone else’s), their frequency and reasons of buying cd/cassette (that they like only 1 song, that they like more than 1 song, the love for the singer, that they like the previous album, the positive opinions that they hear about the album, the interest of making a collection). In every question, the participants were asked to answer all options pointed according to Likert scale (5= always, 1= never). Accordingly, the high point that every option got shows that the option was mostly preferred by the consumer while the low point shows that it was not preferred. In every question, there was a discretionary “other” option. However, in any question, the “other” option was not marked more than at the ratio of %30. Consequently, it was considered that the options covered the most of the preferences of the consumers; and other options were neither separated nor included in the analysis.

7 music kinds that were examined in the scope of the research as well as their contents are as follows:

Foreign Pop: This category includes all the western pop music kinds excepting classical music. Since the consumers mostly consume domestic music products, foreign pop music kind is included in the research as generally, not with its sub-categories.

Domestic Pop: Although the term of pop music means the popular and in-demand music, here, it describes the music kind that is performed by the instruments of western music and by especially the techniques and forms of Western music (Hogg and Bannister, 2000:20). Accordingly, what is meant in this category is the music kind, which began with tangos and cantos in the beginning of 19th century and continued with covering of those songs by translating and, and came until now with the production of music works particular to Turkey from 70s.

Domestic Rock: Although this category can not be accepted as totally at foreign rock music level, it can be considered as Turkish version of foreign rock music. In 70s, this music kind that combined the pop music performed by west music instruments with Anatolian themes and music instruments and was named as Anatolian pop later, disappeared without a trace in 80s; and it gained popularity again as domestic rock from 80s to the present. (Higgs, 1997:1). It usually mentioned together with pop music, however, it was evaluated under a different title in this study.

Turkish Folk Music: It is accepted as a music kind which is produced by local people of different places of Anatolia and mostly contains the elements of local culture. It is one of the traditional cultural people of Modern Turkish music. This category forms the Turkish foot of the music kind called ethnic music in the world.

Turkish Art Music: It is accepted that the music kind in this category is the subsequent of Ottoman music that began in the 11th century and kept improving until the 18th century.

Arabesque/Fantasy: This genre of music that has mainly Middle East melodies differs from other music kinds with its melody as well as its lyrics that pose a rebellion against destiny, contain expression of deep sorrow and pain feelings. Fantasy music came up in consequence of the fact that pop music began to gain popularity and arabesque music began to adopt the elements of pop music. In other words, the mixed music came up with the combining of arabesque and pop music is called fantasy music.

Classical Music: As Classical West music contains so many different features that it cannot be in “other” category, it was evaluated under a different title. Apart from foreign pop music, it is the second foreign music kind in the research.
Besides these questions, by considering that it would affect their buying behavior, the consumer were also asked questions about the pop music albums that mainly constitute the research subject, to see their pop music liking level (5= love so much, 1= don’t love at all) in Likert scale; whether they had listened to pop music recently (yes/no); and whether they had purchased pop music album previously (yes/no).

Before application of the research, a pilot study was carried out on 17 people with intent to determine the reliability level of the questions and options in the questionnaire and to see whether they are understood properly as terms. One week after the research, the survey was applied again to the same people. Consequently, correlation values of the answers in two periods of time proved that the reliability level of the options used in survey was high (between 96 and 99). On the other hand, it was seen that among the options in the survey, there was no option which was understood as different from the aimed meaning.

IV. RESULTS

In the research, the buying behaviors of the music consumers were examined in the context of whether they bought a pop music album recently or not. As the independent variable is binary (“did you buy a pop music album recently?” 0=no / 1= evet), logistic regression is used. The model is meaningful statistically ($\chi^2=73.6; p<.05$) and its prediction power is at the level of %84.

According to analysis results shown in Table 1, among the variables, only the frequency of listening to pop music of the consumer, the frequency of listening to their favorite music from CD /cassette, the frequency of listening from local TV music channels, the frequency of buying albums due to their love for pop music, the level of their love for pop music, their genders, would be considerably effective on their behavior of buying pop music album in the near future. Among aforesaid variables, it was seen that the frequency of listening to foreign pop music and the frequency of watching local TV decreases the possibility of the consumer’s buying pop music album in the near future; whereas the other variables increase that possibility on the contrary.

<table>
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<tr>
<th>Variables</th>
<th>B</th>
<th>S.E.</th>
<th>Wald</th>
<th>p</th>
<th>Exp(B)</th>
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<td>4.04</td>
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<td>.42</td>
<td>.03</td>
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<td>.94</td>
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<td>1.48</td>
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<td>1.84</td>
<td>.18</td>
<td>1.62</td>
</tr>
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</table>

Way of Obtaining Music that You Like

By Buying Original CD/Cassette: .38 | .42 | .83  | .36 | 1.46  
By Buying its Pirate CD/ Cassette: .61 | .35 | 3.04 | .08 | 1.84  
By Downloading Through Internetten: .47 | .32 | 2.08 | .15 | 1.60  
By Copying Another Person’s: -.22 | .33 | .45  | .50 | .80   

Frequency of Buying CD/ Cassette

I liked a song: -.45 | .31 | 2.04 | .15 | .64   
I liked more than one song: .14 | .38 | .14  | .71 | 1.16  
My love for the artist: .69 | .35 | 4.05 | .04* | 2.00  
I liked his/her previous album: -.83 | .44 | 3.60 | .06 | .44   
Positive opinions: -.17 | .35 | .22  | .64 | .85   
Interest in Creating a Collection: .59 | .34 | 2.93 | .09 | 1.80  

Level of Liking Pop Music

1.68 | .67 | 6.27 | .01* | 5.37  

Reasons of Buying CD/ Cassette

I liked a song: -.45 | .31 | 2.04 | .15 | .64   
I liked more than one song: .14 | .38 | .14  | .71 | 1.16  
My love for the artist: .69 | .35 | 4.05 | .04* | 2.00  
I liked his/her previous album: -.83 | .44 | 3.60 | .06 | .44   
Positive opinions: -.17 | .35 | .22  | .64 | .85   
Interest in Creating a Collection: .59 | .34 | 2.93 | .09 | 1.80  

Level of Liking Pop Music

1.68 | .67 | 6.27 | .01* | 5.37  

Attendance Pop Müzik Consert (Ref: No) : .92 | 1.06 | .75  | .39 | 2.51  
Buying Pop Music album recently (Ref: No): -1.14 | .84 | 1.86 | .17 | .32   

Demographics

Gender (Ref: Female) : 2.36 | 1.09 | 4.71 | .03* | 1.63  
Age : .04 | .06 | .53  | .47 | 1.05  
Education (Ref: bachelor's degree and higher) : 1.89 | .60  
Primary education : 1.65 | 1.23 | 1.80 | .18 | 5.19  
High school : .45 | 1.05 | .18  | .67 | 1.57  
Associate degree : .51 | .97  | .28  | .60 | 1.66  
Occupation (Ref: Housewife) : 1.57 | .46  
Student : 1.52 | 1.29 | 1.40 | .24 | 4.59  
Income Earners : 1.06 | 1.96 | .29  | .59 | 2.89  
Income (Ref: 1 billion TL) : 2.50 | .29  
Less than 250 million TL’den az : 1.57 | 1.15 | 1.85 | .17 | 4.79  
Between 250 million TL – 1 billion TL : .25 | 1.00 | .06  | .81 | 1.28  
(fixed) : -11.08 | 5.22 | 4.51 | .03* | .00   

Dependent Variables: 0= Those who have not bought album 1= Those who have bought album

* p<.05

Model \( \chi^2=73.6 \) p<.01; Hosmer ve Lemeshow \( \chi^2=14.3 \) df=8 p=.07>.05

Cox & Snell R\(^2\)=.45; Nagelkerke R\(^2\)=.60

Accordingly, frequency of listening to foreign pop music by the consumer decreases the possibility of buying domestic pop music album at the rate of %59. The frequency of watching local TV as video music channel by the consumer decreases the possibility of buying a pop album at the rate of %65. Local TV is most watched video music channel in Turkey; so it was expected to have a positive effect on album sales. Since the obtained result is contrary to what is expected, the result can be considered as special to only pop music.

According to the results of the analysis, the frequency of listening to favorite music from CD/cassette by the consumer increases the possibility of buying a pop album 1.99 times. On the other hand, the love that the consumer feels for pop music increases the possibility of buying an album two times. The level of love of pop music increases...
the possibility of not buying the album 5.37 times. The consumer is able-minded to buy their favorite pop music album; but the density of their love causes the album to sell more.

Being a male increases the possibility of buying an album 1.63 times, in comparison with being a female. According to this, the possibility of buying an album by men is higher. The housewives in the sample may have caused this situation; because, housewives have any private income and mostly they don’t listen to pop music. On the other hand, it can be considered that male consumers prefer female pop stars whereas female consumers prefer male pop stars.

In the research, the fact that the age is not effective on buying behavior of the consumer is a contradiction to the opinion that pop music is mostly consumed by young people (Hogg and Bannister, 2000:22). The music preferences of individuals are formed at the end of their teenager periods and it tends not to change until the end of their lives (Holbrook and Schindler, 1989:120). Today, it is normal that not only young people but also the adults are fan of pop music. So, it can be considered that age has not an important effect on buying pop music albums.

V. DISCUSSION

According to the research results, it is possible to say that video music channel has an important affect on album sales. Today, video clips especially in the West, are considered as one of the important factors that creates the image of the singers (Hogg and Bannister, 2000:22). On the other hand, music videos are seen as an advertising means for themselves and their products (Lull, 1992). In case no video clip is broadcasted about a pop music album, such a situation is considered as it created a handicap about making the advertisement of that album and it decreased the possibility of sales of the album especially for the consumers who watch the local TV. This situation can be explained with “mere exposure”. Mere exposure expresses that an individual develops a positive emotional feeling for a repeating exciter. Accordingly, the consumer prefers the goods and products, which he/she often meets, to the other similar products or goods that he/she meets less relatively - when other conditions are held equal-, and becomes more prone to prefer them (Baker, 1999:33).

The fact that among the music video channels only local TV has an effect on album selling can be related to that other video music channels can not reach enough number of audiences. At this point, with intent to determine the effectiveness level of local TV on album sales, it will be useful to examine the audience profile and the music consumptions of these audiences. According to a study carried out by Hogg and Bannister (2000:22), music videos have a secondary importance for the teenagers which can be considered as the target group of music consumption. In case most of the audiences of local music channel are not the young people (for example; housewives whose possibility of consumption music products is low), the situation will change. In terms of marketing music, this result shows that pop album presented to the market should be supported by a video clip.

Another result obtained from the research shows that being loved by his/her music consumer is an important factor for the singer, regarding sales of his/her pop music albums. Music albums are the products evaluated in the scope of hedonic consumption. The main feature of hedonic consumption is that the individuals live an emotional experience while consuming the product (Moe and Fader, 2001:378). According to this, the benefit that the consumer obtains from the hedonic products is abstract, not concrete, and especially the feelings are in the foreground. Therefore, it is normal that the love for the music comes into prominence as an important factor in the consumption of music products.

When considered in the context of music marketing, creating a fan population for pop music is an important factor that should be emphasized. The term ‘fan’ is mostly used for teenagers and is described as a person who follows the popstar without judging (Lewis, 1992). These people spend money for their popstars, and appropriate, imitate and model them. At the same time, fans function as opinion leaders and they affect the consumption behaviors of the individuals, with whom they are in contact. So, in further studies, it will be useful to examine the process of being a fan.

VI. REFERENCES

5) Higgs, A. (1997) Turkey shows promise to become viable in the market, Billboard, 109 (23), 1-5.
Democratic Governance and Fuel Crisis in Nigeria

Onifade, Comfort Adenike¹, Ojukwu, Chris C².

Abstract-Nigeria is one of the Oil Producing and Exporting Countries (OPEC) whose crude oil is preferred by many non oil producing countries like Britain and the United States of America. A large percentage of Nigeria’s foreign exchange earnings is generated from the sales of crude oil. While many of the nations who buy crude oil from Nigeria are comfortable with their fuel situation, Nigeria is engulfed in incessant fuel crisis which has been taken its toll on almost all aspects of the economy for almost two decades. This is a situation when there is acute shortage of fuel with attendant long queues that last for weeks and months. When the nation is about to breathe a sigh of relief through regular supply, suddenly, the crisis will erupt again causing untold hardship for vehicle owners, commercial drivers and the general populace who depend on the availability of fuel for mobility and production of goods and services. In recent times, the crisis is further compounded by the inability of the Power Holding Company of Nigeria (PHCN) to meet the energy needs of the populace. Thus many providers of goods and services like tailors, furniture makers and others rely on fuel to generate electricity for their activities. This has resulted in the soaring prices of basic commodities and services. Against this background, this paper examines the role and concept of good governance, the trend of fuel crisis in Nigeria, causes and effects of fuel crisis and identifies ways of preventing fuel crisis in Nigeria.

I. INTRODUCTION

In a society where the citizens are not so much resilient but also adaptive to situations; anything goes. Nigeria is unfortunately one of such societies where citizens as a result of bad governance tend to be more adaptive to ugly situations rather than being resilient. After so many years of military rule in Nigeria, Nigeria is yet to learn and acquire the dictates of good governance and how to put in place effective machinery of government. The challenge is to provide good government and restore citizens’ faith in the democratic process. As Independent Policy Group (2003) puts it, ‘a major challenge facing the current leadership of the country is how best to ensure genuine restoration of democracy and good governance. Weak and battered institutions, poor culture of accountability and transparency, abuse of human rights and the neglect of the majority of the population have created an environment in which reforms tend to be difficult’. The argument is that Nigeria’s political instability as exhibited in its poor economy, among other factors, will not possibly see any real improvement or enjoy the height of good governance until radical changes occur in the mentality and attitude of Nigerians towards the true nature and end of society. As Aristotle holds, ‘One of the fundamental concerns of political societies is the question of the common good or the good(s) communally procured by societies themselves for individual members or groups in their quest for a good life (Ene and Okolo 2003). The good specifically refers to a comprehensive set of goods in which the entire civil society participates. It relates to the material as well as spiritual goods and services of an entire society (Simon 1993).

Fuel scarcity is no longer a new phenomenon in Nigeria. It seems that it has become a common feature and gotten to a crisis stage. In particular, the most recent fuel crisis which started as a joke in December 2009 has now become a feature of the country’s socioeconomic landscape. Across the country, Nigerians queue up at filling stations for hours on end for unavailable fuel. The implications have been loss of man-hours and rising cost of living as transport fares and prices of foodstuffs jumped up. The recurring instances of fuel scarcity, usually worsens towards the end of the year. In the year 2009 alone, there were at least six instances of fuel scarcity according to AFRIICNEWS. Thus, the object of the paper is in three folds: (i) what is good (democratic) governance, (ii) Bad governance and state failure (iii) Fuel crisis as an index of bad governance and state collapse in Nigeria.

II. CONCEPTUALISING GOOD (DEMOCRATIC) GOVERNANCE

In the last two decades, governance has become an important issue in development policy discourse and social science research. Yet a lack of conceptual consensus on the term results in a multiplicity of definitions. However, one of the most popular definitions of governance was the one given by the World Bank and most other United Nations institutions. Governance is defined as ‘the manner in which power is exercised in the management of a country’s economic and social development’ (World Bank, 1992; UNDP 1997; Olowu, 2002). Typically, governance as explained by these multilateral organisations emphasises leadership – the manner in which political (state) leaders manage, use or misuse power, to promote social and economic development or to pursue agendas that undermine such goals. Good governance is in tandem with democratic governance which is largely characterised by high valued principles such as, Rule of Law, accountability, participation, transparency, and human and civil rights. These variables are in distinguishable from the elements of governance of a mature liberal democracy (Adamolekun 1999, World Bank 1989). A review of the literature highlights governance quality as the most critical variable in promoting development across the world. The development crisis in Africa has been described as a ‘Crisis of governance’ (World Bank, 1989). It also follows that while the reasons for south Asia’s colossal human definition are rooted in poor governance, the period of robust and rapid
economic development growth in East Asia (Asian Tigers) is attributed to good governance. Essentially, governance is a process that brings administrators into new collaborative relations in which the prospect for results is deemed to be better than within conventional organisational settings (Hyden and Court, 2002). This involves affecting the framework within which citizens and (state) officials act and politics occurs.

But can there be good governance without good leadership? Logically, the former is derived from the latter. Where there is effective and efficient leadership, there is bound to be good governance. Achebe (1983) in his famous book, ‘The Trouble with Nigeria’, argues that the trouble with Nigeria is failure of leadership – ‘The unwillingness or inability of its leaders to rise to the responsibility, to the challenges of personal example which are the hallmarks of true leadership’. Good leadership is meant to uplift the people, to better the lives of the citizenry and to see that the people as much as possible enjoy the public resources without much ado as is the case in most advance democracies such as the United States, Canada, Switzerland and some fast developing nations such as Singapore, Malaysia, Taiwan and Korea. According to Hyden and Court (2002) there are six functional dimensions of governance: First, the socialising dimension: this refers to the way rules are constituted to channel participation in public affairs. For instance, Putnam’s study (1993) of making democracy work in Italy emphasizes the significance of social capital in building trust, understanding and confidence both in institutions and among people. Second is the aggregating dimension, which refers to the ways a political system is organised to facilitate and control the making of public policy. It deals with how ideas and interest are aggregated into specific policy proposals. Third, the Executive dimensions: Governments do not just make policies. They are also responsible for creating an environment in which people enjoy relative peace and security. What rules, formal and informal do governments put in place to meet popular expectations of freedom from fear and want? These are systemic concerns for which government is ultimately responsible. The fourth dimension is managerial. Policy formulation and implementation is expected to people-oriented, result oriented. In other words, the idea that rules must be legal-national, formal and logical sometimes makes such rules and policies to lack human face which should not necessarily follow in governance. In democratic governance, rules and procedures tend to influence how people perceive the political system at large. The fifth dimension expresses the regulatory dimension. It explains that in governance, state institutions are often created to regulate the economy. That is, the norms and institutions put in place to regulate how corporations operate as well as how capital may be transferred and trade conducted are all important aspects of governance. The sixth and final dimension is the adjudicatory function. Here, each political system develops its own structures for conflict and dispute resolution. How such institutions operate has a great bearing on popular perceptions of regime performance.

III. BAD GOVERNANCE AND STATE FAILURE

The underlying factor behind most theoretical explanations of state collapse or failure in Africa nay Nigeria is bad governance. A conception of state failure or collapse begins with an understanding of what a state is, since a failed state is characterised by what it is not. Ideally, a state is meant to be an organisation, composed of numerous agencies led and coordinated by the states leadership (executive authority) that has the ability or authority to make and implement the binding rules for all the people, and using force if necessary to have its way (Migdal 1988). Zartman (1995) conceives state collapse from the angle of the inability to fulfil the functions of a state which he summarises as the sovereign authority, decision-making institution, and security guarantor for a populated territory. A state collapse expresses a situation whereby the structure, authority (legitimate power) law and political order have fallen apart. Interestingly, there can only be state failure or collapse where bad governance prevails. As Akude (2007) points out, governance denotes the manner in which power is exercised in the management of a country’s economic and social resources for development while bad governance on the other hand implies the management of power in a manner that does not promote economic development. If one critically examines the Nigeria’s leadership in the past two or three decades though predominantly military leadership, one would infer that the country has had a spectrum of bad governance and leadership which is demonstrable in diverse forms and dimensions – patrimonial (neo-patrimonial), predatory and personal rule. The lack of separation between the public and private spheres, which encourage corruption, is often ascribed to ‘neo-patrimonialism’ - The personalised character of African politics in which informal constitutions and organisations are subordinate to individual rulers. Such systems are typically presidentialist and clientelist and they use state resources to go in political support (Szetel 1998; Bratton and Van de Walle 1997). The deeds of the likes of Ibrahim Babangida who introduced Structural Adjustment Programme (SAP) in 1986 and singlehandedly siphoned the gulf war 1991 proceeds, the totalitarian and predatory rule of Sani Abacha (1994 – 1998) and the Olusegun Obasanjo whose regime introduced certain reforms still remain refresh in our memories. Of course, state failure as a result of bad governance is not peculiar or restricted to Nigeria state. We are aware of the antecedents of Mobutu Sese Seko of Zaire, Robert Mugabe of Zimbabwe, Paul Biya of Cameroun and a host of other African leaders who impoverished and looted the state treasury in order to enrich themselves at the detriment of the common citizens.

The concept of bad governance cum state failure in Nigeria perhaps accentuated or exacerbated the high rate of corruption which has eaten deep in the state’s social fibre. This is to the extent that the so-called mixed economy became an excuse for using public funds to subsidize the confused accumulative strategies of equally confused political elite. Thus, the state becomes the accumulative machine of the bourgeoisie class. As this class of individuals
We begin this section by asking fundamental questions: Why has there been a consistent increase in pump price in the last one decade in Nigeria? Should there be any reason Nigeria must import fuel? What is actually wrong with the four oil refineries in Nigeria and is there any reason more refineries should not be built to meet up with the increasing Nigerian population? How many OPEC member countries or oil producing nations import fuel for their countries usage? The history of fuel scarcity in the country is astounding strange. There is hardly a year that runs from the beginning to the end without fuel scarcity coming somewhere in between, with the attendant shock waves and sufferings for Nigerians. This is strange because Nigeria is an oil-producing country, pumping and selling more than two million barrels of crude oil per day in the international oil market. It is strange and tragic too that more than ninety per cent of petroleum products consumed in the country is imported. This is because the four oil refineries in the country are only working in fits and starts. And no private refinery has come on stream yet despite the fact that the federal government has granted licenses to a number of firms to establish oil refineries in the country.

IV. FUEL CRISIS SITUATION IN NIGERIA

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V. CAUSES OF FUEL CRISIS IN NIGERIA

The causes of incessant fuel crisis are not far-fetched. They include vandalisation of oil pipelines, corruption, none-challant attitude of some leaders, hoarding of the commodity by some marketers, insufficient refineries among others. It is note-worthy that almost these entire causes border on the presence or absence of good governance. According to the depot manager of Atlas Cove, Mr. Anthony Onwuka, NNPC had enough products to run the system, it was constrained by the activities of vandals, who rupture pipelines, causing the system to close down thereby creating short supply of petroleum products. He further stated: "The biggest problem, which we have here, is pipeline vandalism. We have engaged all security agencies to be on this pipeline. We have over 100 soldiers on the pipeline within this distance of 72.8 kilometres, from here to Mossimi." (Guardian, Tuesday, 26 January 2010) The issue of vandalisation of oil pipelines as a major cause of fuel crisis could be looked at from the angle of frustration-aggression theory. According to this theory, aggression (in this regard, vandalisation of oil pipelines) is the outcome of frustration. Gurr (1970) opined that where expectation does not meet attainment, the tendency is for people to confront those they hold responsible for frustrating their ambitions. He further stated “the greater the discrepancy, however marginal, between what is sought and what seem attainable, the greater will be the chances that anger and violence will result." (1970:24). In other words, crisis or conflict occurs when the governed are frustrated by the way they are governed especially with respect to deprivations of the basic needs in life. This explains why oil pipelines have, many times, been blown up or damage done to many of the oil installations not only by militants in the Niger Delta area but also in many other parts of the country. The worst aspect is that many Nigerians are not patriotic enough to report such vandals. In a survey conducted among students in six tertiary institutions in Nigeria on reporting cases of fraudulent practices and damaging of government property, less than 50% agreed to report vandals.Onifade, 2002).

Another major cause of fuel crisis in Nigeria is corruption. In fact, high level corruption could be seen as the bane of Nigeria’s oil industry and the cause of incessant fuel crisis. The term corruption is operationally defined by Transparency International (TI) (2006) as the misuse of entrusted power for private gain. TI differentiates between "according to rule" corruption and "against the rule" corruption. Facilitation payments, where a bribe is paid to receive preferential treatment for something that the bribe receiver is required to do by law, constitute the former. The latter, on the other hand, is a bribe paid to obtain services the bribe receiver is prohibited from providing. Historical evidence shows that the First Republic in Nigeria (1960-65) was terminated by military intervention because of the
excesses of corrupt politicians (Ademoyega, 1981). At present, the problem seems to have become a national malady defiling solution in spite of efforts put in place to control it. One of the major ways that corruption serves as a bane of Nigeria’s oil industry Transparency International (TI) (2006) is through its damaging effects on the populace even to the extent of causing physical death as reported by Nsongurua (2008). According to Transparency International (2008), the cost of corruption is four-fold: political, economic, social, and environmental. All these have bearing on the oil industry and fuel crisis in the country. The chairman of National Association of Road Transport Owners (NARTO) was reported as saying that the corruption issue was borne out of the fact that all agencies of government working in the industry and those seen at every refinery and depot were involved in perpetrating the cankerworm. Usually both genuine and fake businesses were often crowded around the industry. Inadequate refineries and mal-functioning or under functioning of existing ones in the country could be seen as another culprit for incessant fuel crisis in Nigeria. At the wake of the most recent fuel crisis, the Group Managing Director of NNPC, admitted that none of the country’s refineries was working. This made the country to depend on 100 per cent fuel importation. The NNPC was said to import more fuel to the country than the combined efforts of all major oil marketers who were not given import approval promptly in year 2009.

None – challant attitude of some of the leaders is another cause of fuel crisis in Nigeria. A situation where both Minister of Petroleum Resources and the Group Managing Director of NNPC, had consistently refused several invitations by the House committee on Petroleum, which is out to find lasting solutions to the incessant fuel crisis in the country, leaves much to be desired. The none – challant attitude could further be seen in the action of the Petroleum Resources Minister who left Abuja for Vienna, Austria for the Christmas and New Year vacation at the heat of the crisis and in spite of the meetings scheduled by Vice President to tackle the lingering fuel crisis. This could be interpreted not only as “a clear demonstration of the lack of respect for the office of the Vice President” but also as an abuse of power and bad governance. No wonder the opposition party said the government has ‘crossed the line from incompetence to sheer insensitivity towards the plight of Nigerians, who daily face harrowing times just to get fuel’.(AFRICAN NEWS)

VI. EFFECTS OF FUEL CRISIS IN NIGERIA

The incessant fuel crisis has led to long queues of vehicles at several filling stations across the country, in addition to sky-rocketing, deviating pump price and racketeering. It said the scarcity of fuel has led to a huge rise in the cost of living, while making it almost impossible for millions of Nigerians to travel home for the Christmas and New Year festivities. Furthermore, the stifling scarcity has led to many avoidable accidents, both on the roads and in homes, with fatal consequences as motorists load extra fuel in their vehicles and store them in their residences. “What sort of government is this that sits idly by as citizens go through untold hardship? Is it not a shame that a government that could not meet its promise to Nigerians to deliver 6,000 megawatts of electricity by the end of the year has now inflicted more pain on them by its inability to even guarantee abundant fuel supply? For how long will Nigerians have to endure this multiplying hardship? (Business World, Feb. 8th 2010). The escape route for many businesses and households in the country from the stranglehold of the energy crisis, which has resulted in the epileptic supply of electricity in the country, has been petrol and diesel. Businesses and households now run their own power plants using petrol and diesel. But with petrol and diesel now becoming as scarce as gold, many households and businesses are having it very rough, and this has resulted in many businesses now operating at levels that are far below their installed capacity. As a consequence, of course, is low productivity and downsizing.

Some unscrupulous marketers usually seize the opportunity of the situation to hoard the commodity in anticipation of announcement of a rise in pump price. To say that the fuel crisis has made Africa’s largest oil-producing nation - Nigeria - a laughing stock in the comity of nations is an understatement. The Way forward

There is a dire need to find the appropriate solution to the recurring oil crisis in order to alleviate the sufferings of the masses. Rasheed Komolafe (Guardian, Tuesday 26 January 2010) aptly stated that Nigerians are no longer interested in whatever caused or is causing the lingering fuel scarcity. All they are interested in is the resolution of the problems that have led to the crisis. It is imperative to make sure that all the four refineries function in order to reduce the country’s dependence on fuel importation. Furthermore more refineries should be built to cater for teeming population of this great country. The way forward in this nation is not importation of products, but refining our crude oil. It would be economically wise for marketers to pool their resources to build refineries instead of depending on fuel importation. This suggestion is in line with that of the former Minister of Finance. The Daily Trust (Wednesday, 30 Dec. 2009) reported, Mrs Ngozi Okonjo Iweala said the solution to the crisis is to break the monopoly of importation. She stressed the need to pursue policies that will ensure more supply in the economy so that we don’t have a monopoly situation but rather competition which will eventually bring the prices down. Daily Trust reports that the Nigerian National Petroleum Corporation (NNPC) is about the only company that has been importing fuel in the past few months. Although some efforts have been made to curb the crisis, for instance banning of the sale of petrol inside jerry cans and sanctions against fuel stations found hoarding the commodity, they have not yielded much result. The problem still borders on bad governance because the law enforcement agents hardly prosecute the culprits. Indeed, some of them were found perpetrating the act during the recent crisis. Sale of fuel in containers and plastic containers called jerry cans should be banned and culprits be made to face the full wrath of the law. Let both the seller and the buyer be arrested, detained and consequently prosecuted while hoarders of the product should be dealt
with by complete auction of the products while monies realised there should be paid into Federal Government coffers. There should be no “sacred cow”. There should be strict monitoring of the distribution of the product as well as profiteering by oil marketers at the filling stations which usually culminate in a major windfall as they rake in huge profits. Disorderliness at fuel stations should also be decisively dealt with. Another solution to the incessant fuel crisis in the country lies in the passage of Petroleum Industry Bill (PIB) and prompt payment of subsidies from Petroleum Support Fund (PSF). Once the PIB is passed into law, deregulation becomes a reality while a new chapter in Nigeria’s petroleum industry would be opened. It is hoped that enabling environment would be created for marketers in terms of licenses to operate properly. Enabling environment should be created for Nigerians who have refineries outside the country to invest in Nigeria.

VII. REFERENCES

1) Achebe, C (1983) the trouble with Nigeria, Enugu: South Dimension Publishers
12) Rasheed Komolafe “PPPRA, Marketers List Conditions to End Fuel Crisis” in the Guardian, Tuesday 26 January 2010
14) Transparency International 2006 in Wikipedia Free Encyclopedia
Globalisation and Imaginary Figures of the Foreigner Anthropological Perspectives

Monique Selim, IrD

Globalisation of the economy that is: of capitalist expansion – has not led to unification on other levels. Far from it: every day we see new areas fragmenting and crumbling, leaving fresh fractures on the maps. Claims to dissident identities and nationalities are multiplying everywhere, asserting differences of culture, religion and origin. Gaps widen, engendering and developing xenophobic partitions. Partition comes about on three different levels. On one level, States seek to legitimise and consolidate their domination by focusing shared frustrations on negative perceptions of the Other; sometimes they then set quotas of aliens to be expelled. As a corollary, on a second level xenophobic movements multiply exponentially, targeting foreigners, portrayed as intruders taking jobs and wealth away from the local population. In the global arena – the third level - the battle against terrorism puts final touches to the production of a radical Alien: the threat par excellence, the threat to be removed. No continent seems to be immune to this declension of the figures of Otherness, its guises articulated in various modes, external and internal, drawing their strength from these linkages. The three supports of a variable structure are today the internal stranger (i.e. of the same nationality), the external stranger (of a different nationality) and the extreme stranger (a globalised figure representing absolute risk, a role currently played by the political Islamist). The structure is a complex one, its categories overlapping and encompassing variations in State-sponsored xenophobia which are grafted on to more or less spontaneous distastes that have been encouraged in various ways and intensified to various degrees. Many dictatorships are able to maintain their power, and to eliminate political opposition without incurring international disapproval, simply by claiming to be part of the global hunt for the “internationalised alien “, currently in the guise of the Moslem terrorist. Seen in foreshortened historical perspective, this configuration shows that profound change has taken place in the images of Otherness. The colonial empires oppressed Others who were considered biologically inferior. Repression, exploitation and forced labour, however, were tempered by the legitimising aim of educating and “civilising”. Admittedly, in putting down rebellions and doing away with political adversities this hypothetical mission was often overlooked. A few earnest subjects succeeded in reaching top positions by carefully conforming to the model prescribed: that of the coloniser, who set himself as an example. Imitation was the force that drove the social, economic and political machinery. This also holds for the symbolic level: the cult of mediums and possession by spirits could set in motion ideological machinery of much the same sort. Decolonisation in its various forms attempted to dismantle these mechanisms ensuring reproduction and alienation. It reactivated forms of otherness that had previously been thwarted and denied. They were now presented as glorious Identities - but without being freed from symmetries and inversions that implied a continuation of subjection. Later, the 1970s saw a blossoming of otherness transformed into myth and exalted in proportion to its remoteness from Western society. Yet it had to be admitted that Western society, industrialised, developmental and consumerist, was also democratic… But then weren’t its elections merely lures thrown to the masses? With the help of a handful of anthropologists, the lifestyles, styles of thinking and modes of political organisation of far-off places that had not been incorporated into the capitalist world – places where there was no State, no surplus, no obligation to work and no sexual frustration - inspired dreams of total alternatives. Here at last was otherness not in negative, but positive form! It came to be seen as the foretaste of a better world, a vanguard. But subsequently, as soon as capitalist growth began to falter, the dream collapsed like a house of cards. Within the space of a few years the splendour of the totally Different vanished into thin air.

I. XENOPHOBIC DERELICTION

In the mid-1970s an anthropologist applying the methods of ethnology to a study of housing estates on the northern outskirts of Paris discovered a landscape that was alarming. The people who had moved out of the Paris slums had initially been delighted with their spacious modern apartments. They were soon to lose their illusions, however. Service charges were high and transportation cost more. On top of this was soon to come fear (unfortunately justified) of losing their jobs. When they realised that as well they would have to share their living space with “foreigners”, it made it all even worse. They seemed to have been relegated to outer obscurity. Their hopes of a symbolic rise in society faded. The imaginary figure of “the foreigner” haunted everyone, regardless of nationality and country of origin. In this population group (at the time social scientists termed it “pluri-cultural”, “multiculturalism” still being regarded as something positive) any family could potentially be branded as “foreign”; but it was also always possible to find

somebody even more foreign than oneself. Spaces resulting in mutual acquaintance – e.g. the stairwells of the buildings acted as theatres of communication, tense with reciprocal recriminations. Recriminating provided animation, and was in turn kept up by what can only be termed a hyper hierarchy of agents ranked according to their position in relation to “the foreigners”, who by consensus formed the negative pole. Hoisting themselves to the summit of each hierarchy were the activists who on the tenants’ committee. Hailing from the working-class districts of the city proper, they lorded it over the other inhabitants, denouncing one another to ensure precedence and pressing lesser families downwards, reducing them to figuring as “the foreigners”. Hierarchies fluctuated according to success in distancing oneself from “the foreigners” and drawing closer to families passing for “non-foreign”. Domination focused on the behaviour of children, which denoted in fact the ability of the parents to control their offspring. Damage to the buildings was attributed to children and thus, by deduction, to the irresponsibility of their parents; it was read as a loss of identity. Conforming to family norms was ostentatious; providing concrete proof of families’ submission, it provided them with upward mobility in the local hierarchy. According to this way of thinking, “foreigners” had no such thing as order in their families. Yet on the other hand they seemed to enjoy a family solidarity that was perpetually in a state of fusion or confusion - a sociological magma that their superiors, isolated as they felt in their own distress, came to envy. These vacillating universes were peopled with women. Yet as soon as they got home from work, the men would also join in. There were constant altercations; people would refuse to return one another’s greetings, would avoiding others’ eyes; denunciations recorded in superintendents’ reports all mentioned that the men took an active part in this relentless harassment. Each and every family was a potential victim. In this context of xenophobic dereliction, inhabitants who came from working-class backgrounds in Paris or provincial cities shared an unquenchable desire to banish “the foreigners”. It was the only thing they did share. They were all trying to save the last vestiges of an identity that had been destroyed in the process of the social, economic and political relegation that had ruined their hopes. Past hardship, fear of falling back into poverty: blame for these nightmares was invariably put on “the foreigners”. Some 40 years later television reporters revisited the estate, which had never really been out of the news. They now saw it as a “no-go” area, riddled with “drug-peddling” and oppressed by a “climate of terror” - the setting for a case-study in “lawlessness”\(^3\). But what strikes one today in their report is not so much this – it has all since become commonplace – as the shift in the grammars used to analyse and describe them.

insistence on political equality has ended up masking discriminations based on “distinctive traits”. Motives are suspect on both sides of the debate. It is argued (the argument ends up as a sort of slogan), that race – black or white, to start with – obviously does exist, and that this should be acknowledged. France, having “lagged behind” in this respect, now has a duty to catch up and to apply the same categories as other countries. The final aim of the argument is to show that the notion of race makes it possible to recognise the wrongs perpetrated against the people who have suffered from racial discrimination. It thus opens the way to more enlightened policies aimed at rectifying matters and establishing de facto an equality that cannot be obtained de jure. The argument is implacable. Those who oppose it are labelled “reactionaries” - of a new and harmful species that refuses to look squarely in the face an undeniable reality: race is apodictic. We see adumbrated here an enormous dimension of the globalisation process, unifying by establishing a single grammar of categories that assigns to agents, whether individual or collective, precise listed identities; in many cases these identifying details also figure in their passports. This new generalisation of categories of membership is part of the ideological plan of globalisation. It seems to be congruent with the exponential multiplication of the breakaway identities currently spreading from the former USSR and affecting Asia and Africa. Furthermore, the adoption of this particular newspeak soon goes beyond race and pigmentation to include religion. As a result, when religion is registered at birth together with group membership, it is difficult for individuals to get rid of this additional tag. Social scientists make extensive use of these confused categories in their surveys, carrying the process to its conclusion and also establishing its corollary: the development of a plurality of imaginary figures of “the foreigner”.

III. PRISMS THAT CATEGORISE

It is hardly surprising in this perspective that incidentally in 2008 “cultural diversity” – a display of “visible minorities” – should become a major theme at scientific conferences. Debated by political elites, this issue irrigates the programmes of international organisations and - last but not least - provides the media circus with a novelty. The more the negatively indexed Foreigner is pushed on to the stage set of the great identity show, the more “cultural diversity” takes over its the hegemonic paradigm. Cultural identity has now become an objective, a reference. It is part of the same “pack” as Universality; inside the package we also find a Tribute to the Republic, Human Rights, Democracy, etc. – the “values” that have to be exported, exalted and consecrated by whatever means are necessary. Caught between these two referents in a plan of action that entails the unrestrained submission of “cultural diversity” to “universality”, specialists discourse, narratives and accounts – merging increasingly with one another – move towards the control of otherness, at best, and at worst towards its programmed abolition. The artifice involved in taking over this matrix as a bipolar referent becomes particularly clear when we examine recent struggles and the polemics that have arisen from them. The political project of recording ethnic statistics has brought two camps into the limelight. In one camp are people who feel that ethnic statistics could be used to protect “visible minorities” (they draw up a list of these); in the other are partisans of a critical rethinking of identity issues and the permanent danger of political, social and symbolic prescription that is implicit in them. This is why it is urgent to put the whole debate back into its context.

concentrates its attacks on *official* xenophobia, in the belief that malignant xenophobia has been created by the political apparatus of the State. The spontaneous xenophobia of a large part of the population is covered with a fig-leaf – sometimes cynically, but sometimes to avoid incriminating the working classes. Xenophobia, however, is also spontaneously secreted in a variety of social agents acting in accordance with their own particular logics. To ignore this is to go back to an obsolete concept of subjectivity; today we can no longer see the subject as a mere marionette of political and economic organisation. Despite its good intentions, this simplistic notion of domination weakens the struggle against xenophobia, by divorcing the struggle from the ways in which subjectivity is constituted. Seen in this context, the universalising moral perspectives with their vignettes of good and evil that impregnate the militancy of the anti-xenophobes are a potential menace, paralysing the ability to think and depriving action of its efficacy. The mode of production of anthropology is based on immersion in a tissue of inter-personal relationships, together with analysis of the mirror-function of the anthropologist. Thanks to this method, anthropology is able to decipher the sombre landscapes where hatred of the Other becomes the banner of identity. Configurations of social and political relationships that lead to imaginary expulsion of Others are many and various; no one unequivocal determinism can ever be singled out. At another level, in collective situations in which xenophobia is solidly implanted in the majority of a group, each of the internal connections that bring individuals to adhere to the ideology and to use it as a prop has its own particular logic and coherence. No transparent mechanism, completely decoded, can be detected here. Some observers point to forms of dissidence in which psychic mobilisations, once they have been deciphered, might eventually open up new political and epistemic pathways for dealing with the widespread desire to have the Other disappear. Anthropology is by definition comparative. It can help us avoid a double trap: that of seeing differences and universalities as ontological, and that of overlooking the complexity of stances that fluctuate when addressing Otherness. Anthropology can revive political and subjective productions by dissolving cultural and “natural” effigies of the Other. It can enable people to understand that dislike of the Other is not wrought by the State and its ideological apparatus alone; it a co-production involving other agents. In the current globalising phase of history, the Other is being represented once again as biologically different - like women and the mentally ill. All these figures are being transformed into genetic avatars of Otherness. These reifications crystallise defence mechanisms. Resistance to the influx of the new populations and goods (material and immaterial) stemming from globalisation produces a cult of security. It is important to unmask and neutralise these lures, this eyewash that is flooding the markets for identity.

*(Translation: D.P. Moerdijk)*
Buddhism as Orientalism on American Cultural Landscape: The Cinematic Orientalization of Tibetan (Tantric) Buddhism

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Since its spread to the West in the nineteenth century, Buddhism has been frequently discussed and explored in the texts of philosophy, literature, and even mass media. Meanwhile, Buddhism was often (mis)represented as an exotic or Oriental philosophy or religion. To name but a few, the literary theorist Friedrich von Schlegel and the philosopher Arthur Schopenhauer cultivated a great enthusiasm for Hindu-Buddhist notions. Besides mixing Buddhist ideas with Hindu ones, these two scholars also expressed some misinterpretations of the major tenets of the two Oriental religions/philosophy. On the American cultural landscape, three great 19th-century writers—Emerson, Thoreau and Whitman—were the pioneers that brought Indian mysticism to North America (Lowenstein 2000: 156), especially Thoreau, who showed a great zeal for meditative solitude at Walden Pond. In mass media, Buddhism (especially Tibetan Buddhism) has long been a source for commercial films (e.g. The Little Buddha, directed by Bertolucci in 1993). As a result, some of them may have been an attempt to present Buddhism as some Oriental spiritual practice or an Oriental mysticism that looks appealing to the American/Western audience and thus satisfies the Westerners’ exotic taste. Responding to the phenomenon of the Orientalization of Buddhism, some American Buddhist practitioners pointed out that the Buddhist way of spiritual cultivation is often adapted to fit the American cultural landscape. In an interview entitled “Is Buddhism Surviving America?” conducted by Amy Edelstein who worked for an American magazine What Is Enlightenment, Helen Tworkov, editor of Tricycle magazine, expressed her concern about the trend of Americanization of Buddhism on the American soil. In other words, America is “reshaping Buddhism according to its own secular and materialistic agenda.” Moreover, a lot of Buddhist bestsellers are designed to be some spiritual fast food guidebooks that may offer some insight for those who are lost or feel empty on their journeys of life instead of being presented as a serious religious canon. As a result, Americanization and secularization of Buddhism (Dharma) pose a great threat to those who desire to pursue the right Buddhist way of spiritual life. Since the cultural productions are tremendous, this paper is aimed at surveying how Buddhism has been (mis)represented in mass media (with a focus on cinema) as a mysterious yet appealing Oriental philosophy or religion on the American cultural landscape since the 19th century. To be more specific, in this paper I will just cite two American movies—Little Buddha and Music and Lyrics—to illustrate how (Tibetan) Buddhism (or Dharma) has long been misrepresented and Orientalized on American cultural landscape. Above all, though the topic of this paper is inspired by Said’s Orientalism, my approaches to the Americanization of Buddhism are not limited to Said’s perspectives on the West’s creation of an exotic “Other.” Though some critics argue that Said intentionally ignores some other Asian countries such as China, Japan, and South East Asia while privileging the Middle East in taking “the East”/the Orient and that he misleadingly claims that Orientalism prevails in the West for almost 2000 years (since the time of Homer), Said actually focuses on his discourse on re-examining the 19th-century literary discourse, which happens to correspond to my objective in this paper—revisiting the stereotypes or misrepresentation of some “essences” of Buddhist doctrine or practice originated during the West’s (mainly the British and the French) colonial/imperial exploitation of Asia in the 19th century whereas continues to haunt the Western psyche up to the present. More importantly, Said argued that the former imperial/colonial powers—Britain and France—have been replaced by America. My point is that Orientalism derives from a particular closeness experienced between Britain and France and the Orient, which until the early nineteenth century had really meant only India and the Bible lands. From the beginning of the nineteenth century until the end of World War II France and Britain dominated the Orient and Orientalism; since World War II America has dominated the Orient, and approaches it as France and Britain once did. (Orientalism 4)

Responding to Said’s argument that the contemporary Orientalism is mainly dominated by America, this paper aims to highlight that Orientalization of (Tibetan) Buddhism in American Cinema. To better illuminate the Americanization of Buddhism, I would like to give a brief survey of the history of how Buddhism prevailed in the West as follows: Though Buddhism first came to the West in the nineteenth century, Buddhist practice in Europe and North America was only on a small scale until the late 1960s: “The 1960s was a time of both advance and confusion” (Lowenstein 148). After that, many seekers of Buddhism committed themselves to the spiritual journey in the East and returned to the West. During that time, Zen and Theravada Buddhism seemed to be the dominant

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Buddhist denominations in the West. But after the Chinese invasion of Tibet in 1950, following the Dalai Lama, many Tibetan monks and inhabitants continually fled to the West and thus spread the Tibetan (Tantric) Buddhism in the West. With the charisma and inspiring teaching of the Tibetan Buddhist superstar—the 14th Dalai Lama—prevailing in the West, Tibetan Buddhism has almost dominated the Westerners’ conception of the Dharma while the Dalai Lama has been the synonym for Buddhism ever since. Nevertheless, Tibetan Buddhism (with other names such as Vajrayana and Tantric Buddhism) combined the doctrines of both Hinayana and Mahayana Buddhism while also embracing Indian Tantra and the Tibetan folk religion (Bon) and thus contributing to its variety and sometimes esotericism in rituals and practice. Aside from the above-mentioned, Tibetan Buddhism shows great vitality in embracing the strengths of both Mahayana Buddhism and Hinduism (Yogi spiritual practice).

Due to a big misunderstanding of Tibetan Buddhism, especially of the esoteric materials (e.g. the Yogi practice of the culminating sexual union between a male and female practitioners), many Western Buddhists and non-Buddhists take the esotericism and the misrepresentation of dharma for the “essence” of Buddhism. As I mentioned in the introduction of this paper, taking the American cultural production for example, several American movies happen to illustrate the misrepresentation of Buddhism or intentional Orientalization of Buddhism aimed at satisfying the Western audience’s exotic taste for Oriental mysticism.

Firstly, I’d like to illustrate the above-mentioned by analyzing Bertolucci’s Little Buddha. This film is mainly a story about a quest of a group of Tibetan monks, led by Lama Norbu to seek out his reincarnated Buddhist teacher, Lama Dorje, with the juxtaposition of the Buddha’s life story narrated from a book entitled Little Buddha. According to some film reviewers who knew little about Buddhism, the life story of the Buddha is presented to look like no more than the “Bible story” and fable that are focused on the portrayal of magic and the superhuman aspects of the Buddha. This seems to be a misunderstanding or misleading conception of how the Buddha reached the ultimate Nirvana, which is the biggest characteristic of Buddhism—to recognize the potentiality of every sentient being for becoming as enlightened as the Buddha had done: Among the founders of religions the Buddha was the only teacher who did not claim to be other than a human being, pure and simple. Other teachers were either God, or his incarnations in different forms, or inspired by him. The Buddha was not only a human being; he claimed no inspiration from any god or external power either. He attributed all his realization, attainments and achievements to human endeavour and human intelligence. A man and only a man can become a Buddha. Every man has within himself the potentiality of becoming a Buddha, if he so wills it and endeavours. (Rahula 1)

However, in Little Buddha Bertolucci seems to just focus on the supernatural power or the predestined events that the seekers for the reincarnated teacher have to undergo. In addition, the idea of samsāra (cycle of existence, reincarnation) is mystified by the director as long as its related idea of karma: in the opening scene of the movie, Lama Norbu narrates a story of how a goat teaches a Hindu high priest the value of no killing—one of the most important Buddhist precepts—when the goat is depicted as having the capability of a human being who speaks and laughs and then weeps again out of its joy for getting the chance to be reborn as a human being whereas having sympathy for the ignorance of the priest’s capricious acts of slaughter. Though an impressive Buddhist parable, this story may seem to many non-Buddhists the equivalent of some magic Bible parables that contain too much magic/supernatural elements. Moreover, throughout the movie, the director seems to ignore the more important implications of samsāra and karma—they are not just equivalents to those of fatalism. For samsāra and karma are among the key ideas of the most important Buddhist doctrine—causation, which is the Buddhist view of universal law and reality. The director seems to assume some “everlasting” elements being reborn with the reincarnated lama.

For example, once challenged by Jesse’s father with idea of reincarnation, Lama Norbu explained to him how samsāra worked by making an analogy of a tea cup in which the tea was compared to man’s mind or spirit while the cup man’s body. Lama Norbu then broke the cup and added that even when the cup had been broken (just like the aging and death of the human body), our mind still continues to exist by looking for another container for shelter just like the tea moving from one cup to another cup or place without change. Lama Norbu claimed that was what they Tibetans believed as reincarnation. Obviously, this scene is a misrepresentation of the idea of samsāra by considering our mind as changeless. In fact, the Buddhist conception of human mind is not eternal just like the body; that is, both of mind and body are no more than the contingent combination of ever-changing physical and mental energies or forces that are identified as the Five Aggregates, which constitute the so-called “being” and being is becoming just like life, which underlies the universal law of impermanence. Besides, in the movie, the director does not clarify the idea of karma as related to an endless network of cause, condition, and effect. Only when conditions are right, the effect can thus come into being. What he presents in the movie is that mostly the lamas follow their destiny or mission in seeking their reincarnated teacher.

What is worse, the director, by juxtaposing the life story of the Buddha in flashback scenes and the quest for the reincarnated teacher Lama Dorje—Little Buddha—seems to deify the three children that are identified as separate manifestations of Dorje. In so doing the director may be implying that they are the equivalents to the Buddha and thus simplifying/distorting the Tibetan belief in the reincarnation of some spiritual leaders. Besides, near the end of the movie when Lama Norbu completes his mission in the quest and passes away, his spirit manifests itself above the three spiritual children
during a ritual held to honor them. Lama Norbu delivers his final sermon to the children by reminding them of the importance of the Heart Sutra, which is being chanted in the ritual. Norbu chants the core part of the sutra when he says to the children that it is a beautiful prayer: “Form is emptiness, emptiness is form. Sariputra, no eye, no ear, no nose . . .” Then Jesse looks puzzled and questions his father by saying: “Lama Norbu just said no eye, no ear, no nose . . . no Jesse!” By so doing, the director not only mystifies again Tibetan Buddhist practitioners but also misinterprets or distorts the meaning of the Heart Sutra, which is the core and outline of Mahayana Buddhist philosophy and guidelines for practicing the way leading to the cessation of dukkha (samsāra).

In addition, the theme of the Heart Sutra is to illuminate the idea of emptiness (Sanskrit. Sunyata), which happens to form the backbone of the Dharma. It does not mean nothingness but impermanence. Every phenomenon, physical or mental, comes into being when the conditions are right and thus is subject to change when the conditions vary. Above all, the Heart Sutra is by no means a Buddhist prayer. Here, the director fails to mark this Buddhist spirit of impermanence by only hitting the superficial level of the Dharma illustrated in the Heart Sutra—supposedly the most famous and popular Tibetan (and Mahayana) Buddhist scripture.

Likewise, in another American movie, Music and Lyrics, the same things happen but in a more serious and bizarre way almost could be considered as a blasphemy to Buddhism. This movie is usually taken as a romantic comedy. And very few viewers seem to care much about its misrepresentations of Buddhism. The main story is about a washed-up 1980 pop star and composer Alex Fletcher, who is invited by a pop diva Cora to write and perform a duet song. Cora is an extremely erotic entertainer yet devotional Buddhist. In her studio, the interior design is full of Oriental or Buddhist atmosphere. Watching her erotic dance in shooting an MV for her new album on the side, Alex and his manager cannot help praising her for her seemingly devotedness to Buddhism. His manager says Cora seems to be very “spiritual” while Alex admires her exploration of religion. Besides, Cora claims to be inspired by a Hindu guru’s book entitled “Way Back into Love” recently after she broke up with her boyfriend. And she decides to use the book’s title for the theme song of her new concert tour. Moreover, when shooting the MV of the “Buddha’s Delight,” the way she performs is highly erotic when she keeps dancing seductively and showing her orgasm, with her fellow dancers caressing her body. Meanwhile, her fellow dancers are dressed in lama robes while trifling erotically with her in the dance and bowing down to her as a goddess or Buddha figure. The lyrics of “Buddha’s Delight” are full of erotic description of her sexual orgasm and desire for sexual consummation with her true love, which she claims is her “Buddha’s Delight”:

So forget about your past life
Cause this could be our last life
We’re gonna reach nirvana
Boy, we’re gonna reach nirvana

Chorus
Each time you put your lips to mine
It’s like a taste of Buddha’s delight
I see the gates of paradise
You’re a taste of Buddha’s delight
Tell me all your fantasies tonight
And I will make them happen
Cause I’m not satisfied if I don’t get my Buddha’s delight

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Here, at least two things about the misrepresentation can be deciphered: One is the misreading of Tibetan Buddhism, especially the Tantric practice of sexual union between a male and female yogi practitioners, which is considered by most orthodox Buddhist monastic practitioners as an unorthodox or “perverted” way of spiritual practice, for the ecstasy caused by such yogi practice can never lead to the ultimate enlightenment and liberation from samsāra—Nirvana. But in the song “Buddha’s Delight,” Cora keeps making expressions of such orgasm and believes such “Buddha Delight” could lead to the ultimate bliss of Nirvana. In addition, the song exposes a great misunderstanding of karma. The idea of karma in the lyrics does not, as what I mentioned earlier in this paper, mark the Buddhist philosophy of how causation functions as a networking of cause, condition, and effect. Rather, it reveals an overtone of fatalism by showing everything seems to be a result of destiny. Nevertheless, we could see this “distortion” or “blasphemy” against Buddhism as a kind of cultural translation as Homi Bhabha puts it:

To blaspheme is not simply to sully the ineffability of the sacred name . . . Blasphemy is not merely a misrepresentation [my emphasis] of the sacred by the secular; it is a moment when the subject-matter or the content of a cultural tradition is being overwhelmed, or alienated, in the act of translation [my emphasis]. Into the asserted authenticity or continuity of tradition, ‘secular’ blasphemy releases a temporality that reveals the contingencies, even the incommensurabilities, involved in the process of social transformation.(225-26)

Therefore, in Bhabha’s view, this kind of blasphemy is not necessarily a bad thing. Rather, citing Rushdie’s example in representing Koran in his novel, Bhabha argues that such cultural translation (blasphemy) may open up “a space of discursive contestation that places the authority of the Koran within a perspective of historical and cultural relativism” (226). In other words, when Buddhist diasporas lead to the alienation and contestation of Dharma in a Christian context, misinterpretation is the way of understanding/interpreting a new culture. Or we can just see it as an inevitable cultural phenomenon that occurs when an idea or object is being translated into a foreign culture which has no equivalent to represent this idea/object. As a result, misrepresentation
occurs. This is natural and does not matter much unless it is involved with some spiritual matters. For in pursuit of spiritual liberation and enlightenment, the seeker has to find the right way of practicing it; therefore, the blasphemy may pose a great threat for those serious Dharma practitioners.

On the other hand, Bhabha argues that “it is the medium Rushdie uses to reinterpret the Koran that constitutes the crime. In the Muslim world, Samad argues, poetry is the traditional medium of censure” (226). Likewise, in the contemporary postmodern world, cinema is a dominant cultural commodity/industry—a “cultural dominant” in postmodernism (Flaxman 126), for it combines at least three things: culture/art, commerce and technology. Unless ruled by an authoritarian regime, cinema is a main medium for public entertainment and commercial profit. Besides, it reflects the mass consensus of some cultural phenomenon. Hence, the misinterpretations or stereotypes of Buddhism revealed in the American cinema at least highlight the emerging need for popularity of the Dharma/Buddhism in western spiritual practice as well as its decline.

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- Separating a table/chart or figure - impound each figure/table to a single page
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- Use past tense to describe specific results
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- Fundamental goal
- To the point depiction of the research
- Consequences, including definite statistics - if the consequences are quantitative in nature, account quantitative data; results of any numerical analysis should be reported
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<td>No specific data with ambiguous information Above 250 words</td>
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<tr>
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<tr>
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<td>Wordy, unclear conclusion, spurious</td>
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