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# European Journal of Social Sciences

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# **Factor Intensity and Choice Pattern in a Household Production Model**

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## **Abstract**

THIS paper proposes that preference and choice are aligned with the pattern of factor intensity in household production process. It has proved that households will choose commodities whose production into consumable sets in the households' production process uses its abundant resource more intensively. Normalized relative prices of resources, apart from determining the resource endowment position and the direction of demand at individual household levels, provide the basis for allocation of household resources between the factor markets and the household domestic production activities.

**Keywords:** Household production activities, resource endowment, factor intensity, choice.

## **1. Introduction**

CONSUMPTION of any commodity entails the use of other economic resources, namely, labour capital goods, complementary/supplementary commodities, and time. Becker (1965) noted that households do not always, at least in most cases, consume the traditional bundles of ready-made commodities but they also use some resources and are involved in what might well be regarded as production. It has been acknowledged that some factor inputs such as labour, capital, energy, raw/intermediate materials (that is, other commodities) and time are required for a typical household to turn some commodities into consumable items that would yield the final utility. The job of the housewife and children of school age can be appreciated and underscored if we recognize the household as a rudimentary firm necessary for transformation of resources into usable commodities. It is the nexus of these informal production activities within the households that even determine the pattern of formal employment among the members of households (Nakamura, *et al*, 1979).

The choice of any commodity depends on the level of complementary requirement of other economic commodities that such a choice would place on consumer in order to satisfactorily enjoy the commodity whose purchase and consumption is under consideration. The need for a video set brings into consideration the time required for the enjoyment of the services since its consumption is time-intensive. The preparation of most continental dishes by African households is labour-intensive. Yet some luxurious private cars are energy-intensive while consumption of the services of a personal computer is both capital- and time-intensive. Child rearing is labour- and time-intensive and their upbringing in terms of education, capital intensive. Indeed, individual taste appears to be closely determined by the extra requirements created in the process of the demand for (purchase of) and consumption of a given commodity.

The question is: does factor intensity in consumption guide the consumers in ordering their preferences and making choices? In order to give answer to this question, we will consider the household not only as a simple economic unit where only consumption takes place, but will also reckon it as the unit where some economic resources are combined in the process of consumption. We also recognize that the cost of any consumption decision is not just the alternatives which the money



spent on the commodity could have bought. The costs of household consumption decision include the value of other physical commodities, labour and time that have to be expended in order to enjoy the services of the commodity in question. The alternative valuation of these resources, some of which are not listed in the financial prices, also accounts for the choice decision on the commodity under study.

This paper, which presents an argument that choice and consumption pattern depend on the factor intensity of consumption, is divided into four sections. After this introduction, section two discusses the theoretical issues on the traditional economic household as a pure final consumer and the modern issues on households as a producer. The third section deals with household production model, factor intensity, choice and consumption pattern. Section four provides conclusion to the study.

## **2. Theoretical Conceptions of Household as Consumer and Producer**

THIS section is subdivided into two sections. The first is concerned with the traditional theory of household behaviour while the second is devoted to issues raised in the household production modelling of the household behaviour.

### **2.1. Classical consumer's utility maximization**

THE conceptualisation of consumer activities differs with respect to assignment of role to the household. Most times, because of analytical convenience associated with high level of abstraction, the household is often regarded as an end, direct consumer of commodities. Under the ordinal utility analysis, a rational consumer is subjected to some assumptions concerning his income, market price and preference ranking among commodities in order to maximize the utility. Under this simple analysis, virtually everything, including the existence of equilibrium in a consumption space, is assumed. These assumptions include lexicographic preference relation whose ordering is complete, transitive, strongly monotone and strictly convex; continuous preference relation that can be represented by continuous function with ordinal utility formulation. The associated budget constraint function is non-empty value set, continuous and convex in income and market prices of commodities (Mas-Colell, Whinston and Green, 1995).

Given these assumptions, the household utility maximization problem can be set as,

$$\begin{aligned} & \text{Max}_{(x \geq 0)} U(x) \\ & \text{s.t.} \\ & \quad \mathbf{px} \leq Y \end{aligned} \tag{1}$$

where:  $\mathbf{x}$  is a vector of  $X_i$  ( $i = 1, 2, \dots, n$ ) market commodities

$\mathbf{p}$  is a corresponding price vector to  $X_i$

$Y$  is a single value income of the household.

The maximization conditions are derived using Lagrangean multiplier

$$L_{a(\max x, \lambda)} = U(\mathbf{x}) + \lambda(Y - \mathbf{px}) \tag{2}$$

The consumer's equilibrium level of consumption (that is, consumer's preference set) is determined by solving the partial derivative  $\partial L / \partial \mathbf{x}$  ( $\mathbf{x} = X_1, \dots, X_n$ ) for the common variables and deriving the commodity bundle at that level where,

$$\frac{MU_1}{MU_2} = \dots = \frac{MU_m}{MU_n} = \frac{P_1}{P_2} = \dots = \frac{P_m}{P_n} = MRS_{2,1} = \dots = MRS_{n,m} \tag{3}$$

Although this condition guarantees the evaluation of the consumer behaviour, it is loaded with some unrealistic assumptions such as market prices for individual commodities being the sole indicative determinant of such demand and purchases for consumption being consumed without any further processing of the commodities within the household.

## 2.2. Household production model (HPM)

A more realistic modelling of household behaviour considers a household as a producing unit that uses market commodities along with non-market household resources to produce consumable commodities. This would make the activities of the households and the firms overlapping but only differ in the level of intensity of the goal pursuit. In the household production model, the household is a little more complex in composition, goal, activities and results than the pure classical household. “The new economies of the family instead views the family as a multiple person production unit, maximizing a production function whose inputs are market goods and, this time, skill, and knowledge of different members of the family” (Blaug, 1992:220).

The new conception about the household as the producer as well as the consumer was adumbrated in the Becker’s (1965) article which asserted that the household does not consume goods ( $X_i$ ) as bought from the market but will combine  $X_i$  with time ( $T_i$ ) to produce consumable commodities  $Z_i$ . This means that some level of production takes place within the family household which contains the husband, wife and children and other wards (and sometimes in the unmarried person household, one person or more). This conception also permits the admission of non-market activities of the household members (such as children, wards, housewife, husbands and family friends and relations) and non-market goods and other factor inputs into the analysis of household economic behaviour. Pollak (1978) and Glewwe (1991) have made this observation.

Basically, household production model is built on the fact that market goods and services cannot directly yield the required utility except when combined with some factor inputs within the household to produce consumable commodities that yield utility. Even when such services as haircut, and manicure in the beauty salon, or taking food in a restaurant are considered, one needs to spend time at the salon or restaurants. As Pollak (1978:285) observed, market goods are combined with time in the household to produce commodities; and “these commodities rather than the market goods, are the arguments of the household’s preference ordering; the demand for goods and time is a ‘derived demand’, since goods are not desired for their own sake but only as inputs into the production of commodities”. This only restated the assertions by Lancaster (1966) who summarized the essence of the new approach to utility analysis as that – (a) good per se does not give utility to the consumer, but it possesses characteristics which give rise to utility, (b) a good possesses more than one characteristic, some of which are shared by more than one good, and (c) goods in combination may possess characteristics different from those pertaining to the goods separately.

The simplest form of household production activity can be formed using the Becker (1965) concept of market goods,  $X_i$ , combining with non-work time,  $T_n$ , to produce consumable, utility-yielding commodity  $Z$ . Such production activity is presented thus,

$$Z_i = f_i(X_i, T_n) \quad (4)$$

Lancaster (1966) made an addition to the model by introducing linear technological relationship among market goods  $X_i$  in the household production system<sup>1</sup> to derive  $Y_i$ , which was a mere assumption in Becker’s model. The formulation of a linear model made easy the handling of Lancaster’s model as a production function.

$$Y_i = \sum \alpha_i X_i$$

$$F_{(z, Y)} = \sum b_i Y_i \quad (i = 1, \dots, m)$$

$$Z_i = \sum \alpha_i Y_i \quad (5)$$

In this case non-market time and other non-market factors seem to be given some market valuation (normalized price) and evaluated as market goods  $X_i$ . The utility function is, therefore,

$$U = f(Z_i) = f(X_m, X_n, T_i)$$

$m$  = market goods ( $1, \dots, m$ )

$n$  = market goods ( $1, \dots, n$ ), including, time

$T_i$  = leisure (time allocated to  $i$  different leisure activities) <sup>1</sup>

With the budget constraint,

$$P_m X_m + P_n X_n = A + wL_m$$

where  $w$  = wage rate;  $P_m$  = market prices;

$P_n$  = normalized price <sup>2</sup>;

$A$  = Non-labour income;  $L_m$  = market labour, a residual total time adjusted for non-market production activities and leisure.

The model is solved forming Lagrangean multiplier function and taking the first differentials and verifying with the performance of the second order differentials. The Lagrangean multiplier function is below:

$$L_{\max_{\mathbf{x}, \lambda}} f(Z_i) + \lambda(\mathbf{p}\mathbf{x} - A - wL) \quad (7)$$

$\mathbf{p}$ ,  $\mathbf{x}$  are vectors of market and non-market prices and goods, respectively.

In a study by Pollak (1978), taste endogenization in the analysis of demand was considered. Objective evaluation of taste variation as an argument in choice has to be considered rather than assumed that it remains unchanged. There is need to think of some economic factors that would enter into the formation of taste. Household factor endowment represents relative cost of the factors to the household. Low income families are likely to be labour rich since there is a negative relationship between income on the one hand and number of children, fertility rate and level of education of the members of the family on the other (Blaug, 1992:222). Also as Browning (1992) observes the composition of the family also determines the structure and scale of demand. Pollak (1978:289) also argues that increase in prices does not necessarily entail an increase in cost of living index by the same ratio, in fact according to him, the cost-of-living index may even fall, depending on the change in household technology.

### 3. Factors intensity, preferences and choice under the HPM

THE proposition that this paper sets out to prove is that the levels of resource endowment and factor intensity in production of commodities are basic determinants of household choice. Before going further, it is good to set out some basic working assumptions.

- (1) The household is regarded as a rational economic agent whose goal is to maximize gains <sup>3</sup> from the use of its resources in both the market and domestic activities. In the market activities, the household is both a supplier of inputs (namely labour, financial capital from its savings) and a buyer of market goods which are used as input for its domestic production of consumables. The household is thus involved in multiple goal optimisation problem of cost minimization (or gains maximization) on the use of its resources, the solution of which is determined by the relative price/real cost of both its market and non-market resources and its domestic level of technology.
- (2) The household production model is different from business production whose goal is to put back the output on sale for optimal profit. The household production decision is meant to minimize household costs of consumption; and the outputs from household production are meant for consumption not sales. In fact, any household production activity whose final product gets back

<sup>1</sup> Non-market goods are goods used by the households in their production of consumable commodities which get economic value but are not offered money prices e.g. household (housewife, husband and children) labour, domestic farm products, etc. These goods have their shadow prices, which can be evaluated, as market goods.

<sup>2</sup> Non-market goods are goods used by the households in their production of consumable commodities which get economic value but are not offered money prices e.g. household (housewife, husband and children) labour, domestic farm products, etc. These goods have their shadow prices, which can be evaluated, as market goods.

<sup>3</sup> The household necessarily considers the costs and benefits in the use of its resources and decides in favour of the lines of resource use that maximize the difference between its costs and benefits.

to the market ceases to be a household activity and becomes business. Household does not maximize profit except in the nominal sense.

- (3) Inactivity in the household production function is impossible. This is opposed to the business production function where output at shutdown, zero, is an element in the production set. That is, for household production function  $\emptyset \notin U$ . ( $U$  being evaluated in bundles market goods that have passed through domestic production in combination with non-market resources). The non-zero solution in household production has to do with impossibility of household existence without consumption.
- (4) Households are differently endowed with resources; and production process for every commodity is different but consistent across households. That is, if the production of commodity  $X_i$  is intensive in capital in household A, it will consistently remain capital-intensive across other households.

Market commodities purchased by households can be compared to raw and intermediate products in the manufacturing sector's production process. The production of utility from any commodity depends on the availability, within the household, of factors required for processing the commodity. Thus, the constraint to utility maximization in a commodity space comprises both the market and non-market factors. The classical evaluation has considered the market factors and made some rationalizations (assumptions) about the non-market variables. Some of those assumptions concerning the preferences and choice by the consumer can be verified under HPM using factor intensity measurement in a household production process.

The first concern here centres on the proposition that household will choose (reveal its preference for) the commodities whose processing within the household production system requires intensive use of its abundant factors. Conversely, a household will restrain itself, for purely economic reasons, from the consumption of commodities whose production to a utility-yielding level is intensive in its 'scarce' factors.

At this point, there is a need to be clearer with the conditions of a household relative level of factor endowment. Physical availability of the factors required in production is necessary for the household to be described as being abundant in such factor. But that alone could be misleading and grossly insufficient condition. Economic availability must be introduced wherein household resources are weighted with appropriate alternative market prices. A household has more abundantly the resources whose alternative market prices,  $w_m$ , are lower than their non-market prices,  $w_n$ , as evaluated by the household.

This involves a comparative valuation between the market value and household valuation of resources. Given this definition, a household may be physically rich in human labour, but lacks it when economic valuation is introduced – that is, when the available labour market opportunities are adjusted for. Paid employment opportunities available and high expected future wages and other residual gain (such as prestige) for schooling children may make physical labour abundant family to be in need of labour. Such family will not choose labour-intensive pattern of consumption. That means, the economic market valuation of household resources influences availability of such to the household. Lower valuation of the resources in the market than within the household makes such resources to be retained for household usage and therefore the household of them for its domestic usage.

Assuming that  $R_i$  ( $i = 1, 2, \dots, n$ ) are the household resources whose  $w_{im}$  and  $w_{in}$  are market and non-market prices of  $R_i$ , then, a household is more abundant in, say  $R_2$  than  $R_1$  if the available market opportunity for  $R_1$  relative to its non-market household opportunity is greater than a comparative opportunity for  $R_2$ . This is, given

$$\frac{w_{1m}}{w_{1n}} R_1 > \frac{w_{2m}}{w_{2n}} R_2 \quad (8)$$

then, the household has abundance of  $R_2$  than  $R_1$  for use in its production. In the inequality (8) above, a few assertions can be made. First, the market price of  $R_1$  is greater than the market price of  $R_2$ , their non-market valuations are equal ( $w_{1n} = w_{2n}$ ). Or second,  $w_{1n} < w_{2n}$  while their market prices are equal.

Or third, the price ratios may be equal but the physical quantity index of  $R_1$  is greater than  $R_2$ , making it reasonable to offer  $R_1$  for market transaction while  $R_2$  sales may not bring in as much.

Let  $w_{im}/w_{in} = \rho_i$ , then,  $\rho_1 R_1 > \rho_2 R_2$  means that the household will offer  $R_1$  to the market and will use  $R_2$  domestically. This makes the household to be described as having abundant of  $R_2$ , when considering the household production and choice of factor for use within the model. It is more profitable to offer the household resources whose market value is higher and use domestically the ones whose market value is lower in household production process. Abundance of factors within the household relates to the factor whose utilization in the household production process rather than offer such for sale in the factor markets will increase the welfare of that household.

Another clarification necessary is regarding factor intensity in the HPM. Given a commodity choice spectrum  $X_i$  ( $i = 1, 2, \dots, n$ ) which sets  $X_i$  being close substitutable bundles, each of  $X_i$  (say,  $X_1$ ) has a clearly different, unique production (processing) technique from all others (namely,  $X_2, X_3, \dots, X_n$ ), but all having uniquely different processing techniques. The technique is defined in terms of the input ratios in the production process. The differentiation of technique axiom means that for an  $n$ -commodity choice set, there are  $n$ -technology choice spectrum. Let the number of resources that the household has and can use in the production of commodities to utility-yielding goods be aggregated to two ( $R_1, R_2$ ) and the number of commodities restricted to three ( $X_1, X_2, X_3$ ). Factor intensity in the production of the three commodities is defined by the ratio of the two inputs required for production of a unit of each commodity. That is  $\alpha_{11}, \alpha_{21}$  are the technically efficient amounts or resources  $R_1, R_2$  required for production of  $X_1$ ;  $\alpha_{12}, \alpha_{22}$  for  $X_2$ ; and  $\alpha_{13}, \alpha_{23}$  for  $X_3$ , then, the factor intensity ratios for each line of household production are:

$$\frac{\alpha_{11}}{\alpha_{21}}; \frac{\alpha_{12}}{\alpha_{22}}; \frac{\alpha_{13}}{\alpha_{23}} \tag{9}$$

Given the assumption of technique uniqueness and differentiation then comparison can be introduced into the three ratios. For example,

$$\frac{\alpha_{13}}{\alpha_{23}} > \frac{\alpha_{11}}{\alpha_{21}} > \frac{\alpha_{12}}{\alpha_{22}} \tag{10}$$

With the household under consideration, production of  $X_3$  uses  $R_1$  more intensively than the others while  $X_2$  is the least intensive in  $R_1$ , or  $X_2$  is the most intensive in the use of  $R_2$ . Production of  $X_1$  requires more of  $R_1$  than does  $X_2$ ; but production of  $X_1$  uses  $R_2$  less intensively than  $X_2$ .<sup>4</sup> Now the problem is how do we resolve the issue of choice of commodities by the household based on its resource endowment and technological requirements? This calls for bringing in the household's factor endowment index alongside technical ratios of factor intensity.

From inequalities (8) and (10) above, we can combine the normalized returns on factors with the physical requirement in production to get a normalized monetized valuation for the technological requirement for each line of production. That is, let

$$\begin{aligned} \rho_1 \alpha_{11} &= \gamma_{11}; \rho_1 \alpha_{12} = \gamma_{12}; \rho_1 \alpha_{13} = \gamma_{13} \\ \rho_2 \alpha_{21} &= \gamma_{21}; \rho_2 \alpha_{22} = \gamma_{22}; \rho_2 \alpha_{23} = \gamma_{23} \end{aligned} \tag{11}$$

Then the factor intensity ratios can be represented in normalized monetized valuation that can allow us to relate the household factor endowment to the production process factor intensity and therefore ascertain the pattern of choice of commodities. That is relating (10) to (11) above, we then have:

$$\frac{\gamma_{13}}{\gamma_{23}} > \frac{\gamma_{11}}{\gamma_{21}} > \frac{\gamma_{12}}{\gamma_{22}} \tag{12}$$

<sup>4</sup> If commodities  $X_1, X_2, X_3$  are close substitute in the sense that they are meant to satisfy the same want such that purchase of one rules out the need for others, the intervening factor intensity ratios (here  $\alpha_{12}/\alpha_{21}$ ) will not be relevant for economic decision only the extreme values will be considered when all factors are brought into the computation of the ratios.

Since the numerators and the denominators in these ratios were multiplied by a given value  $\rho_1$  and  $\rho_2$  the outcomes do not change the inequality.

From the inequality (12) above the production of  $X_2$  is most intensive in the use of  $R_3$ , which given the going market and household valuation is more available to the household for domestic usage. The household will thus choose  $X_2$ . For a household that is rich in  $R_2$  the preference ranking will be:

$$X_2 \phi X_1 \phi X_3$$

where  $\phi$  is the strong preference ranking relation.

The household that has  $R_1$  more abundantly will have the preference and choice pattern of the form.

$$X_3 \phi X_1 \phi X_2$$

Here, the choice could be  $X_3$ , which uses  $R_1$  more intensively in its production.

For preference ranking by the household, what is necessary and sufficient, therefore, are both the knowledge of the market prices of the commodities and household's resources and the household valuations (normalized prices) of the resources. Once a household's evaluation, given the market and non-market factors, reveals that a commodity can be processed at minimum cost the household will prefer that commodity to all others.

This ranking can be extended to an n-commodity, n-resource and n-household analysis.

Change in household production technology leading to alteration in factor intensity index and change in resource market prices and/or change in resource physical supply within household leading to a change in resource endowment index, will both lead to a change in household preference ranking and choice in favour of the commodities that use the currently abundant factor more intensively. Thus taste of the household will change along with change in factor endowment or factor intensity. It is needless to say that if factor intensity index changes towards  $R_1$  while the endowment index changes by the same proportion in favour of  $R_2$ , then, there will be no effect on the household choice of commodities.

Given the definition of resource endowment for household as  $\rho_1 R_1, \rho_2 R_2, \dots, \rho_n R_n$ , the change in resource endowment can come from a change in  $\rho_1$  or  $R_1$ . Hence, for a two factor aggregation:

$$\rho_1' R_1 >, =, < \rho_2 R_2$$

$$\rho_1 R_1 >, =, < \rho_2' R_2 \quad \dots\dots \text{effect of change in relative factor prices}$$

$$\rho_1 R_1' >, =, < \rho_2 R_2$$

$$\rho_1 R_1 >, =, < \rho_2 R_2' \quad \dots\dots \text{effect of change in physical resource supply}$$

$$\rho_1' R_1' >, =, < \rho_2' R_2' \quad \dots\dots \text{effect of change in resource relative prices and physical endowment}$$

Since  $\gamma_i$  is normalized monetized valuation ( $\rho_i$ ) of physical resource ( $\alpha_i$ ) that goes into household production, then the change in  $\rho_i$  will alter the factor intensity ratio,  $\gamma_i/\gamma_j$  and the direction of choice. This is the basic reason through which economic development and monetization of economic activities have led to a reduction in household production activities, shifting such production to the market. The household becomes better off if it can obtain more from the commodity market by offering its resources at the new market prices and using the proceeds to pay for production which could have taken place within the household. This explains why some households offer their resources to the factor markets and use the income to pay for some traditional household services like taking children to day-care and nursing homes, hiring gardeners and cooks or eating in restaurants. It is simply the change in household factor endowment and intensity indices which make the economic assertion that as “an economy develops, production shifts from households to markets” (Devereux and Locay, 1992), to hold.

It should be stated that all non-market factors that are considered in demand enter into household valuation numeraire. Therefore, the high sounding assumptions about choice and preference in the classical models can be contained in a more realistic modelling, based on data obtained by administering appropriate questionnaire or using other techniques to collect relevant information from the household.

In a situation where the commodity under consideration has utility flow that will last longer than one period, the household factor inputs and market goods required for the production into consumable state throughout its life-span will be considered by the household. The problem therefore becomes minimization of the costs of production of the goods throughout its life-span. That is, the household will have to consider what factor inputs will be required most for the derivation of consumable form from the good throughout the period of its expected flow of utility-services and whether the household has in abundance the factor required intensively. (A commodity may require high financial capital at purchase but be labour-intensive at usage, making the household which is rich in labour go for it while families that are capital abundant will not buy it.)

In the case of purchases of good produced by big-time companies with long-established history of quality dependability, the choice is also considerate of factor intensity. The household has to consider the costs of future repairs, the probable costs of complete defectiveness and the disutility from malfunction period, that may arise as a result of purchasing of newer and cheaper brand substitutes. These costs to the family household are evaluated by the resources intensity of the expected repairs and replacement besides the disutility of the waiting period during repairs/replacement. These expected repair/replacement factor intensity requirements are built into the own-factor-intensity of the commodity before the choice is made. If in the end, own factor intensity plus the expected maintenance factor intensity make the costs of the long-established brand relatively cheaper compared to the newer and pecuniary cheaper brands, the older and pecuniary dearer brand may still be chosen/preferred. This offers part of the explanation for high preference for older-brand-named goods to newer ones even when their relative monetary prices suggest otherwise.

#### **4. Implications and conclusion**

WHAT are the implications of this HPM choice process to choice formulation in consumer behaviour analysis? First, this analysis alludes to the fact that consumers revealed taste, preference and choice can be explained by the resource valuation and production technology of the household. Choice is explained by factor intensity of the production within the household. The formulation of consumer's demand problem should rather consider the normalized resources costs to the household alongside prices of commodities.

Again, given the verification of the  $\pi$  within the household, economists can understand more the importance and economic rational for housewives', house-helps' and children's production activities in the HPM. Since many non-market production activities take place within households, most of which can be given appropriate monetary valuations, economic analysis should shed light on the understanding of such economic activities as child rearing, domestic chores, compound farming, cooking, and other family management activities. Besides, in developing economies such as in Africa, where level of non-market subsistence activities is so high, the analysis of household production activities can be used to supplement the official national income accounting so that the true valuation of aggregate economic activities might be known.

However, there are some activities within the household such as interpersonal leisure relationship and child rearing that attract increasingly higher normalized prices than the market valuations as the economy develops. This is the justification for housewife and children allowances paid by employers for the service of parent members of households.

Child-rearing is commonly known to be intensive in labour, which is more abundant in the rural sector than in the urban areas. Family sizes in the rural areas are larger, with more children, than those

in the urban areas. Even though demand for children depends on availability of labour for their initial rearing (at infancy), the quality transformation of children through education is intensive in financial capital. This additional determinant variable deters some families, especially those with educated parents, from raising large number of children. But this discouraging factor is less influential in rural families because of low level of education, leaving us still with the conclusion that rural families have larger number of children. This trend of choice of family size and demand for children has serious implication for rural surplus labour, low wage rates, unemployment and poverty problems, which seem to be defying stop-gap poverty alleviation policies.

Generally, relative factor endowment position as specified by the normalized prices for household resources above is the basis for which prices of factor input in the factor market must continually rise, especially in a developing economy, in order to bid resources away from the non-market household sector to the monetized market sector. That is the basis for an outward shift in the market sector production possibility frontier and development.

In conclusion, households do not just buy commodities from the market and consume and derive utility directly as supposed in classical analysis of consumer behaviour. A typical household is a producing unit where commodities are bought for its processing into utility-yielding consumable sets. What determines the choice of any commodity is not just its market price but also the technological requirements for its processing within the household production model. A household will only choose those commodities that use its abundant resources more intensively in the processing of such commodities to consumable, utility-yielding goods. Preference and taste are influenced by the household evaluation of its resource endowment and its technological capability.



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# **Estimating Exportable Tree-Crops Relative Price Variability and Inflation Movement Under Different Policy Regimes in Nigeria**

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## **Abstract**

This study modeled the link and impact of inflation on tree-crop commodity relative price variability in Nigeria under different agricultural policy regimes. Empirical results revealed that aggregate inflation had a negative non-linear impact on relative price variability of tree-crop commodities in Nigeria. Furthermore, the results revealed that tree-crop commodities in Nigeria had higher producer price instability indices between 1970 and 2005. Also, Structural Adjustment Programme (SAP) policies brought about an upward shift in the coefficient of inflation while Civilian Post-SAP policies affected relative price variability directly and negatively through inflation. Based on the findings, the study suggested re-assessment and improvement of policy framework of SAP and CPSAP to ensure more efficiency in resources allocation within the sub-sector, in addition to provision of input subsidy during high inflation period.

**Keywords:** Tree Crops, relative price variability, inflation, policy regimes, Nigeria

## **Introduction**

Before the emergence of the oil sector in 1970s in Nigeria, agriculture was the main sustenance of the nation economy (Okuneye, 2003). Greater proportion of Nigeria GDP was contributed by the agricultural sector. Tree crops (rubber, cocoa, oil palm, palm kernel and cotton) played an important role during this era. Though their productions were regional, it triggered infrastructural development in the producing areas. In recognition of the important of tree-crop production in the agricultural sector vis-à-vis the economy, various government regimes initiated series of policies with sound policy instruments to stabilize producer prices and increase tree-crop production in the country.

Between 1960 and 1970, federal government initiated marketing board policy with the following objectives: purchasing exportable tree-crop commodities at prices lower than the world price, providing incentive to farmers and encouraging the adoption of foreign technologies in production in other to increase farmer's overall productivity. In 1975, tree-crop programme was launched. The aim was to increase the acreage, output and raised the income level of the producers (Idachaba, 2000). Following the dissolution of the marketing boards in 1976, government between 1977 and 1985 set up an ad hoc agricultural programme; National Commodity Board with the policy objective of centrally determining producer prices of cash crops (Garba, 2000). All these policies/programmes were formulated in an attempt to periodically improve agricultural commodity

prices and enhance farmers' income level as well as their overall productivity (Akanji and Ukeje, 1995).

By the end of 1985, it was obvious that the commodity Boards could not achieved most of it set objectives as evidenced by their asymmetric pricing that resulted in implicit taxation of farmers. The tree-crops producers on average suffered an implicit tax of 35.74% for cocoa and 35.53% for rubber between 1970 and 1985 (Akanji and Ukeje, 1995). These acts among others faulted the agricultural price intervention effort of the government. The resultant was a continuous fluctuation in producer price of agricultural commodities as shown in Table 1.

**Table 1:** Fluctuations in the mean producer price of tree-crops and inflation (1970 to 2005)

| Policy Regime     | Rubber            |       | Cotton            |       | Cocoa             |      | Oil Palm          |       | Palm Kernel       |       | Inflation |      |
|-------------------|-------------------|-------|-------------------|-------|-------------------|------|-------------------|-------|-------------------|-------|-----------|------|
|                   | Mean Price ₦ /ton | CV %  | Mean Price ₦ /ton | CV %  | Mean Price ₦ /ton | CV % | Mean Price ₦ /ton | CV %  | Mean Price ₦ /ton | CV %  | Mean %    | CV % |
| Pre-OFN 1970-1975 | 293.7             | 36.0  | 155.7             | 45.0  | 398.3             | 34.0 | 133.2             | 55.5  | 85.0              | 44.2  | 14.3      | 69.5 |
| OFN 1976-1979     | 398.8             | 5.1   | 319.0             | 3.5   | 887.5             | 27.0 | 356.3             | 18.4  | 157.5             | 8.3   | 16.3      | 20.7 |
| NCB 1977-1986     | 637.5             | 37.0  | 510.0             | 33.0  | 1289.0            | 21.0 | 529.5             | 33.2  | 207.0             | 38.1  | 15.6      | 63.4 |
| GR 1980-1985      | 664.2             | 14.0  | 558.8             | 20.0  | 1400.0            | 8.3  | 522.5             | 10.9  | 281.7             | 29.9  | 17.8      | 66.1 |
| SAP 1986-1993     | 6150.8            | 125.0 | 5846.3            | 123.0 | 8361.4            | 89.7 | 5719.4            | 119.7 | 3104.3            | 103.4 | 27.1      | 69.8 |
| MPSAP 1994-1999   | 48964.8           | 21.0  | 3897.2            | 14.0  | 78309.8           | 11.8 | 63327.5           | 26.5  | 18580.2           | 14.1  | 30.7      | 83.6 |
| CPSAP 200-2005    | 62160.3           | 49.0  | 36438.9           | 12.3  | 121082.3          | 14.2 | 92050.0           | 18.4  | 23700.3           | 7.9   | 12.5      | 28.7 |

Source: Computed from the records of CBN various issues and FMANR (1997).

Where; OFN = Operation Feed the Nation; NCB = National Commodity Board; GR = Green Revolution ; SAP = Structural Adjustment Programme; MPSAP = Military Post-SAP era; CPSAP = Civilian Post-SAP era

The abolition of commodity boards, price control, export taxes and introduction of trade and exchange rate liberalization following the enunciation of Structural Adjustment Programme (SAP) in 1986 ushered in "Free Market regime" for agricultural commodities (Garba, 2000). This regime was marked by unprecedented fluctuation in agricultural commodity prices. The high degree of price fluctuations was consistent with high coefficient of variability for the producer prices as shown in Table 1. The devaluation of naira during SAP-era improved the tree-crop export competitiveness and hence intensified production for exports. During this period, cocoa, rubber and palm kernel provided more than 70 percent of Nigeria's non-oil export earnings (UNEP-Reports, 2000). The increased activities in the sub-sector during SAP period sprouted local production compared to the previous policy regimes and this further elevated the degree of producer price fluctuations (Table I and II). However, the post SAP (1994-2005) policies witnessed the relaxation of some of the policy objectives/instruments of SAP-period and introduction of some new ones (Garba, 2000). The post-SAP period also saw an increased domination of Nigerian economy by the oil sector and a secular decline in contribution of agriculture to the nation GDP (CBN, 2000). These occurrences among others reduced activities in the tree crop sub-sector and a corresponding dispersion of producer prices.

From observation of Nigerian macroeconomic variables, it seems inflation assume a similar trend with increase fluctuations in the mean producer price of tree-crop commodities within the specified policy periods. The mean coefficient of variability and the mean relative producer price of tree-crops in Nigeria seems to exhibit undulating movement in relation to the mean inflation rates in the specify policy regimes (Table I and II).

Based on this observed variability in tree-crop nominal prices, its relative prices and inflation rates in the specified policy periods, the pertinent question now becomes: does tree-crop commodity relative price variability relates to inflation fluctuations in Nigeria? Empirical answer to this question is the fundamental issue this paper seeks to address. If relative price variability of tree-crop fluctuates because of inflation, such co-movement may decrease activities in the sub-sector and exposed tree-crop farmers to more risks and uncertainties in production, marketing and processing of their products during high inflationary period. However, total elimination of relative price variability of tree-crop

commodities is not a rational marketing policy for any government as the price differential may constitute a panacea for efficient re-allocation of scarce farm resources (Ukoha, 2005).

**Table 2:** Mean Relative Price of tree-crop commodities in various policy regimes in Nigeria.

| Policy Regime       | Rubber | Cotton | Cocoa | Oil Palm | Palm kernel |
|---------------------|--------|--------|-------|----------|-------------|
| Pre-OFN (1970-1975) | 1.39   | 0.73   | 1.90  | 0.59     | 0.39        |
| OFN: 1976 – 1979    | 0.96   | 0.77   | 2.06  | 0.84     | 0.38        |
| NCB: 1977 – 1986    | 0.97   | 0.78   | 2.04  | 0.82     | 0.39        |
| GR: 1980 – 1985     | 0.97   | 0.81   | 2.06  | 0.77     | 0.40        |
| SAP: 1986 – 1993    | 0.80   | 1.26   | 1.76  | 0.73     | 0.46        |
| MPSAP: 1994 – 1999  | 0.99   | 0.77   | 1.59  | 1.28     | 0.38        |
| CPSAP: 2000 – 2005  | 0.98   | 0.57   | 1.81  | 1.37     | 0.37        |

Source: Computed from the records of CBN various issues.

Owing to the contributions of tree-crops sub-sector to the development of agricultural sector and the entire economy there is need to isolate and determine the contributions of inflation to changes in relative price dispersion of tree-crop commodities in Nigeria. Therefore, the objectives of the study would be to determine the impact of some agricultural policies/programmes on relative price variability of tree-crops and also estimate the link and impact of inflation on tree-crop commodity relative price variability in Nigeria. It is hope that the result of the study would provide facts to policy makers in the agricultural sector to efficiently make good policies to the sub-sector that would upsurged the sector’s overall productivity.

### Theoretical Framework and Literature Review

The study adopts both menu-cost and limited information models. The menu-cost model as proposed by Sheshinski and Weiss (1977) postulates that, there is a lump sum cost of changing prices and that firms follow one-sided (S,s) pricing rule when faced with inflation. Firms will adjust prices once the real price implied by the level of inflation fall below a theoretical threshold ‘s’. And if the real price increases, firms will wait until the real price of their commodities increases more than the upper bound ‘S’. The dispersion of the critical interval (s,S) across different products and the unsynchronized price setting behaviour creates relative price dispersion. And as inflation is expected to increase, the optimal band (s,S) widens leading to a greater dispersion of prices simultaneously.

The limited information model is based on equilibrium misconceptions proposed by Lucas (1973) and Barro (1976). In the model, Hercowitz (1981) and Cukierman (1983) discovered that aggregate demand shock trigger relative price dispersion because firm do not have the same price elasticities of supply. Based on this difference, firms with high elasticities of supply adjust their prices faster than firms with low elasticities in response to a given aggregate demand shock. The model predicts that the size of the relative price dispersion is directly related to the magnitude of the demand shock. However, in this study, the macro-economic shocks were depicted by various agricultural policy regimes in Nigeria.

Structurally, the link between inflation and relative price variability is found in the framework of supply and demand. Lucas (1973) type of supply model assumes that quantity supplied,  $q_t$  in an industry of commodity  $i$  in period  $t$  consist of trend output  $q_{it}^n$  and cyclical output  $q_{it}^c$ . That is

$$q_{it} = q_{it}^n + q_{it}^c \tag{1}$$

The cyclical component of output is further divided into the lagged value of the cyclical component of output  $q_{it-1}^c$ , plus a relative price effect, which is proportional to the deviation from the mean price level  $P_t$  of the relative price  $P_{it}$ , which firms in the industry receive.

Hence supply equation becomes

$$q_{it} = q_{it}^n + \rho q_{it-1}^c + \beta(P_{it}-P_t) \dots \tag{2}$$

All variables are expressed in log. Where  $\rho < 1$  and  $\beta$  are constant parameter ( $\beta$  is price elasticity of supply),  $P_t$  is the mean price level in period  $t$  and  $P_{it}$  is the price of output  $i$ .

On the other hand, demand is a function of relative prices and income (Jaramillo, 1990). Hence demand equation becomes

$$q_{it} = \alpha (P_{it} - p_t) + \delta m_{it} \dots \quad (3)$$

where  $m$  is income,  $\delta$  is the income elasticity of demand for good  $i$ , and  $\alpha$  is the price elasticity of demand for the same good. Equating demand to supply and re-arranging terms, an expression for the commodity-specific rate of price change is given by:

$$P_{it} = (\beta - \alpha)^{-1} [\delta m_{it} - q_{it}^n - \rho q_{it-1}^c] + P_t \dots \quad (4)$$

$$P_{it} - P_{it-1} = (\beta - \alpha)^{-1} [\delta [m_{it} - m_{it-1}] - [q_{it}^n - q_{it-1}^n] - \rho [q_{it-1}^c - q_{it-2}^c] + \rho [P_t - P_{t-1}] \dots \quad (5)$$

In this framework, commodity inflation rates are a result of demand shocks and the anticipated aggregate inflation rate transmitted through sector-specific elasticities. Aggregate demand shock has an effect in each market that is identical for positive or negative changes in income. Consequently, an increase in demand has the same aggregate effect on inflation and relative price variability as an equivalent variation of opposite sign. While symmetric price responses to shocks are a feature of most simple linear models of supply and demand interaction, its real world relevance has often been questioned within the tradition of downward price rigidity (Akerloff et al, 1996). The downward price rigidity in some markets will produce an asymmetrical response in the rigid sector, which makes the new aggregate level of relative price variability higher than that obtained under the positive shock (Jaramillo, 1999). In addition, the absolute value of inflation will be lower than for a positive shock, reinforcing the fact that negative inflation rates will be associated with higher variations by working through the asymmetric price responses to shocks in some markets arising from downward price rigidity in those markets. In this study, we analyzed the change in relative agricultural prices from inflation due to rigidities and government policies that impact on prices.

Mill (1927) and Graham (1930) pioneered the empirical research on the relationship between relative price dispersion and inflation. They found a positive correlation between the two variables. Lapp and Smith (1992) tested the relationship in U.S.A and United Kingdom respectively. They documented a positive relationship between the variables. Lach and Tsiddon (1992) using panel data set of foodstuff prices in Israel also attested to positive relationship. Subsequent works by Zanas (1997), Loy and Weaver (1998), Nath (2003) and recently Ukoha (2005) and Brownson (2006) all supported positive relationship between the variables. However, Reinsdorff (1994), using panel data that runs from 1980 to 1982 for 65 commodities in 9 U.S.A cities, surprisingly found a negative relationship between inflation and relative price variability.

## **Methodology**

### **Data Source**

Data were obtained from the publications of Central Bank of Nigeria (CBN), Federal Office of Statistics (FOS) and the Federal Ministry of Agriculture and Natural Resources (FMANR). Five (5) exportable tree crop produces were used for the analysis (Rubber, cocoa, cotton, palm oil and palm kernel). The data were annual nominal price and output of crops. It covered the period 1970 to 2005.

### **Analytical Techniques**

#### **Measuring relative price variability**

Relative price variability is the change in the relative prices, and is used as an indicator of the real costs of inflation in relation to its effect on commodity price changes (Loy and Weaver, 1998). It is measured by constructing an index to show changes over time in relative prices among a commodity group. The nominal rate of price change consists of two aggregate components, inflation and a relative price component (Lapp and Smith, 1992).

$$P_{i,t} = P_t^* + Z_{i,t} \dots \tag{6}$$

Where  $P_{i,t}$  = Nominal price of ith commodity in period t,  $P_t^*$  = Producer price index (PPI) in period t,  $Z_{i,t}$  = Relative price of product i in time t. All variables are expressed in natural log.

The rate of change of  $P_t^*$  measure the rate of inflation ( $\pi_t$ ) in period t.

$$\pi_t = \ln P_t^* - \ln P_{t-1}^* \dots \tag{7}$$

The rate of change in  $P_{i,t}$  measure the nominal rate of price change ( $\pi_{i,t}$ ) in period t.

$$\pi_{i,t} = \ln P_{i,t} - \ln P_{i,t-1} \dots \tag{8}$$

then relative price variability as defined by Parks (1978) is

$$V_t = \sqrt{\sum_{i=1}^k W_i (\pi_{i,t} - \pi_t)^2} \tag{9}$$

$W_i$  denotes the weight of the price index, so that

$$P_t^* = \sum_{i=1}^k W_i P_{i,t} \tag{10}$$

This study used 1/N as weight attached to each commodity (where N is the total number of observations in  $t_k$ ). Lasperes price index was used to compute PPI.

### Empirical models

To measure the effect of various agricultural policies on tree-crops relative price variability, we introduced a dummy variable (DP) which takes value 1 in the policy period and 0 otherwise and interact it with the inflation slope coefficient.

$$V_t = a_0 + a_1 \pi_t + a_2 (D*\pi)_t + a_3 (POFN)_t + a_4 (POFN*\pi)_t + a_5 (OFN)_t + a_6 (OFN*\pi)_t + a_7 (GR)_t + a_8 (GR*\pi)_t + a_9 (SAP)_t + a_{10} (SAP*\pi)_t + a_{11} (MPSAP)_t + a_{12} (MPSAP*\pi)_t + a_{13} (CPSAP)_t + a_{14} (CPSAP*\pi) + U_t \dots \tag{11}$$

Where  $V_t$  = Relative price variability as defined in equation (9),  $a_0$  = Constant term,  $\pi_t$  = Absolute value of inflation (%),  $POFN$  = Pre-OFN agricultural policies,  $OFN$  = Operation Feed the Nation,  $GR$  = Green Revolution,  $SAP$  = Structural Adjustment Programme,  $MPSAP$  = Military Post SAP,  $CPSAP$  = Civilian Post-SAP,  $a$ 's = Coefficients to be estimated

To estimate the link and impact of inflation on relative price variability of tree-crop, we specified the relative price variability equation following Jaramillo (1999) and Ukoha (2005).

$$V_t = a_0 + a_1 \pi_t + a_2 (D*\pi)_t + U_t \dots \tag{12}$$

Where  $D$  = dummy variable ( $D = 1$  when inflation is negative and 0 otherwise),  $D*\pi$  allows for different slope of the relationship between  $V_t$  and inflation during deflationary period.

Equations 11 and 12 were estimated by Ordinary Least Square Method. Augmented Dickey-Fuller (ADF) was used to determine the time series properties of the variables.

## Results and Discussion

**Table 3:** Unit root test statistics

| Variables | ADF Test Statistic | Critical value of ADF |        |        |
|-----------|--------------------|-----------------------|--------|--------|
|           |                    | (1%)                  | (5%)   | 10%    |
| $V_t$     | -3.499             | -3.709                | -2.983 | -2.623 |
| $\pi$     | -3.426             | -3.702                | -2.983 | -2.623 |

After comparing the ADF test statistic with the Mackinon critical values, it is concluded that the variables are stationary in their levels suggesting the rejection of non-stationarity of the variables. Therefore equations 11 and 12 could be specified in the level of the variables without the risk of getting spurious regression.

## Regression Result

**Table 4:** Results of Regressing Relative Price Variability of tree-crop commodities on Inflation

| Variables    | Coefficients | Standard Error | t-statistics |
|--------------|--------------|----------------|--------------|
| $a_0$        | 0.052        | 0.016          | 3.25***      |
| $a_1\pi$     | -0.0013      | 0.00059        | 2.27**       |
| $a_2(D*\pi)$ | -            | -              | -            |
| $R_2$        | 0.1422       |                |              |

Note \*\*\* means significant at 1% level. All variables are as defined in equation 12.

The result shows that inflation fluctuations had negative accumulative impact on relative price variability of tree-crops within the specify policy periods. This result is similar to that obtained by Reinsdorff (1994). The result further reveals that the Nigerian tree-crop commodity prices become less volatile relative to one another when the economy wide inflation rate increases. The finding perhaps is in consonance with government intention to stabilized cash crops commodity prices irrespective of changes in macroeconomic variables in the economy during the commodity board era. Between 1970 and 1985, the then federal government enunciated price control mechanism to regulate cash crop commodity prices. This effort aid stabilized output prices despite dynamic economic environment farmers were operating in. Therefore the finding suggests that Nigerian tree-crop farmers were exposed to more risks and uncertainties in production, processing and marketing of their commodities during periods of high inflation. This is so because during periods of high inflation, resources were shifted from the tree-crop sector to other crop-sector. Hence, production growth rate of tree-crop sector reduced during period of high inflation while other crops especially the food crops production increased. Then the few tree-crop farmers remaining were exposed to increasing diseconomies of scale accompany by increasing cost of inputs among others. This scenario retard productivity in the sub-sector. Though individual tree-crop commodity price increased because of excess demand, commodity relative price variability in aggregate reduced with increased inflation (Table VI). The case is reversed, when inflation rate is reduced.

Thus, inflation had a negative significant non-linear effect on relative price variability of tree-crop commodities in Nigeria. There was no deflation period in Nigeria within the study period, thus the impact of deflation on relative price variability of tree-crop commodities could not be captured in the analysis.

## Results of Regressing Relative Price Variability on Inflation and Various Government Policy Regimes

The estimation of equation (11) involved the introduction of dummy variables which detect the effect of agricultural policies and inflation on relative price variability of tree-crop commodities in the specify policy periods. The policy regimes considered include Pre-Operation Feed the Nation (PRE-OFN) (1970-1975), Operation Feed the Nation (OFN) (1976-1979), Green Revolution (GR) (1980-1985), Structural Adjustment Programme (SAP) (1986-1993), Military Post-SAP (1994-1999), Civilian Post-SAP (2000-2005).

**Table 5:** Results of Regressing Relative Price Variability on Inflation and various government policies

| Variables      | Coefficients | Standard Error | t-statistics |
|----------------|--------------|----------------|--------------|
| Constant       | 0.0337       | 0.0516         | 0.65         |
| $\pi$          | -0.0071      | 0.0022         | -3.16***     |
| $\pi * D$      | -            | -              | -            |
| OFN            | 0.532        | 0.0645         | 0.82         |
| OFN * $\pi$    | 0.0076       | 0.0094         | 0.81         |
| GR             | -0.00040     | 0.0029         | -1.38        |
| GR * $\pi$     | 0.0025       | 0.0032         | 0.81         |
| SAP            | 0.0428       | 0.0601         | 0.71         |
| SAP * $\pi$    | 0.0047       | 0.0024         | 1.92**       |
| MPSAP          | 0.0199       | 0.0265         | 0.75         |
| MPSAP * $\pi$  | 0.0077       | 0.0123         | 0.62         |
| CPSAP          | 0.1940       | 0.09827        | 1.97**       |
| CPSAP * $\pi$  | -0.0140      | 0.0067         | -2.11**      |
| $R_2$          | 0.4051       |                |              |
| Adjusted $R_2$ | 0.1723       |                |              |

Note: Variables are as defined in equation 11

The coefficients of pre-OFN, OFN, GR and MPSAP were not statistically significant. This means that these agricultural policies did not have a significant effect on relative price variability of tree-crop commodities. Thus, these agricultural policies did not cause a significant reallocation of resources among the tree-crop commodity producers in Nigeria. On the other hand, the agricultural policies in SAP period brought about a positive significant shift in the coefficient of inflation. This mean that during SAP period, inflation rate fluctuation moves in the same direction as the relative price variability. This co-movement caused an efficient reallocation of resources to the tree-crop sector (Ukoha, 2005). SAP period witnessed a continuous increase in relative price variability of tree-crop commodities. The high relative price dispersion favoured high output growth as evidenced by high growth rate in output of tree-crops during SAP period (Table VI).

The civilian Post-SAP policies significantly impacted directly on the relative price variability and indirectly through inflation. This implies that the agricultural policies of CPSAP significantly and positively affected relative price variability of tree-crop commodities within the policy period. This mean that the policy instrument of CPSAP-era brought about a significant change in the nominal price of tree-crops that resulted in increase relative price variability of tree-crop commodities. On the other hand, CPSAP policies also impacted indirectly on relative price variability of tree-crop through inflation. This negative relationship between the two variables ushered in a less efficient resources reallocation in the tree-crop sector. A reduction in the inflation during CPSAP period (which was the case) sprouted food crop production and reduced tree-crop production because resources were shifted from tree-crop sector to food crop sector. The tree-crop growth rate in CPSAP period decrease as compared to SAP-era. The relative price variability increased probably due to demand for the tree-crop commodities exceeding supply. The demand increased may be due to increase in local utilization among others. Thus SAP and CPSAP policies were effective in the tree-crop sub- sector and the result was a fluctuating increase in relative price variability and consequently a non-directional reallocation of resources within the tree-crop sub-sector.

### **Relationship Between Relative Price Variability, Inflation and Output of Tree-Crop in Various Policy Regimes in Nigeria**

Table I and VI provide a clear picture about the relationship between relative price variability, inflation and output of tree-crops under various policy regimes in Nigeria. Between 1970 and 1985, the relative



price variability was uncorrelated with inflation fluctuations. Output growth rate takes irregular pattern in relation to other variables. The relative price variability, inflation and output (except for rubber and cotton) were increasing during SAP period. In MPSAP era, inflation increased while relative price variability and output declined. In CPSAP period, we had an increasing relative price variability and decreasing output and inflation compared to SAP-period.

Thus in aggregate, high inflation rate favoured low relative price variability and consequently low output of tree-crop.

**Table 6:** Growth rate of Crops (%), Inflation (%) and Relative Price Variability of Tree-Crops in various Policy regimes in Nigeria.

| Variables        | 1970-1975 | 1976-1979 | 1980-1985 | 1986-1993 | 1994-1999 | 2000-2005 |
|------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| Cotton           | 48.5      | -20.7     | 107.2     | 13.3      | 10.8      | 3.4       |
| Cocoa            | -6.6      | -6.3      | 1.4       | 16.7      | -2.9      | 1.2       |
| Oil Palm         | 0.7       | 7.2       | -0.4      | 4.3       | 0.5       | 2.4       |
| Rubber           | 1.4       | -4.0      | 54.3      | 4.4       | 2.9       | 3.5       |
| Palm Kernel      | 0.9       | -1.1      | 4.7       | 16.1      | 3.4       | 3.4       |
| RPV              | 0.2       | 0.1       | 0.1       | 0.3       | 0.2       | 0.5       |
| Inflation        | 14.3      | 16.3      | 17.8      | 27.1      | 30.7      | 12.5      |
| Rice (Food Crop) | 12.1      | -10.8     | 7.8       | 55.8      | 3.5       | 5.0       |

Source: Computed by the researchers.

### **Concluding Remarks**

The study revealed that in aggregate inflation had a negative non-linear impact on relative price variability of tree-crop commodities in Nigeria. Furthermore, the SAP policies brought about an upward shift in the coefficient of inflation while CPSAP policies affected relative price variability directly and negatively through inflation. Based on the findings, the following recommendations are made:

- SAP and CPSAP policy measures significantly impacted on relative price variability of tree-crops. These policies should be re-assessed and improved upon to ensure more efficiency in resources allocation within the sub-sector.
- Inflation impacts negatively on relative price variability of tree-crop commodities in Nigeria. Hence, those policies which reduces the rate of inflation, which will equally increase relative price variability and consequently increase efficiency in resource use within the sub-sector are strongly advocated by the study.
- The study established the fact that the period of high inflation is a period of low productivity in the tree-crop sub-sector. Hence, a form of input subsidy should be introduced during period of high inflation to cushion the effect of loss of real income including risks and uncertainties that would be faced by tree-crops farmers.

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## **Petroleum Prospecting Companies and Youth Restiveness in Akwa Ibom, Niger Delta, Nigeria**

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### **Abstract**

The financial benefits derived from crude oil exploitation by multi - national oil corporations in Nigeria's Niger – Delta region, have tended to overshadow the more potent and chronic effects of adverse socio-economic imbalances, ecological devastation and environmental degradation arising thereof, and which have resulted in a lot of restiveness and violent confrontations between the youth and other stakeholders in the Niger Delta. This study was conducted to ascertain the effects of multi- national oil corporations' prospecting activities on youth restiveness in Akwa Ibom State, which is one of Nigeria's Niger Delta's most peaceful states. Qualitative data collection techniques utilized to collect information from two adversely affected oil producing LGAs revealed the degraded and adverse socio-economic conditions of the study areas. Various manifestations of youth restiveness occasioned by their adverse experiences are also documented. The paper recommends the participation of youth representatives in the formulation of socio-economic policies and programmes, in order to avert youth restiveness

**Keywords:** Youth, Globalization, Restiveness, Multinational Corporations, Akwa Ibom State, Niger Delta.

### **Introduction**

Globalization has been acknowledged as a complex web that inextricably interlinks our economic, political, cultural and technological world, and is one of the major forces that is radically and rapidly shaping and influencing the development and underdevelopment of the world and its people, especially in this millennium. The resultant effect is that our world has become a global village and market place where diverse groups (and individuals) jostle for competitive advantage (Oyewole, 2002). According to Mitter (1995) globalization reaches every household in the world, especially in Africa, and its presence is felt in employment, production, consumption, social impact of structural adjustment, and in the conflict, violence and injustice resulting thereof.

The economic aspect of globalization as exhibited through the corporate activities of multinational corporations (MNCs) is of particular interest in this study. Developing countries are engaged in the drive to attract foreign direct investments (FDI) as espoused by MNCs, because of the belief that this is a key instrument to foster growth and competitiveness. These countries however frequently attract only resource seeking FDIs in extractive industries like mining and oil exploitation and which are propelled exclusively by profit motive. It has been asserted (Held et al, 1999) that as at 1997, about 53,000 MNCs with 450,000 foreign subsidiaries were operating worldwide and that these accounted for 70% world trade, selling more than 9.5 trillion dollars worth of goods and services around the globe.

There is the erroneous impression that trade rules and policies primarily impact the formal economy and hence not much attention has been paid to the effects of economic globalization on the informal economy and especially the rural poor, majority of whom are youth. It has been asserted (Oyewole,2002) that the effects of MNCs activities are multifaceted and complex in different regions, and in many regards vary along a continuum between positive and negative. While globalization has indeed yielded mostly positive dividends for youth in developed countries, the opposite can be said for the African youth who are at present facing insufficient conditions for a meaningful existence because they are generally poor and often lack access to training and productive employment. It has been revealed (UNO 2004) that young people (15-24 years) make up almost 1/5<sup>th</sup> of the world's population and that 86% of them live in developing countries. In Nigeria, youth are believed to constitute 33% of the total population, and of the 115 million-estimated Nigerian populations in 2000, the United Nations system in Nigeria (2001) reported that 45% fell in the 0- 14years age bracket, and 46% in the 15 – 49 years age bracket. With regard to means of existence, the global employment trend for youth (2004) revealed that youth make up only 25% of the working age population of between 15 – 64 years, but make up a whopping 47% of the total number of 186 million people that were out of work, world wide, in 2003. According to the UNO (2004) Nigeria ranks 3<sup>rd</sup> out of the 11 countries with the largest concentration of youth living below the poverty line of less than 1 dollar per day. As at 2002, 47.51% - 64.61% Nigeria youths were unemployed and were facing bleak prospects. A new trend in Nigeria is the rising unemployment level among educated youth. It has been reported (UNECA. 2002) that only 10% of the 3 million graduates from Nigeria's secondary schools and tertiary institutions can be absorbed for productive employment by the economy. The resultant effect is the very high dependency ratio of the Nigerian populace with dire negative consequences on living standards.

In attempts to escape their poor quality of existence, the Nigerian youth is faced with two options.. In the first option, able – bodied and virile youth migrate to cities and create social problems and engage in anti- social acts that debase human nature and thereby deface and endanger urban environment and life. The second option is a resolve to remain in their rural communities and fight for their rights. Whichever option is undertaken involves a lot of stresses and undercurrents, which ultimately lead to friction and youth restiveness, with avoidable conflict as the undesirable end product. Conflict situations therefore occur between: (1) the youth and the elders – who are perceived (by the youth) as saboteurs to rightful course of self and group liberalization; (ii) between youth and stranger elements within the communities – who the youth regard as appropriating opportunities meant for indigenes and feeding fat on local resources; and (iii) between the youth and the MNCs, who are believed (by the youth) to be degrading their environment and are not doing quite enough to ameliorate human and environment problems arising thereof.

The above- depicted scenario is being played out in Akwa Ibom State, one of the most peaceful States in the hotbed of conflict and youth restiveness called the Niger delta, which is located in south – south Nigeria. The State is however also affected by all the problems occasioned by MNC activities in the Niger delta, especially those that have to do with prospecting for petroleum. These companies have been carrying out their activities in the territorial land and waters of the State since about 1957 but Akwa Ibom State is still regarded by UNECA (2002) as one of the poorest states in the country, with

more than 70% income expenditure on food. This situation has occasioned a number of unrest and crises situations, which has led to conflict on many occasions.

This paper is an attempt to analyze the effects of MNC activities on host communities and which has culminated in a lot of restiveness. On a specific basis the paper will attempt to analyze the present socio – economic and environmental structure of the study area, examine the effect of MNC activities on the human and physical environment of host communities and finally document manifestations of youth restiveness as a reaction to MNC activities in host communities.

## **Materials and Methods**

### **Data Collection**

Data collection for the study was facilitated with the aid of qualitative techniques like focus group discussions (FGDs) and in-depth interview (IDI) sessions (with the aid of a semi – structured interview schedule). Participatory observation techniques were utilized to complement the data collection process.

The universe for the study was all the youth in all the oil producing areas of Akwa Ibom State. A multi-stage sampling procedure was utilized in the choice of sample for the study. This is as detailed below:

- (i) Two major oil producing Local Government Areas (LGAs) (Ibena and Eastern Obollo) which are officially recorded (Environmental Rights Action (ERA – 1998) as bearing the major impact of oil exploitation activities, were purposively selected for the study.
- (ii) Five communities were thereafter randomly selected from each LGA for the study. These were: Iwuo-Okpon, Iwuoachang, Upenekang and Inuayet-Ikot (Ibena LGA) and Iko, Okoroete, Ikonta, Amazaba and Emereoke II (Eastern Obollo LGA). These made up 10 sampled communities.
- (iii) Stratified random sampling technique, was later utilized to select two youth groups (one male and one female) from each of the 10 sample communities – making up 20 sampled youth groups utilized for the study.
- (iv) IDI sessions were also conducted with the presidents of each of the 20 sampled youth groups

## **Results and Discussion**

### **Socio-Economic Structure of Study Area**

Table 1 reveals that the youth and children make up about 3/4 total population of the study area and the households are typically large sized, due to prevalent polygamous marriage modes. More than half survey population have not had any access to formal /informal education, and while emigration pattern is medium to high for EOLGA; the converse is the case for ILGA. There is a palpable air of tension in the two areas, regarding oil companies/youth relationship but actual conflict is higher in ILGA because of the closer interaction between the two groups due to Ibena's status as the operational base of a major oil prospecting company.

**Table 1:** Demographic Structure of Study Area

| Parameter                                 | Local Government Areas       |                                     |
|---|------------------------------|-------------------------------------|
|   | Eastern Obollo               | Ibena                               |
| <b>(a) Major Ethnic Group</b>             | Andoni                       | Ibena                               |
| <b>(b) Population Structure</b>           |                              |                                     |
| (i) Children                              |                              |                                     |
| (ii) Youth                                | 3/4                          | 1/2 – 3/4                           |
| (iii) Middle-aged                         |                              |                                     |
| (iv) Elderly                              | 1/4                          | 1/4                                 |
| <b>(c) Male/Female Ratio</b>              | 50:50                        | 50:50                               |
| <b>(d) Marriage Mode: Poly/Mono</b>       | 60:40                        | 56:44                               |
| <b>(e) Mean Household Size</b>            | 12                           | 11                                  |
| <b>(f) Mean No. of Children/Household</b> | 7                            | 6                                   |
| <b>(g) Literacy Level</b>                 |                              |                                     |
| (i) Functionally literate                 | <1/4                         | < 1/4                               |
| (ii) Academically literate                | < 1/4                        | < 1/4                               |
| (iii) Non-literate                        | > 1/2                        | > 1/2                               |
| <b>(h) Migration Pattern</b>              |                              |                                     |
| (i) Emigration – Temporary                | High                         | Low                                 |
| – Permanent                               | High                         | Very low                            |
| (ii) Immigration – Temporary              | Low                          | High                                |
| – Permanent                               | Low                          | Medium                              |
| (iii) Migration Target                    | Youth (female/male)          | – Same –                            |
| <b>(i) Intra/Inter Ethnic Relations</b>   |                              |                                     |
| (i) Indigenes/stranger relations          | Cordial                      | Cordial                             |
| (ii) Intra Communal conflict              |                              |                                     |
| (a) Youth/elders                          | Low                          | Constant tension – high             |
| (b) Youth/oil companies                   | Palpable tension – low       | Constant tension -moderate          |
| (iii) Inter communal conflict             | High – uneasy calm presently | With Eket (serious)-now uneasy calm |

Fishing is the predominant occupation of the youth in the study areas (Table 2). Ibena youth were revealed to combine fishing with artisanship in order to make them amenable for employment in the oil prospecting companies and their subsidiaries. More than 70% respondents however earn monthly incomes ranging between N1, 000 – N10, 000.

**Table 2:** Economic Structure of Study Area

|                                     | Parameter   | Local Government Areas  |
|-------------------------------------|---|---|
|                                     | Eastern Obollo  | Ibena   |
| <b>(a) Major Occupation</b>         |   |   |
| (i) Men                             | Fishing/trading   | Fishing/trading   |
| (ii) Women                          | Trading/fishing   | Trading/collection of forest/river products                                 |
| (iii) Youth                         | Fishing   | Fishing /Artisanship  |
| (iv) Children                       | Help adults   | Collection of river produce/help adults                                     |
| <b>(b) Estimated Monthly Income</b> |   |   |
| (i) < 1,000                         | 10%   | 10%   |
| (ii) 1,000 – 10,000                 | 60%   | 70%   |
| (iii) 10,000 – 50,000               | 20%   | 10%   |
| (iv) > 50,000                       | 10%   | 10%   |
| <b>(c) Agriculture</b>              |   |   |
| (i) Major crops                     | Cassava, plantain, rice   | Cassava, vegetables, coconut  |
| (ii) Land size variation            | Decrease  | Decrease  |
| (iii) Reason                        | Oil exploration   | Oil exploitation, oil company installations                                 |
| (iv) Major agro-problems            | Pollution, Poor quality land                                      | Pollution, lack of inputs   |
| <b>(d) Fisheries</b>                |   |   |
| (i) Variation in fish catch         | Rapid decrease  | Rapid decrease  |
| (ii) Reason                         | Pollution, oil installations, lack of motorized fishing equipment | Oil company installations, increased turbidity, lack of motorized equipment |
| <b>(e) Trade</b>                    |   |   |
| (i) Volume of trade                 | Low   | Medium (reducing)   |
| (ii) Reason                         | Low population  | Oil spill   |

Table 3 reveals that access routes into the 2 LGAs are in good condition. Intra communal routes are also in moderately good condition in some areas of ILGA, but very poor in EOLGA, because these are mainly earth routes, which cannot withstand voluminous down, pour. A single poorly infrastructured market serves each LGA, although smaller weekly markets exist. The whole of EOLGA has only 6 primary schools (all but 1 of which are in dilapidated conditions) and 2 secondary schools. The situation is slightly improved for ILGA; except that only an oil company’s funded technical school has a full complement of technical equipment and manpower requirements. Also while electricity supply is lacking in the whole of EOLGA, some communities in Ibena have both Oil Company and national grid (freely) supplied electricity. Potable water supply is lacking in the two LGAs. Water supply is therefore derived from natural untreated sources into which human and household wastes are dumped and which act as breeding grounds for disease pathogens, with resultant hazardous health implications



**Table 3:** Infrastructure Condition of study Area

| Parameter                                    | Local Government Areas                            |  |
|--|---|--|
|  | Eastern Obollo                                    | Ibena  |
| <b>(i) Access Road/Public Transportation</b> |   |  |
| (a) LGA Linkage                              | Good (cars, motorcycles)                          | Good/cars, buses   |
| (b) Intra LGA                                | Fair from Okoroete – Iko , others very poor       | – Same –   |
| (c) Intra community                          | Very poor   | – Same –   |
| (d) Riverine                                 | Paddle canoe, engine boat                         | – Same –   |
| <b>(ii) Local Market</b>                     | One main market – very poor facilities            | A major Mkt (Iwuochang) – no infrastructure                      |
| <b>(iii) Pry/Sec. School</b>                 | Few – some are inaccessible/poor facilities       | Available, easily accessible, passable conditions                |
| <b>(iv) Health facility</b>                  | Available – not for all, poor facilities/no drugs | Available, except on Islands, poor facilities                    |
| <b>(v) Electricity</b>                       | Broken down supply in Iko & Okoroete              | Mkpanak – uninterrupted supply, others epileptic where available |
| <b>(vi) Potable water</b>                    | Nil   | Not available  |

On quality of life in both LGAs, (table 4) it was revealed that about 3/4 of the houses in these communities lack modern conveniences. It was also revealed that food (predominantly carbohydrate based and mainly imported) and health care; account for more than 70% total expenditure. More than 3/4 indigenes are regarded as unemployed and while the partially educated (primary schools leavers) make up the bulk of unemployed, the present trend is for graduates of tertiary institutions to be either unemployed, or underemployed, in positions not commensurate with their educational qualifications.

**Table 4:** Quality of Life / Living Standards

| Parameter                 | Local Government Areas  |   |
|---------------------------|---|---|
|                           | Eastern Obollo  | Ibena   |
| (i) Household Pattern     |   |   |
| Mud wattle/zinc           | 20%   | 5%  |
| Earth block/zinc          | 25%   | 5%  |
| Cement block/zinc         | 30%   | 46%   |
| Cement block/Asbestos     | 5%  | 28%   |
| Mud/wattle thatch         | 20%   | 16%   |
| (ii) Modern conveniences  | < 1/5   | < 1/4   |
| (iii) Proportion of poor  | > 3/4   | 3/4   |
| (iv) Reason for poverty   | Lack of opportunities and infrastructure, and environmental degradation | Oil exploitation, gas flares, massive erosion |
| (v) Proportion of jobless | 3/4   | 3/4   |
| (vi) Most affected group  | Partially educated  | Partially educated                            |
| (vii) Expenditure pattern | Food/health (> 2/3)   | Food/health (3/4)                             |

### Effects of oil Companies Activities on Host Communities

A major and immediately visible impact of oil companies' exploitation activities is that of oil spillage, which respondents stated are of a recurrent nature In 1995, 20,000 barrels of oil were spilled into the coastal waters of the study area, when an oil company's production platform located offshore exploded, claiming 10 lives of company operatives in the process, and causing untold damage and hardship to community inhabitants (ERA 1998). Also in 1998, an old pipeline linking an oil company's platform to its terminal got ruptured, spilling about 40,000 barrels of light crude into the sea, with untold human and environmental damages. Oil spills have also been reported in November 2000 and 2003.

Fishing is the main livelihood occupation engaged in by the youth in the study areas. It is now however regarded as a high-risk activity because it now take place on the high seas with attendant risks of violent waves and bad weather. Fishing nets are also stained by petroleum exudates and oil pipelines are reported to hook and tear fishing nets. All these have led to low volumes of fish catch. The rate of spoilage and deterioration of fish harvest is also high. The youth remember with nostalgia, the period when their mothers used to harvest fish and other aquatic products like crabs, periwinkles etc; with minimal stress, at the shallow swamps. The youth report that fish product scarcity has resulted into a situation where scales are presently being utilized to market fish, a situation that makes the product only affordable to oil company workers.

Another effect of oil companies activities derive from the fact that farmlands and fishing grounds have been taken over to either construct exploration sites or other oil wells. Even whole communities have been taken over by oil companies. Oil companies also abandon oil wells, either at the appraisal or development stages. These oil wells are not returned to their pre-exploitation stages and are also not covered and thereby remain as veritable death traps.

Table 5 reveals that economic trees and farmlands have also been affected by oil exploitation activities especially from exhudates like gas flares and oil leakages and which have resulted in cholerosis on vegetables and arable crops. Stunted growth, premature flowering and ripening and unripe fruit abortions have also been reported on tree crops like coconut, oil palm and banana/plantain, while root and tuber crops like cassava, yam and coco yam – which are major staples – have also recorded stunted harvest sizes and poor yields.

Oil exploitation activities according to respondents have led to earth tremors and cracked walls of dwelling houses. Gas from oil drilling activities are purported to have especially resulted in rusty and damaged rooftops. A new bundle of roofing sheets (zinc) now has a life span of about 3-5 years, compared to the hitherto 15-20 years life span. Community dwellers now utilize asbestos roofing sheet (which is carcinogenic) or long span roofing sheets – which is affordable only to the very affluent.

It is the ultimate desire of respondents to be employed by oil companies. This desire is however hardly realized. Respondents revealed that a total of 5 individuals are on full time employment with oil prospecting and subsidiary companies. A relatively higher number (about 20) are on contract employment while contractors (about 10 of them) are given only small supplies as sub-contracts by the major contractors, who are invariably non-indigenes.

**Table 5:** Environmental Characteristics

| Parameter                 | Local Government Areas  |  |
|---------------------------|---|--|
|                           | Eastern Obollo  | Ibena  |
| (i) Major <u>problems</u> | Gas flares, ocean surge, air/water pollution, land degradation  | Gas flares, oil spill, earth tremors, and marine erosion. Industrial pollution |
| (ii) Causes               | Oil exploitation  | Oil exploitation   |
| (iii) Effects             | Leaking rooftops, reduced bush fallow, poor fish catch/farm yield, very poor health, poor water sources | Low fish catch, poor health, leaking roof tops and cracked building walls      |

Interactive session also revealed that another purported effect of MNC activities according to Table 5 is increased coastal erosion, which is alleged to have submerged many dwelling houses and even communities. The width of the Qua Iboe River is said to have been extended by more than 50 metres in the last 3 years and it constantly overflows its banks during the rainy season. Other listed purported effects of MNC activities include: deforestation, loss of biodiversity, and increased decadence and decline in traditional values due to influx of stranger elements and commercial sex workers, whom are patronized by oil company workers.

Natural water resources like streams, rivulets and creeks have been exposed to various liquid, solid and gaseous contaminants arising from oil and gas exploitation activities. Ground water

contamination by hydrocarbons also poses a great disturbance to potable water sources. Most of the rivers and streams have also been confirmed to contain mercury and lead, which are two dangerous elements that cause human disorder, anaemia and death, in extreme cases (Abdullahi, 1992). Hence the disease patterns of these communities have changed from the traditional malaria and pneumonia to diseases of the respiratory tract and spinal cord (table 6) Heat rashes and deteriorating eyesight's are also prevalent, and resistant insect pests are now rampant. To worsen the situation, health centres (whenever they exist) are hardly functional.

**Table 6:** Health Status of Study Area

| Parameter                         | Local Government Areas  |   |
|-----------------------------------|---|---|
|                                   | Eastern Obollo  | Ibena   |
| (i) Water Supply Source/Treatment | Ponds & streams – not treated                                     | Untreated boreholes, streams, rainfall  |
| (ii) Solid Waste disposal         | Dumping/throwing into running/stagnant water                      | Same –  |
| (iii) Human Waste disposal        | Water channel   | – Same –  |
| (iv) Common diseases/pest         | Typhoid, malaria, rashes, respiratory cough, sand flies, mosquito | Malaria, cholera, eye problem, respiratory tract infection mosquito, housefly |
| (v) Disease cure                  | Native doctors/health centre                                      | Patent medicine stores, health centre   |

All the above listed problems have led to a strained youth and community relationship with oil company officials. This is because the oil companies are regarded as being generally insensitive to the plight of community indigenes but are rather ready to embark on “divide and rule” tactics to court the favour of community elites, to the utmost displeasure of the generality of community dwellers, especially the youth. The youth also maintain that many of the oil companies’ development assistance are actually meant to further their (oil companies) own interests. For instance, to ease movement of staff and /or materials.

### **Cases of Youth Restiveness in The Study Area**

It is well known that youth restiveness in Nigeria is more prevalent in oil-bearing communities than in non-oil communities’. The study areas over time, have experienced a lot of youth restiveness. Instances of restive situations have been reported between: youth and elders; two groups of opposing youths loyal to different factions, led by feuding elders: youth and stranger elements; and youth with officials of oil prospecting and service companies. (viz Table 1 (i))

Apart from the poor socio-economic and environmental conditions (as earlier enumerated which may precipitate crises situations based on calls for reversal of trends, restiveness may also occur because of perceived non-chalant attitude and unfulfilled promises by oil prospecting and service companies, and due to perceived marginalization by youth who may have cause to believe that scholarship, employment and contract opportunities are being allocated to non- indigenes. Youth grouse is further aggravated when these stranger elements exhibit or flaunt their wealth during competition for female favours or any other activity that is associated with “showing off”.

A very peculiar but very common restive situation occurs over oil companies’ perceived “divide and rule” tactics. This situation occurs when oil companies prefer to “settle” a few community elders and elites, instead of implementing earlier agreed – upon development activities. These “settled” individuals thereby attempt to pacify restive youths or cause disaffection in their rank and file, instead of complementing youth efforts at getting the oil companies to fulfill their promises. It is pertinent to note that oil companies do regularly distribute some cash and / or material incentives to community elites and elders, as part of the legitimation process of entering into a new community for oil- related construction activities. Oil companies may also allocate employment slots to these elites, to be utilized by qualified community youths. Restive situations occur if the youth perceive these elites as “selling”

these employment quotas to the highest bidders – mainly stranger elements. However, these slots are mainly for short – term contract jobs. The general unsubstantiated belief is that oil – prospecting companies’ favour non – indigenes for permanent employment opportunities. This is because recruitment exercises take place in oil companies’ headquarters, which are located in Lagos or Port Harcourt.

The relationship between oil companies and youth are at best tension – soaked and may be depicted as a case of “hope and dependence” on one hand, and “ dashed hopes and unbridled hostility”, on the other hand. The youth view oil company officials with hostility, while officials view the youth as irritants and pests. Actual conflict situation between youth and oil company officials may be few and far between (in comparison with youth – elder/elites situation) due to limited level of interaction; as the company officials move out of host communities, as soon as their construction activities cease. However, such conflicts possess the greatest potentials to escalate into violent situations. The reason is because oil companies would usually resort to the use of public law enforcement agencies for protection and during such police / army – youth protesters stand – off, lives may be lost or severe injuries sustained.

### **Conclusion and Recommendations**

The World Commission on the Social Dimensions of Globalization, in 2002, took a retrospective glance at the generally negative effects of globalization especially in developing countries and then advocated for a process of globalization with a strong social dimension that is fair, inclusive, democratically governed and provide opportunities and tangible benefits for all countries and people. The above enunciated ideals of fair globalization has not been experienced in the Niger Delta of Nigeria, where the economic aspects of globalization, as espoused by multinational oil corporations, have not been perceived as engendering fair returns to the indigenes and environment of the study area.

It is important to observe that rigid institutional perspectives and procedures that disallow or give minimal attention to feedback mainly generate conflict situations. A stable and conflict free society is therefore one that can accommodate and tolerate the varying perspectives and needs of its different sub groups. In the same vein, for an institution to survive, it must also adopt strategies that would be advantageously reflected in the lives of the people for which it is articulated.. The fact that Akwa Ibom youths have chosen to pursue their goals with very minimal (and only provoked) recourse to violence, unlike the situation in other parts of the Niger Delta, is an advantage that could be explored to make the Akwa Ibom youth play more relevant roles in community and national development. Sustainable development in Akwa Ibom State’s oil-bearing communities is predicated on discarding the long –held erroneous conception of the youth as troublesome irritants and engaging them in a more inclusive, participatory and democratic process. The youth must be involved in needs identification, problem solving and decision-making processes in their local communities. This procedure helps them to feel more integrated into the community. It also enhances effective communication among generations and with institutions. This is the approach that has been utilized in more developed countries, and which has proven effective.

In conclusion, it has become imperative to convene a general assembly of relevant stakeholders and concerned citizens, including the youth to deliberate on how to solve youth restiveness and address socio-economic and environmental imbalances in the Niger delta, an area of which Akwa Ibom State is a veritable stakeholder and constituent. It is however important to discard the erroneous impression that the youth will passively imbibe or remain vulnerable victims of seemingly unfavourable policies and degraded environments. The youth are conscious of their desires and as stakeholders in the development process, can help in the formulation of sustainable programmes and policies. They must however be assisted to acquire the needed capacity to access information that will enhance their contribution to community and national development. This step will act as a catalyst to facilitate the

process of curbing the twin negative problems of underdevelopment and youth restiveness in Akwa Ibom State and the Niger delta in general.

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# **Human Resource Development Practices in Malaysia: A Case of Manufacturing Industries**

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## **Abstract**

The national HRD policy in Malaysia is highlighting the importance in providing its human resources with the skills, knowledge and expertise to enhance the innovativeness and creativity of its workforce, which support the nation's vision in achieving a fully developed nation status by the year 2020. Most of the initiatives, incentives and support provided by the Government are towards the manufacturing industry for the reason that it accounts for the country's major exports and economic growth. With the government emphasis and support towards HRD in the manufacturing industry, this paper examines the degree and nature of HRD activities being practiced and implemented within this industry. A mixed-method combining questionnaire survey and personal interviews were employed. The results indicated that HRD is strategic in nature with the involvement of other levels of management in the different practices of HRD despite the various setback and factors impeding the effective implementation of HRD. And it was clearly evident that employees are developed for short term rather than longer term development.

**Keywords:** Human Resource Development; training and development; manufacturing industry; Malaysia

## **Introduction**

Malaysia being a developing country and is in the midst of transforming itself into a knowledge-based economy (k-economy) believed that the development of k-economy is crucial for the country to sustain its economic growth and competitive advantage. Malaysia started to lay the foundation for k-economy in the 1990s under the Third Outline Perspective Plan (OPP3), in which the key element and main objective of the plan is to build knowledge-based workforce (Malaysia, Government, 2001). Since then, the task of developing human resources has been the key emphasis and a major concern in developing the country and achieving the country's 'Vision 2020' status of a developed nation.

The national economic growth has been rapid at an average of 4.2 percent per annum and the GDP is growing at 4 percent annually. The expansion of the manufacturing sector has been the stimulus to the growth of the Malaysian economy. This is seen in the contribution of the manufacturing sector to the GDP which has increased from 27.1 in 1995 to 33.4 percent in 2000. From 2001 to 2003, the GDP from the manufacturing sector has been a constant of 30 percent per annum (Ministry of Finance, 2004).

A majority of the government's emphasis in HRD is targeted to the manufacturing sector. This is because manufacturing accounts for one third of the GDP and more than 70 percent of the country's exports (Ministry of Finance, 2004) towards the country's economic growth. Developing human resources in the manufacturing sector is recognised as a crucial and important task to prepare capable and skilled workers of meeting current much needed expertise and meeting future challenges by providing them with technological skills and critical thinking (Lim, 1999; Osman-Gani, 1999; Zidan, 2001).

In supporting the need for training, education and development of human resources, Human Resource Development Act, 1992 was established to provide unskilled or low skilled workers to be trained and developed with higher skills, and also to provide potential workers with the opportunity to acquire more knowledge and skills. And under the legislation numerous support, initiatives and incentives were provided by the Government to assist the manufacturing industry in developing its human resources. These initiatives include the various training schemes (either partially or fully funded) such as the Graduate Training Scheme for the unemployed graduates and Workers ICT Training Scheme to increase workers expertise on information and communication technology. At the same time, substantial amount of resources have been invested and continuously investing in education and training. As at August, 2004, the Government has approved RM1.72 billion for the purpose of retraining and upgrading the skills of workers (Ministry of Human Resources, 2004). In addition, in supporting the demand for skilled and knowledgeable human resources, the government has also accredited from only nine training providers in 1993 to 1,809 training providers and institutions in 2002 (Ministry of Human Resources, 2003). This is because the Government believed that investment in human capital is the key to the success of the country's economic growth.

Specific to the case of manufacturing companies in Malaysia, it can be argued that despite government's initiatives and support towards HRD as described above, manufacturing companies need to be able to provide strategic HRD to meet the changing demands in the global market. Coupled with the lack of empirical evidence of HRD practices in Malaysia, eventhough other developed countries such as UK, Europe and USA have found variations in HRD practices, this research is pertinent to understand the HRD scenario in Malaysia as a developing country moving towards k-economy and k-workforce and a fully developed nation.

## **Research Aims**

Due to the absence of empirical research of HRD practices in Malaysia, it is pertinent to first understand the basic fundamentals of HRD. Hence, the general aim of this study is to explore and examine the degree and nature of HRD practices in the manufacturing companies in Malaysia. First, this study assess the nature of HRD policies and structure, and secondly, to examine the dynamics of HRD activities and practices in the manufacturing companies.

## **An Overview of Global HRD Practices**

Research in HRD has evolved as an academic discipline, a set of practices and a discourse over the last two decades (Garavan, Heraty and Barnicle, 1999; McGoldrick, Stewart and Watson, 2002). As a result, it has attracted enormous interest and apprehension among scholars and researchers around the world. Research in HRD includes research which examines technology and HRD (example Sun, 2001; Odini, 1999; and Lim, 1999), examines current training and development practices in small organization (for example, Hill & Stewart, 2000; Nolan, 2002; and Vinten, 2000). Studies have also looked at the implications of culture on HRD practices (Lee & Chon, 2000; Al Bahar, Peterson & Taylor, 1996; and McGuire, O'Donnell, Garavan, Saha, & Murphy, 2002).

The changing nature of HRD has seen organizations recognizing the value of its human resource as an important asset in enhancing its business strategy. For example, Luoma, (2000) reported

that integration, involvement and evaluation is the framework for capability-driven HRD for business success. Supported by Gilley, Egglund and Gilley (2002) who posit that an increasing number of organizations is placing a greater emphasis and focus on the role of human resource for the enhancement, advancement, development and growth of its human resources. This trend indicates that HRD is a vital concern facing organizations today as it is viewed as a strategic approach in improving organizational performance (Marchington & Wilkinson, 2002) and sustaining competitive advantage (Garavan, Heraty and Barnicle, 1999; Nolan, 2002).

In an attempt to explain HRD, numerous literatures debated on the concept, model and HRD approaches. Garavan, Heraty and Barnicle, (1999) strongly argued that several conceptual aspects of HRD still lack evidence, for example, the philosophical concepts and purpose of HRD. McGoldrick, Stewart and Watson, (2002) believed that the debates are complicated by the epistemological and ontological perspectives of individual stakeholders and HRD practitioners.

Although relatively debatable, several studies have been undertaken to explain the epistemological and ontological perspectives of HRD. A study in Russia by Ardichvili & Gasparishvili (2001) found that the educational systems, national legislation and economic factors affected the theoretical practice of HRD. On the other hand, Abdelhafiz, (2001) reported that Polish companies are lacking in assessment and evaluation of training process which is critical in implementing HRD policy. Other studies, for example by Budhwar, Al-Yahmadi & Debrah, (2002) in Oman; Sambrook, (2001) in UK; Heraty & Morley, (2002); Kjellberg, Soderstrom & Svennson, (1998) in Sweden; Morrow, (2001) and Nolan (2002) in Ireland; and Mishra, (2002) in India indicated that HRD practices in each country varies according to the economic, political, cultural, labor market and educational systems of individual country.

Studies of HRD are still lacking and very limited empirical evidence is available to support HRD research in Malaysia. Attempts to study HRD in Malaysia was made by Wan, (1994) and (1995) when he explained that HRD in Malaysia is affected by transnational companies in the advent of technological innovation and labor market. Subsequently, Debrah, McGovern and Budhwar, (2000) explained that HRD policies and practices in Malaysia is complementing the South-East Asian Growth Triangle. In contrast, Rowden and Shamsuddin (2000) looked at workplace learning and job satisfaction in SMI. This indicated that empirical evidence of HRD in Malaysia has breath and depth to be examined.

### **A Brief Review of Literature on HRD Practices**

Literature has indicated that HRD strategies must be linked and incorporated to the overall business strategy for it to support the overall strategic direction and also to differentiate itself from training and development (T&D) (Wilson, 1999). And HRD was further differentiated from T&D as involving the many partnerships in HRD and also the concept of innovativeness and creativity of individuals in an organization (Garavan, 1991).

In addition, it was suggested by Garavan, Costine and Heraty (1995) that HRD ‘cannot be integrated into strategy unless senior managers want that to happen’, and this depends very much on senior managers’ ability to identify environmental trends in HRD. This ability can be enhanced if there is a positive HRD culture and learning approach to strategy within the organization. However, it can be argued that positive HRD culture and learning approach could not be achieved with first, achieving the need for a proper separate function or department handling HRD. It was posited by various literature (see for example, Church and McMahan, 1996; Megginson et al., 2000; Huang, 2002; and Budhwar, et al., 2002) that many organizations are trying to meet the need in establishing a separate function for HRD. A separate section for HRD is said by Nadler and Nadler (1989) as a professional and specialised function and having just one separate HRD unit might not be sufficient and the employment of more than few HRD specialists in the department is essential as the lack of HRD staff might hinder the strategic recognition of HRD (Cho et al., 1999).



The term HRD and HRD department has been used globally for more than 20 years with a shift in the trend from T&D to HRD, but despite this shift, the term training is still widely used in businesses and in HRD practice. Similar to the need for a separate department for HRD, having a separate budget for HRD is crucial as it provides for the HRD practitioner to have specific financial resources available in providing HRD services throughout the organization using the budget allocation (Nadler and Nadler, 1989). However, studies have found that only 10 percent of the overall HR budget is allocated to HRD which is considered by organisations to have the most value. The remaining 90 percent are devoted to administration and service delivery of HR (Wilkerson, 1997). Cho, Park and Wagner, (1999) stress that the dearth of funds can cause organisation to fail in implementing an effective HRD and hinder its recognition as a strategic business partner.

Garavan (1991) suggest that for HRD to be focus and strategic, it must formulate plans and policies which are integrated with the business plans and policies and it was stressed by Armstrong (2000) that all organizations should have an HRD plan and policy. It was articulated that the effectiveness of HRD activities depends on the development, implementation and articulation of the HRD plans and policies with the overall HR policy and organizational strategy.

The function of HRD theoretical encompass practices concerned with carrying out the identification of needs analysis, design, implementation and evaluation of HRD activities, career planning and development and performance management (Gilley et al, 2002). However, the notion of a strategic approach to HRD is the involvement of other stakeholders at various stages of the practices (Harrison, 2000). In analysing HRD needs, four levels of needs within the organization must be analysed. First, is analysing the organisational needs to understand organisational characteristics to determine HRD efforts needed; secondly, is analysing the occupation or task analysis which is concerned with employees' performance and competencies; thirdly, is analysing individual employees' abilities, skills, knowledge and attitudes in performing their tasks (Desimone, et al., 2002); fourth and finally, is identifying departmental objectives and work processes (Wilson, 1999). These needs identification can be accomplished by interviews, questionnaires, observations and focus groups (Wilson, 1999), as well as the more complex method of is/should analysis, critical analysis and root-cause analysis in information gathering.

Delahaye (2000) suggested that it is important to consider the learning strategies to be used, the learning outcomes to be achieved and the identifying the learners involved in HRD activities. Hence, key activities such as setting objectives for learning, selecting trainer or provider, developing a lesson plan, selecting methods for delivering training, preparing training materials, scheduling HRD programme, and finally planning the costs. Other than off-the-job training such as classroom-based and outdoor-experiential learning (Read and Kleiner, 1996), employees are also trained on the job itself as in on-the-job training (Sparkes and Miyake, 2000). And these activities have to be evaluated to identify its effectiveness on the individual employees' learning and performance (Kirkpatrick, 1994) as well as identifying the financial benefits of providing training to employees by conducting return-on-investment (ROI) analysis (Mitchell, 1994). Moreover, employees are also assessed on their performance improvement by the more formal performance appraisal process (Jacobs and Washington, 2003). Finally, HRD is concerned with planning and developing employees' career growth path in which employees' advancement or upward movement is planned and training activities are provided when required for the advancement.

As HRD is more strategic and focused than T&D, hence, all the above activities and practices of HRD are shared between all levels of management, the individual, and also the external environment such as external provider and consultants (Garavan, et al., 1998; Yadapadithaya and Stewart, 2003; Budhwar, 2000; McGovern et al., 1997; and Mindell, 1995)). Therefore, it can be concluded that the function of HRD is to train and develop the individual employee, short term and longer term development perspectives to improve and achieve individual, departmental and organizational objectives which support change for organisational development and improvement.

## Methodology

### Instrument

Considering the main aim of the study, exploring and examining the degree and nature of HRD practices and devoid of empirical research evidence in Malaysia, this study employed the concurrent-triangulation strategy of combining both quantitative and qualitative research methods. This mixed-method has the strength to corroborate, cross-confirm, complement and validate data findings from each method (Creswell, 2003). A questionnaire was developed for the survey which was piloted and tested. And a semi-structured questionnaire served as an interview guide to correspond the research data gathered. The questionnaire covers all aspects of HRD from the strategic components of HRD to individual training and development. The questionnaires were distributed by postal, email and personal delivery. These questionnaires are addressed to HRD managers or personnel-in-charge of HRD and in the absence of these personnel, thus, directed to the HR managers. These personnel are selected due to their subject-matter expertise and hands-on experience, hence, they are the best person to provide a comprehensive and informed views on the evolution of HRD function.

### Sample

There are five regions in Malaysia, namely, East Malaysia peninsular; Central region, Southern region, Northern region and Eastern region. All the manufacturing companies are dispersed all over Malaysia and a national survey and interviews were conducted in all these regions. The sample for the study was the whole population of companies both large and the SMI registered with the Federation of Malaysian Manufacturer (FMM). Up to the point of this study, there are 2,135 companies registered with FMM, and a response rate of 365 (17.1 percent) was obtained. To corroborate and supplement the questionnaire survey, face-to-face interviews with fifty HR managers or personnel-in-charge of HRD were conducted covering all the five regions.

## Findings and Discussion

### HRD Structure

**HRD Department.** The findings found that out of 365 companies survey, only 28.9 percent (44) companies responded to having a separate department or section handling HRD and these are large companies whereas, the SMI showed no evidence of any HRD department. The existence of a separate HRD section as an important part of the organizational structure is absent in the manufacturing companies in Malaysia which is contrasting to studies which indicated that most companies do have a formal HRD section within their organizations (see for example, Budhwar et al, 2002).

**Table 1:** Provision of HRD Section

|             | Size of Organization |       |              |       |
|-------------|----------------------|-------|--------------|-------|
|             | Large (N=152)        |       | SMI (N= 213) |       |
| HRD Section | N                    | %     | N            | %     |
| Yes         | 44                   | 28.9  | -            | -     |
| No          | 108                  | 71.1  | 213          | 100.0 |
| Total       | 152                  | 100.0 | 213          | 100.0 |

The existed HRD sections are mostly incorporated less than ten years (77.3 percent) with staff manning the department ranging from one to 31 staff. A majority has three and less HRD staff, whilst about one third (29.6 percent) of the larger multinational companies such as the electrical and electronics and oil and gas corporations have more than 3 HRD specialists within the department. The large number of HRD specialist in an organisation is not a surprising phenomenon as these specialists are responsible for internal specialists training and on-the-job training, coaching and mentoring which

is agreed by other theorists such as Nadler and Nadler, (1989); McMahan and Woodman, (1992) and Church and McMahan, (1996).

However, an interesting finding is the label for these departments that varies from the modern HRD department (18.2 percent) to training or T&D (59.1 percent) and others such as learning and development department (15.9 percent), Employee Development and Placement and Talent development unit (6.8 percent). In the absence of a separate section of HRD, a majority of human resources training and development activities are under the function of HR department (91.6 percent in large companies and 68.5 percent in the SMI) and the remaining are under personnel, administration and accounts department. Nonetheless, only 33.4 percent of the total population has its own training centre which favours the larger companies by 56.6 percent, but the impression of running a training centre which is considered expensive prevaricate many organisations from having one.

**Table 2:** Profile of HRD Department

|                             |                          | Large (N = 44) |             |
|-----------------------------|--------------------------|----------------|-------------|
|                             |                          | N              | %           |
| <b>Number of years</b>      | Less than 5 years        | 13             | 29.6        |
| <b>HRD unit established</b> | 5 – 9 years              | 21             | 47.7        |
|                             | More than 10 years       | 10             | 22.7        |
| <b>Department's name</b>    | HRD department/unit      | 8              | 18.2        |
|                             | Training & development   | 3              | 6.8         |
|                             | Training department/unit | 23             | <b>52.3</b> |
|                             | Others                   | 10             | 22.7        |
| <b>Number of Staff</b>      | 1                        | 6              | 13.6        |
|                             | 2                        | 12             | 27.3        |
|                             | 3                        | 13             | <b>29.5</b> |
|                             | 4                        | 2              | 4.6         |
|                             | 5                        | 3              | 6.8         |
|                             | 6                        | 2              | 4.6         |
|                             | More than 6 staff        | 6              | 13.6        |

Note: N=108 of the large organizations and N=213 of the SMI are not included in this analysis as they do not have a separate section for HRD.

**Table 3:** Other Department Responsible for HRD

| Other Department responsible for HRD | Size of Organization |             |             |             |
|--------------------------------------|----------------------|-------------|-------------|-------------|
|                                      | Large (N=108)        |             | SMI (N=213) |             |
|                                      | N                    | %           | N           | %           |
| Human Resources department           | 99                   | <b>91.6</b> | 146         | <b>68.5</b> |
| Personnel Department                 | 6                    | 5.6         | 43          | 20.3        |
| Administration & Finance /Accounts   | -                    | -           | 22          | 10.3        |
| Others                               | 3                    | 2.8         | 2           | 0.9         |

**Table 4:** Distribution Of Organizations Having A Training Centre

| Having a Training Centre | Size of Organization |              |              |              |
|--------------------------|----------------------|--------------|--------------|--------------|
|                          | Large (N= 152)       |              | SMI (N= 213) |              |
|                          | N                    | %            | N            | %            |
| Yes                      | 69                   | <b>45.4</b>  | 53           | 24.9         |
| No                       | 83                   | 54.6         | 160          | <b>75.1</b>  |
| <b>Total</b>             | <b>152</b>           | <b>100.0</b> | <b>213</b>   | <b>100.0</b> |

**HRD Plans and Policies.** In relation to HRD plans and policies, the results showed that less than one third (27 percent) of the large companies and only 8.9 percent of the SMI plans for HRD activities and these plans are reviewed on a medium term basis of one year or less, or rather more of as

and when required by the management. The HRD plans and policies existed in these companies are more informal in nature as reported by 65.9 percent in the large companies and 100 percent by the SMI. It was suggested that a vast majority of the companies depended on the ISO Quality Policy to serve as their plans and policies to provide its employees with training and development. And the common reasons for not having a formal and separate plans and policies for HRD are: no emphasis from top management, no HRD department or personnel, being an SMI company, production is more important than training and development; and language problem with written document.

**Table 5:** HRD Plan and Policy

|                               | Size of Organization |       |     |       |
|-------------------------------|----------------------|-------|-----|-------|
|                               | Large                |       | SMI |       |
| Having HRD Plan and Policy    | N                    | %     | N   | %     |
| Yes                           | 41                   | 27.5  | 19  | 9.1   |
| No                            | 108                  | 72.5  | 190 | 90.9  |
| Total                         | 149                  | 100.0 | 209 | 100.0 |
| Reviewing the Plan And Policy |                      |       |     |       |
| Long Term (over 3 years)      | -                    | -     | -   | -     |
| Medium term (1 – 3 years)     | 6                    | 14.6  | -   | -     |
| Short term (less than 1 year) | 35                   | 85.4  | 19  | 100.0 |
| Total                         | 41                   | 100.0 | 19  | 100.0 |
| Nature of Plan and Policy     |                      |       |     |       |
| Formal                        | 14                   | 34.1  | -   | -     |
| Informal                      | 27                   | 65.9  | 19  | 100.0 |
| Total                         | 41                   | 100.0 | 19  | 100.0 |

**Note:** Question not applicable for 108 large companies and 190 companies in the SMI, since they do not have an HRD plan

**HRD Budget and Expenditure.** As the manufacturing companies contribute to the national HRD funds, the notion of having a separate budget for HRD is not very common. Less than 10 percent of all the companies surveyed have a separate budget for HRD and this is only from the larger more richer companies. It was found that all the companies depended heavily on the HRDF contribution for training and developing it employees. The amount of expenditure on HRD annually varies from less than RM10,000 to more than RM1 million (see table 6 below), depending on the size of the organization and the number of employees as the number of employees influenced the amount of money contributed to the HRDF.

**Table 6:** Budget and Expenditure

|                              | Size of Organization |       |     |       |
|------------------------------|----------------------|-------|-----|-------|
|                              | Large                |       | SMI |       |
| Separate HRD Budget          | N                    | %     | N   | %     |
| Yes                          | 36                   | 23.7  | -   | -     |
| No                           | 116                  | 76.3  | 213 | 100.0 |
| Total                        | 152                  | 100.0 | 213 | 100.0 |
| Amount of money spent on HRD |                      |       |     |       |
| Less than RM10,000           | 3                    | 2.8   | 37  | 28.2  |
| RM10,001 to RM50,000         | 18                   | 16.8  | 74  | 56.5  |
| RM50,001 to RM100,000        | 21                   | 19.6  | 12  | 9.2   |
| RM100,001 to RM500,000       | 40                   | 37.4  | 8   | 6.1   |
| RM500,001 to RM1 million     | 3                    | 2.8   | -   | -     |
| More than RM1 million        | 22                   | 20.6  | -   | -     |
| Total                        | 107                  | 100.0 | 131 | 100.0 |

**Note:** Missing data – 45 cases from the large organisation category and 83 cases from the SMI category

In asking the sufficiency of the funds from the HRDF contribution, only 63 percent from the large companies and 38.5 percent from the SMI reported the adequacy in training and developing

employees. The remaining majority which is from the SMI, testify that the available funds are not sufficient to provide its employees with the necessary training due to the high cost involved in fees, consultancy, facilities and administration of HRD activities, hence, impede the effective implementation of HRD. Cho et al (1999) supported this finding as it was inferred that organisations' participation in strategic activities are affected by lack of financial resources and effective HRD activities.

### **HRD Practices**

**Needs Analysis.** The four stages in HRD practices begins with needs analysis, design, implementation and ends with evaluation (Wilson, 1999; Delahaye, 2000; and Harrison, 2004). Both the large organisations and SMI conduct some kind of needs analysis (large, 92.1 percent and SMI, 62 percent). The individual needs are more often analysed compared to the organisation, department and functional needs analysis. In this instance, analysing HRD needs are more evident in the larger organizations compared to the SMI. And the most preferred method of determining HRD needs is by direct observation (38.6 percent); questionnaire survey (25 percent) and personal interviews with employees (11 percent). This result suggests that HRD needs analysis is more informally conducted rather than the formal and systematic process. Among the most common justifications given are resources such as financial, manpower, skills and expertise; high employees' turnover, lack of top management commitment and support, lack in HRD plan and policy.

**Table 7:** Analysing HRD Needs

|   | <b>Size of Organization</b> |             |            |             |
|---|-----------------------------|-------------|------------|-------------|
|   | <b>Large</b>                |             | <b>SMI</b> |             |
| <b>Analysing HRD Needs</b>                                  | <b>N</b>                    | <b>%</b>    | <b>N</b>   | <b>%</b>    |
| Yes   | 140                         | 92.1        | 132        | 62.0        |
| No  | 12                          | 7.9         | 81         | 38.0        |
| Total   | 152                         | 100.0       | 213        | 100.0       |
| <b>Level of Analysis</b>                                    |                             |             |            |             |
| Analyse organization's overall performance                  | 41                          | 27.0        | 13         | 6.1         |
| Analyze departmental requirement and performance            | 36                          | 23.7        | 30         | 14.1        |
| Analyze individual employee's skills, knowledge & attitudes | 43                          | <b>28.3</b> | 69         | <b>32.4</b> |
| Analyze employee's job and functional responsibilities      | 33                          | 21.7        | 17         | 8.0         |
| All of the above  | 56                          | <b>36.8</b> | 11         | 5.2         |
| Total   | 140                         | 100.0       | 132        | 100.0       |
| <b>Methods of Determining HRD Needs</b>                     |                             |             |            |             |
| Questionnaire survey  | 41                          | <b>27.0</b> | 27         | 12.7        |
| Personal interviews with individuals                        | 30                          | 19.7        | -          | -           |
| Direct observation  | 44                          | <b>28.9</b> | <b>61</b>  | <b>28.6</b> |
| Performance appraisal report                                | 28                          | 18.4        | -          | -           |
| Analysing individuals job description                       | 8                           | 5.3         | -          | -           |
| Heads of department or line manager's report                | 8                           | 5.3         | 6          | 2.8         |
| Production report   | 16                          | 10.5        | -          | -           |
| Special training committee                                  | 5                           | 3.3         | -          | -           |
| Others  | 5                           | 3.3         | 3          | 1.4         |
| Total   | 140                         | 100.0       | 132        | 100.0       |

**Design and Implementation.** As it was found that most of the companies do not have sufficient internal HRD specialist and training centre, HRD practitioners reported that other than on-the-job training, a vast majority of the HRD activities are conducted by external trainers or consultants in in-house training room (mean, 2.3) or venues away from the organisation's premise to reduce distraction from job responsibilities (average mean, 2.4). And in ascending order, preferred method of HRD programmes delivery are lectures, group discussion, audio visual aids, brainstorming, case studies,

computer based, management games, role playing, fieldwork visits, job rotation and finally, special projects.

**Table 8:** Location and Provider for Training

|  | Size of Organization |      |      |     |      |      |
|--|----------------------|------|------|-----|------|------|
|  | Large                |      |      | SMI |      |      |
|  | N                    | Mean | SD   | N   | Mean | SD   |
| In-house by internal trainers                | 152                  | 2.04 | 0.72 | 213 | 4.01 | 1.41 |
| In-house by external consultants             | 152                  | 2.10 | 0.78 | 213 | 2.49 | 1.29 |
| Externally conducted by internal trainers    | 152                  | 4.38 | 1.37 | 213 | 4.72 | 1.18 |
| Externally conducted by external consultants | 152                  | 2.42 | 1.22 | 213 | 2.39 | 1.22 |
| Organization own training centre             | 152                  | 4.83 | 1.59 | 213 | 5.60 | 0.80 |

Note: Ranking: 1-Very High, 2-High 3-Average, 4-Low, 5-Very Low and 6-None at all.

**Table 9:** Ranking of Methods Used in HRD Programmes

| Methods           | Mean Rank | Rank |
|-------------------|-----------|------|
| Lectures          | 2.69      | 1    |
| Group Discussion  | 3.30      | 2    |
| Audio Visual Aids | 5.21      | 3    |
| Brainstorming     | 5.26      | 4    |
| Case Studies      | 5.90      | 5    |
| Computer based    | 6.07      | 6    |
| Management Games  | 6.27      | 7    |
| Role Playing      | 6.49      | 8    |
| Field Work Visits | 7.96      | 9    |
| Job Rotation      | 8.19      | 10   |
| Special Projects  | 8.65      | 11   |

In designing employees' HRD programmes, it was found that both the large organisations and SMI viewed that providing training to new employees upon recruitment and on new working methods or new technology as the main priority, indicated by an average means of 2.4 and 2.3 respectively, which is frequently provided with a higher favour to the larger companies. The shopfloor, technical and professional employees and lower management and supervisory are seen to be in high favour for training indicated by an average (mean ranging from 2.9 to 3.2) provision compared to the other levels such as senior and middle management as well as the support and administrative staff with low provision (mean ranging from 4.2 to 4.4) and sometimes no training is given at all.

**Table 10:** Provision of Training

|                                      | Average Mean |
|--------------------------------------|--------------|
| Shopfloor                            | 2.9          |
| Technical/Professional               | 3.2          |
| Lower management and supervisory     | 3.2          |
| Middle management                    | 4.2          |
| Support, administrative and clerical | 4.3          |
| Senior management                    | 4.4          |

**Table 11:** Level of Training Provided

|                                      | Average Mean |
|--------------------------------------|--------------|
| Shopfloor                            | 2.9          |
| Technical/Professional               | 3.2          |
| Lower management and supervisory     | 3.2          |
| Middle management                    | 4.2          |
| Support, administrative and clerical | 4.3          |
| Senior management                    | 4.4          |

Ranking: 1-Very High, 2-High 3-Average, 4-Low, 5-Very Low and 6-None at all

**Evaluation.** The success and failure of HRD programmes can only be established accurately through evaluation. In this study, it was found that this is the most ignored and forgotten part of the HRD process. However, the companies surveyed indicated that some kind of evaluation activities have been conducted in which despite the low frequency in evaluating HRD programmes, HRD practitioners reported that they frequently have employees completing a questionnaire at end of each HRD programme to report their reaction on the programme (average mean, 2.4), and asking immediate managers or supervisor for assessment on employees’ learning (average mean, 2.5). Assessing employees’ learning through their job performance is sometimes executed (average mean, 2.8), whilst, comparing employees’ learning outcome before and after each HRD programmes is rarely performed.

**Table 12:** Evaluation Methods

|   | Size of Organization |      |      |     |      |      |
|---|----------------------|------|------|-----|------|------|
|   | Large                |      |      | SMI |      |      |
|   | N                    | Mean | SD   | N   | Mean | SD   |
| Employees completing a questionnaire at the end of each training programme            | 152                  | 2.09 | .965 | 213 | 2.69 | .976 |
| Interview employees after each training programme                                     | 152                  | 3.63 | .689 | 211 | 3.85 | .880 |
| Comparing the learning outcome of employee’s before and after each training programme | 152                  | 4.19 | .698 | 211 | 4.22 | .788 |
| Assess employees’ learning through their job performance                              | 152                  | 2.27 | .661 | 213 | 3.30 | .821 |
| Asking employee’s manager or supervisor for their assessment of employee’s learning   | 152                  | 2.49 | .876 | 213 | 2.62 | .943 |

Ranking: 1-Very Frequent (VF), 2-Frequent (FR), 3-Sometimes (SO), 4-Rarely (RA), 5-Never (NV)

Assessing the cost-effectiveness of HRD programmes is a complex and difficult process and a vast majority of the companies do not conduct any financial measurement on its HRD programmes. Only a small fraction of the large organisations sometimes to frequent conduct return-on-investment (ROI) on HRD programmes (11.4 percent). The findings in this study established that HRD practitioners lacked the commitment towards evaluation and impeded by factors such as lack of resources such as manpower, expertise, skills, knowledge and financial; complexity of the evaluation process; absence of job descriptions to compare job requirement and standards; and unclear HRD objectives. This finding corroborates with previous studies, for example, Junaidah, 2001; Desimone, et al, 2002; and Mitchell, 1994.

**Longer-term Developmental Activities.** The other important functions of HRD practices are performance management and career planning and development. Almost similar with evaluation, performance management is measuring employees’ performance and most companies rarely or do not measure employees’ performance regularly. Only a third of the manufacturing companies have regular annual performance appraisals for its employees. And in this appraisals process, employees are usually only analysed of its acquired skills, knowledge and attitudes after being provided with training by informal methods of getting line managers reports and feedback rather than the formal and systematic process of identifying employees’ training and development gaps and comparing current with desired performance. Nevertheless, managers involved in the appraisal process are usually developed for skills

and knowledge, and the employees motivated for improved performance. However, the notion of rewarding employees for high performance is non existence.

**Table 13:** Performance Management

|  | Size of Organization |      |      |      |     |      |      |      |
|--|----------------------|------|------|------|-----|------|------|------|
|  | Large                |      |      |      | SMI |      |      |      |
|  | N                    | Mean | SD   | %    | N   | Mean | SD   | %    |
| We have an annual employee’s performance appraisal   | 152                  | 3.07 | 1.62 | 45.4 | 211 | 4.06 | 1.27 | 18.5 |
| We compare employee’s current performance with performance standards to determine performance gaps       | 152                  | 3.82 | 1.31 | 23.0 | 211 | 4.46 | 0.82 | 5.7  |
| We analyse employee’s acquired skills, knowledge and attitudes after training and development activities | 152                  | 2.46 | 1.10 | 74.3 | 211 | 3.05 | 1.36 | 52.6 |
| We compare employee’s current performance with desired performance                                       | 152                  | 2.37 | 1.07 | 78.3 | 211 | 3.93 | 1.10 | 17.1 |
| We create management development initiatives for managers who does appraisals                            | 152                  | 2.36 | 0.96 | 80.3 | 211 | 3.13 | 1.41 | 50.7 |
| We develop and encourage self-directed and self-esteemed employees                                       | 152                  | 2.28 | 0.90 | 84.2 | 211 | 2.85 | 1.36 | 61.6 |
| We have reward strategies for high performance employees   | 152                  | 3.72 | 1.37 | 25.0 | 211 | 4.27 | 0.84 | 6.6  |

Ranking: 1-Strongly Agree, 2-Agree, 3-Neither, 4-Disagree, 5-Strongly Disagree

Employees career planning is inevitable ignored in these manufacturing companies. The results indicated that the larger companies rarely plans and development its employees for career growth (average means of 4), whereas, the SMI completely ignored this function (average means of 5). The notion of ignoring employees’ career development have been reported because of high employees’ turnover rate as well as the discernment of ‘poaching’ within the same industries which is quite evident.

**Table 14:** Career Planning and Development

|  | Size of Organization |      |      |     |      |      |
|--|----------------------|------|------|-----|------|------|
|  | Large                |      |      | SMI |      |      |
|  | N                    | Mean | SD   | N   | Mean | SD   |
| Job posting system   | 152                  | 4.13 | 1.12 | 213 | 4.78 | 0.47 |
| Mentoring programs   | 152                  | 4.22 | 1.04 | 213 | 4.77 | 0.55 |
| Career development seminars and workshops                        | 152                  | 4.16 | 1.20 | 213 | 4.82 | 0.41 |
| Long term human resource planning process                        | 152                  | 4.30 | 1.17 | 213 | 5.00 | 0.00 |
| Transforming performance appraisals in developmental evaluations | 152                  | 3.75 | 1.42 | 213 | 4.66 | 0.74 |

Ranking: 1-Very Frequent, 2-Frequent, 3-Sometimes, 4-Rarely, 5-Never

### Roles and Responsibilities

Having discussed the different purpose of HRD practices, the function of HRD demonstrates extensive and vast responsibilities. However, this study found that the roles in HRD are not the sole responsibility of the HRD practitioner but rather a shared partnership with the internal and external stakeholders. It was stated that the role in designing, facilitation, evaluation or HRD activities, integrating HRD with HRM activities, coaching, counselling, mentoring and career path development are responsibilities shared in partnership with HRD, HR managers, and line managers. The task of analysing and assessing needs as well as budgeting and investments are reported to be the shared responsibilities of top management, HRD and HR managers, and line managers. And finally, planning, policy making and decision making in HRD are the responsibilities of HRD or HR managers with top management. Hence, it is clearly apparent that the functions in HRD are shared with every level of



management within the organisations and corroborated by previous literature (see example, Garavan, 1995; Garavan et al., 1998; Gilley et al., 2002; Budhwar, et al., 2002 and McGovern et al., 1997).

## **Conclusions**

In conclusion, the analysis of the above results shows that HRD practitioners and employers are aware of the importance of HRD and the effective implementation of HRD practices. The basic fundamentals of HRD such as planning and policies, HRD structure, the main functions of needs analysis, design and implementation, evaluation, performance management and career planning and development are somewhat eminent despite lacking the commitment in holistic implementation.

The almost non-existence of the HRD department or separate section in handling HRD was noted as a critical factor and it is important to have a separate HRD department or section as part of the structure as the existence of this function enables the organisation to be strategic and business-led. However, despite the almost non-existence of the HRD department and considering the existed HRD departments have been established around the early 1990s, interestingly, there is a reluctant shift in the more modern terms for HRD department. A majority of the companies still maintained the traditional term of training or training and development, but also the emergent of other terms such as employee development; learning and development; and placement and talent development.

Considering the strategic approach in HRD of having a periodic plans and formal policies for HRD, the manufacturing companies are very dependence on ISO Quality Policy for as a platform for human resources training and development. This surprising finding was reiterated by practitioners as the main influence in not having a clear plan, policy and objectives for HRD but rather just providing employees with training to accomplish ISO requirement. Hence, the expenditure for employees training relies heavily on HRDF contribution as a means of utilising the funds rather than having a clear objective for training but this is not universal to all companies. Some of the larger companies have their own separate budget for HRD other than the HRD funds. In this aspect, the intent for training and development in the larger organisations maybe more objective as justification for spending on HRD activities are required. As seen in the need to provide employees with training when new technology and methods are being introduced and implemented and also providing induction and on-the-job training for new employees upon recruitment into the organisations.

Other than the casualness of the HRD plans and policies, analysing and assessing HRD needs is also an informal procedure. Similarly, evaluating employees' learning and performance is often ignored and omitted due to its complexity and limited in resources. In addition, a systematic and formal performance management and employees' career path planning and development are absent. These informalities, ignorance and omissions are because of the lack of skilled and professional HRD personnel in handling these complex and specialised processes. This is also seen in the high preference for external trainers and consultants to train and develop employees as most of the organisations lack specialised internal trainers.

Finally, the last theme emerged from this study is the sharing or rather partnerships in the role and responsibilities of HRD. It could be concluded that the term training reflects the epistemological views of practitioners towards HRD in which it was clearly evident that there is some evidence of strategic of HRD where there is an element of sharing the roles and responsibilities which differs HRD from T&D. However, practitioners are seen to be merely concern with providing employees with short term training rather than the longer term developmental.

## **Implications**

The role and function of HRD is increasingly vital, stressing the responsibility of HRD practitioners and employers to encourage and support innovative and creative strategies for learning and practice within their companies. Human resources in companies are also often the deciding factor in order for organizations to triumph. It is important that organisations have the appropriate skilled and

knowledgeable specialised personnel handling the relevant functions, particularly the HRD function. At the same time, the quality and HRD programmes contents as well as on-the-job training becomes crucial for organizational effectiveness. This implies that employers would gain by investing appropriately on establishing the importance of HRD structural issues, recruiting and selecting relevant specialised HRD personnel to manage and implement effective HRD activities. In addition, investments in HRD activities and competencies and skills development need to be correlated to changes in the job as well as employees' long-term development needs to be integrated with HR long term strategic planning. At the same time, there is a need for a more holistic approach to key competencies and skills, to focus not only on technical and specialised skills but also on promoting and enhancing cognitive, attitudinal and socio-affective skills. Hence, there is a need to apply a more long-term and strategic approach to HRD, to enable employees with short formal training to have the opportunities to change and adapt with the demands of new competencies.

Finally, as this study is the first empirical exploratory research on HRD practices in the manufacturing companies in Malaysia, HRD practitioners in the manufacturing industries can benefit in understanding the scenario of HRD practices and adapting the concepts and findings in this study in filling the current gaps in HRD practice and enhancing for continuous improvement towards best practices of HRD not only in the manufacturing industry but rather inclusive of the other sectors of businesses. In addition, academics in the field of HRD can add abundance to the limited empirical literature in Malaysia as well as in the Asia-Pacific region.

### **Limitations**

The first limitation of this study is mainly confined to the manufacturing sector in Malaysia and it was justified in the selection for this sector, thus, it cannot be generalised to other sector other than the manufacturing industry. As already mentioned, as this is the first known study on HRD activities and practices in the manufacturing sector in Malaysia, this created limitations as there is no existing literature on the same study in Malaysia to corroborate the results findings.

The second limitation is related to the research methods. Again as mentioned above, since this is the first known empirical study in HRD in Malaysia, this study is mainly descriptive and it aims to explore degree and nature of HRD activities and practices in the manufacturing companies. The limitation is that findings in this study is generalised for both the large organisations and SMI in some of the context except specified and categorised.

Third and final limitation to this study is because of time and resource scarcity, some aspects of HRD could not be probed as these aspects needed behavioural observation. In addition, the aspects related to the individual employees themselves were a limitation as only the HRD practitioners were surveyed and interviewed. Hence, employees' opinions and points of view were not conceptualised.

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## **Psychosocial Factors as Predictors of Mentoring Among Nurses in Southwest Nigeria**

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### **Abstract**

This study examined the psychosocial factors predicting mentoring among nurses. The sample comprises 480 nurses randomly selected from some hospitals in southwest Nigeria. Measures of self-esteem, locus of control, emotional intelligence and demographic data form were administered to the sample. Data collected were analysed using hierarchical multiple regression analysis. Results revealed that self-esteem, locus of control, emotional intelligence, age, job status and tenure significantly predicted mentoring relationship experience but not gender. The implication of the findings is that counselling psychologists should consider the psychosocial factors when promoting mentoring relationship in the workplace.

**Keywords:** Mentoring, self-esteem, locus of control, emotional intelligence, demographic factors.

### **Introduction**

A study of the career progression of nurses in Nigeria established that the nurses faced a variety of obstacles in progressing their careers (Adeyemo, 2006; Alarape & Oki, 1999; Olomitutu, 1999; Salami, 2002). At an organizational level these obstacles included role conflicts and role ambiguity; poor working conditions, frequent shift duties and transfers, lack of motivation, lack of training facilities, inadequate working facilities, work overload and stress, poor salary and poor promotion prospects. Most nurses are not satisfied with their jobs and lack commitment to their career and organizations (Adeyemo, 2006; Salami, 2002). According to Olomitutu (1999) much is demanded from the nurses. Too little pay and too much work has often resulted in absolute discontentment, lack of self-will on the job and high turnover among the nurses (Salami, 2002).

Life is precious and because it has no duplicate it should not be toyed with. For this reason, nurses who are charged with the responsibility of caring for the sick require a good deal of commitment, retraining and interpersonal relationship to help them dispense appropriate drugs, retrieve useful information from clients and arrange them logically for the physicians' perusal (Umoinyang, Nsemo, Ntukidem, Obi & Joshua, 2004). These, according to Kram (1986), could be achieved through mentoring.

Unfortunately, there is paucity of documented studies dealing with mentoring among Nigerian workers. This might be attributed to the general negative attitude of Nigerian society toward seeking professional social-psychological help from outsiders (Salami, 1998). Fear of stigmatization and reluctance to self-disclose are some of the factors responsible for the negative attitudes of Nigerians toward seeking professional psychological help. This is based on the assumption that self-disclosure by individuals may indicate betrayal of one's own family and acceptance of weakness by the individual concerned. So what most Nigerians do is to rely more on traditional methods (family, friends, religious

persons, Holy Quran and Bible) for help with socio-psychological and career development problems. Probably this cultural belief is transferred to the work environment by the workers. This study examined mentoring in relation to demographic factors, self-esteem, locus of control and emotional intelligence among Nigerian nurses.

Mentoring has been defined as a relationship between a senior (mentor) and a junior employee (protégé) in which the senior employee provides a developmental functioning (i.e. kinds of support) such as coaching, counselling, advising, and sponsorship in social, psychological and career development problems (Allen, 2003). According to Lankau and Scandura (2002), a mentor is an influential individual in one's work environment who has advanced experience and knowledge and who is committed to providing upward mobility and support to one's career.

Some researchers have identified some roles or functions of mentoring viz: social support, career development and role modelling (Kram, 1986; Scandura & Viator, 1994). Mentoring has a variety of benefits for the protégés. Protégés' benefits include facilitation of personal development, advancements in organization, provision of challenging assignments, guidance, counselling, exposure to top management and role modelling (Barker, Monks & Buckley, 1997). Informal mentoring arrangements are most likely to exist in most work organizations in Nigeria. There are no research evidences to support the existence of formal mentoring schemes in hospital settings in Nigeria. Some researchers have related mentoring to psychosocial or career development (Burke, McKen & McKenna, 1994), organization socialization, organizational commitment, promotion opportunities, job satisfaction, self-esteem, perception of procedural justice, salary and turnover (Anifotos, 2002; Higgins, 2000; Hill & Bahniuk, 2000; Lankau & Scandura, 2002; Ragins, Cotton & Miller, 2000). While much has been written about mentoring in the developed countries especially U.S.A. and Europe, there is paucity of research work on mentoring among Nigerian workers. Thus gaps are created in the literature as regards mentoring in Nigeria.

Self-esteem is the overall value that one places on oneself as a person. It is the perception of how others view us. It is fundamentally rooted in reality as opposed to illusion (Judge, Locke, Durham, & Kluge, 1998). Several studies have linked self-esteem to job satisfaction (Judge et al, 1998; Nwagwu & Salami, 1999); and job performance (Adebayo, 1999). Few empirical studies have linked self-esteem to mentoring (Lankau & Scandura, 2002; Ragins & Cotton, 1999) and attitude toward seeking professional help (Nadler, Maler & Friedman, 1984). It is expected that nurses with high self-esteem will indicate higher mentoring relationship experience.

Locus of control is the extent to which people believe that they are in control of events in their lives (internal locus of control) and the belief that forces external to them are responsible for their plights (Rotter, 1966). Thus, people are partitioned into two groups – internal and external locus of control. People who have internal locus of control believe that positive or negative events are consequences of their own actions and that the events are under their control. People with external locus of control have the belief that positive or negative events are not related to their own actions in most situations and are therefore beyond their personal control. Locus of control has been linked to job satisfaction (Judge et al. 1998), and career commitment (Adeyemo, 2006). However, hardly had any empirical study related locus of control with mentoring. It is expected that people with external locus of control will be more involved in mentoring relationships. They are more likely than people with internal locus of control to believe that some one higher in rank and with more experience will be able to solve their psychosocial and career development problems.

Mayer and Salovey (1997) defined emotional intelligence (EI) as a set of interrelated skills that can be classified within four dimensions viz: the ability to perceive accurately, appraise and express emotion; the ability to access and/or generate feelings when they facilitate thought; the ability to understand emotion and emotional knowledge; and the ability to regulate emotions to promote emotional and intellectual growth. Individuals with high emotional intelligence experience continuous positive moods and feelings that generate higher levels of satisfaction, interpersonal relationships, cooperativeness and well-being. Emotional intelligence has been linked to job satisfaction (Carmeli,

2003). Hardly had any empirical study linked EI to mentoring. It is expected that emotional intelligence will be related to mentoring because a person with high emotional intelligence will be able to establish and maintain good interpersonal relationship which is the core of mentoring relationship.

There are empirical evidences to support the claim that gender has significant relationship with mentoring behaviour. For example, several studies have found that women were more likely than are men to develop mentoring relationships with their supervisors (Ragins, 1999; Ragins & Cotton, 1991). However, some researchers did not find any significant difference between men and women in reporting use of alternative sources of support through mentoring (Allen, 2003; Barker, Monks & Buckley, 1997; Scandura & Viator, 1994).

On the link between age and mentoring there are empirical evidences to support a strong relationship. For example, Finkelstein, Allen and Rhoton (in press) reported that younger workers were more involved in mentoring relationship than older workers. According to them, this was because the prototypical protégé was younger and the prototypical mentor was older and more experienced, the older newcomers may either avoid seeking out a traditional mentor or may be passed over by potential mentors.

Although there are scarce empirical studies that addressed the relationship between mentoring and job rank and tenure (Barker, Monks & Buckleys, 1997; Dirsmith & Covaleski, 1985; Finkelstein et al. in press) it can be assumed that younger protégés will also be of lower job ranks and newcomers in most organizations. Therefore, significant differences are expected between the mentoring activities of junior and senior workers and between newly employed and more experienced workers. Thus, it is expected that job rank and tenure will be significantly related to mentoring of the nurses.

Given the paucity of research in the area of mentoring and the immense benefits of mentoring for the individuals and the organizations in terms of its potency for improving employee productivity and satisfaction, there is need to fill the gaps by researching into the mentoring phenomenon among the nurses. The purpose of this study was to investigate the demographic factors (age, gender, job status, and tenure), self-esteem, locus of control, and emotional intelligence predicting mentoring among Nigerian nurses. Findings from this study may help counselling and organizational psychologists in developing mentoring programmes designed to meet the needs and expectations of Nigerian workers.

## **Hypotheses**

The following hypotheses were tested at the 0.05 level of significance:

1. Social/demographic factors ((a) age (b) gender (c) job rank and (d) tenure) will significantly predict mentoring among the nurses.
2. Self-esteem will significantly predict mentoring among the nurses.
3. Locus of control will significantly predict mentoring among the nurses.
4. Emotional intelligence will significantly predict mentoring among the nurses.

## **Methodology**

### **Research Design**

This study adopted a survey research design in order to explore the relationship between self-esteem, locus of control, emotional intelligence, demographic factors, and mentoring behaviour among the nurses.

### **Participants**

Four hundred and eighty nurses (males = 230, 47.92%, females = 250, 52.08%) randomly selected from five states in southwest Nigeria participated in this study. Of the 500 questionnaires distributed 20 were not properly filled and were discarded and were not used for the data analysis. Four hundred and



eighty were used for analysis. Their ages ranged from 21-54 years with a mean age of 36.56 years (S.D. = 7.80). The participants had the required nursing and midwifery certificates for practising as recognized by the Nursing and Midwifery Council in Nigeria. The participants vary in working experience from 2 to 25 years. Their job ranks ranged from Nursing or Midwifery Officers to Chief Nursing Officers or Assistant Directors of Nursing Services.

## **Measures**

Demographic information was collected from participants regarding their age, gender, job rank, and job tenure. The participants completed four questionnaires: Self-Esteem Scale (SES) by Rosenberg (1979), Locus of Control Scale (LOC) by Craig, Franklin and Andrews (1984), Emotional Intelligence Scale (WLEIS) by Wong and Law (2002) and modified version of Mentoring Scale by Scandura and Viator (1994).

The SES (Rosenberg, 1979) was used to measure the individual's self-esteem. The SES consists of 10 items which were answered on a 5-point likert scale ranging from 1 = strongly disagree to 5 = strongly agree. Higher scores indicate higher levels of self-esteem. The reliability coefficient Cronbach alpha for the scale was 0.85. Adequate validity has been reported for this widely used measure.

Locus of control behaviour scale (LOC) (Craig et al. 1984) was used to measure the participants' locus of control. LOC has 17 items constructed on a 5-point likert type scale which were used in the direction of externality. Higher scores indicate higher external locus of control. The LOC has Cronbach alpha of 0.79. Adequate validity has been reported for this widely used scale.

WLEIS (Wong and Law, 2002) was used to measure emotional intelligence. It is a 16-item, likert-type scale ranging from 1 = strongly disagree to 5 = strongly agree. Higher scores indicate higher levels of emotional intelligence. The alpha coefficient in this study was 0.91. Adequate validity has been reported for this widely used scale.

Modified version of Mentoring Scale (Scandura & Viator, 1994) was used to measure the mentoring relationships the participants may have experienced in their present work organization. It is a 15-item scale constructed on a 5-point likert scale. Higher scores indicate higher levels of mentoring relationship experience. The scale has a Cronbach's coefficient alpha of 0.93. Adequate validity has been reported for this widely used measure.

## **Procedure**

The present researcher and six research assistants with the help of some hospital personnel administered the four questionnaires to the participants after obtaining the consents of the nurses and the hospital authorities involved in this study.

## **Data Analysis**

To assess the relationship of self-esteem, locus of control, emotional intelligence and demographic factors (age, gender, job rank, and tenure) with mentoring behaviour, hierarchical multiple regression analysis was employed.

## **Results**

Table 1 present descriptive statistics of the variables in the study and the correlation matrix.

**Table 1:** Means Standard Deviations and Intercorrelation Matrix of all Variables Studied

|   | Variables        | 1      | 2     | 3     | 4     | 5   | 6     | 7    | 8     |
|---|------------------|--------|-------|-------|-------|-----|-------|------|-------|
| 1 |                  | 1      |       |       |       |     |       |      |       |
| 2 | Self-esteem      | .28*   | 1     |       |       |     |       |      |       |
| 3 | Locus of Control | .32*   | .18   | 1     |       |     |       |      |       |
| 4 | EI               | .20*   | .27*  | .09   | 1     |     |       |      |       |
| 5 | Gender           | .11    | .12   | .14   | .19   | 1   |       |      |       |
| 6 | Age              | -.23*  | .07   | .05   | .03   | .04 | 1     |      |       |
| 7 | Job Status       | -.198* | .11   | .03   | .20*  | .15 | .18   | 1    |       |
| 8 | Tenure           | -.20*  | .05   | .13   | .18   | .18 | .24*  | .21* | 1     |
|   | Mean             | 35.40  | 28.30 | 45.80 | 48.70 | 1.5 | 36.56 | 2.20 | 13.20 |
|   | S.D.             | 5.30   | 4.60  | 3.50  | 3.20  | .50 | 7.80  | 1.40 | 2.50  |

Note: EI = Emotional Intelligence, S.D. Standard Deviation, N = 480, \* P < .05 (2-tailed test).

The results on Table 1 show that significant correlations were obtained between mentoring relationship experienced and self-esteem ( $r = .28, p < .05$ ), locus of control ( $r = .32, P < .05$ ), EI ( $r = .20, P < .05$ ), age ( $r = -.23, P < .05$ ), job status ( $r = -.198, P < .05$ ), tenure ( $r = -.20, P < .05$ ) but not gender ( $r = .11, P > .05$ ).

Results on Table 2 show the hierarchical multiple regression analysis performed in predicting mentoring relationship experience from self-esteem, locus of control, emotional intelligence and the four social/demographic factors. In the regression, analysis, the social/demographic factors were entered in step 1, followed by self-esteem in step 2, locus of control in step 3 and emotional intelligence in step 4.

**Table 2:** Hierarchical regression analysis of the prediction of mentoring relationship experienced from psychosocial factors

| Variables        | R <sup>2</sup> | ΔR <sup>2</sup> | ΔF    | Df    | Beta | T      |
|------------------|----------------|-----------------|-------|-------|------|--------|
| Step 1           | .19            |                 | 2.85* | 4,475 |      |        |
| Age              |                |                 |       |       | -.19 | -2.10* |
| Gender           |                |                 |       |       | .11  | 1.50   |
| Tenure           |                |                 |       |       | -.20 | -2.5*  |
| Job Status       |                |                 |       |       | -.22 | -2.8*  |
| Step 2           |                |                 |       |       |      |        |
| Self-esteem      | .30            | .11             | 3.50* | 1,474 | .20  | 2.62*  |
| Step 3           |                |                 |       |       |      |        |
| Locus of control | .35            | .05             | 3.75* | 1,473 | .22  | 2.80*  |
| Step 4           |                |                 |       |       |      |        |
| EI               | .39            | .04             | 3.30* | ,472  | .19  | 2.30*  |

Note: N = 480, EI = Emotional Intelligence, \* P < .05 (2-tailed test)

In step 1, all the social/demographic factors (age, gender, job rank and tenure) serving as control variables explained a significant amount of variance in the prediction of mentoring ( $R^2 = .19, \Delta F_{(4,415)} = 2.85, P < .05$ ). Furthermore, each of the following factors: age (Beta =  $-.19, t = -2.10, P < .05$ ), tenure (Beta =  $-.20, t = -2.5, P < .05$ ) and job status (Beta =  $-.22, t = -2.8, P < .05$ ) with the exception of gender (Beta =  $.11, t = 1.50, P > .05$ ) uniquely made significant contributions to the prediction of mentoring relationship albeit negatively. The lower the age, job rank and tenure, the higher the mentoring relationship experienced and vice versa.

Similarly, addition of self-esteem in step 2 ( $R^2 = .30, \Delta R^2 = .11, \Delta F_{(1,474)} = 3.50, \text{Beta} = .20, P < .05$ ), locus of control in step 3 ( $R^2 = .35, \Delta R^2 = .05, \Delta F_{(1,473)} = 3.75, \text{Beta} = .22, P < .05$ ), and emotional intelligence in step 4 ( $R^2 = .39, \Delta R^2 = .04, \Delta F_{(1,472)} = 3.30, \text{Beta} = .19, P < .05$ ) all made separate significant contributions to the prediction of mentoring relationship experience among the nurses. In summary, the results revealed that, for the most part, Hypotheses 1, 2, 3 and 4 are confirmed as all the

predictors separately and significantly predicted mentoring relationship experience among the nurses though age, job status and tenure made negative impact on mentoring.

## **Discussion**

The results, for the most part, indicated that social/demographic factors (age, gender, job status and tenure) significantly predicted mentoring. Of the four demographic factors only gender did not significantly predict mentoring among the nurses. That age, job status and tenure predicted mentoring is consistent with findings of previous researchers who found that prototypical protégé was younger and prototypical mentor was older, more experienced and of higher job status (Barker, Monks & Buckley, 1997; Finkelstein et al. in press). This finding is due to the fact that younger protégés who are lower in job status and experience need more tutelage and nurturing to acquire necessary skills from the older, more experienced higher status workers.

That gender did not significantly predict mentoring relationship experienced supports the findings from previous researchers who supported that gender in the organization had no significant effect on the mentoring relationship experienced by protégés (Allen, 2003; Barker, Monks, & Buckley, 1997; Scandura & Viator, 1994). The results, however, contradict the findings of Ragins (1999) who found significant difference between the mentoring relationship experienced by male and female protégés.

The reasons for this finding might be that the protégés involved in this study had similar informal mentoring experiences regardless of their gender. Probably they all got similar social support from their friends, families and other sources apart from formal mentoring. This might be attributed to the general negative attitude of Nigerian society toward seeking professional socio-psychological help from outsiders (Salami, 1998). Fear of stigmatization and reluctance to self-disclose are probably responsible for this. It is assumed that self-disclosure indicated betrayal of one's family and acceptance of weakness.

That self-esteem significantly predicted mentoring relationship experienced by the protégés involved in this study supported the work of Lankau and Scandura (2002) and Ragins and Cotton (1999) who found that self-esteem was significantly related to mentoring. An explanation for this result is that the protégés with high self-esteem might have believed and had self-confidence that they could benefit maximally from the mentors in terms of solving their psychosocial and career development problems.

The results also show that locus of control significantly predicted mentoring relationship experience. This result is due to the fact that protégés who have external locus of control also had more mentoring relationship experience as they believed that the mentor was capable of assisting them in solving their psychosocial and career development problems.

Emotional intelligence was found to significantly predict mentoring in this study. This result may be due to the fact that the protégés had high emotional intelligence and as such they were able to establish and maintain good interpersonal relationship which is the core of mentoring relationship.

Results from this research revealed that social/demographic factors (age, job status, and tenure) and the psychological factors (self-esteem, locus of control, and emotional intelligence) significantly predicted mentoring. The implication of these findings is that the investigated factors should be considered when promoting mentoring among the nurses. Protégés who are looking for mentors should know that the identified factors have great roles to play in strengthening mentoring relationships.

The findings have implications for career counselling practice. Counselling and industrial psychologists should let the employees know that relationship building and learning through mentoring are critical for success in today's workplace. Some employees may not be aware that their career development and psychosocial needs could be satisfied by means of mentoring relationship. In this connecting, it is suggested that formal mentoring programmes should be introduced into the various work organizations and career counsellors employed to counsel the workers on what they stand to gain

from developing mentoring relationships. As a rider to this, counsellors should address workers' fear of self-disclosure and stigmatization and therefore counselling programmes should focus on educating them about mentoring expectations and goals.

A limitation of this study is that all the participants in this study were from the same nursing profession hence, we cannot be sure of the extent to which the results might generalize to employees in other professions. Further research is needed to determine the extent to which these findings are applicable to employees in other professions. In conclusion, this study has been able to demonstrate that some psycho-social/demographic factors could significantly predict mentoring relationship experience among the nurses.

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## Sources of Sport Confidence of Athletes from West African Universities

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### Abstract

Sport confidence is defined as the “belief or degree of certainty individuals possess about their ability to be successful in sport” (Vealey; 1986). Confidence in sport is easy to recognize and difficult to change. Composure, timing, space and effortless rhythm are the performance hallmark of confident athletes (Horsley, 1995).

This study examined the sources of sport confidence of volleyball and handball players from West African Universities. Participants were 192 male and female universities athletes from the Anglophone and Francophone countries (male,  $n = 114$ , mean of age 22.6;  $S = 3.0$  years; female,  $n = 78$ , Mean of age 21.5;  $S = 2.2$  years). The participants, with the approval of their team officials completed the sources of sport confidence questionnaire (SSCQ), which possess an overall coefficient of determination of .90. (Vealey *et al.* 1998). The 41-items were based on the sub-scales of Mastery, Demonstration of ability, physical/mental preparation, physical self-presentation, social support, coaches leadership, vicarious experience, environmental comfort and situational favorableness were rated on a 7-point Likert scale which ranges from 1 (not at all important) to 7 (of highest importance).

Data were analysed with the use of correlation matrix and the t-test. Highlight of result indicated significant positive relationship of all the sub-scales based on the participants’ responses. The relationship of physical /mental and mastery was found to be the strongest ( $r=.675$ ;  $df = 191$ ,  $p < .000$ ). Further results shows that significant difference was found on seven sub-scales of sources of sport confidence between the male and female athletes from the Anglophone countries, while significant difference was not found on social support ( $t=.515$ ;  $df=116$ ;  $p > .607$ ) and coaches leadership ( $t=.469$ ;  $df=116$ ;  $p > .640$ ).

The results also revealed significant difference on 8 of the sources of sport confidence between the male and female Francophone athletes, while situational favorableness is the only sub-scale which did not reveal a significant difference ( $t=1.02$ ;  $df = 72$ ;  $p > .309$ ).

The findings suggest that female participants both from the Anglophone and Francophone countries derive their sport confidence from all the sub-scales more than their male counterparts when their mean values were compared. In conclusion, environmental comforts and situational favorableness were the best sources of sport confidence for all the athletes from the Anglophone countries, while the other sub-scales were the best sources of sport confidence for athletes from the francophone. Further studies on various approaches to understand and enhance confidence in sport among athletes from the developing world especially Africa is expedient.

## **Introduction**

Self-confidence according to Vealey et. al, (1998) is widely acclaimed by theorists, researchers and practitioners as the most critical psychological characteristics influencing sport performance. Self-confidence that is specific to sport reflects the degree of certainty that the athletes have about their ability to successfully perform sport skills (Vealey, 1986, Feltz & Chase, 1998). The successful mastery of a task is expected to enhance confidence, however individuals, especially athletes who perform the same task and master the same challenges according to Bandura (1997) may vary in the amount of perceived confidence that is derived from their successes. Reflecting on the theoretical position of Bandura (1990, 1997), Magyar and Feltz (2003) posited that athletes may use different sources to develop, enhance and sustain confidence, this position was supported by studies such as Feltz & Lirgg (2001) and Vealey (2001) which distinguished the various sources that are used by athletes to determine confidence in sport. Although, research on sport confidence has been discussed in sport psychology literature but research on universities' athletes in Africa, especially the western part of the continent is seldom found. Therefore, this study examines the sources of sport confidence of athletes from the West African Universities and also explore and relationships of the various sports confidence variables and also compared the sports confidence variables between genders and countries, which was categorised as francophone and Anglophones.

## **Method**

### **Participants**

Participants were 192 male and female volleyball and handball players from West Africa Universities athletes from the Anglophone and francophone countries (Male, n = 114, mean of age 22.6; SD = 3.0 years; female, n = 78, mean of age 21.5; SD = 2.2 years).

### **Measures**

The sources of sport confidence (SSCQ) developed by Vealey et al. (1998) was used for this study. The instrument is a (7) – point Likert scale that ranges from 1 (not at all important) to 7 (of highest importance). It consists of (9) sub-scales of mastery, demonstration of ability, physical/mental preparation, physical self-preparation, social support, coaches' leadership, vicarious experience, environmental comfort and situational favourableness.

The instrument comprises of 43 – items, however, 41-items were used for this study based on Vealey's et al (1998) submissions that item "win" under the sub-scale of demonstration of ability and item "follow certain rituals" under the subscale of environmental comfort were deleted from the inventory due to the significantly lower loadings and squared multiple correlations than other items. The overall coefficient of determination (COD) was .90, which is a representation of acceptable generalised measure of reliability for the entire model. The validity of (SSCQ) is reflected in Vealey et. al. (1998) in which several predictions including the sub-scales influence on SC – trait, in an attempt to examine the link between sources and levels of sport-confidence were made. There are no norms available for (SSCQ) since the instrument is a subjective psychological test.

### **Procedure**

The consent of the team officials as well as the players was sought before the administration of the instrument. The researchers with the assistance of 8 other researchers explained the content of the instrument to the participants for clarity and understanding. They were assured of the confidentiality of all the information given. The administrations of the instrument were done at the training venues and at the camps of the teams.



## Design and Analysis

The descriptive survey research design was used for this study. This design is probably the best that can be adapted to obtaining personal and social facts, beliefs and attitude as it is reflected in this study. This design according to Kerlinger (1992) has the advantage of wide scope as well as a great deal of information that can be obtained from a moderately large sample from a particular population. This design is also adequate since no intervention was used in this study.

The descriptive statistics of mean and standard deviation were computed, where appropriate, the parametric statistics of t-test and correlation matrix were also used for analysis.

## Results

**Table 1:** Descriptive Statistics and Internal Consistency Coefficient for the Sources of Sport Confidence Factors

| Subscales                   | Mean  | SD   | Alpha (This study'a) | Alpha(Vealey's) |
|-----------------------------|-------|------|----------------------|-----------------|
| Mastery                     | 27.39 | 5.72 | .84                  | .88             |
| Demonstration of ability    | 26.63 | 5.34 | .81                  | .86             |
| Physical/Mental preparation | 33.91 | 5.84 | .85                  | .79             |
| Physical self presentation  | 15.52 | 3.60 | .71                  | .78             |
| Social support              | 31.17 | 6.08 | .78                  | .88             |
| Coaches' leadership         | 25.41 | 6.75 | .88                  | .92             |
| Vicarious experience        | 26.31 | 4.84 | .72                  | .90             |
| Environmental comfort       | 15.43 | 3.83 | .84                  | .93             |
| Situational favourableness  | 15.02 | 3.83 | .74                  | .71             |

**Table 2:** t – test Analysis of the Sources of Sport Confidence factors between the Francophone and Anglophone Players

| Subscales                   | Country     | N   | Mean  | SD    | t-value | Df  | Sig.   |
|-----------------------------|-------------|-----|-------|-------|---------|-----|--------|
| Mastery                     | Anglophone  | 118 | 27.24 | 5.673 | .457    | 190 | .648** |
|                             | Francophone | 74  | 27.63 | 5.848 |         |     |        |
| Demonstration of ability    | Anglophone  | 118 | 26.57 | 5.337 | .193    | 190 | .847** |
|                             | Francophone | 74  | 26.72 | 5.387 |         |     |        |
| Physical/mental preparation | Anglophone  | 118 | 34.01 | 5.652 | .299    | 190 | .765** |
|                             | Francophone | 74  | 33.75 | 6.181 |         |     |        |
| Physical self-presentation  | Anglophone  | 118 | 15.41 | 3.547 | .512    | 190 | .609** |
|                             | Francophone | 74  | 15.68 | 3.700 |         |     |        |
| Social support              | Anglophone  | 118 | 31.01 | 6.105 | .459    | 190 | .647** |
|                             | Francophone | 74  | 31.43 | 6.093 |         |     |        |
| Coaches leadership          | Anglophone  | 118 | 25.11 | 6.694 | .793    | 190 | .429** |
|                             | Francophone | 74  | 25.90 | 6.866 |         |     |        |
| Vicarious experience        | Anglophone  | 118 | 26.24 | 4.721 | .241    | 190 | .810** |
|                             | Francophone | 74  | 26.41 | 5.058 |         |     |        |
| Environmental comforts      | Anglophone  | 118 | 15.67 | 3.752 | 1.09    | 190 | .274** |
|                             | Francophone | 74  | 15.05 | 3.954 |         |     |        |
| Situational favourableness  | Anglophone  | 118 | 15.13 | 3.838 | .522    | 190 | .602** |
|                             | Francophone | 74  | 14.83 | 3.853 |         |     |        |

Note: \*\* Not significant at 0.05

**Table 3:** t-test Analysis of the sources of sport confidence factors between the male and female Anglophone players

| Subscales                   | Sex    | N  | Mean  | SD    | t- value | Df  | Sig.   |
|-----------------------------|--------|----|-------|-------|----------|-----|--------|
| Mastery                     | Male   | 64 | 26.25 | 6.441 | 2.10     | 116 | .03*   |
|                             | Female | 54 | 28.42 | 4.372 |          |     |        |
| Demonstration of ability    | Male   | 64 | 25.31 | 5.291 | 2.88     | 116 | .005*  |
|                             | Female | 54 | 28.07 | 5.038 |          |     |        |
| Physical/mental preparation | Male   | 64 | 32.95 | 6.693 | 2.26     | 116 | .025*  |
|                             | Female | 54 | 35.27 | 3.778 |          |     |        |
| Physical self-presentation  | Male   | 64 | 14.70 | 3.757 | 2.42     | 116 | .017*  |
|                             | Female | 54 | 16.25 | 3.109 |          |     |        |
| Social support              | Male   | 64 | 30.75 | 6.076 | .515     | 116 | .607** |
|                             | Female | 54 | 31.33 | 6.182 |          |     |        |
| Coaches leadership          | Male   | 64 | 24.84 | 6.999 | .469     | 116 | .640** |
|                             | Female | 54 | 25.42 | 6.365 |          |     |        |
| Vicarious experience        | Male   | 64 | 25.32 | 5.058 | 2.34     | 116 | .021*  |
|                             | Female | 54 | 27.33 | 4.070 |          |     |        |
| Environmental comforts      | Male   | 64 | 14.28 | 4.130 | 4.79     | 116 | .000*  |
|                             | Female | 54 | 17.33 | 2.379 |          |     |        |
| Situational favourableness  | Male   | 64 | 14.68 | 3.500 | 1.38     | 116 | .168** |
|                             | Female | 54 | 15.66 | 4.175 |          |     |        |

Note: \*\* Not significant at .05  
\* Significant at .05

**Table 4:** t-test Analysis of the sources of sport confidence factors between the male and female francophone players

| Subscales                   | Sex    | N  | Mean  | SD    | t-value | Df | Sig.   |
|-----------------------------|--------|----|-------|-------|---------|----|--------|
| Mastery                     | Male   | 50 | 26.56 | 6.171 | 2.35    | 72 | .021*  |
|                             | Female | 24 | 29.87 | 4.436 |         |    |        |
| Demonstration of ability    | Male   | 50 | 25.48 | 5.380 | 3.03    | 72 | .003*  |
|                             | Female | 24 | 29.33 | 4.468 |         |    |        |
| Physical/mental preparation | Male   | 50 | 32.50 | 6.774 | 2.62    | 72 | .011*  |
|                             | Female | 24 | 36.37 | 3.597 |         |    |        |
| Physical self-presentation  | Male   | 50 | 14.86 | 3.827 | 2.92    | 72 | .005*  |
|                             | Female | 24 | 17.41 | 2.764 |         |    |        |
| Social support              | Male   | 50 | 30.04 | 6.160 | 2.98    | 72 | .004*  |
|                             | Female | 24 | 34.33 | 4.896 |         |    |        |
| Coaches leadership          | Male   | 50 | 24.52 | 7.393 | 2.60    | 72 | .011*  |
|                             | Female | 24 | 28.79 | 4.510 |         |    |        |
| Vicarious experience        | Male   | 50 | 25.18 | 5.393 | 3.23    | 72 | .002*  |
|                             | Female | 24 | 29.00 | 2.992 |         |    |        |
| Environmental comforts      | Male   | 50 | 14.16 | 4.334 | 2.95    | 72 | .004*  |
|                             | Female | 24 | 16.91 | 2.062 |         |    |        |
| Situational favourableness  | Male   | 50 | 14.52 | 3.552 | 1.02    | 72 | .309** |
|                             | Female | 24 | 15.50 | 4.423 |         |    |        |

Note: \*\* Not significant at .05  
\* Significant at .05

**Table 5:** Correlation Matrix of all the sport confidence factors

|                             | Mastery        | Demonstration of ability | Physical/mental preparation | Physical self preparation | Social support | Coaches leadership | Vicarious experience | Environmental comfort | Situational favourableness |
|-----------------------------|----------------|--------------------------|-----------------------------|---------------------------|----------------|--------------------|----------------------|-----------------------|----------------------------|
| Mastery                     |                |                          |                             |                           |                |                    |                      |                       |                            |
| Demonstration of ability    | .604**<br>.000 |                          |                             |                           |                |                    |                      |                       |                            |
| Physical/mental preparation | .675**<br>.000 | .524**<br>.000           |                             |                           |                |                    |                      |                       |                            |
| Physical self-preparation   | .432**<br>.000 | .505**<br>.000           | .350**<br>.000              |                           |                |                    |                      |                       |                            |
| Social support              | .454**<br>.000 | .533**<br>.000           | .405**<br>.000              | .613**<br>.000            |                |                    |                      |                       |                            |
| Coaches leadership          | .439**<br>.000 | .433**<br>.000           | .540**<br>.000              | .442**<br>.000            | .623**<br>.000 |                    |                      |                       |                            |
| Vicarious experience        | .585**<br>.000 | .504**<br>.000           | .511**<br>.000              | .568**<br>.000            | .620**<br>.000 | .560**<br>.000     |                      |                       |                            |
| Environmental comforts      | .490**<br>.000 | .395**<br>.000           | .332**<br>.000              | .517**<br>.000            | .490**<br>.000 | .323**<br>.000     | .605**<br>.000       |                       |                            |
| Situational favourableness  | .398**<br>.000 | .379**<br>.000           | .251**<br>.000              | .330**<br>.000            | .287**<br>.000 | .297**<br>.000     | .491**<br>.000       | .546**<br>.000        |                            |

**Note:** \*\* Signify significant relationship.  
Correlation is significant at 0.01 level (2tailed)

The results in Table 1, shows the descriptive statistics of mean and standard deviation for the sources of sport confidence subscales. The table further shows the internal consistency coefficient for this present study and that of Vealey et. al., (1998). The internal consistency value for all the 9 sport confidence sub-scales revealed for this study surpassed the required criterion of .70 as allocated by Nunnally (1978). Table 2, shows the t-test analysis of the sources of sport confidence sub-scales between the players from the francophone and Anglophone countries. It further shows the mean and standard deviation, and t-test value for the two groups on all the sport confidence subscales. Table 3 also shows the t-test analysis of the sources of sport confidence sub-scale between the male and female players from the Anglophone countries.

The results shows that significant difference ( $P < .05$ ) was found on sub-scales of mastery, demonstration of ability, physical/mental preparation, physical self preparation, vicarious experience and environmental comfort between the male and female players from the Anglophone countries, while significant difference was not found ( $p > .05$ ) on the variables of social support, coaches leadership and situational favourableness as shown in the table. Table 4, shows the t-test analysis of the sources of sport confidence subscales between the male and female players from the francophone countries. Significant difference ( $P < .05$ ) was found between the two groups on all the subscales but one, which is the situational favourableness sub-scales. Table 4 shows the correlation matrix for all the subscales. The table indicates that significant ( $P < .05$ ) relationship exist between the subscales, this signifies that meaningful prediction for good performance can be made for this athletes based on the relationships found between the variables.

## Discussion

The purpose of this study was to examine the sources of sport confidence of athletes from West Africa Universities. The instability of confidence is said to be a function of the sources upon which that confidence is based. Vealey et. al. (1998) were of the opinion that it is important to understand each athlete's particular source or sources of self confidence before intervening to enhance that confidence. This study did not establish significant differences on all the sport confidence scales when all the athletes were categorised into the Anglophone and francophone groups. However, the athletes from the francophone countries derived their sport confidence more from the sub-scales of mastery, demonstration of ability, physical/mental preparation, physical self presentation, social support, coaches leadership and vicarious experience than their Anglophone counterparts, while the

Anglophone athletes derives their sport confidence more from the comforts of the environment and how favourable the situation was to them. Comparison was done on the sources of sport confidence between the male and female athletes of both Anglophone and francophone countries respectively. Significant difference was found between the male and female athletes of Anglophone countries on sport confidence sources of mastery, demonstration of ability, physical/mental preparation, physical self preparation vicarious experience and environmental comforts, while significant differences was not found on sport confidence sources of social support, coaches leadership and situational favourableness. However, the female athletes derived their sport confidence more from all the sport confidence subscales than their male counterpart judging from the specific mean values of the subscales for each group. Similar results was found with the athletes from the francophone countries, the female athletes get more confident from these sources than the male athletes. However, significant differences was found on all the sport confidence subscale but one, and this was the situational favourableness subscale which did not reveal a significant difference. Studies such as Lirgg (1991) Eccles & Harold (1991) and Duda (1989) had also compared the sources of sport confidence of male and female athletes and had found some specific sources to be more important than others between the gender groups. Positive significant relationships between the sport confidence sub-scales was also established in this study. The relationship between mastery and physical/mental preparation was found to be the combination with the highest correlation value. While the least significant correlation was between situational favourableness and physical/mental preparation. Correlation analyses of the linked of mastery and physical/mental preparation gives support for the vital role the two variables perform to enhance the confidence of athletes and also in the views of Magyar and Duda (2000) provide evidence that there is a distinct difference in patterns of confidence information in sport based on the athlete's dispositional tendencies.

## **Conclusion**

The findings suggest that the female athletes both from the Anglophone and francophone countries derive their sport confidence from all the subscales more than their male counterparts when their mean values were compared. Environmental comforts and situational favourableness were the best sources of sport confidence for all the athletes from the Anglophone countries, while the other subscales were the best sources of sport confidence for athletes from the francophone. Further studies on various approaches to understand and enhance confidence in sport among athletes from the developing world especially Africa is expedient.

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## **Stakeholders Perceptions on the Gender Specific Extension Delivery System in Akwa Ibom State**

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### **Abstract**

This study ascertains the perceptions of both the officials and clientele of the Gender Specific Extension Delivery System, with regard to its effectiveness in Akwa Ibom State of Nigeria. Data was collected from 206 clientele and 29 female Block Extension Agents. Data analysis, with the aid of descriptive and inferential statistics revealed a strong association in the perceptions of both key stakeholders. Recommendations are proffered in this light.

**Keywords:** Female gender., Gender Specific Extension Delivery System., Stakeholders., Block Extension Agents, Akwa-Ibom State, Nigeria.

### **Introduction**

Women are vital to food security and family well-being and their need for labour – saving and income generation technologies is acute. However most research and development programmes from the 1970's through the mid – 1990's only partly recognized this fact and the effect of its low recognition on the development process (Paris et al, 2001).

An increasing awareness of the importance of women to food security and family well-being has culminated in an increasing upsurge in the reflection of women farmers priorities. A more focused approach to the tackling of issues affecting women farmers has also been embraced. A case in point is the focus on the recruitment and training of female extension agents to disseminate relevant agricultural information to women farmer. This is done through the ambit of the women – in – agriculture (WIA) sub-component of the Agricultural Development Programmes (ADP). The WIA sub-component utilizes the “ Gender Specific Extension Delivery System (GSEDS) in its operations.

The GSEDS procedure expands the scope of extension to cover both on-farm and off- farm activities of women farmers and the ultimate goal is to ensure that agricultural information targets women farmers in the short run, so as to include them in the mainstream of agricultural development in the long run. Female extension agents involved in the GSEDS liaise with women groups to identify and register their production problems as well as provide relevant interventions through training and improved technological dissemination. The agent is expected to cover about eight women groups in each agricultural cell and is expected to interact with each group on a fortnightly basis.

Recent literature on women's role in development have been enlarged to include cultural and psychological issues bordering on how women react to innovations and on how it affects them Longley (1999) asserted that ‘How’ knowledge is gained through research into cognition, perception and

classification. Boster (1985) regards perception with reference to participation in agricultural development, as a visual process that takes place to and independently of any assessment regarding the utility of a particular participatory approach. Against earlier arguments (eg Roling, 1988) about perceptions remaining in peoples’ heads, like the knowledge on which they are based; Leeuwis (2004) asserted that perception (or meaning) constitutes information. This is because it informs about a particular state of affairs. In essence, to understand farmers’ practices, one has to take into account farmers’ perceptions rather than other people’s evaluations of these (Uitdewilligen et al, 1993; Probst and Hagmann, 2003). Farming practices are however shaped in a series of social interaction between different people at various points in time and in different locations within the context of a wider social system. With the current emphasis on participatory extension, it becomes pertinent to evaluate the feelings of both the GSEDS clientele and the female Block Extension Agents (BEAs) with reference to the activities and operations of the service and the benefits accruing thereof. Against this background, this study was conceived to determine the perceptions of key stakeholders (women clientele and extension officers) on the effectiveness of the activities and operations of the GSEDS in the study area. The study also investigated the existence or otherwise, of a significant relationship in the perceptions of the two key stakeholders.

## **Materials and Methods**

A pre-tested and validated structured interview schedule and In-depth Interview (IDI) sessions were utilized to elicit relevant information from 206 respondents selected through a multi-stage sampling procedure, from 274 registered WIA groups in the state. All the 29 female Block Extension Agents (BEAs) in the selected zones were also purposefully selected for the study (viz) (Table 1). Collated data was analyzed through descriptive (frequency, mean, rank) and inferential (Spearman Rank Order Correlation Coefficient) procedures.

**Table 1:** Sampling procedure

| S/No | Zones        | Blocks | Cells/Groups | Clientele | BEAs |
|------|--------------|--------|--------------|-----------|------|
| 1    | Abak         | 9      | 59           | 59        | 9    |
| 2    | Eket         | 7      | 40           | -         | -    |
| 3    | Etinan       | 4      | 28           | -         | -    |
| 4    | Ikot Ekpene* | 8      | 63           | 63        | 8    |
| 5    | Oron*        | 4      | 23           | 23        | 4    |
| 6    | Uyo*         | 8      | 61           | 61        | 8    |
|      |              | 40     | 274          | 206       | 29   |

\* Selected agricultural zones

**Stake holders’ perceptions** were measured through a request to respondents to respond to a 4 – point Likert continuum of: very ineffective (1); ineffective (2); effective (3) and very effective (4); with regard to their perceptions on the effectiveness of 19 identified operational activities of the GSEDS. Any activity with a mean score of 2.5  $[(1+2+3+4)/4]$  and above, was perceived as effective, while a mean score of less than 2.5 was depicted as a non-effective activity Ranking was also performed in a decreasing order of effectiveness, where an activity with the highest mean score was assigned the highest rank (1).

## Results and Discussion

### Stakeholders' Perceptions on the GSEDS

Table 2 shows that the women clientele perceived the GSEDS as being effective in 12 of the 19 identified role items, the most effective activities were perceived as: Training on small scale agro-enterprises (  $x = 3.97$ , rank = 1.5 ), dissemination of post harvest technologies ( $x=3.97$ ; rank = 1.5) and regular visits to 80 – 100 contact farmers in each block ( $x = 3.42$ ; rank =3 ).

**Table 2:** Stakeholders Perceptions on the effectiveness of the GSEDS in Akwa Ibom State – Nigeria

| S/N | Items   | Clientele |      |      |        | BEAs |      |      |        | Grand Score |      | Remarks |
|-----|---|-----------|------|------|--------|------|------|------|--------|-------------|------|---------|
|     |   | A.S       | Mean | Rank | Remark | A.S  | Mean | Rank | Remark | Mean        | Rank |         |
| 1   | Restructuring the research agenda to meet the need of women farmers             | 557       | 2.70 | 10   | A      | 97   | 3.34 | 4    | A      | 3.02        | 5    | A       |
| 2   | Use of participatory research to address women farmers' constraints             | 612       | 2.92 | 7    | A      | 88   | 3.03 | 9.5  | A      | 3.0         | 6    | A       |
| 3   | Development of women oriented technologies                                      | 494       | 2.40 | 13   | D      | 71   | 2.44 | 12   | D      | 2.42        | 11   | D       |
| 4   | Provision of solution to identified problems of women farmers                   | 367       | 1.76 | 14   | D      | 38   | 1.31 | 17   | D      | 1.54        | 16   | D       |
| 5   | Registration of women farmer groups into cooperatives                           | 633       | 3.07 | 5    | D      | 95   | 3.28 | 5    | A      | 3.18        | 4    | A       |
| 6   | Identification of relevant Adaptive Non-farm technologies (ANTs)                | 570       | 2.77 | 9    | A      | 89   | 3.07 | 7.5  | A      | 2.92        | 9    | A       |
| 7   | Use of women contact farmers to coordinate women                                | 665       | 3.23 | 4    | A      | 107  | 3.98 | 1    | A      | 3.40        | 3    | A       |
| 8   | Provision of processing machines at subsidized rate                             | 216       | 1.05 | 18   | D      | 37   | 1.28 | 18   | D      | 1.17        | 18   | D       |
| 9   | Training on vitamin A and iodine deficiency control                             | 210       | 1.02 | 19   | D      | 31   | 1.07 | 19   | D      | 1.05        | 19   | D       |
| 10  | Training on management of small scale agro-enterprises                          | 818       | 3.97 | 1.5  | A      | 88   | 3.03 | 9.5  | A      | 2.25        | 13   | D       |
| 11  | Linkage with financial institutions for loan acquisition                        | 531       | 2.58 | 12   | A      | 70   | 2.41 | 13   | D      | 2.50        | 10   | A       |
| 12  | Exposure to modern farming and processing methods                               | 328       | 1.59 | 16   | D      | 89   | 3.07 | 7.5  | A      | 2.33        | 12   | D       |
| 13  | Linkage of women with national and international agencies                       | 354       | 1.72 | 15   | D      | 56   | 1.93 | 14   | D      | 1.83        | 15   | D       |
| 14  | Seminar and advocacy workshops on household food security                       | 548       | 2.66 | 11   | A      | 52   | 1.79 | 16   | D      | 2.23        | 14   | D       |
| 15  | Organisation of study tours by blocks extension officers                        | 220       | 1.07 | 17   | D      | 55   | 1.90 | 15   | D      | 1.49        | 17   | D       |
| 16  | Regular visit (fortnight) to 80-100 contact farmers in each block               | 705       | 3.42 | 3    | A      | 102  | 3.52 | 3    | A      | 3.47        | 2    | A       |
| 17  | Report of farmers reaction to recommended technologies                          | 613       | 2.98 | 6    | A      | 86   | 2.97 | 11   | A      | 2.98        | 8    | A       |
| 18  | Dissemination of post harvest technologies in the crop and non-crop sub-sectors | 818       | 3.97 | 1.5  | A      | 113  | 2    | 3.90 | A      | 3.94        | 1    | A       |
| 19  | Introduction of labour saving devices in agro-processing                        | 592       | 2.87 | 8    | A      | 90   | 3.10 | 6    | A      | 2.99        | 7    | A       |

Source: Field survey (2003)

Key: VE = Very Effective; E = Effective;

I = Ineffective;

VI = Very Ineffective Percentages in Parentheses

The BEAs perceived 11 of the 19 identified activities as being effectively performed through the GSEDS (Table 2). The three most effectively performed activities were revealed as: Use of women contact farmers to co-ordinate women ( $x=3.96$ ; rank =1; disseminations of post –harvest technologies. ( $x=3.90$ ; rank =2) an regular fortnight visits to 80-100 contact farmers in each block ( $x= 3.52$ ; rank =3)



A congruence of stakeholders' perceptions (Table 2) revealed that 10 activities were regarded as effective, the most effective being "Dissemination of post harvest technologies" ( $x = 3.94$ ; rank = 1). This was followed by "regular visits to 80- 100 contact farmers in each block" (Item 16) and "use of women contact farmers to co-ordinate women" (item 7)

The stakeholders held different opinions on only 3 of the 19 items under discussion. While the women clientele were of the belief that the GSEDS was effectively performing roles related to "linking them with financial institutions for loan acquisition (item II) and organizing of seminars and advocacy workshops on household food security" (item 14) the BEAs disagreed with such feelings. On the other hand, GSEDS officials vouch for the effectiveness of their advocacy on "exposing their clientele to modern farming and processing method" (items 12) while the clientele think otherwise.

On a general note, there is a relative congruence of perceptions on the three most effective GSEDS activities. For instance, both stakeholders agree on the effectiveness of GSEDS activities with regard to dissemination of post harvest technologies (item 18). The women clientele are however quite impressed with the GSEDS activity of "training its clientele on the management of small-scale agro-enterprises" (item, 10; rank = 1.5). This result is in consonance with a related finding in the course of the research study, which revealed that only 30% respondents regarded farming as a primary occupation. It is also indicative of respondents' interest in diversifying from primary agricultural production – to processing- because of farming's low remunerative status.

Berdegue and Escobaar (2003) asserted that agriculture is not the best avenue for increasing income and reducing poverty for poor rural households. Against this background, many of world's poor see little future in agriculture. This situation accounts for the women's desire to acquire information on available harvest technologies, ostensibly to help take care of excess crop harvests. It is believed that this would help reduce spoilage and consequent haste to sell off excess produce at low prices – a process that ultimately acts as a disincentive to large-scale crop production.

The BEAs perceived the "use of women contact farmers to co-ordinate women" (item 7) as their most effective activity. This activity was also highly ranked (4<sup>th</sup>) by the female clientele. This leadership development activity, is in tandem with both stakeholders' third position ranking of "regular visits to go to contact farmers.." (item 16).

Leeuwis (2004) asserted that "farmers practices are shaped by their level of trust in the functioning of organizations (as exemplified by the hard-working and conscientious BEAs) and by their confidence in their own capabilities (as exemplified by the women observing their acquaintances assuming coordinating positions in the GSEDS. In essence, this demystifies their innate fears of occupying exalted positions. In their own words "if our friends can be leaders why can't we?"

The fifth position ranking of "registration of women farmers' groups into cooperatives" (item 5) is a much welcome development as this is in accordance with Akpabio et al's (2003) recommendation with reference to the poor functional status of contact groups in the study area. It is important to note the low attitudinal ranking for two important pro-women GSEDS activities. These are "development of women – oriented technologies" (item 3) and "linkage of women with national/international agencies" (item 13). There is also the non-effectiveness of the GSEDS with reference to provision of solutions to identified problems of women farmers (item 4). Mosse (1993) had alluded to the poor representation of women's perspectives in most extension activities. It is obvious that the trend still persists. The non-effectiveness of item number 8 (provision of processing machines at subsidised rates) is incongruous with item 18 (dissemination of post – harvest technologies). It is obvious that the GSEDS needs for sustenance, a back up of experienced technologies that will translate the women's dreams into reality. Hagmann et al (1999) had pointed out that teaching of external knowledge and technologies is insufficient if knowledge taught is not directly applied and tried out by farmers themselves.

A congruence of respondents' very low ranking of "poor linkage with national and international agencies" (item 13) and "lack of study tours" (item 15), further exposes the inadequacies of the GSEDS and also affirm the fact that women actually do understand their felt needs and are also

apprised of envisaged solutions. The resultant effect of these grave omissions are: lack of clarity, lack of awareness of relevance, and open – ended development; all of which affect perception, resulting to poor participation and low probability of adoption (Davidson et al, 2001)

### Test of relationship of stakeholders’ perceptions

Results on table 3 confirms the findings on table 2, to the effect that there is a strong positive association between the BEAs and their women clientele ( $r_s = 0.772$ ). A test of significance conducted at 5% (0.05) level also revealed the higher value of the computed value in comparison to the table value of ( $r_s = 0.462$ ). This confirms the validity of the alternate hypothesis, to the effect that a strong association exists in the perceptions of stakeholders on the GSEDS. This is a welcome development and a positive trend towards the improvement of the GSEDS in Akwa Ibom State. This finding echoes pangare’s (1998) submission that women farmers have independent views about farming and other activities of interest to them and “ are highly knowledgeable about what can be done about most of their farming problems” ( Sseguya and Abel, 2003). In essence, it is important to integrate women into the mainstream of agricultural extension activities and programmes. This will help to meet productivity goals, reduce negative impact of development efforts on the women folk, who are always worse hit by unintended consequences.

**Table 3:** Test of association on perceptions of GSEDS clientele and officials with Spearman Rho correlation analysis

| S/N | Items   | Rank For Clientele | Rank For BEAs | Difference b/w Ranks (D) | D <sup>2</sup> |
|-----|---|--------------------|---------------|--------------------------|----------------|
| 1   | Activities and modes of operation.  | 10                 | 4             | 6                        | 36             |
| 2   | Restructuring the research agenda to meet the need of women farmers             | 7                  | 9.5           | -2.5                     | 6.25           |
| 3   | Use of participatory research to address women farmers’ constraints             | 13                 | 12            | 1                        | 1              |
| 4   | Provision of solution to identified problems of women farmers                   | 14                 | 17            | -3                       | 9              |
| 5   | Registration of women farmer groups into cooperatives                           | 5                  | 5             | 0                        | 0              |
| 6   | Identification of relevant Adaptive Non-farm technologies (ANTs)                | 9                  | 7.5           | 1.5                      | 2.25           |
| 7   | Use of women contact farmers to coordinate women                                | 4                  | 1             | 3                        | 9              |
| 8   | Provision of processing machines at subsidised rate                             | 18                 | 18            | 0                        | 0              |
| 9   | Training on vitamin A and iodine deficiency control                             | 19                 | 19            | 0                        | 0              |
| 10  | Training on management of small scale agro-enterprises                          | 1.5                | 9.5           | -8                       | 64             |
| 11  | Linkage with financial institutions for loan acquisition                        | 11                 | 13            | -1                       | 1              |
| 12  | Exposure to modern farming and processing methods                               | 12                 | 7.5           | 8.5                      | 72.25          |
| 13  | Linkage of women with national and international agencies                       | 15                 | 14            | 1                        | 1              |
| 14  | Seminar and advocacy workshops on household food security                       | 11                 | 16            | -5                       | 25             |
| 15  | Organisation of study tours by blocks extension officers                        | 17                 | 15            | 2                        | 4              |
| 16  | Regular visit (fortnight) to 80-100 contact farmers in each block               | 3                  | 3             | 0                        | 0              |
| 17  | Report of farmers reaction to recommended technologies                          | 6                  | 11            | -5                       | 25             |
| 18  | Dissemination of post harvest technologies in the crop and non-crop sub-sectors | 1.5                | 2             | -0.5                     | 0.25           |
| 19  | Introduction of labour saving devices in agro-processing                        | 8                  | 6             | 2                        | 4              |

### Conclusions and Recommendations

The study attempted to ascertain the perceptions of extension agents and the women clientele on the activities and operations of the GSEDS, as practiced in Akwa Ibom State. Findings revealed that the GSEDS effectively performs functions relating to dissemination of post harvest technologies and

inculcation of leadership skills in their female clientele through using some of them to co-ordinate the women groups. The BEAs were also revealed to be effective in observing scheduled fortnightly visits. The GSEDS was however revealed to be less effective in performing specific pro-women activities. On a general note, there was a strong positive relationship in the perceptions of stakeholders.

The GSEDS is an attempt to integrate gender into development programmes, a process called Gender Mainstreaming. It must be noted that a sustainable gender mainstreaming process is predicated on political will, through the allocation of adequate resources (time, material and money) for enhanced success and entrenchment of participatory orientation in the actors and relevant institutional mechanisms. The following points are worthy of consideration in that regard, so as to facilitate the development of technologies suited to women clientele,

1. The formation of Gender Field Schools is advocated. These schools are expected to focus on actual incidences of gender injustices and seek to inventorise the social and political factors underlying gender inequality. A resultant effect would be the collation and dissemination of gender views, which can be espoused through rejuvenated stronger social groups which with their enhanced bargaining power and beneficial linkages, will take steps towards effective gender mainstreaming for sustainable development.
2. Linkage of women groups with national and international agencies will enhance various latent capacities in these ad-hoc groups and which will broaden their scope of development beyond agricultural production. Through linkage and capacity building programmes, these groups will be able to mobilize local resources and also acquire the voice and capacity to negotiate with external entities for supplemental resources in aid of sustainable development.
3. Look and learn tours to relevant facilities and innovative sites will facilitate sharing of knowledge and skills among farmers and with researchers and extensionists; and facilitate adaptation of technologies to suit local conditions.
4. Extension officers should be re-oriented to act as catalysts and facilitators with a focus on helping women groups to achieve self-defined goals. They would therefore have to learn to interact closely and develop two-way responsive communication skills with their clientele. This process would require new skills and attitudinal re-orientation, which can be aided by high level quality training and practical field activities.

Finally, any research agenda should be fuelled by farmers needs. Extension should therefore facilitate and aid research to take up issues and questions identified by farmers and extension workers and work from there, taking into consideration, available local knowledge.

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## **Analysis of Domestic Water Consumption Pattern by Farming Households in Itu, Akwa Ibom State, Nigeria**

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### **Abstract**

This study analyzed the domestic water consumption pattern of farming households through the use of cross-sectional data collected from 100 households in Itu Local Government Area of Akwa Ibom State, Nigeria. The study utilized both exploratory statistical techniques and econometric procedure in data analysis. Findings revealed that though, the number of commercial borehole subscribers outnumber that of Akwa Ibom Water Company (AKWC), households still have high preference for water from AKWC. Result further revealed that household size, household income, storage facility, multiple usage and body mass index are major domestic potable water consumption shifters and were fairly inelastic. Findings also revealed a low per caput of 0.03399 cubic meters (33.99 liters) of water per person per day, which showed deficit of about 16 litres of water per day when compared with the WHO standard.

### **Introduction**

Access by all people, at all time to safe and sufficient fresh water supply is a basic condition for economic well being and healthy life (Udoh and Etim, 2004). Approximately 1.1 billion people lack access to safe drinking water (Francis, 2005). One billion people are without clean drinking water and 1.7 billion have inadequate sanitation facilities (Rosegrant, 2001). Water is a source of life and livelihood (Meinzen-Dick and Rosegrant, 2001). According to Rosegrant (2001), water is abundant globally but scarce locally. Meinzen-Dick and Rosegrant (2001) also reported that at the global level, plenty of water is available. Water is an increasingly scarce resource and a possible constraint to development around the world (Wilson, 2001 and Rosegrant *et al*, 2002).

There is no region in the world not affected by water problems, though the magnitudes of the problems vary across countries. As reported by Deelstra and Girardet (2000), lack of water is a major problem to many, if not all developing countries. Water is a problem for both humans and livestock (Lemunyete, 2003). People in many parts of the world today are faced with the problem of water paucity and insecurity. According to IMF (2003), growing water shortages and water pollution in developing and developed countries alike have plunged the world into a water crisis. Water use across the globe ranges from agricultural, industrial and domestic uses. Water consumption and use has however been greatly hampered by the increasing population brought about by the influx of people into peri-urban and urban areas. IFPRI (2002) reported that population and economic growth in developing countries creates intense competition for water among agricultural, industrial and household use. The demand for water is fast outpacing its availability for consumption and the supply of domestic water is seriously constrained by the rising population (Udoh and Etim, 2004). Because of population and

economic growth, households, industry and agriculture are increasing their water demands, while watersheds and irrigated land are deteriorating and ground surface water pollution is increasing (IFPRI, 2000).

With an estimated population of about 170,000 people, Itu is saddled with the challenge and responsibility of bridging the gap between the demand and supply of potable water among its residents. As population increases and urbanization intensifies, the present mismanagement of water together with the effects of climate change has caused many to warn that we will soon come to terms with a global water crisis (Ingevall *et al*, 2003). But Akwa Ibom State Water Company (AKWC) whose responsibility is to pump and distribute sufficient clean water to semi-urban residents in the study area and the entire State is seriously constrained due to its inability to meet the rising demand of domestic potable water. Consequent upon this, private boreholes are drilled and drinking water supplied to interesting households at a cost higher than the unit rate charged by the AKWC. The emergence of private water vendors and couple with the fact that the drilling of these boreholes is normally done indiscriminately without proper health/environmental impact consideration affect access by all people, at all time to safe and sufficient fresh water supply in the area. This study specifically investigate available sources and degree of preference of domestic water by households and also estimate households' consumption function for domestic water in the study area.

Studies conducted on domestic water consumption include Morgan and Simolen (1973), Guariso *et al* (1981), Hansen (1996). The results of these studies show that domestic consumption of water is generally price and income inelastic. With respect to consumption shifters, Danielson (1979); Chicoine *et al* (1986) Briscoe and Ferranti (1988); Udoh and Etim (2004) found that household size, multiplicity, sources, season and household income as major demand/consumption shifters. Both single and simultaneous structural modeling approaches have been adopted in estimating water demand/consumption models. For instance, Chicoine *et al* (1986) through block rate pricing system estimated water demand using a simultaneous equation approach. This study however, utilized the single equation approach in estimating households' consumption function for domestic potable water.

## **Methodology**

### **Study Area and Data Collection**

The study was conducted in Itu Local Government Area of Akwa Ibom State, Nigeria. Itu comprises five (5) clans namely, *Itam, Oku-Iboku, Ayadeghe, Mbiabo and Itu*. Itu lies on the tropical rainforest belt with its dominant vegetation of green foliage. The predominant occupation of the people are fishing, farming and trading. Because of its close proximity to Uyo capital city of the State, majority of civil servants working in the city reside in this area. There is therefore increasing pressure on the available natural water resources in the area and emergence of urbanization.

A survey conducted in year 2006 using well structured questionnaire provided the primary data used for the analysis. Akwa Ibom Water Company (AKWC) was the source of the secondary data used for the analysis. Based on the fact that there is heterogeneity within the clans and homogeneity among the clans, stratified sampling technique was employed. Also, to ensure that people from all the social strata and income levels and groups are adequately and equally represented in the study, purposive sampling method was employed to select the respondents. With a total of 100 households sampled, at least 20 households from each of the five clans in Itu were sampled. Each clan was taken as a stratum and to ensure equal representation of the various kinds or residential housing status of households (one room apartment, two room apartment, bungalows and duplexes) in the sample, 20 households were purposively sampled.

## Analytical Techniques

The study utilized both exploratory statistical techniques and econometric procedure in the estimation; specifically, the aggregate households' consumption of domestic potable water is described by an implicit utility function expressed as

$$DW = DW(H_s, H_i, S_f, M_u, B_i, D_s, M_f)$$

Where DW = Average daily water consumption in litres; H<sub>s</sub> = Household size in number; H<sub>i</sub> = Household income in Naira; S<sub>f</sub> = Storage facility (dummy); 1= have storage facility and 0=otherwise; M<sub>u</sub> = Multiple Usage in number; B<sub>i</sub> = Body mass index in kg/m<sup>2</sup>; D<sub>s</sub> = Distance of water source in metres; M<sub>f</sub> = Modern facilities available in number

The function is assumed to be homogenous in the exogenous variables.

A household consumption function estimated on cross-sectional data as this one is likely to be bedeviled with the problem of spurious consumption curves explained by cost-based price setting rules. Due to the limitation of data as to warrant use of time series data, the authors however depended on economic, statistical criteria and economic theories in making choice of appropriate functional form to fit the data set. On this premise therefore, four functional forms were fitted viz linear, exponential, semi-log and double-log functions.

## Results and Discussion

### Empirical Results

The static theoretically assumed model is estimated through Ordinary Least Square to yield unbiased estimators as presented in table 1

**Table 1:** Regression estimators from the different models

| Variables      | Linear model          | Exponential model     | Double-log model     | Semi-log model           |
|----------------|-----------------------|-----------------------|----------------------|--------------------------|
| Constant       | 235.188<br>(180.491)  | 4.225<br>(0.530)***   | 2.514<br>(1.372)     | -307.955<br>(476.887)    |
| H <sub>s</sub> | -7.872<br>(2.912)***  | 0.06071<br>(0.023)*** | 0.390<br>(0.083)*    | 62.636<br>(28.728)**     |
| H <sub>i</sub> | 0.00215<br>(0.0021)   | 0.00001070<br>(0.002) | -0.0647<br>(0.027)** | -8.154<br>(16.352)       |
| S <sub>f</sub> | 0.350<br>(0.098)***   | 0.01119<br>(0.002)*** | 0.434<br>(0.096)***  | 125.55<br>(33.294)**     |
| M <sub>s</sub> | -84.350<br>(29.735)** | -0.190<br>(0.087)**   | 1.060<br>(0.367)***  | -419.267<br>(127.510)*** |
| B <sub>i</sub> | 2.873<br>(4.592)      | 0.01446<br>(0.013)    | 0.46<br>(0.231)**    | 115.883<br>(115.147)     |
| D <sub>s</sub> | 0.836<br>(14.184)     | 0.02611<br>(0.042)    | 0.0162<br>(0.792)    | 5.324<br>(27.303)        |
| M <sub>f</sub> | 16.218<br>(15.022)    | 0.04908<br>(0.044)    | 0.112<br>(0.107)     | 47.190<br>(37.256)       |
| R <sup>2</sup> | 0.404                 | 0.332                 | 0.764                | 0.239                    |
| F ratio        | 3.597**               | 6.533**               | 7.980**              | 4129**                   |

Note: \*, \*\* and \*\*\* represent 10%, 5% and 1% levels of significance

Based on the signs, magnitudes and numbers of statistically significant estimators, log-linear model produced parsimonious coefficients across the regressants. Thus, it became the lead equation which explicitly describes the consumption function of domestic potable water in Itu. This is consistent with other previous studies on demand and consumption of potable water by (Frankel and Howe, 1982; Frederick, 1993; Hansen, 1996; Udoh and Etim, 2004). The estimated equation reveals that except for distance of water source and modern toilet facility, all other variables greatly and aptly contribute to the consumption of potable water in Itu. With respect to the responsiveness of the estimated function,

the signs and magnitudes of the significant coefficients imply inelastic nature of the variables in terms of the quantity of water consumed by residents of Itu.

**Descriptive Analysis:**

Tables 2 and 3 show the available sources and degree of preference of water by households in Itu respectively.

**Table 2:** Available Sources of water in Itu

| Sources \ Clan               | Itam  |             | Oku-Iboku |             | Ayadeghe |             | Mbiabo |             | Itu   |             | Over-all |
|------------------------------|-------|-------------|-----------|-------------|----------|-------------|--------|-------------|-------|-------------|----------|
|                              | Freq. | Per-centage | Freq.     | Per-centage | Freq.    | Per-centage | Freq.  | Per-centage | Freq. | Per-centage |          |
| AKWC                         | 18    | 29          | 14        | 37          | 12       | 24          | 21     | 34          | 23    | 34          | 32       |
| Private/ Commercial Borehole | 27    | 43          | 18        | 47          | 21       | 43          | 30     | 48          | 31    | 46          | 45       |
| Tanker/ Water Vendors        | 1     | 2           | 1         | 3           | 5        | 10          | 1      | 2           | 1     | 1           | 4        |
| Stream/ Spring               | 17    | 27          | 5         | 13          | 11       | 22          | 10     | 16          | 12    | 18          | 19       |

Source: Field Survey, 2006.

**Table 3:** Level of Household Preference of the Different Water Sources in Itu

| Sources \ Clan               | Itam  |             | Oku-Iboku |             | Ayadeghe |             | Mbiabo |             | Itu   |             | Over-all |
|------------------------------|-------|-------------|-----------|-------------|----------|-------------|--------|-------------|-------|-------------|----------|
|                              | Freq. | Per-centage | Freq.     | Per-centage | Freq.    | Per-centage | Freq.  | Per-centage | Freq. | Per-centage |          |
| AKWC                         | 16    | 52          | 14        | 44          | 21       | 53          | 23     | 50          | 16    | 41          | 48       |
| Private/ Commercial Borehole | 7     | 23          | 5         | 16          | 6        | 15          | 8      | 17          | 18    | 27          | 20       |
| Tanker/ Water Vendors        | 1     | 3           | 2         | 6           | 2        | 5           | 1      | 2           | 4     | 10          | 5        |
| Stream/ Spring               | 7     | 23          | 11        | 34          | 1        | 28          | 14     | 31          | 9     | 23          | 28       |

Source: Field Survey, 2006.

Table 2 shows that there are more private/commercial boreholes than AKWC functional outlets/taps within Itu. This suggests that, the most readily available source of potable water in Itu is private/commercial borehole. Ranking the sources of water in Itu in terms of availability in table 2 shows that commercial/private borehole precedes AKWC. But preference is given more to water from AKWC than other sources of water as shown on Table 3.

The reason for the preference is in conformity with household’s responses that water from AKWC is well treated and free from disease causing micro-organisms, AKRUWATSAN (2002). The quantity of domestic potable water available for consumption per person per day is however affected by the variability in the available sources of water and the level of preference of the different types of water available to households in Itu. According to table 4, the quantity of water available for consumption per person per day in Itu is about 33.99 litres (0.03399 cubic metres per person per day).

The high patronage given to commercial/private borehole operators is attributable to the absence of AKWC outlets/pumps and the inability of the AKWC to pump and distribute sufficient water associated with the problem of frequent disruption in public power supply. It is indisputable that though the commercial borehole operators charge higher average pump prices when compared to the bill/tariff charged by AKWC, consumers of potable water in Itu still prefer water from AKWC where available.



**Table 4:** Per Caput Water Available for Consumption in Itu

| Location (Clan) | Quantity (Litres) | Household Size | Per Caput Litres/day |
|-----------------|-------------------|----------------|----------------------|
| Itam            | 4820              | 105            | 45.90                |
| Oku-Iboku       | 3250              | 92             | 35.33                |
| Ayadeghe        | 4890              | 120            | 40.75                |
| Mbiabo          | 2900              | 110            | 26.36                |
| Itu             | 3200              | 148            | 21.62                |
| Average         | 3808              | 115            | 33.99                |

Source: Field Survey, 2006.

The high patronage given to commercial borehole operators whose pump price per litre is higher than the average tariff charged by Akwa Ibom Water Company (AKWC) may be the reason for the low per caput water consumption in the study area. Private/commercial borehole operators charge an average of ₦ 5.00 per 20 litres of domestic water. This implies that for households that consume about 100 litres per day, an average of ₦ 25.00 is required daily for the consumption of this quantity of domestic water. It therefore follows that ₦ 2,500.00 will be spent on domestic water consumption monthly. On the other hand, Akwa Ibom Water Company charged between ₦ 200.00 to ₦ 250.00 as its water tariff per residence per month depending on the location of the residence. This low water tariff by AKWC may be one of the reasons for household preferential value of its water for consumption. Most households have resorted to patronizing the commercial borehole operators not minding their high litre prices. However, the low capacity of the overhead surface reservoir tanks and frequent disruption of public power supply by Power Holdings Company of Nigeria is a major shortcoming which has impeded the ability of the commercial borehole operators to pump, supply and sale sufficient quantity of water. This may also account for the low per caput water consumption of 33.99 litres per day.

### **Summary and Conclusion**

This study has highlighted factors which affect consumption pattern through a well-behaved consumption function. It has however been revealed from the study that though, the number of commercial borehole subscribers outnumber that of AKWC, households still prefer consuming water from AKWC taps/outlets where available due to a number of reasons ranging from safety and treated to low water tariff. The breakdown and non-functioning of AKWC public taps has seriously constrained and limited households' consumption of the treated water from AKWC. Because households demand for domestic water is insatiable, overtime residents have depended solely on private/commercial borehole operators for their daily water requirement. With a low per caput water of 0.03399 cubic metres per person per day, urgent steps should be taken by relevant authorities to step up the water supply situation in the study area using appropriate intervention measures. Such measures include the introduction of metering system; privatization of AKWC, replacement of ole pipes with new ones to reduce leakages during distribution, strict/close supervision of boreholes before drilling to avoid indiscriminate drilling and to ensure suitability; and provision of functional public taps. The recent introduction of metering system of water tariff in some locations within the State will go a long way in ensuring that households pay exactly for the specific quantity of water they consume.

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## **Challenges in Ph.D Studies: The Case of Arts Student**

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### **Abstract**

Ph.D students have to take responsibility managing their own learning and getting a Ph.D. They are also responsible for determining what is required as well as for carrying it out, and must always keep in touch in regular meetings with the supervisor. The student is the main person responsible for his/her Ph.D research. Doing a Ph.D clearly indicates that this is a student's own research and work. The actual research using case study method where three Malaysian Ph.D students from three major disciplines of study namely arts, science and social science were involved. However only one case study which focusing on Arts discipline will be presented in this article. The reason being there were too many quotations have to be put in if better understanding of the story is to be achieved. This would make the article be too long if three case studies to be presented in this article. The objective of this research is to provide better guidelines for effective roles of a Ph.D Arts student especially the foreign student. As a result, the research had developed the best effective roles in order for students to success in their study.

**Keywords:** Foreign Student, Overseas, Ph.D, Research Student, Role, Supervision, University

### **Introduction**

One factor driving the decision to do a Ph.D is the consideration that this qualification is needed in order to become an academic. As the doctorate is the highest grade, completing a Ph.D is seen as a substantial investment in human capital <sup>[1]</sup>. Often, starting a research degree marks a transition in the lives of students <sup>[2]</sup>. For some, it is a transition from recent undergraduate work where learning was structured and directed to a situation where the learning is more self-directed. For others, starting a research degree may be a return to study after a lengthy break. Some students may already be employed in a university and be switching back from the role of teacher to that of a student. Whatever the situation, the student will need time and help to adjust to the new role <sup>[3-4]</sup>.

All foreign students have a lot of challenges to overcome, such as cultural differences, language, families, money etc. which may lead to lower achievements by them <sup>[5]</sup>. These challenges are much greater if the student is doing postgraduate education, which really consumes time, effort, patience and enthusiasm. Furthermore, those mature students coming from overseas together with their families and with limited sources of income, may face many more challenges than those who are younger and single.

Most Malaysian students who have been sent to the United Kingdom for postgraduate studies, are civil servants in the Malaysian Government, and they are contracted to serve the government again after they have completed their programme. It is their duty to ensure that they fulfil the government's aspirations to contribute their acquired knowledge for the benefits of the country. While the amount of allowance that they have received to live on overseas is very minimal, the Government of Malaysia

spends a lot of money in order to develop the knowledge of its people. This is seen as a crucial factor in the development of a better educated work force, particularly in science, technology and related professions. Therefore, the students are expected to complete their programme as soon as possible, and certainly within the contracted time frame.

Many factors can contribute to foreign students being unable to successfully complete their programme within the given time frame. All other aspects need to be taken into account in studying the foreign student's experience of supervision. These include the support of the department or school, as well as the fact that the students should properly know their own responsibilities<sup>[6-8]</sup>. This research project studies the three Malaysian Ph.D students' experience in relation to their roles as a research student.

In general, the objective of this research is to identify the experiences in supervision of Ph.D student studying in the University of Manchester, United Kingdom. This includes of what she had obtained, what were the problems she went through and what she expects from the parties who had involved in her research such as supervisor, school and sponsor. Such experience will be good as general guidelines in order to identify the main problems and helping the involved parties to improvise their services and conducting the necessary research when the issue aroused. The implication of this research will be the students especially the foreign students would be able to apply the experiences and guidelines discovered from the findings.

## **Literature Review**

A literature search has provided evidence that the student/supervisor relationship is vital to the Ph.D process. The literature includes statements about the single most important problem, in the eyes of many respondents, being the quality of supervision<sup>[9]</sup>. Various books have approached the acquisition of Ph.Ds, including the management of the supervisor/student relationship<sup>[2]</sup> and many departments carry out their own surveys in an attempt to assess their performance in the supervision of their students<sup>[10]</sup>.

Phillips and Pugh<sup>[2]</sup> point out that the acquisition of skills by postgraduate students should be effected as professional learning conducted under their own management. In other words, research students have to take responsibility for managing their own learning and getting a Ph.D. They are also responsible for determining what is required as well as for carrying it out, and must always keep in touch in regular meetings with the supervisor<sup>[8,11-12]</sup>. Moses<sup>[13]</sup> argues that supervisors expect students to be diligent, hardworking, energetic, keen, tenacious and conscientious and to have a sense of urgency. They also expect students to be enthusiastic and motivated towards research work, to be pleasant at work and to contribute to a good working environment. Also, students should give continual feedback, so that the supervisor can give informed instruction.

The student is the main person responsible for his/her Ph.D research. Doing a Ph.D clearly indicates that this is a student's own research and work. Phillips and Pugh<sup>[2]</sup> emphasise that it is the student's responsibility to determine what is required as well as carrying it out, and that students have to come through with the clear aim of becoming a competent professional researcher. In other word, it is agreed that the student is responsible for an original contribution to the subject and for developing a mature, critical knowledge of the subject area and its context. It is also a good idea for them to talk to other postgraduates about their experience of the role as well as their work. Russell<sup>[14]</sup> found that one of the highly rated constraints on research students' are personal problems. In fact, sharing apprehensions helps to resolve problems through the knowledge that the problem is not an individual one<sup>[15]</sup>. Once students are able to share feelings and talk about them and their effect on their work, they will all start to feel better<sup>[14]</sup>.

Students should identify the topic and preliminary reading<sup>[16]</sup>. This can be linked with other parts of the Ph.D task, like the development of a relevant body of knowledge, placing the research in the context of the literature and originality<sup>[10,14,17]</sup>. Moses; and Phillips and Pugh<sup>[8,2]</sup> elaborate this

statement mentioning that the process of defining the research topic varies across disciplines. The supervisor in a science discipline has to take the lead in obtaining the physical resources and the research personnel required. The student's research topic will be clearly defined to fit in with the innovative thrust of the supervisor's research programme. In contrast, in the humanities and social sciences, students often come with their own topics within the field in which the supervisor is expert. Additionally, after surveying aspects of graduate education in Canadian universities, Holdaway *et al.* [7] report that in education, social sciences and humanities, graduate students choose their thesis topics themselves more frequently than those in other disciplines do.

The thesis is usually the most substantial piece of writing yet undertaken by students, and it provides an opportunity for them to develop their skills in writing and in marshalling arguments [10]. On the other hand, they should submit written work in some form as early as possible in their studies so that writing problems can be recognised and corrected [14]. Donald *et al.* [18] propose that the responsibilities of the student should include understanding the scope of doctoral work, such as the number of years to be devoted to full time study, knowledge of research methods necessary to carry out studies, the regulations on thesis submission and the expectations of the supervisor regarding every aspect of the research.

A good student should have a broader view of academic training in the discipline in which he/she is undertaking the research, seeing it as professional development [2]. In this sense, professional development include attending conferences, writing papers for publication, attending seminars and workshops, making presentations, networking with other researchers, working as a research assistant and teaching [16,7,2]. Students are expected to gain expertise in the research process so that their talents can be observed in as many different settings as possible [16].

Most overseas students are sponsored by appropriate bodies during their study. They have been given a specific period, namely three years, to complete their study and return to their own country. Therefore, time is one of the enemies of the overseas student. This is relevant to the study conducted by Russell [14], who found that students are concerned about time and time management. Lack of funding seriously affects some students' research, or requires them to partly self-fund it and this result in serious concerns and deep frustration [7]. This view is supported by the Economic and Social Research Council (ESRC) which reported that less than 20 percent of students receiving a grant complete their study within four years while 27 percent complete within five years and that completion rates trailed off markedly after five years [19]. So, students should expect to work within deadlines [2,17,20] and to have a planned timetable [21,22,23].

## **Materials and Methods**

This article will be focusing on one case study of Malaysian Ph.D student studying in the University of Manchester, United Kingdom. The participant represented the Arts discipline. The researcher also decided to choose participant who was already in at least his second year of study, such student have much more information than first year students, due to the greater experience he had gained. Initially, the researcher conducted in-depth interviews with twelve participants and decided to pick three of them to participate in the case studies to represent Science, Social Science and Arts discipline. The students were then interviewed again to obtain more information about recent developments in their current year of study. However, due to the case study best to be presented in narrative order, the article will be way too long. Therefore, for this article only one case study will be presented which focusing on Arts student. The researcher will not reveal the real name of the participant, as it is part of the ethics of doing research where the background of participant should be kept confidential. Therefore, Azrie will represent Arts students for this case study.

The case study was conducted over a one year period with the subjects. The interviews, which were semi-structured, were taped and transcribed and then the transcripts were checked with the subjects before the data was used. The purpose of the case study is to gain as much information as

possible about the participants' experiences in supervision and university practices. The case study generated large amounts of written data from the students concerning their views and experiences of supervision.

The case study was used as part of the data collection method for the actual research project. Other methods that been used by the researcher were survey on 110 respondents and in-depth interviews on 12 informants. However, this article will only focusing on the results related to the roles and experiences of Ph.D student. The results were obtained through one case study which emphasising on Arts discipline. The researcher decided to report the case study as a narrative. Many quotations are presented in reporting the case study in order to give a better understanding of the story.

## **Results and Discussion**

### **Participant's Backgrounds**

#### **Azrie**

Azrie is a 37 year old married man with three children. He has seven years working experience as a lecturer in a Malaysian University. Having gained his Bachelor's and Master's Degree in geography in Malaysia, he intended to pursue his Ph.D studies in the same field, as requested by his sponsor. His Masters was in rural hydrology, in great contrast to his Ph.D, which is in urban hydrology. At first, he was very confused whether his research was considered as coming under sciences or arts. He claimed that normally geography is an arts discipline, as his tuition fees are similar to those of other arts students. Moreover, the University of Manchester website mentions that the Faculty of Geography is an arts faculty. Nevertheless, some of his friends in the same faculty have to pay considerable tuition fees because they are considered to be science students, which involves working in the laboratory. Later on, he understood that the type of research can be used to identify which discipline the student belongs to.

Azrie had been appointed two supervisors for his research. The main supervisor is male and the co-supervisor is female. He seems to be very happy with both of them and maintains a good relationship with them. The main supervisor is the person who can make decisions for him in relation to many aspects related to his study. His first supervisor has appointed a co-supervisor to assist him in satellite computer applications and other technical aspects. Most of the time, the three of them sit together in meetings to discuss his research progress. Sometimes, when the discussion does not involve any technical matters, he only needs to see his first supervisor. His first supervisor has the title, Professor Emeritus, and he mentioned that this supervisor is a member of many committees throughout the UK that are involved in environmental science. There are five Ph.D students under his supervision, four from overseas and one from the UK.

Spending his first year in Manchester with his family was very challenging for Azrie because, at the same time, he had to act as the head of his family. He has been clear about his research since his first year and is very confident that he can manage to complete his Ph.D within the given period of three years. He started to collect his data in the first year of his study because he had conducted sufficient literature reviews beforehand. Unexpectedly, when he was about to register for the second year of his Ph.D, his wife said she wanted to return to Malaysia for good with the children and therefore she would no longer be with him in Manchester. At this point in time, he made an important decision, for, after discussing this matter with his supervisor, he decided to complete his work in Malaysia. He had managed to collect some of his data in some areas in Manchester. His plan is to go back to Malaysia only after he has complete collecting all the data. Azrie and his supervisor had discussed this matter earlier and they decided to meet every three months if appropriate. He said that his main supervisor is very supportive, knows his problems and has always tried to solve them as soon as he can. So, Azrie will represent arts students for the purpose of the case study.

### **Azrie on the Student's Responsibilities**

Firstly, Azrie talked about his responsibility as a government employee who has been sponsored during his Ph.D study. He said he has been given study leave for three years to do his Ph.D and, when he goes back to his country, he has to work in a university as a lecturer. Therefore he can see his role as working hard to achieve his objective as well as his sponsor's mission. He said that, if he managed to complete his study within three years, it would be an advantage for him and his sponsor. Secondly he mentioned his responsibility in choosing his research topic. He spoke about it in the following terms:

First of all, the Malaysian Government is sponsoring me, so, it is my duty and responsibility to work hard and serve the university after completing my study. And to try as hard as I can to complete my Ph.D within the time given... The topic that I am doing now is my own topic. While I was in Malaysia, I sent my proposal and it was accepted...

Azrie talked about skills that he should gain during his study. He said that, as a lecturer, he has to prepare himself by acquiring wide knowledge through involving himself in conferences and seminars, as well as writing journal articles. He claimed that he has to put his own effort into writing journal articles but there is a person to refer to, namely his supervisor, who can give him ideas about how to deal with these things. Therefore, a good student must take this opportunity to write journal articles. As for him, he has to grab these chances because while he is still a Ph.D student, working with a well-known Emeritus Professor, he could have an advantage when his name and that of his supervisor appear together as the authors of a journal articles. As he put it:

Secondly, my responsibility is to involve myself in conferences, seminars and writing journal papers to improve my knowledge in my field. I am supposed to attend an international seminar this coming October in Kuala Lumpur. I sent a paper through him, but he was quite busy, he has still not checked them. However I can't attend because of other problems. Anyway, he will invite my co-supervisor and me to write a paper in one journal. The pilot study that I am doing right now will be inserted in the paper. He has a lot of contacts and that makes it easier and this is an advantage for me.

Besides, Azrie mentioned the new experience that he has gained while doing the research at this current stage. Firstly, he feels that his English is much better than before he arrived in the UK. Secondly, he knows many new things related to his research, especially in relation to technical aspects. In his view, these skills will be very valuable to him, especially when he goes back to his country to teach his future students. As he mentioned:

I have improved my English a little bit. I got much of it from the computer. Before this, I was quite blind. I knew that the Journal of Arc View is software to do satellite images. When I was at this stage, I only knew that modelling could be done in a GIS (Geographic Information Systems) environment. Normally, modelling used to be done in what was called loose coupling, which used other models linked with GIS. This is a new thing that I learned in the technical area.

Azrie claimed that he has learnt to develop his new skills through mistakes. He gave an example:

My co-supervisor invited me to edit her paper. She allowed me to do it at home. If the job was successful, we would be able to see the map. The command had to be clear or the result would not be visible. I did it correctly and the result was visible. I showed it to her and she said it was correct. The skill is based on training on technical questions provided by her. If I failed to do it, she would take it to her room and alter it herself. An example was when I wanted to transfer a GIS file. It had to be transferred to an intermediate file. If we transferred it incorrectly, the analysis process would be difficult. I did it at home



with a lot of mistakes. However, I found that I'd developed my skill through the mistakes.

Azrie said that a good student has to manage his own time by planning his study activities very carefully. Therefore, he thinks that it is better to have a timetable during his Ph.D study. He made a long term plan and a short term plan. The long term plan described his future activities from his first year until his third year. From this, he could get a rough idea about major or important events and when he was supposed to complete his study. However, the short-term plan is very important because it is more detailed. In fact, his supervisor prefers him to make a timetable on a two monthly basis. There are certain occasions when he makes an effort to make a weekly timetable, but normally it is changed a lot. He makes sure that he follows his timetable as far as possible. As he said:

...After I submitted the first year report, he asked for a three year plan. So, in the first year report, he already had all the detail. When I met with him, he wanted me to break it down into two or three months. Right now, the timetable has been shortened to two months. I do not make any detailed plans about what I have to do every day, but I have working experience and I have my own target of what to do in certain weeks. I wrote down what I wanted to do in that particular week. I try to finish what I want to do. However, it may not be finished that week and may be carried forward to the following week.

He gave an example how fast he works if he follows the timetable and works according to a plan. He talked about it:

Even in the first six months, I managed to do the pilot study and my supervisor agreed with my transfer report and agreed with the location for my study. He gave me an option regarding the method I should choose. In my second year, I had to choose which one was suitable. All this is due to following the timetable.

Azrie said he has no need to come every day to the school if he can do his work at home. Therefore, he prefers to do his work in his home rather than working in the school. He claimed that he only goes to school if he wants to go to the library, to the laboratory, to see his friends or to meet his supervisor. Therefore, most of his weekly timetable is about how he plans his work at home. In his first year, he spent most of his time at home and sometimes he had to go to the laboratory. When he reached his second year, it was time to collect data. Therefore, he had to meet certain people so that they could assist him in collecting it. However, if there isn't any important event, he just spends his time at home doing his research. He gave an example:

Generally, I only go to school when I need to change a book, collect a journal, go to the lab or see my supervisor if there aren't solutions after discussion with friends or if I want to show him my data. I spend a lot of my time at home. If I go to school, it is just to see two or three important people.

His supervisor prefers to use e-mails to discuss anything that can be solved through this. Therefore, he usually spends most of his time in front of the computer either checking e-mails from his supervisor every day or doing his research work. He also has to plan his work properly so that he can submit it on time exactly according to plan. Azrie said it is his responsibility to prepare write-ups of progress regularly. He has to submit his work prior to meetings with his supervisor. As agreed by both parties, Azrie sends a diskette containing his research write-up. Most of the time, he sends his work by e-mail to his supervisor in an attachment. However, on certain occasions he also needs to send him his written work, which needs to be printed out. As he put it:

Every time I see him, I bring along my written work. He is experienced and professional. I feel embarrassed if I arrive for the meeting empty handed or my work is not yet completed. I used to send it to him in printed form, on diskette and sometimes by e-mail. I keep in touch with him by e-mail regularly.

Azrie also mentioned the Research Planner or Student Record Book. In his view, it depends on whether the student or supervisor has decided to use the book to record the meeting agenda or not.

However, his supervisor preferred him to have a book, which is like a diary, in which to write information in relation to all meetings or his activities during his Ph.D programme. The purpose of having the book is that he can refer to it in future when necessary. Azrie himself thinks that the record book is very important and must be kept properly even after he has completed his Ph.D. As he put it:

On my first meeting with him (the supervisor), he advised me to ask my faculty for the report book in order to record the meeting date and agenda to be discussed. Since I registered a bit late, the book had run out and I had to buy myself a book similar to the one provided by the faculty. Besides, he had shown me his notebook when he did his Ph.D. He still kept it, so he asked me to do the same. So, I bought one big book and noted down every time I had a meeting with him. Sometimes he notes it himself. Every time I meet my supervisor, I write down what he wants and his comments about my work in that book. It is useful, especially when I need to refer to his comments on my work in the meeting. I think this idea is good because we can review what we have discussed earlier.

Azrie also said that a good student must have a responsibility to work independently and not depend too much on the supervisor. In this connection, he mentioned a friend, who helps him a great deal in the laboratory and with his research in general. There are three of his friends working together in the laboratory, and each person's research is quite relevant to that of the others. Generally, they discuss the theory and concepts and the current outcome they have achieved. As Azrie said, each student may have different perspectives. Therefore, it is an advantage for him to have a discussion with the people who are doing similar research. For instance, he discussed his problems with those friends, especially with the one from Syria. He prefers to refer any problems to his Syrian friend, because he has working experience in the same field and is very familiar with the software and technical aspects. As he said:

One thing about my three friends is that they spend much of their time in the lab. Besides, they are in the same field as mine, so we use the same lab and equipment, and, even in the lab, two of them are using the same room as I do. Since my Syrian friend has related working experience, I spent a lot of my time in discussion with him because this thing is very technical and he is very familiar with the software used for analysis in the lab. When I took my new sample, I discussed it with him. So, when I go to the school, if I can't discuss things with my supervisor, discussing them with him is good enough. For example, I will discuss what they have achieved with them because they have the same theory and concept as I do. Probably they have read some books and we discuss it.

Hence, as far as possible, Azrie will try not to see his supervisor if he just has having a small problem. He also talked about a sabbatical student who is working in the same laboratory and doing similar research to his. The presence of this sabbatical student makes him feel he has many choices of people to go to for help. Accordingly, he just wants to see his supervisor if there is no solution after discussion with his friends. He spoke about it as follows:

It depends on the problem, I am a lecturer myself and I know that, if it is a small problem, I do not need to look for lecturer, so I ask my friend and discuss things with him. If we cannot come to any solution, then I go to my supervisor. My research involves technical aspects. Only one lecturer in the faculty has knowledge in this field. If I have any problem, I will ask this guy. But I am quite lucky because there is another person who is expert, Dr. R, who has come here for sabbatical in the same field. If I cannot see my lecturer, I see Dr. R who sometimes comes and visits me and I discuss things with him.

Azrie spoke about his difficulties and his responsibility towards his family. When he was about to reach his second year, his wife made a decision to go back to his country together with the children. He tried to persuade his wife to stay another year in the United Kingdom but she stuck to her decision. Nevertheless, as he said, he could not force his wife because there were too many strong reasons why he thought he has to let her go. Therefore, he felt really stressed and tried to find solutions to his problem. Luckily, after discussion with his sponsor and his supervisor, he decided to continue the rest of his study in his own country. However, with the agreement of both parties he still has to come to see his supervisor every three months. Therefore, he sent them to Malaysia, whereas he, himself had to stay in the UK for a while to complete his data collection. He mentioned that, even though his family are not staying with him, he still has a responsibility to call them and care about them. As an example, on one occasion, he really missed his family and he had to come to the decision to go back for about three weeks. As he said:

I called them every day and night, keep on calling and tell them what to do. My children said they missed me so much and I feel so bad about our being apart and, my mind is always with them. They never said they missed me before and that is why I am going back in March, but for about three weeks only.

Azrie has spent two years of his life as a Ph.D student in the United Kingdom. During his separation from his family, he has had an opportunity to go on a Hajj for about one month, when he was in his second year of study. He claimed that, after returning from the Hajj, he had to assemble new strength in order to continue his research. He said, he had tried to make an effort to get back on track because he knew it was his responsibility to ensure that he follows his plans or timetable. Moreover, he thought that he had to collect all the data before returning home. Luckily, he managed to sort it out and felt more positive about completing his study in the UK for another few months before continuing it in his country. He talked about it in the following terms:

After coming back from the Hajj, I faced a little problem. A little disturbance occurred. I lost my rhythm, I was sick and coughing for about two to three days and my will to study was lost. Furthermore, one of my kids was sick, which made me feel like going back. Hence, it was a non-productive week. Tomorrow, I will see my supervisor and probably see what to do.

Azrie also mentioned an adviser who helped him, especially at the beginning of his registration in the university. He claimed that on the four occasions he met the adviser, they never talked about personal matters. However, he decided not to see his adviser very often, because his relationship with his supervisor was going well. In his view, the adviser is very useful to students who faced problems in their relationship with their supervisor. Also, it might be an advantage for the student who prefers to spend most of his time in the school, to have a good or close relationship with an adviser. However, this does not apply to Azrie, because he prefers to use his own house to do his work. Therefore, in his view, students who face a relationship problem with their supervisors should know whom they should go to in order to ask for a consultation. As he put it:

When I first arrived here, I met one adviser. He is a lecturer and I have seen him four times. He assisted me, especially during registration, when I had a problem determining whether I was in the arts or science field, so I saw him. We never talked about personal matters, for I prefer to talk about these with my first supervisor. His function is not similar to that of the supervisor, and he does not help academically. My meetings with him were not as frequent as those with my supervisor and I have not seen him since then. I will see him if I have any problem, but, so far, that is all the meetings I have had with him because, normally, I see my supervisor.

Generally, Azrie can be seen as a disciplined student because he works according to his timetable. It is very interesting that while he uses his friends a lot, he still has a very good relationship with his supervisor. Azrie has also managed to solve his problem very well. Besides being a good

student, he is a good husband and father for his three children. This can be seen from the fact that he made a decision to continue his study in his country when his family left him.

## **Conclusion**

The actual research which was done by the researcher had involved the foreign Ph.D students studying in the United Kingdom. Survey on 110 respondents and in-depth interviews on 12 informants were used as part of the actual data collection method. However, as for the case studies method, the researcher aimed to focusing on Malaysian Ph.D students only. For this article, only the results from one case study were discussed.

Azrie is a well-prepared student as he has planned his work properly since he made the decision to study for his Ph.D in the UK. Moreover, he has had to plan most of his time precisely since his first day of registration here, because he registered to study in the UK as a Ph.D student straight away. Therefore, he did not have to attend any classes. However, as recommended by his supervisor, he just took two classes that were very relevant to his research area. As a student who has his own family, he has played his role very well. He managed his own time by having a timetable. Azrie prefers to use most of his time in his home and just comes to school if there is a need to.

His supervisor is a very effective one, because he supervises students based on their level of competence. One of the reasons that he chose his supervisor was that the latter's research interest is similar to the research that he intended to do. With this kind of supervisor, it can be seen that Azrie's work has become easier and quicker. He has also managed to have a very good relationship with both of his supervisors. If both supervisors know their role, there is not a problem in the relationship. For instance, Azrie's first supervisor is the main person who can make a decision in general, whereas the co-supervisor is there to help on technical aspects.

The meetings can be seen as generally very well prepared because everyone knows his/her role. He met his supervisors once a week in his first year and every two weeks in his second year, and the meetings normally lasted forty to forty-five minutes. He prefers to record what happens in the meetings with his supervisors in a special diary. Before the meeting is held, Azrie is prepared with his work and his supervisors are already reading his write-up. Therefore, the meetings go very smoothly and Azrie seems to have felt the benefit after the meetings because his work has been corrected word by word so that he can proceed with other research activities. Generally, Azrie seems very satisfied with his school due to the fact that he has been able to minimise his attendance there. He can access journals from home and he also uses e-mail quite often to communicate with other staff. He has also talked about his laboratory, which he describes as very sophisticated with new technology, which he cannot obtain in his own country.

It is hoped that this research could provide general views of the experiences faced by the Ph.D Arts student while doing Ph.D in overseas. It is true that each individual had different experiences, challenges and problems during their studies and it will be very interesting to study those things. It is also true that we cannot make generalisation and conclusion towards the findings of this case study since this article had only focusing on one Malaysian Ph.D student in the United Kingdom. As mentioned earlier, the researcher had used various methods and more than one case study for the actual research. However, this case study could at least provide useful knowledge to the readers who need such information for their reference.

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## **Preference for Cyber-Counseling Among Nigerian University Students**

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### **Abstract**

This study examines the level of Preference for cyber-counseling among Nigerian university students. 427 students participated in the study by filling and returning the research questionnaire. The findings revealed that 92% of the students would rather be involved in face-to face counseling relationship rather than be involved in cyber -- counseling (8%). 64% of the students preferred the e-mail counseling to chatting (29%) and video conferencing (7%) if the face-to-face option is going to be delayed or not available. No significant difference was recorded between the undergraduate and the graduate students in the level of their Preference for cyber-counseling. Also no significant difference due to gender was found level of Preference for cyber-counseling. The urgent need for group counseling to create awareness as to the usefulness of cyber-counseling based on the large number of students in the university compared to the few trained counselors available was discussed.

**Keywords:** Cyber-counseling. Acceptability. Nigerian university students.

### **Introduction**

Counseling is a process of helping people to find solutions to their challenges (problems) through the exploration and utilization of their potentials. This is professionally done by trained counselors who make use of appropriate counseling techniques in helping the counselees/clients.

According to the US National Board for Certified Counselors (2001) Counseling is the application of mental health, psychological or human development principles, through cognitive, affective, behavioral or systemic intervention strategies, that address wellness, personal growth, or career development, as well as pathology.

Depending on the needs of the client and the availability of services, counseling may range from a few brief interactions in a short period of time, to numerous interactions over an extended period of time for individuals with more substantial needs.

The reasons people go in to counseling are as varied as the people themselves. But generally, the clients seek for counseling because they have some conflicts. These conflicts may be within the client (intrapersonal), between the client and other people (interpersonal), or between the client and the society as a whole. The client is the primary change agent in that the success of the counseling process

depends on his/her cooperation. It is the client who has to take what is offered and work with it to make it work.

Often, clients have encountered distressing or stressful experiences or situations which they'd like to talk about in a safe setting. These might include present circumstances of bereavement, separation, or other major life transitions, or experiences from the past, such as in childhood. Others seek help in dealing with specific psychological or behavioral traits which they'd like to alter, such as compulsive thoughts or difficulties relating to people. Some people seek counseling to help them explore a general feeling that their lives are not quite right, or to cope with feelings of depression or anxiety. Still others look to counseling as part of their effort to discover or create meaning in their lives. Yet many others are attracted to counseling as an opportunity to undertake personal development in a safe and supportive environment.

People seeking general fulfillment as well as looking for solution to difficulties ranging from minor to profound distress impacting all areas of life could benefit from counseling.

According to Frank and Frank (1991) many clients also explore personal coaching which is a service well suited to helping them re-discover their own talents, identify what is most important to them in life, and create and implement concrete plans to live the kind of life they want to live.

In addition to help with specific goals or difficulties, clients who undertake counseling may experience general improvements in quality of life, including: healthy defensiveness, increased ability to express themselves, improved relationships with other people, and increased self-esteem.

Whatever their reason for seeking it out, clients coming to counseling will find a safe and confidential environment and a supportive human being who will listen to them without being judgmental and strive to understand thoughts and feelings from the client's own point of view. Depending on their preferred therapeutic approach, clients may choose to work with a counselor who offers almost no direct advice and simply supports them in their own explorations, or they may choose to work with a counselor who challenges them and teaches them particular techniques which can help them meet their goals. Clients come from all walks of life and from all occupations. They may be senior executives running large corporations, or they may be students or unemployed. They may be married, separated, divorced, or single. Clients may be young children, adolescents, adults, or old people. They may be physically healthy, or they may be suffering from a debilitating or even terminal illness. Men and women of all kinds benefit from the services provided by counselors.

### **Different forms of counseling**

The counseling format could be in a variety of ways that could differ with respect to participants, delivery location, communication medium, and interaction process. Counseling client(s) could be individuals or groups (clients particularly interested in developing and clarifying their own goals or preferences in life may also benefit from either individual or group counseling).

The location for counseling delivery can be face-to-face or at a distance with the assistance of technology. The communication medium for counseling can be what is read from text, what is heard from audio, or what is seen and heard in person or from video. The interaction process for counseling can be synchronous or asynchronous. Synchronous interaction occurs with little or no gap in time between the responses of the counselor and the client. Asynchronous interaction occurs with a gap in time between the responses of the counselor and the client.

The selection of a specific form of counseling is based on the needs and preferences of the client within the range of services available. Distance counseling supplements face-to-face counseling by providing increased access to counseling on the basis of necessity or convenience. Barriers, such as being a long distance from counseling services, having to queue-up due to too many clients waiting to see the counselor, or limited physical mobility as a result of having a disability, can make it necessary to provide counseling at a distance. Options, such as scheduling counseling sessions outside of traditional service delivery hours or delivering counseling services at a place of residence or employment, can make it more convenient to seek for or provide counseling at a distance.



According to the US National Board for Certified Counselors (2001) internet counseling involves distance interaction among counselor and client(s) using e-mail chat, and videoconferencing features of the internet to communicate.

E-mail-based individual internet counseling involves distance interaction between the counselor and the client using what is read through text messages in communicating.

Chat-based individual internet counseling is the distance interaction between counselor and client using what is read in text messages for communication.

Chat-based group internet counseling has to do with the distance interaction among counselor and clients making use of what is read in text messages to communicate.

Video-based individual internet counseling make use of distance interaction between counselor and client using what is seen and heard from video in communicating.

Video-based group Internet counseling involves distance interaction among counselors and clients making use of what is seen and heard from video to communicate.

## **Types of challenges for which students seek counseling**

### **Personal problems**

Students seek out counseling for many different personal problems. Personal problems can really make life hard for university students for instance they can affect their mood, motivation, and how their self-esteem. They can also be really distracting, and can interfere with the process of meeting their academic goals.

Counselors help with personal problems in many ways. They have training and experience in helping students with many types of personal problems including family conflict, depression, sexuality or relationship concerns, sleep difficulties, anger, anxiety, or stress. Because counselors are highly trained, they can provide information about the students' problem or situation that may help them see things differently. They can help the students think of new ways of coping with ongoing situations. They can teach the students new skills when necessary. Also, the counselors can provide the students the opportunity to sort out their thoughts and feelings or make decisions with their objective support. The counselors could help the students analyze and respond to internal pressures and negative attitudes towards themselves and/or others.

### **Academic problems**

Many students in the university have times when they are not pleased with their academic performance. May be they are not getting the grades that they know they are capable of getting. Or, perhaps they keep trying to study but just can not get motivated. Maybe they need better time management but they have no idea of how it could be achieved. Perhaps they study like they use to do before, but it does not seem to be working anymore. So many kinds of problems can interfere with the students' academic performance. But many times, when students are not doing well in school, they might not be really sure of the reason why. Counselors could offer academic/educational counseling where they analyze what is interfering with such students' academic success. They could look at what is not working and why it is not working, then help the students to develop strategy/strategies for change. Academic/educational counseling sessions would help students strengthen their study skills, time-management, stress management or test-taking strategies. Counselors can also help the students understand if there are personal issues that may be interfering with their academic success.

### **Career problems**

Many students might not be sure of which career they really want to embark upon on graduation. Some of them do not even know exactly what they want to do with the rest of their lives. A lot of the students are not sure if they have chosen the right course of study. Other students feel conflicted because they

want to please their parents by choosing a particular course of study, but they have no interest in that course and are struggling with it. The counselors can talk with such students about these issues to identify their career interests and to help them make the right choice based on their interest, potential, record of previous achievement, and right subject combinations. For a more comprehensive list of reasons while students seek for counseling, see Appendix 1

Generally, counselors help the clients gain insight into their ways of thinking, feeling, and behaving, and teach them to assess which ones are working and which ones they might need to change. Sometimes students know what they need to do but they just can't get themselves to do it. Counseling can help them understand why and then make the changes they want.

Cyber counseling could be defined as the practice of professional counseling through information delivery that occurs when client(s) and the counselor are in separate locations and utilize electronic means to communicate through the internet. It is simply a form of technology-assisted distance counseling (Collie, Mitchell and Murphy, 2001). It could be in form of e-mail, chat, or video delivery of online counseling. Cyber-counseling is often used interchangeably with terms such as ‘e-therapy,’ ‘online counseling,’ ‘e-counseling,’ and ‘e-advice.’ It is a process of interaction between a client and a counselor by utilizing the internet facility as means of text-based communication. The counselor and the client establish a therapeutic relationship through secured e-messages (Casey, Bloom and Moan, 1994).

While face-to-face counseling for individuals and groups involves normal physical interaction between the counselor and clients using what is seen and heard in person to communicate, internet-based distance counseling for individuals and groups involves the use of the computer to enable counselors and clients to communicate at a distance when circumstances make this approach necessary or convenient.

Casey, Bloom and Moan (1994) identify the electronic mail as a viable option for online communication in counseling. Sussman (2000) describes the use of e-mail technology as the easiest way for counselors to establish online communication with their clients. The e-mail is usually available for use as a form of communication between persons within close proximity such as next office or as a way of maintaining communication within a group who have access to internet connectivity. The high level frequency of the use of e-mails all over the world and at all levels of society makes it less cumbersome for clients to learn.

### **Statement of the problem**

Cyber-counseling becomes necessary within the university system where thousands of students have to be attended to by just a few professional counselors. See table 1 for the case study of the students’ population of the University of Lagos, Nigeria.

**Table 1:** The Students’ Enrolment in University of Lagos by Faculty and Programmes (2000-2004)

| Year/Prog           | Faculty/Teaching Unit |         |      |      |        |      |      |       |      |       |       |       |
|---------------------|-----------------------|---------|------|------|--------|------|------|-------|------|-------|-------|-------|
|                     | Arts                  | Bus Adm | Educ | Engr | Env Sc | Law  | Med  | Pharm | Sc   | SocSc | Dli   | Total |
| 2000/2001 Undergrad | 1079                  | 4043    | 1347 | 3844 | 1050   | 1219 | 2157 | 0     | 2531 | 2999  | 6490  | 26559 |
| Graduate            | 166                   | 610     | 300  | 230  | 80     | 295  | 73   | 0     | 213  | 564   | 0     | 2531  |
| Sub-Total           | 1245                  | 4653    | 1647 | 4074 | 1130   | 1514 | 2230 | 0     | 2744 | 3563  | 6490  | 22800 |
| 2001/2002 Undergrad | 2186                  | 4207    | 1935 | 3828 | 1207   | 1200 | 2240 | 0     | 3184 | 2857  | 10817 | 22844 |
| Graduate            | 203                   | 962     | 674  | 385  | 73     | 409  | 323  | 0     | 422  | 718   | 0     | 4169  |
| 2002/2003 Undergrad | 2731                  | 4069    | 2895 | 3796 | 1514   | 1180 | 1800 | 392   | 3487 | 2498  | 7347  | 24362 |
| Graduate            | 254                   | 326     | 390  | 95   | 139    | 341  | 213  | 70    | 669  | 1010  | 0     | 3507  |
| Sub-Total           | 2985                  | 4395    | 3285 | 3891 | 1653   | 1521 | 2013 | 462   | 4156 | 3508  | 7347  | 27869 |
| 2003/2004 Undergrad | 3121                  | 2461    | 2887 | 3663 | 1352   | 1191 | 243  | 359   | 3495 | 2264  | 7770  | 28806 |
| Graduate            | 174                   | 301     | 566  | 256  | 159    | 277  | 0    | 34    | 383  | 476   | 0     | 2626  |
| Sub-Total           | 3295                  | 2762    | 3453 | 3919 | 1511   | 1468 | 243  | 393   | 3878 | 2740  | 7770  | 31432 |

Apart from enhancing the counseling services, cyber-counseling allows the client ample opportunity to contact the counselor any time of the day by simply sending e-messages. Follow-up services and continued care would become less stressful for the counselor with the aid of cyber-counseling. Also when and where appropriate, the counselor would be able to make necessary referrals early enough.

### **Research questions**

- (1) Will the students rather be involved in face-to face counseling relationship rather than cyber-counseling?
- (2) Which of the cyber-counseling options would the students prefer if the face-to-face option is delayed?
- (3) Will there be a significant difference between the undergraduate and the graduate students in the level of their Preference for cyber-counseling?
- (4) Will there be a significant difference between the male and the female’s level of Preference for cyber-counseling?

### **Method**

The design of this study was descriptive survey.

### **Procedure**

The participants were 427 university students who filled and returned the copies of the survey questionnaire given out to 500 of them randomly selected for this study. 289 were undergraduates consisting of 149 female and 140 male students; while 138 were graduates made up of 65 female and 73 male students (see table 2). All of them were regular students.

**Table 2:** The Participants Distribution

| <b>Level</b>  | <b>Gender</b> | <b>Frequency</b> |
|---------------|---------------|------------------|
| Undergraduate | Female        | 149              |
|               | Male          | 140              |
| Graduate      | Female        | 65               |
|               | Male          | 73               |
| Sub-Total     | Female        | 214              |
|               | Male          | 213              |
| <b>Total</b>  |               | <b>427</b>       |

The questionnaire was constructed by the researcher to elicit the responses of the participants regarding their level of Preference for cyber-counseling. It has two sections, A and B. Section A requires information about the name (which was optional); Gender (Male or female); Level of study (undergraduate or graduate). Section B consisted of the statements that the participants were required to simply circle their preferred options. Which counseling interaction would you prefer-‘Cyber-counseling’ or ‘face-to-face’ counseling? If ‘face-to-face’ counseling interaction is not readily available which of these internet options would you choose-‘e-mail’, ‘chatting’, or ‘videoconferencing’? A nominal point of 1 was allotted to the choice of ‘cyber-counseling’ while 2 points was allotted to ‘face-to face’ counseling just for the purpose of data analyses.

## Data Analyses

The percentages of those who chose face-to-face counseling was computed and also the percentages of those who chose e-mail counseling, chatting, or video conferencing in the absence of face-to face counseling interaction. However, independent t-test statistics was used to find out whether or not there would be significant difference between the undergraduates and the graduate students or significant difference based on gender.

## Results

The analyses of the data showed that 92% of the students would rather be involved in face-to face counseling relationship than be involved in cyber-counseling (8%). The Chi-Square statistics (301.829; Degree of Freedom=1) revealed a significant difference (see table 3)

**Table 3:** Chi-Square Statistics of the level of Preference for Cybercounseling

| Counseling Type | Observed N (%) | Expected N (%) | Residual | Degree of Freedom | Chi-Square | Sig   |
|-----------------|----------------|----------------|----------|-------------------|------------|-------|
| Cybercounsel    | 34 (8.0)       | 213 (50.0)     | -179.5   | 1                 | 301.829    | .000* |
| Face-to-face    | 393 (92.0)     | 213 (50.0)     | 179.5    |                   |            |       |

64% of the students preferred the e-mail counseling to chatting (29%) and video conferencing (7%) if the face-to-face option is going to be delayed or not available (see table 4).

**Table 4:** Percentages of Students and their Preference among Cybercounseling options in the absence of Face-to-face counselling

| Type of Cybercounseling | Number of Students | Percentage |
|-------------------------|--------------------|------------|
| E-mail                  | 273                | 64         |
| Chatting                | 124                | 29         |
| Videoconferencing       | 30                 | 7          |
| <b>Total</b>            | <b>427</b>         | <b>100</b> |

No significant difference was recorded between the undergraduate and the graduate students in the level of their Preference for cyber-counseling. The undergraduate students' mean was 1.962 while the graduate student mean was 1.942 with standard deviations of .192 and .235 respectively;  $t = .932$  (see table 5). To further establish the result, the T-test for equality of means and Levene's test for equality of variance was used and the result still showed no significant difference. The mean difference was .0199 whether or not the equal variances was assumed; the degree of freedom was 425 when equal variances was assumed and 227.323 when equal variances was not assumed;  $T = .932$  with equal variances assumed, and .868 with equal variances not assumed. Levene's test for equal variances revealed  $F = 3.446$ , not significant (see table 6).

**Table 5:** T-Test statistics comparison of the means and the standard deviation of the Undergraduate and the Graduate students

| Level         | N   | Mean  | Standard Deviation | Standard Error Mean | Degree of Freedom | t    | Sig                    |
|---------------|-----|-------|--------------------|---------------------|-------------------|------|------------------------|
| Undergraduate | 289 | 1.962 | .192               | .011                | 425               | .932 | .352 (not significant) |
| Graduate      | 138 | 1.942 | .235               | .020                |                   |      |                        |

**Table 6:** T-test for Equality of Means and Levene’s Test for Equality of Variances of Undergraduate and Graduate Students

|                             | t-test for Equality of Means |                 |      | Levene’s Test for Equal Variances |       |                        |
|-----------------------------|------------------------------|-----------------|------|-----------------------------------|-------|------------------------|
|                             | Degree of Freedom            | Mean Difference | t    | Sig                               | F     | Sig                    |
| Equal Variances assumed     | 425                          | .0199           | .932 | .352 (not significant)            | 3.446 | .064 (not significant) |
| Equal Variances not assumed | 227.323                      | .0199           | .868 | .386 (not significant)            |       |                        |

Also no significant difference was found between the male and the female Preference for cyber-counseling. The mean for female students was 1.911 while the mean for male students was 1.889 with standard deviations of .288 and .317 respectively;  $t = .819$  (see table 7). Furthermore, the t-test for the equality of means showed the mean difference to be .0239 whether or not equal variances was assumed; the degree of freedom was 425 when equal variances was assumed and 419.905 when equal variances was not assumed;  $T = .819$  with equal variances assumed, and .819 with equal variances not assumed. Levene’s test for equal variances revealed  $F = 2.203$ , not significant (see table 8).

**Table 7:** T-Test statistics comparison of the means and the standard deviation of the Female and Male students

| Gender | N   | Mean  | Standard Deviation | Standard Error Mean | Degree of Freedom | t    | Sig                    |
|--------|-----|-------|--------------------|---------------------|-------------------|------|------------------------|
| Female | 214 | 1.911 | .288               | .029                | 425               | .819 | .413 (not significant) |
| Male   | 213 | 1.889 | .317               | .029                |                   |      |                        |

**Table 8:** T-test for Equality of Means and Levene’s Test for Equality of Variances of Female and Male Students

|                             | t-test for Equality of Means |                 |      | Levene’s Test for Equal Variances |       |                        |
|-----------------------------|------------------------------|-----------------|------|-----------------------------------|-------|------------------------|
|                             | Degree of Freedom            | Mean Difference | t    | Sig                               | F     | Sig                    |
| Equal Variances assumed     | 425                          | .0239           | .819 | .413 (not significant)            | 2.203 | .335 (not significant) |
| Equal Variances not assumed | 419.905                      | .0239           | .819 | .413 (not significant)            |       |                        |

## Conclusion

Students seek counseling for a variety of interpersonal, developmental, and psychological concerns. It can be difficult to for the students to begin a counseling relationship due to fears or even feelings of embarrassment. But most students would probably find out that once they start the counseling relationship, they are likely to feel some relief and have hope because they would begin to face their difficulties instead of avoiding them. But cyber-counseling might be more appropriate for adults (at least 18 years of age); who are not suicidal or homicidal; to whom face-to-face counseling is not available; and /or who the counselor believes would benefit from such.

The counselor in addition to being educated should possess accurate empathy, non-possessive warm, and genuineness (Rogers, 1951). For the counseling process to be effective, Frank and Frank (1991, p.44) identify six things the counselor has to do as follow: develops and maintain a good relationship with the client; links hope to the process of counseling; offers new learning experience; arouses the client’s emotions; enhances the client’s sense of self-efficacy and confidence; and provides opportunities for practicing new ways of responding and behaving. Underlying all these responsibilities is the fact that the counselor must be able to observe well and listen well. According to Carkhuff (2002), counselors listen to clients actively by suspending personal judgment, focusing on the client, resisting distractions, recalling the client’s expressions accurately, and noticing common themes in the client’s communication. Counselors can also teach the clients ways of dealing with stressful life

events and circumstances they can not change. Sometimes, the most helpful aspect of counseling is that the counselor is objective and is not directly involved in the situation the client is trying to resolve. The counselor has only the best interests of the clients to consider.

However, the US National Board for Certified Counselors (2001) develops some standard for the practice of internet counseling. To engage in the practice of internet counseling, the basic ethical standard must be followed (See appendix 2).

**Appendix 1:** List of the most frequent concerns students present when seeking counseling:

- Need to talk with someone who can provide an objective viewpoint.
- Feeling of an overwhelming and prolonged sense of sadness and/or helplessness.
- Emotional difficulties which make it hard for them to function at their best day to day.
- Urge to engage in actions that are potentially harmful to themselves or others.
- Being troubled by the emotional difficulties of family members or close friends.
- Feeling lonely, and disconnected from others.
- Health concern
- Anxiety and stress
- Depression
- Sleep disturbance (oversleeping or inability to have enough sleep which is insomnia)
- Procrastination (putting off important tasks till later)
- Family issues (having misunderstanding with partner and/or children)
- Alcohol and drug use
- Academic difficulties (poor grades, probation)
- Lack of motivation or difficulty concentrating on schoolwork
- Relationship problems or break-ups
- Questions about sexuality
- Thoughts about death or suicide
- Inability to manage anger
- Past experience of abuse, rape, violence, or trauma
- Seeking for ways of coping with death and grief
- Eating, weight, or body image problems
- Lack of confidence or self-esteem
- Having difficulties in adjusting to university life
- Questions about career choice

### **Appendix 2**

*National Board for Certified Counselors (2001) Standards for the Ethical Practice of Internet Counseling*

These standards govern the practice of Internet counseling and are intended for use by counselors, clients, the public, counselor educators, and organizations that examine and deliver Internet counseling. These standards are intended to address practices that are unique to Internet counseling and Internet counselors and do not duplicate principles found in traditional codes of ethics.

Recognizing that significant new technology emerges continuously, these standards should be reviewed frequently. It is also recognized that Internet counseling ethics cases should be reviewed in light of delivery systems existing at the moment rather than at the time the standards were adopted.

### **Internet Counseling Relationship**

In situations where it is difficult to verify the identity of the Internet client, steps are taken to address impostor concerns, such as by using code words or numbers.

Internet counselors determine if a client is a minor and therefore in need of parental/guardian consent. When parent/guardian consent is required to provide Internet counseling to minors, the identity of the consenting person is verified.

As part of the counseling orientation process, the Internet counselor explains to clients the procedures for contacting the Internet counselor when he or she is off-line and, in the case of asynchronous counseling, how often e-mail messages will be checked by the Internet counselor.

As part of the counseling orientation process, the Internet counselor explains to clients the possibility of technology failure and discusses alternative modes of communication, if that failure occurs.

As part of the counseling orientation process, the Internet counselor explains to clients how to cope with potential misunderstandings when visual cues do not exist.

As a part of the counseling orientation process, the Internet counselor collaborates with the Internet client to identify an appropriately trained professional who can provide local assistance, including crisis intervention, if needed. The Internet counselor and Internet client should also collaborate to determine the local crisis hotline telephone number and the local emergency telephone number.

The Internet counselor has an obligation, when appropriate, to make clients aware of free public access points to the Internet within the community for accessing Internet counseling or Web-based assessment, information, and instructional resources.

Within the limits of readily available technology, Internet counselors have an obligation to make their Web site a barrier-free environment to clients with disabilities.

Internet counselors are aware that some clients may communicate in different languages, live in different time zones, and have unique cultural perspectives. Internet counselors are also aware that local conditions and events may impact the client.

### **Confidentiality in Internet Counseling**

The Internet counselor informs Internet clients of encryption methods being used to help insure the security of client/counselor/supervisor communications.

Encryption methods should be used whenever possible. If encryption is not made available to clients, clients must be informed of the potential hazards of unsecured communication on the Internet. Hazards may include unauthorized monitoring of transmissions and/or records of Internet counseling sessions.

The Internet counselor informs Internet clients if, how, and how long session data are being preserved.

Session data may include Internet counselor/Internet client e-mail, test results, audio/video session recordings, session notes, and counselor/supervisor communications. The likelihood of electronic sessions being preserved is greater because of the ease and decreased costs involved in recording. Thus, its potential use in supervision, research, and legal proceedings increases.

Internet counselors follow appropriate procedures regarding the release of information for sharing Internet client information with other electronic sources.

Because of the relative ease with which e-mail messages can be forwarded to formal and casual referral sources, Internet counselors must work to insure the confidentiality of the Internet counseling relationship.

### **Legal Considerations, Licensure, and Certification**

Internet counselors review pertinent legal and ethical codes for guidance on the practice of Internet counseling and supervision.

Local, state, provincial, and national statutes as well as codes of professional membership organizations, professional certifying bodies, and state or provincial licensing boards need to be reviewed. Also, as varying state rules and opinions exist on questions pertaining to whether Internet counseling takes place in the Internet counselor's location or the Internet client's location, it is important to review codes in the counselor's home jurisdiction as well as the client's. Internet counselors also consider carefully local customs regarding age of consent and child abuse reporting, and liability insurance policies need to be reviewed to determine if the practice of Internet counseling is a covered activity.

The Internet counselor's Web site provides links to websites of all appropriate certification bodies and licensure boards to facilitate consumer protection.

(National Board for Certified Counselors (2001) *The practice of internet counseling*. Retrieved on October 25, 2005 from <http://www.nbcc.org/webethics>)

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## **A Plan for the Creation of a Community College System in Developing Countries: Case Study Haiti**

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### **Abstract**

A research study was conducted to assess the need for a community college system in Haiti. A plan was designed for a community college system that will potentially help Haitian citizens reach their highest potential. First, this study took into account Haiti's socio-economic situation and its history of higher education, as well as financial and faculty components. Second, this research assessed the level of satisfaction with Haiti's current system among high school junior/senior students, professionals, business and industry owners. The plan for the community college system designed for Haiti was based upon the principle that the system should be comprehensive, provide access for all, optimize human resources, contribute towards building a democratic society and protect the Haitian culture.

**Keywords:** Higher Education, Community College, Haiti, Economic Development, Democracy

### **Introduction**

Many third-world countries have not invested adequately and sufficiently in human resources. Consequently, the production of their industries and services has been low and their economies have suffered (Hellinger, 1999). Haiti exemplifies such a decline of the labor force. The rates of population growth and unemployment are increasing rapidly (CIA, 1999). In order to determine what changes are necessary to solve Haiti's problems, it is important to understand the history of its educational system.

For the 25 years succeeding independence, Haitians were so preoccupied by a possible return of the French and an ever-possible attempt at re-enslavement that they could not concentrate on the affairs of the country, much less on education (Moreau de Saint-Rémy, 1983). Since the French planters who

lived in Haiti were not interested in education, they had not created schools for themselves and for their slaves. Under Toussaint, there was little time for education. Dessalines had no use for it. Forty years after independence, there were only 11 schools in Haiti, and they were exclusively for the elite (Marshall, 1930). The signing of the Concordat with the Vatican in 1860 resulted in the arrival of clerical teachers, emphasizing the influence of the Roman Catholic Church among the educated class. Not until the government of President Fabre Geffrard, in 1875, were efforts made to develop schools for others than those in elite ranks (Marshall, 1930). Civil wars and coups d'état had divided the country, which, considering its political condition, was more of an empire than a republic.

One hundred years after independence, the political situation was still getting worse (Heinl, 96). The opening of World War I offered a pretext to both France and Germany to collect their Haitian debts by force (Rodman, 1961). Several Haitian presidents had prolonged their terms in office. In 1912, President Leconte was murdered in the National Palace. The following year, President Tancrède Auguste was poisoned. In 1914, presidents Oreste Zamor and Davilmar Theodore were deposed by revolutions. On the morning of July 28, 1915, President Sam's body was torn into pieces by an infuriated mob (Rodman, 1961). That afternoon, American Marines landed at Port-au-Prince from gunboats.

The country was so tired of revolutions that it welcomed the occupation, at least during the first two years (Dorsainville, 1950). But the mood quickly changed even though economic and political stability was increasing. The Americans had sent Marines from Southern states to Haiti on the theory that they would "know how to handle" Negroes (Plummer, 1992). They had underestimated Haitian pride. The war that followed between the Haitians and the Americans claimed 6,000 Haitian lives, including guerrilla leader Charlemagne Péralte (Rodman, 1961). The occupation ended with the visit of President Franklin Roosevelt to Cap-Haitien in 1934 (Schmidt, 95).

The social and economic stability lasted until 1957. Haiti was bankrupt (Rodman, 1961). With the support of U.S. State Department officials who feared that Communist Cuba would take advantage of a power vacuum in Haiti, Francois Duvalier became president-for-life four years later. After 14 years in power, Duvalier, before dying, named his son Jean-Claude his successor who stayed in power until being forced to exile in 1986. Haiti's small army was dismantled 10 years later, when the Americans came back with a multinational force to restore ousted President Jean-Bertrand Aristide.

At the same time, major efforts were being made to change the educational system and promote a common language. The educational system, the laws, and the official documents were all in French, even though only 5 percent of the population spoke French (U.S. Agency for International Development, 1987). Creole, a "French-based, independent language with its own vocabulary, traditions, literature, styles, utility, and symbolic value" (Leyburn, 1966 and Valdman, 1978), became the other official language. The first initiative to introduce Creole into the curriculum followed the enactment of a 1982 law created by Secretary of State Joseph C. Bernard (Ministère de l'Éducation Nationale, de la Jeunesse et des Sports 1997c). Today, there is still not enough literature in that language to help modify the school curriculum. Haiti is relatively isolated because of its languages (Fouchard, 1972). Its closest neighbors, the Dominican Republic, Cuba, and Puerto Rico, are Hispanic. The rest of the Caribbean is Anglo-phonetic, except for some relatively distant islands such as Martinique, Guadeloupe, and Saint-Lucia, Dominica, whose official language is also French. Language creates isolation even inside Haiti. The use of French versus the use of Creole presents a problem in education. Since French-language mastery is a prerequisite for upward social mobility, schooling in Creole generates strong reactions. Conflicting political interests have caused Haiti's national language policy to be inconsistent (The World Bank Group, 1999).

Today, Haiti has a population estimated at 8 million inhabitants (Oxford Encyclopedic, 2005), including almost 2 million living in the capital city of Port-au-Prince. With almost half its population less than 20 years of age (U.S. Agency for International Development, 1998), Haiti is going through its darkest time. The 2.22 percent average population growth has created a need for nutritional products of all kinds. The import of nutritional products increased from \$11 million in 1970 to \$180 million dollars

in 1990. An analysis of the socio-economic situation in Haiti suggests that, for any educational plan to succeed, it must take into account the following facts about the country. Haiti's purchasing-power parity, estimated at \$8.9 billion, is primarily founded on agriculture (42 percent), industry (14 percent), and services (44 percent) (Central Intelligence Agency, 1999). Agricultural products, composed of coffee, mangoes, sugar cane, rice, corn, sorghum, and wood, represent 50 percent of the total of the exported products, estimated at \$200 million dollars (The Bank of the Republic of Haiti, 1990). Seventy percent of the population of the country lives in poverty. The gross national product per capita is \$410 (The World Bank, 1999). Haitian industry is predominantly composed of sugar-refining, flour-milling, textiles, cement, tourism, light assembly manufacturing based on imported parts, and mining. The country depends upon tourism as the main industrial asset. According to the 1996 Report of the Institute of Statistics in Haiti, between 1970 and 1975, the country received a yearly average of 200,000 tourists. Today, tourism has been paralyzed by political crises that began in 1986. Haiti's service sector includes banking, financial services, transportation, and communication.

An analysis of the educational system reveals that 80 percent of the population is illiterate, 36 percent of the students who start first grade reach the Primary Education Certificate level (CEP) level, 8 percent the Baccalauréat levels, and only 1 percent the universities or the technical schools (Ministère de l'Éducation Nationale, de la Jeunesse, et des Sports 1998b). Only 2 percent of the total population has a professional or technical education. The lack of qualified teachers and professors constitutes the main problem in Haiti's educational system. Only 47 percent of teachers in the public sector and 8 percent of teachers in the private sector graduated from a recognized university, and half of them have fewer than five years of experience (Ministère de l'Éducation Nationale, de la Jeunesse, et des Sports 1998a). The efficacy of the public school is doubtful. There is a need for qualified and motivated faculty in both the public schools and the universities. In conclusion, providing a substantive education is harder for the Haitian people than for most other international groups because of several factors, including the following: (a) extreme poverty; (b) lack of educational institutions; (c) lack of parental support; (d) language barriers; (e) limited qualification among professors; (f) lack of efforts from the leaders; and (g) low salaries (LaTortue, 1993). Therefore, this study was designed (a) to determine the extent of need for a community college system in Haiti and (b) to develop a proposed system model. Toward this end, this study has attempted the following:

1. Determine the level of satisfaction with Haiti's current educational system among high school junior and senior students.
2. Determine the level of satisfaction with Haiti's current educational system among business and industry owners.
3. Determine the level of satisfaction with Haiti's current educational system among professionals.
4. Propose a design for a community college system that would serve a long-range plan in the different regions of the country.

In order to develop a community college system in this 200-year-old country, it is necessary to make three basic assumptions about the theoretical foundation of this study and the role of education in augmenting the economic welfare of the country and its citizens. Therefore, it is assumed that education is (a) necessary for democratic government, (b) valuable for the improvement of society, and (c) indispensable in the 21<sup>st</sup> century. Since Haiti is relatively new to the democratic process, it is critical to stress the idea that not only education, but also democratic education, is valuable to democratic government. Following limitations to the study were taken into account as well:

1. The efforts to establish a community college system was modeled after the open-access community college system that has been established in the State of Florida.
2. The development of a community college plan was designed in accord with the responses of Haitian educational leaders.
3. This study concentrated solely on the administrative and organizational aspect of a community college system in Haiti. Curriculum and financing will be discussed only when they are directly

linked to an administrative section of the system. Since the system has not been tested in Haiti, no data are available on what works and what does not work.

4. The generalization of this study was confined to the context of the findings of this study (Behar, 94).

The aim of this study was to address one of the many components of the Haitian crisis, the lack of higher education, and to assess the need for a system that would permit more students to transfer to a university, lead to increased numbers of trained technicians, and give all citizens an opportunity to reach their highest potential. This study was facilitated by the work of Dr. James L. Wattenbarger, Distinguished Service Professor Emeritus at the University of Florida. Dr. Wattenbarger created and developed the community college system for the state of Florida and has directed several dissertations that have focused upon the development of a community college system in other states and other nations, for example, Poland (Marzak, 1994), Colombia (Matthews, 1971), and Jamaica (Jones, 1989). The Haitian Ministry of Education granted the researcher permission to conduct the study. This investigation determined whether high school juniors and seniors would be interested in going to a community college if a system were in place, and whether the business and industry owners and professionals, especially educational leaders, would support such a system, as well as participate in its creation and development.

The practical significance of this study is evidenced by the fact that students would not have to wait a year before they can reapply to the university. Thanks to an open-door policy, they would be able to seek admission to a community college and work on a transferable associate's degree. Other students would be able to work on technical degrees and certificates designed for the workforce. The theoretical significance of this study is evidenced by the empowerment of individuals, no longer victims of a socio-economic situation but masters of their destiny.

## **The History of Higher Education in Haiti**

In order to make recommendations, it is important to understand the current higher educational system. The origin of higher education in the Republic of Haiti began with the independence and the creation of the Northern Royal Academy (Académie Royale du Nord) in Cap-Haitien in 1815 by King Henry Christophe. This institution was comprised by schools in medicine, agronomy, and arts. In 1825, following the king's death, President Boyer proposed a plan for a National Academy of Haiti (Académie Nationale d'Haiti) that was not executed (LaTortue, 1993). From 1830 to 1880, the government built institutions to educate, based on the higher education institutions (Grandes Ecoles) model in France. The best students received scholarships to study in France. In 1915, professors who trained in Europe were strong proponents for the creation of a system of higher education (Romain, 1987). In 1944, the concept of a "university" was introduced. President Elie Lescot founded the University of Haiti. The schools were named "faculties" and their directors, "deans". In 1960, the government created the State University of Haiti. In the 1980s, some private universities were established in Haiti (LaTortue, 1993).

The principal goal of Haitian education has been to reduce the margin between vision and reality. Unfortunately, in the higher education setting, this goal has yet to be achieved because of inadequate preparation of university professors. Most professors have only a bachelor's degree in their fields of study. Of the 1,600 higher education faculty members, 74 percent have bachelor's degrees, 18 percent master's degrees, and only 8 percent hold doctoral degrees (Ministère de l'Éducation Nationale, de la Jeunesse et des Sports, 1995).

Many educators believe that research and publications are what constitute perceptions of the net value regarding scholarship, yet they are almost nonexistent in Haiti (LaTortue, 1993). University professors work only part-time. Insufficient salaries stop the university from hiring those it needs the most, professors. As a result, many areas of study, such as journalism, meteorology, sports,

mathematics, physics, chemistry, and environmental sciences, are not taught in Haiti at a graduate level. Additionally, technical laboratories and libraries are practically non-operational.

The State University of Haiti, founded in 1944, has eight main fields of study. A list of the field of study, program areas and duration follows. The program of medicine and pharmacy, created in 1880, offers degrees in community, social, preventive and internal medicine, cardiology, dermatology, pathology, microbiology, biology, anesthesiology, obstetrics and gynecology, psychiatry (six years of study) and pharmacy (three years). The dentistry program, created in 1928, offers degrees in maxilla facial surgery, stomatology, hygiene and dental prevention (five years). The program of law and economic sciences, created in 1860, offers bachelor's degrees in law and economic sciences (four years). The human and social sciences department, created in 1974, offers bachelor's degrees in psychology, sociology, social service, and communication (four years). The ethnology program, created in 1944, offers four bachelor's degrees, two master's degrees and one doctoral degree (six years). The agronomy department, created in 1924, offers degrees in agricultural engineering (four years). The veterinary medicine department offers four-year degrees. The department of sciences, created in 1902, offers bachelor's degrees in civil engineering, architecture, physics, chemistry, geology, and mathematics (five years).

Four other schools and five other institutes and centers in Port-au-Prince are also under state control. They include the Superior Normal School (Ecole Normale Supérieure), the School of Nursing, the National Institute of Administration, Management, and International Higher Education (Institut Nationale d'Administration, de Gestion et des Hautes Etudes Internationales), the Commercial and Economic Institute of Higher Education (Institut des Hautes Etudes Commerciales et Economiques), the Haitian Polytechnic Institute Group Olivier and Collaborators (GOC) (Institut Polytechnique d'Haiti GOC), the Institute of Electronic Technology (Institut de Technologie Electronique), the Superior Institute of Economic and Political Sciences (Institut Supérieure des Sciences Economiques et Politiques), the Haitian Superior Technical Institute (Institut Supérieure Technique d'Haiti), and Notre Dame University.

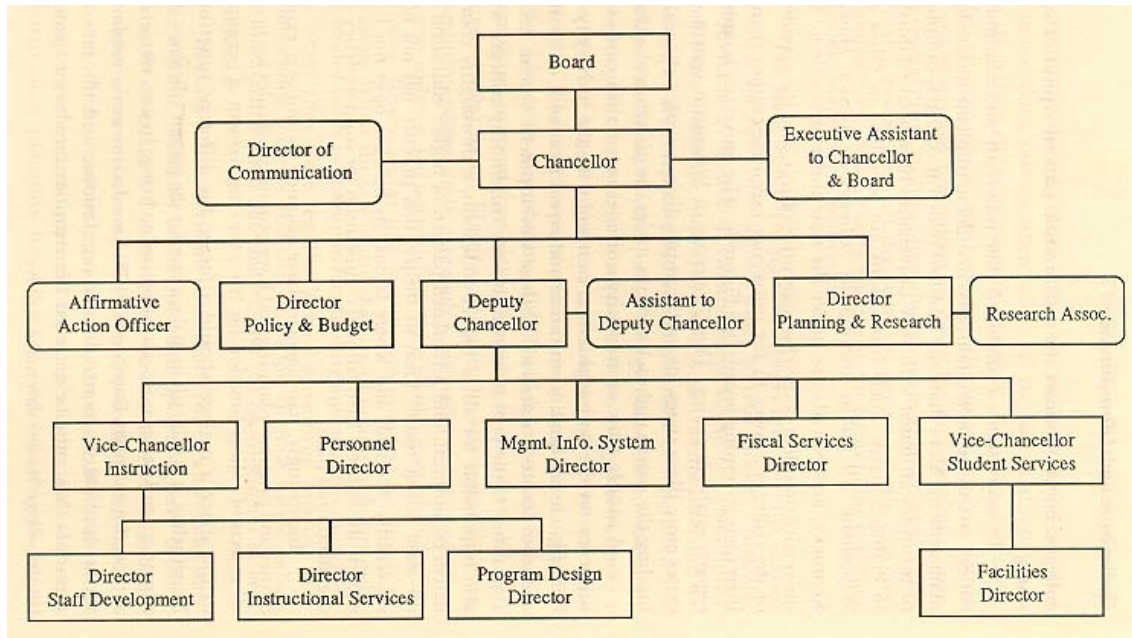
After three to four years of college-level study, students are awarded a Bachelor of Arts or Science degree (License or Diplôme d'Etudes Supérieure), a certificate (Certificat d'Etudes Supérieure), or a professional title. Law students receive the equivalent of a bachelor's degree (Licence en Droit) after four years, and medical students receive the doctor of medicine degree (Diplôme de Docteur en Medicine) after seven years. Master's (Maitrise) and doctoral degrees, awarded in anthropological sciences, ethnology, and developmental sciences, are rare and equivalent to degrees awarded in France (The British Council, 1991). Certificates and diplomas are not awarded for partial completion of a degree at the universities of Haiti (Romain, 1987).

**Table 1:** Number of Technical and Vocational Schools and Students, 1995

| Category  | Number of Schools | Number of Students | Student Percentage |
|-----------|-------------------|--------------------|--------------------|
| EET       | 5                 | 1,110              | 0.2                |
| EEM       | 0                 | 0                  | 0.0                |
| CFE / EEP | 23                | 3,588              | 0.6                |
| EFA       | 0                 | 0                  | 0.0                |
| CM        | 10                | 1,085              | 0.2                |
| Total     | 38                | 5,783              | 1.0                |

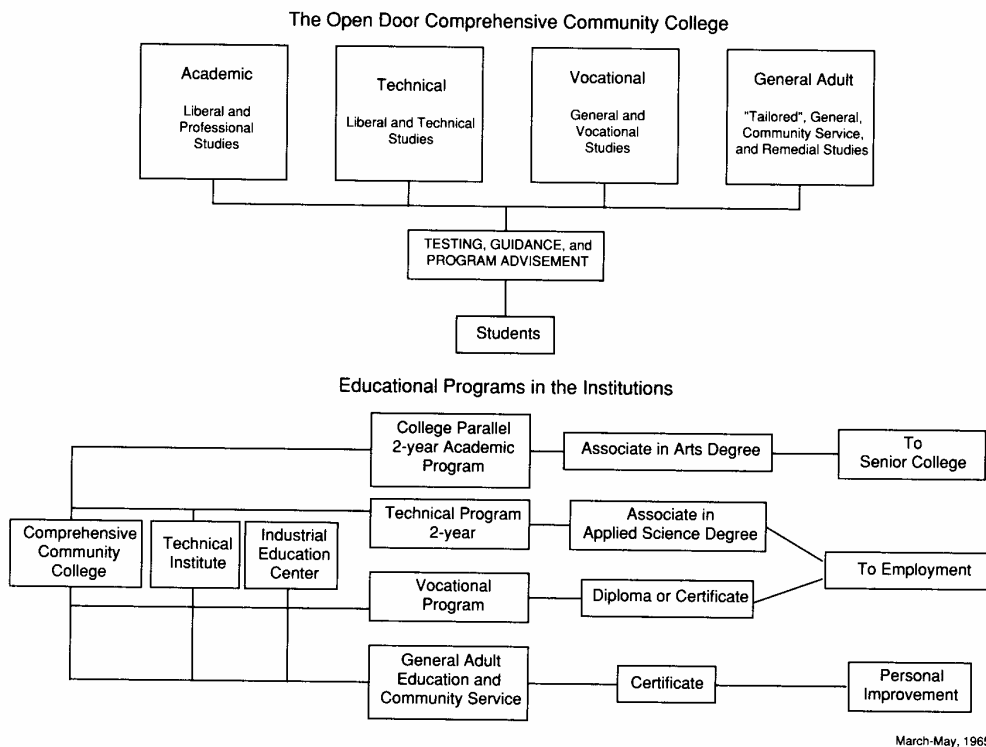
**Source:** Ministère de l'Education, de la Jeunesse et des Sports, 1995 (CFE: Center of Formation for Instruction. CM: Centre of Interior Decoration. EEM: School of Middle Instruction. EEP: School of Primary Instruction. EET: School of Technical Instruction. EFA: School of Agricultural Formation)

**Figure 1:** Organization of the American community college system by (Evans & Neagley, 1973)



(Permission to reproduce this figure was granted by the editor, Prentice Hall).

**Figure 2:** Educational Needs by Cohen & Brawer, 1989



The Baccalauréat II exam and an entrance examination are required for most of the universities. From 1988 to 1990, the number of admitted students increased from 1,080 to 2,080. The dropout rate varies from 10 percent to 20 percent in the first two years, and 5 percent to 20 percent in the other years of study (Romain, 1987). During the 1987-1988 academic year, the number of Haitian

undergraduate or graduate students in other countries was 1,956, with 1,460 (74.6 percent) in the United States of America, 257 (13.1 percent) in France, 89 (4.5 percent) in Canada, 75 (3.8 percent) in Belgium, and 75 (3.8 percent) in other countries, according to the annual report of UNESCO (LaTortue, 1993). The established institutions of higher education have a capacity of 7,500 students, which represent 0.1 percent of the population of the country, compared to developed countries, whose institutions accommodate 2.5 percent of their populations (Ministère de l'Éducation Nationale, de la Jeunesse et des Sports, 1997 (b)).

There is a need to understand how Haitian and American academic credentials compare in order to facilitate the exchanges between Haitian and foreign faculty and allow students to study abroad and to transfer credits back to the Haitian system. The International Standard Classification of Education (ISCED) was designed as an instrument for presenting statistics on education internationally. Haiti and the United States report education statistics, according to this standard, to the United Nations Education, Science, and Culture Organization (UNESCO) and the Organization for Economic Cooperation and Development (OECD). In this manner, the Haitian system is similar to the American system. The credit system, used in Haiti, is adopted by the National Institute of Administration, Management, and International Higher Education (INAGHEI), as well as such private institutions as the International University Center, King Henri Christophe University, the Polytechnic Institute (GOC), and Notre Dame University.

National and international agencies have conducted important research on the Haitian educational system. From October to December 1984, an eight-person team of U.S. Agency for International Development (USAID) consultants assessed the state of the Haitian educational system and evaluated its priority needs. More than 250 interviews were conducted with officials from different ministries of public and private primary and secondary schools, and more than 265 reports and related documents were reviewed. In a report to Haiti's Ministry of Education, the team recommended: (a) strengthening basic education; (b) improving income-producing skills; (c) reinforcing existing public and private educational institutions; (d) conducting planning studies and surveys; and (e) improving donor coordination.

### **The Proposed Plan for a Community College System in Haiti**

Three assumptions serve as the basis to create a community college system in Haiti. These assumptions are consistent with the vision of the Ministry of Education, which asserts that characteristically, education must be “of a Haitian school of quality, accessible to all Haitian citizens, and of a Ministry of Education which exercises fully its role of keeper of the democratic process through quality education at all levels, private or public” (Ministère de l'Éducation Nationale, de la Jeunesse et des Sports, 1997 (c)). Specifically, the ministry's vision establishes also that education is necessary for democratic government, valuable for the improvement of society and indispensable in the 21<sup>st</sup> century.

The plan for a community college system in Haiti included the followings (a) An overview of the American community college system; (b) the criteria for a community college mission in Haiti; and (c) financial and faculty components (d) the costs of establishing a community college system in Haiti and (e) The organization and administration of a community college system.

### **Overview of the American Community College Systems**

An overview of the community college systems in the United States of America would help the reader understand the characteristics of the administration, financial structure, and composition and educational background of faculty for states that have a high Haitian population (American Association of Colleges, 83). The proposed plan for creating a post-high school level of education in Haiti will recognize the organization of the American community college as illustrated in Figure 1 (Evans & Neagley, 1973), as well as nature, customs, and traditions commons to the American system as a working model.

The community college in the United States evolved as a post-World War II “feeder” institution to provide educational opportunity for students, since traditional four-year universities were criticized for being unable to meet the needs of the changing economy and society. The need for trained workers to operate the expanding industries and the drive for social equality contributed to the rise of the community college (Chamber of Commerce, 1945). The community college serves a unique role. The function of a community college is characterized by its (a) flexibility, (b) broad curriculum, (c) maintenance of academic standards, (d) goal of helping each student develop his or her own potential, (e) personalized educational atmosphere, (f) closeness to the secondary schools and to the life of the community it serves, (g) determination to remain a two-year institution, and (h) unique function in a community.

The concept of open access for all students unique to the community college system is the cornerstone of the democratization of education. The community colleges, also known as “junior colleges,” “two-year colleges,” “city colleges,” “people’s colleges,” and “democracy’s colleges” (Cohen & Brawer, 1989) were created to serve the educational needs of a diverse student body. These educational needs included “academic transfer preparation, vocational-technical education, continuing education for adults, remedial education, and community services” (Cohen & Brawer, 1989) (see Figure 2).

Miami-Dade Community College is a representative of the American community college system that has been ranked among the top in the nation. The curriculum of Miami-Dade typifies the kind of education program that defines the role of an American community college. Instead of studying separate subjects, students choose between five multidisciplinary courses: communications, social environment, natural environment, humanities, and the individual. Specific disciplines are taught within each course topic. For example, natural environment includes courses in biology, chemistry, and earth science. Social environment includes courses in sociology, economics, and history.

American community colleges are similar in their functions, descriptive institutional traits, and contributions (Donnelly, 1975) (see Figure 2). They have had the largest impact of any institution of higher education in the past century and represent the American dream of access and equality in higher education, but they remain misunderstood. Their mission is to improve the life of Americans while disavowing elitism that might result from the improvement, to develop people intellectually while remaining anti-intellectual. The confusion about the role of community colleges is best explained by Cain (1999):

“Proponents of vocational education see community colleges as extensions of high school trades programs, while those who advocate four-year degree programs emphasize the transfer function. Some, as Dale Parnell does in his influential book, *The Neglected Majority*, try to walk a tight line between career prep and transfer. Others see the job of the community college as a salvage operation, a sort of institution-as-social-worker philosophy”.

Funding patterns for community colleges are at the discretion of individual state legislations. Some states provide support according to enrollment, while others provide support for special student groups or students who are enrolled in particular course of study. Various funding formulas have been created to address the complexity of state expectations. Performance-based approach to funding ties subsidies to documented evidence of student learning, and rests heavily on assessments of curriculum effects on program completers. Many states have instituted a form of performance-based budgeting in order to impose accountability on publicly supported institution. For community colleges, performance often includes student graduation rates and the number of students employed in their fields after graduation (Honeyman, 1996).

One of the primary goals of the American community college is to build communities and promote lifetime learning. Multicultural programs in community colleges usually focus on addressing the needs of the local community (Torres, 98). However, as economic interests and technologies redefine the notion of community, community colleges develop or refine programs to respond to local



needs. The community college has made U.S. higher education available to the surging tide of high school graduates. While universities fight to remain exclusive, community colleges measure their success by inclusion (Witt & Wattenbarger, 1994).

### **Criteria for a Community College System in Haiti**

Planning a community college system in Haiti will take into consideration the following: (a) the economic situation of the university population, (b) the inadequate basic preparation of primary and secondary school students, (c) the lack of job satisfaction and motivation among faculty, (d) the limited curricula within the programs that are offered, (e) the inclusion of curriculum and programs relevant to the development of the country, and (f) the principal actors in the pedagogical support system.

The following, considered to be preconditions for the successful establishment of community colleges in Latin America, will be applied to the Caribbean as well.

1. The creation of two-year colleges must be initiated through a legislative effort, as higher education in the Caribbean is delegated to a national system under the control of the national ministries of education.
2. There must not be enough secondary school graduates to overtax the university system.
3. There must be an economy rife with opportunities for the employment of community college graduates in mid-level jobs.
4. “The country’s political climate must be stable, as political instability works against the educational agenda: the well educated, especially if they are unemployed, challenge political regimes” (Madden, 1998).

### **Financing and Faculty Components**

Haiti can be divided into nine regions: the North with Cap-Haitien as its capital, the North East with Fort-Liberté as its capital, the North West with Port-de-Paix as its capital, the Center with Hinche as its capital, the Artibonite with Gonaives as its capital, the West with Port-au-Prince as its capital, the South-East with Jacmel as its capital, the South with Les Cayes as its capital, and the Grand’Anse with Jérémie as its capital. The plan calls for the creation of 9 community colleges, each located in one of the main regions of Haiti (FAdHiEd, 2005).

Of all the Haitian higher education institutions, the majority is funded by the state (see Tables 3-4). The rests are either financed by the private sector or benefit from international aid such as the Canadian Agency for International Development (ACDI), the French Funds for Aide and Cooperation (FAC), the United States Agency for International Development (USAID), Howard University, Segar Senghor Foundation, the Nationalist China, United Nations Education, Science, and Culture Organization (UNESCO), Ford-Foundation, and the United Nations (ONU). Some of the institutions such as the department of Agronomy and Veterinary Medicine get two or all three types of funding (Ministère de l’Education Nationale, de la Jeunesse et des Sports, 1995).

**Figure 3:** Map of Haiti with the regions where the community college will be built



**Table 2:** Principal Actors in the Pedagogical Support System

| Pedagogical Support     | MENJS Central Administration  | MENJS Dept. Directions  | Private Associations                     | Others   |
|-------------------------|-------------------------------|-------------------------|--|--|
| Curriculum              | DEF,DES,DFP, BUGEPE, INFP     | DDE                     | FONHEP                                   | KF, MA, CES, CHREPROF Deschamps, Methodist, AS |
| Textbooks               | DEF, INFP                     |                         | FONHEP                                   |  |
| Tests                   |                               |                         | FONHEP                                   |  |
| Exams                   | DEF,DES,DFP, INFP,BUNEXE      |                         | FONHEP                                   |  |
| Formation               | ENI,ENS, INFP DEF,DFP, BUGEPE |                         | FONHEP, ENI, ENS, CEEC, FEPH             | CNEH, CES, ENI, ONGs                           |
| Research Documents      | DPCE, INFP                    |                         | FONHEP                                   |  |
| Supervision and Support | BUGEP, DEF, DES,DFP,INFP      | CPR, Présco, Inspectors | FONHEP, CEEC, FEPH<br>FONHEP, CEEC, FEPH |  |

**Source:** Ministère de l'Éducation Nationale, de la Jeunesse et des Sports, 1995. (AS: statistics information.BUGEPE:the department of management of the pre-school institutions.BUNEXE:the national department of state exams.CEEC:the Episcopal commission for catholic education.CES:the center for special education.CHREPROF:the Haitian department of research and promotion of women.CNEH:the national assembly of Haitian educators.CPR:the regional.DEF:the direction of the fundamental instruction..Deschamps: a publishing company.DFP: the direction of formation and perfection.DPCE: the direction of planning and external cooperation.ENI: the normal training schools.ENS: the superior normal school.FONHEP: the Haitian foundation of private instruction.INFP: the national institute of professional training.KF: Konesans Fanari.MA: ministry of agriculture. ONG: non-governmental organizations)

**Table 3:** State University Expenditures (in millions of gourdes), 1994-1995

| Category       | 1994-95  | 94-95 cost per student |
|----------------|----------|------------------------|
| Total          | 84,552.0 |                        |
| Personnel      | 59,621.6 |                        |
| Academic       | 24,930.4 |                        |
| Rectorate      | 1.4%     |                        |
| Administration | 5.3%     |                        |
| FMP            | 8.3%     | 11,647                 |
| FLA            | 3.0%     | 11,766                 |
| ENS            | 7.1%     | 7,926                  |
| FDSE           | 11.8%    | 4,014                  |
| FS             | 14.2%    | 27,149                 |
| FSH            | 12.1%    | 14,169                 |
| FE             | 4.7%     | 5,650                  |
| INERAH         | 2.4%     | 14,184                 |
| INAGHEI        | 11.8%    | 3,145                  |
| FO             | 3.6%     | 26,595                 |
| FAMV           | 14.2%    | 38,834                 |

**Source:** Ministère de l'Éducation Nationale, de la Jeunesse et des Sports, 1998 (a). (ENS: the superior normal school (secondary teacher training school). FAMV: the school of agronomy and veterinary medicine. FDSE: the college of law and economic sciences. FE: college of ethnology. FLA: school of medicine and pharmacy. FMP: the school of applied linguistic. FO: the dental school. FS: college of sciences. FSH: college of humanities. INAGHEI: National Institute for Administration, Management, and Higher International Studies. INERAH: the institute of study and African research in Haiti)

**Table 4:** Government Spending and Projections (in millions of gourdes), 1998-2008

| Categories   | 1998-99  | 1999-00  | 2000-01  | 2001-02  | 2002-03  | 2007-08  |
|--------------|----------|----------|----------|----------|----------|----------|
| PIB/GDP      | 35,478.9 | 36,720.7 | 38,005.9 | 39,336.1 | 40,712.9 | 48,354.1 |
| State budget | 5,321.8  | 5,508.1  | 5,700.8  | 5,900.4  | 6,106.9  | 7,253.1  |
| MENJS Budget | 1,064.3  | 1,101.6  | 1,140.1  | 1,180.0  | 1,221.3  | 1,450.6  |

**Sources:** Ministère de l'Éducation Nationale, de la Jeunesse et des Sports, 1998 (c). (MENJS: the Ministry of Education, Youth and Sports. PIB: the internal net product)

Foreign assistance varies from one year to another and is difficult to measure because many of the activities of non-governmental and voluntary organizations do not report to official authorities. Determining the amount of money invested in education by all contributors over a certain amount of time is necessary in order to make predictions about financing an educational system in Haiti. The government of Haiti spends 20% of its budget on education (Tables 2-4).

**Table 5:** Educational Background of High School Teachers and University Professors

| IES    | Haiti (%) | Foreign (%) | Total |
|--------|-----------|-------------|-------|
| UEH    | 33.2      | 66.8        | 561   |
| IpuExt | 33.7      | 66.3        | 92    |
| IprES  | 34.4      | 65.6        | 529   |

**Source:** Ministère de l'Éducation Nationale, de la Jeunesse et des Sports, 1998 (c)  
(IES: Higher Education Institutions. UEH: State University of Haiti. IpuExt: External Public Institutions. IprES: Private Higher Institutions)

**Table 6:** Distribution of Higher Education Faculty by Academic Title

| IES    | Bachelor's | Master's | Doctorate | Others | Total |
|--------|------------|----------|-----------|--------|-------|
| UEH    | 33.58%     | 46.38%   | 18.37%    | 1.67%  | 539   |
| IpuExt | 48.17%     | 22.63%   | 19.71%    | 9.49%  | 137   |
| IprES  | 41.63%     | 41.19%   | 16.08%    | 1.10%  | 454   |

**Source:** Ministère de l'Éducation Nationale, de la Jeunesse et des Sports, 1997 (c)  
(IES: Higher Education Institutions. UEH: State University of Haiti. IpuExt: Foreign Public Institutions. IprES: Private Higher Institutions)

**Table 7:** Distribution of Higher Education Faculty by Status

| <b>IES</b> | <b>Part-Time Faculty (%)</b> | <b>Full-Time Faculty (%)</b> | <b>Total</b> |
|------------|------------------------------|------------------------------|--------------|
| UEH        | 94.6%                        | 5.4%                         | 780          |
| IPuExt     | 85.4%                        | 14.6%                        | 137          |
| IPrES      | 90.0%                        | 10.0%                        | 529          |

**Source:** Ministère de l'Éducation Nationale, de la Jeunesse et des Sports, 1997 (c)  
(IES: Higher Education Institutions. UEH: State University of Haiti. IPuExt: External Public Institutions. IPrES: Private Higher Institutions)

The faculty represents a fundamental component of any higher education system, since it is expected to perform all three functions of the university: research, teaching, and community service, which themselves define the intrinsic value of a university and its rank compared to other institutions (Ministère de l'Éducation Nationale, de la Jeunesse et des Sports, 1997 (c)). The need for an economic analysis of education is pivotal in countries where resources are limited and where competition for those resources is high (USAID, 1987). The educational background of the faculty is critical to the success of any academic system (Tables 5 to 7). In Haiti, teachers of the primary schools are graduates of the Ecole Normale d'Instituteurs with Bachelor of Science degrees in education (Diplôme de Fin d'Études Normales). A Bachelor of Science degree in elementary education (Brevet Élémentaire du Premier Cycle) or foundations of education (Brevet d'Enseignement Fondamental) and an entrance examination is required for admission. Students with "Baccalauréat I" can enter the one-year teacher-training program instead.

Secondary schools teachers are graduates of the same program with a bachelor of science in education (Diplôme d'École Normale Supérieure) from, the Faculty of Letters and Pedagogy of the University d'Haiti. Students with the Baccalauréat II take an entrance examination for the three-year program (The British Council, 1991). Most faculty members are employed on a part-time basis and must work in different universities to increase their incomes. The 1,446 professors at the universities are university graduates. Seventy percent of them are part-time professors and visiting international professors recruited by non-governmental international organizations (Ministère de l'Éducation Nationale, de la Jeunesse et des Sports 1997b).

Even though the 1987 Constitution recognizes the autonomy of the university and grants it the power to produce and develop knowledge, the true power of an institution comes from the qualifications of its academic personnel. In Haiti, the academic level of the professors may limit the universities' ability to utilize the power granted by the Constitution in a manner that benefits the student, the university, or the state. Most Haitian students who come to the community colleges will be from a European-based educational system, except for those coming from the American institutions in Haiti. The Haitian Constitution guarantees the right to tuition-free education. Since an associate's degree in a Florida community college is transferable in most universities and colleges in the United States of America, it is sufficient for the Haitian community college system to meet the standards of the Florida community colleges.

### **Cost of Community College**

To predict the cost of community college in Haiti, the difference between Haitian and American secondary education is computed and applied to American community college (Becker, 92). Public and private expenditures per student on educational institutions in U.S. dollars in 1995 were as follows: (a) \$6,151 in K-12 and (b) \$16,262 in higher education in the United States. In Haiti, the costs were (a) \$512 in K-12 and (b) \$1,549 in higher education. The middle alternative projections of expenditures per students in U.S. K-12 and community colleges are \$6,742 and \$7,487 in 2000, \$7,306 and \$8,097 in 2005, and \$7,622 and \$8,451 in 2008. In the middle alternative projection, current-fund expenditures are projected to reach \$28.7 billion in 2007-2008, and expenditures per student are projected to increase to \$8,451 (National Center for Education Statistics, 1998). Expenditures are projected to

increase in K-12 institutions. In the middle alternative projection, expenditures per student are projected to be \$674 in 2005 and \$703 in 2008 in Haitian community colleges.

### **Organization and Administration of a Community College**

The organization of an institution for governance and administration must coordinate the various resources of the institution effectively to accomplish the goals (Knowles, 1970). Separation of responsibility between governance and administration, policies, and procedures will help decision-making about needs, efforts, and results. Based on the surveys of the high school juniors and seniors, professionals, and owners of industries and businesses, the Haitian community colleges must offer a variety of programs that acknowledge students' achievements and abilities. The type of curricula recommended by the respondents follows. The 31-item instrument was categorized into eight groups: (a) university-transfer programs consisting of courses parallel or equivalent to those offered by universities themselves during the first two years of a four-year degree program; (b) vocational and trades training programs intended to lead directly to employment by graduates who are job-ready and apprenticeship training programs developed in cooperation with employers and unions for trades that require specific types of work preparation; (c) remedial education should be offered for those who have an interest in and aptitude for the various programs offered, but who do not have the requisite academic background; (d) career, technical, and para-professional programs intended to prepare graduates for employment at technical, mid-managerial, or professional assistant levels; (e) contract programs that help develop close ties with the businesses and industries in the region; (f) programs that attract new industry in Haiti were also recommended by professionals; (g) programs that assist small business was recommended by professionals; and (h) general academic programs, such as labor studies, women's studies, or interdisciplinary programs, with courses not intended for transfer to a university but responding to a locally recognized need for post-secondary instruction of an academic nature, rather than job training.

A plan for building the community colleges will have to take into account the needs of the community and the culture of the region. Each community college should include, but not be limited to, a central administration building, laboratories, a library, a dining center, a nursery, and sport centers. Specific regulations and requirements in the areas of health and safety should be included in the planning process of community college building design. Each community college building should be individually planned to house specific programs and be adaptable to curriculum change in the future. A planning committee should be organized, with the function of producing written recommendations to the community college board, expressing the educational needs and desires of the citizens of the community, and the program for achieving them. As a minimum, four areas must be studied to produce a sound building program for the community: (a) the educational program; (b) the evaluation of existing school plants; (c) financial resources; and (d) future enrollments.

### **Conclusions and Recommendations**

Haitian higher education is in urgent need of profound reform (Ministère de l'Éducation Nationale, de la Jeunesse et des Sports, 1997). In this plan, are recommendations for community college programs that are based upon an analysis of a survey and questionnaires administered to 568 Haitian high school juniors and seniors, 27 owners of businesses and industries, 27 educational leaders, and 21 other professionals. This plan includes a recommendation to the Haitian Legislature, and the organization and administration of the community college system.

The development of a system for community colleges in Haiti must be a legal mandate. A plan for the creation, organization, control, and financing of the community college system must be approved by the Haitian Legislature. The Ministry of Education must charge a division or board to oversee the functioning of the community colleges and (a) supervise their activities, (b) evaluate their progress, and (c) allocate the necessary funds for their development. The results of these evaluations

and reports must be made known to the general public (Ministère de l'Éducation Nationale, de la Jeunesse et des Sports, 1996). The language used in writing the criteria of a community college system in Haiti must correspond to international standards in order to facilitate interactions between the community colleges within Haiti and abroad.

The community colleges will guarantee quality in higher education in Haiti that is based on principles of ethics, competency, and performance and that is committed to working for the development of Haiti. The community colleges will not be linked to any political party. The community colleges will be open to all political views and religious beliefs. Democratic education in Haiti requires the creation and development of a community college system (Soder, 96). This study provides educational leaders in Haiti with a viable community college model that can be developed in Haiti.

The proposed model is based on the analysis of the Haitian educational system, including a survey of high school juniors and seniors, a questionnaire for business owners, and a questionnaire for Haitian professionals and educational leaders. This study helped determine the level of satisfaction with the current Haitian educational system and the level of interest for a community college in the chosen locale. The proposed model provides a system of education previously unknown to Haiti in the Haitian maternal language. This study provides a new educational system, consistent with the mission of the Haitian Ministry of Education and which has the capacity to meet the educational needs of the Haitian people.

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# **Improving Development Programming in Nigeria Through the Sustainable Livelihood Approach: Rationale and Challenges for Pro-Poor Policy**

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## **Abstract**

Development policies are made based on assumptions about the needs of people, the constraints facing them and their potential response to incentives, regulations and opportunities. This has led to the formulation of several conceptual approaches for planning and analysing development issues. One of such approaches in recent times is the sustainable livelihood approach. This approach considers that for development to be enduring, it should be people centred, non-sectoral and based on the multi-dimensional reality of the multiple problems faced by people in their daily efforts at achieving a satisfactory living given the complex social and institutional environment in which they operate the approach is considered as newly evolving and, as such, one in which new discoveries are possible. This paper attempts to contribute to this discovery by considering the import of emerging consensus on the sustainable livelihood approach for pro-poor development programming using Nigeria as a reference case. Appropriate recommendations were also offered.

## **Introduction**

Development policies are made based on assumptions about peoples needs, constraints facing them and their potential response to incentives, regulations and opportunities. Hence, policies are more effective when policy makers and practitioners have clear understanding of the complex contexts and situations which policy relates to. In turn, the outcomes of policies are themselves dependent on the choices, preferences and constraints faced by the targets of development policies (Department for International Development, DFID, 2003). To be effective therefore, development must be anchored on appropriate conceptual pillars and policy framework.

A conceptual approach for planning and analysing development issues that has gained wide popularity in recent times is the livelihood approach (Seeley, 2002). Kaag et al (2003) sees the livelihood concept as an approach that is “used mostly as a sensitizing concept indicating an approach to poverty issues that aims to be people-centred, non-sectoral and grounded in the multi-dimensional reality of daily life”. While Conway, Moser, Norton and Farrington (2002) opine that livelihood approaches are concerned with “the practical means of development such as improving the level and reliability of household entitlements to material goods and services”.

Livelihood analysis helps to improve understanding of “what is really happening in people’s lives; what enables some, and not others, to escape from poverty and how people are affected by policy. It assumes that to design better policy it is essential to understand the complex reality facing the poor” (DFID, 2003). While it has now become popular, the livelihood approach is, in fact considered by many as a concept that is presently still evolving and in which “there are still ways forward to be explored” (Kaag et al, 2002:1).

This paper attempts to contribute to the exploration of the “ways forward” in livelihood studies especially as it relates to its usefulness in the policy process. The paper provides an overview of current thinking in livelihood studies, and highlights the import of emerging consensus on the concept, for pro poor development programming in developing countries especially Nigeria. The paper highlights some of the areas in which the livelihood thinking can be useful for pro poor development programmes and how it can be useful. Appropriate recommendations were also offered.

### **Forms, Features, Rationale and Dimensions of the Livelihood Paradigm**

Although the emergence of the term livelihood in economics dates back to the 1940s (Kaag et al, 2002), it was only in the late 1980s/early 1990s, that it emerged as an integrated approach to development research and policy (Cameron, 2003). Since then, it has been used by scholars in different disciplines and background to deal with a diversity of themes and issues on development essentially from the perspective of what it takes for people to make their living given the constraints imposed by their environment. It is thus primarily a micro economic perspective to the analysis of development problems given a particular social and institutional environment. It is interested in the “microanalysis of household and communities but within the context of dynamic macro factors: social, economic, political, physical and environmental” (DFID, 2003).

The basic characteristics of livelihood approaches include:

- (i) a consideration of development problems and processes by starting from an understanding of the household and the resources available to it;
- (ii) a recognition that livelihood strategies and context varies within and between households;
- (iii) a focus on the dynamics of household well-being and the adoption of a multi-sectoral perspective to development analysis;
- (iv) a focus on the institutional context (economic, social and political relationships governing production, exchange and accumulation) as determinants of people’s livelihood strategies (Conway, Moses, Norton and Farrington, 2002; Kaag et al, 2002; Farrington, Christoplos, Kidd and Beckman, 2002 and Farrington, 2001).

In the livelihood approach, livelihood connotes the “means, activities, entitlements, capabilities and assets” required for people to make their living or by which they actually make a living (DFID, 2002 and Cameron, 2002) and the object is usually how to achieve a “sustainable livelihood”. Sustainable livelihoods are livelihoods that are “able to cope with and recover from shocks and stresses” through strategies that are economically effective, ecologically sound and socially equitable (Cameron, 2005).

Three basic and interrelated dimensions of sustainable livelihood are discernible:

- (i) To achieve sustainable development is a development objective; the objective being how to maintain people’s ability to achieve a satisfying level of living and improve on it over time.
- (ii) Sustainable livelihood is an analytical tool for understanding the factors influencing people’s ability to enhance their livelihoods, and
- (iii) It is a conceptual approach to policy formulation. As a concept, it pursues development objectives by combining its analytical framework with a set of standards or principles on what development should focus on and how it should be carried out (Kaag et al, 2002; Farrington, 2001).

Several but similar models of the livelihood approach exist due to the fact that most understanding of the concept are based on the work of development institutions such as the Department for International Development (DFID), Institute for Development Studies (IDS), OxFAM and to a lesser extent, the World Bank. A popular model however is the DFID's Sustainable Livelihood Framework (SLF). In the SLF, people are conceptualized as having five different sets of capital (natural, physical, social, financial and economic resources called livelihood assets) which they use to create livelihoods, reduce vulnerability to poverty and food insecurity (among others), and to improve their ability to cope with short term and long term disturbances to their livelihoods. A sixth livelihood political capital has also been suggested (Baumann and Sinha, 2001).

The livelihood assets constitute the building blocks for livelihoods and their abundance or lack determine people's ability to achieve their livelihood outcomes which usually include to realise more income, improved food security and increased well being among others. The framework opines that people pursue their preferred livelihood outcomes by drawing on their capital assets to pursue a variety of livelihood strategies "based on their preferences and priorities, and the policies, institutions and processes that impinge on their everyday living".

Thus, the achievement of livelihood outcomes depend on the interactions between a number of macro and micro variables. At the macro level, such determinants of livelihood outcomes include:

- the environmental and economic trends shocks and cycles affecting households and over which they have no control. This is referred to as the "vulnerability context";
- levels of government and private sector called transforming structures and institutions, policies, etc (transforming processes) that affect households and help determine the economic opportunities open to them.

At the micro level, the determinants of livelihood outcomes are:

- livelihood assets (such as land, vegetation, cash, credit, remittances, skills, knowledge, good health, networks of friends and relatives, patrons and Community Based Associations (CBAs), infrastructures – good roads and communication facilities, housing etc, political capital, power relations, access to and involvement in centres of political administrations etc;
- livelihood strategies – the particular mix of economic activities that households choose based on opportunities open to them (Orr and Orr, 2002; Baumann and Sinha, 2001; Boyd et al, 2000).

Livelihood strategies for responding to the vulnerability context can generally be elaborated in three ways (Scoones, 1998) viz:

- intensification - using available resources more intensively
- diversification - expanding the households portfolio of income generating activities or the relative share of different activities in a portfolio
- migration - seasonal or permanent movement to other (usually urban) areas in search of better livelihood. Recent experiences suggest that inter country migrations usually from the LDCs to Europe/USA may be very important.

Livelihood strategies may be aimed at:

- Surviving - prevention of destitution/death
- Coping - short term minimization of the costs of livelihood shock
- Adapting – adjusting to disturbances to livelihoods in the long term
- Accumulating – increasing the stock of available livelihood assets

Survival/coping strategies are defensive and reactive strategies that do not build up the poor's access to long term assets while adaptive and accumulative strategies are positive and proactive (Orr and Orr, 2002).

## **The Rationale and Policy Imperative of the Livelihood Approach**

The livelihood approach is generally acknowledged as an important new approach to development analysis that consciously attempts to overcome some of the deficiencies associated with most other planning approaches. The major point of reference here is that the approach:

- (i) focuses attention on the diversity of poverty and multidimensional nature of development problems;
- (ii) emphasized that the poor themselves are important, imbued with agency and should thus be active participants in rather than passive recipients of development policies;
- (iii) facilitates detailed analysis of the factors constraining or enhancing livelihood opportunities and emphasizes their interrelated nature;
- (iv) draws attention to the complex manner through which people construct their livelihood and thus offer a more holistic view of the combination of resources that are important to the poor;
- (v) offers opportunities for assessing the roles of non-quantifiable variables such as social claims and power relations in development;
- (vi) emphasizes the final ends of development and not just the intermediate goals. It thus emphasizes that developments should be about people.

Unlike the unitary and structural approaches such as the macro economic and basic needs approaches, the sustainable livelihood approach emphasize that the poor are imbued with agency and capability (that is, they are active decision makers not passive victims of their conditions) and are therefore actively shaping their lives given the context in which they have to make a living. Such a view focuses on the “strengths rather than the needs” (Murray, 2000) of the poor and also implies that poverty elimination will be achieved only if external support focuses on what matters to people and complement rather than supplement their current livelihood strategies. This is particularly important when designing support activities that aims to build on the strength of the poor (DFID, 2003).

In addition, the sustainable livelihood approach incorporates in its analysis, many factors and relationships that conventional reductionist strategies often ignore. For example, individuals and rural households are seen as drawing their livelihood from a basket of combinable livelihood strategies (in which agriculture is only one) rather than being viewed solely as agriculturalists as is often done in most reductionist approaches. The importance of this is crucial given that it has been estimated that the share of non-farm income in farming families often exceed 40% while non farming population of rural societies may be up to 30 – 50%. The failure to incorporate this into policy formulation can lead to policy failure.

In a similar vein, by recognizing not only income but also food security, well-being, sustainable use of the NR base etc as outcomes of livelihood actions, the approach provides a more realistic framework for assessing the direct and indirect effects of policy on people’s living conditions than the traditional approaches, which often consider desired outcome of people’s actions as being aimed solely at generating more income or alternatively, at increasing farm productivity (Cameron, 2005: Adato and Meinzen-Dick, 2005). As a consequence of the two factors above, the approach enables relationships between relevant factors to be analysed at different levels (micro, meso and macro levels) thus facilitating better prioritisation and sequencing of interventions and policies.

Most importantly, the sustainable livelihoods approach offers a way for incorporating the effects of non-economic and often non-measurable factors into development planning. Such factors as conflicts, clan and kinship systems, community values and beliefs and the extended family greatly affect the pattern of asset sharing and decision making in many developing countries especially in the rural areas and need to be countenanced if policies are to be effective. As Adedeji (1989:261) noted:

*“Although economists have always focused on the role of the factors of production – natural resources, labour, capital and enterprise – in bringing about development, there has always been the realization, no matter how vague and hazy, that non-economic, non-quantifiable or not so quantifiable factors – social, political, cultural, psychological and institutional – are*

*involved and indeed crucial in the development process... What is debatable is the realism with which...their logic and policy imperatives are always reflected in the practical application of economic theorizing and thinking”.*

The sustainable livelihood approach offers a realistic, systematic and practical framework for analyzing these factors and incorporating them into development policies. This has become important in recent times given the failure of growth based development theories over the past 40 – 60 years to bring about the transformations desired in the economics and lives of people in several developing countries.

There is the realization nowadays in development circles, that development is only meaningful if it directly touches people’s lives allowing them to enjoy long, healthy, creative and productive life (UNDP, 2002; Seers, 1972). By focusing on people’s entitlements, capabilities and vulnerability context, livelihood approaches such as the sustainable livelihood framework provides a comprehensive analytical tool for identifying the particular problems associated with human development in context specific situations and the modalities for overcoming them.

## **Relevance of the Sustainable Livelihood Approach to the Understanding of Nigeria’s Development Problems**

In Nigeria, there are a number of development issues that have over time proven intractable, complex in nature and difficult to resolve. These include, inter alia, the issues of corruption for which Nigeria is internationally recognized as one of the most corrupt; ineffective management of the nation’s natural resources base which has created a real crisis in the Niger Delta Area of the country; failure of economic reform programmes to significantly improve the fate of the masses and extensive internal and international migration among both the young and the most skilled groups.

### **Corruption**

Corruption is pervasive in Nigeria, the country consistently being regarded as one of the most corrupt nations in the world. Widespread corruption impedes the effectiveness of social spending and macroeconomic programmes, distorts policies, misallocate aids, inhibits effective targeting of programmes, weakens the implementation of plans, creates allocative inefficiency and hinders the optimization of public welfare (Fatula, 2005; Public Services International, PSI, 2003).

There is thus a need for explicit consideration of corruption as an interacting variable in development policy. This would facilitate an identification of those implementation strategies that can withstand the constraints posed by such rent seeking behaviour and an understanding of how policy benefits from them.

Both institutional and legislative mechanisms have been attempted for tackling the corruption problems in Nigeria over time, albeit to no avail. The most recent of these was the establishment of anti-corruption agencies namely the ICPC and EFCC in 2001 and 2003. While these institutions especially the EFCC have recorded some significant successes, much is still left to be desired. These mechanisms are reactionary designed to catch and punish offenders after the offence might have been committed. If the problem of corruption is to be effectively tackled a pro-active approach is required. Such an approach will also work best when built into the policy process.

### **Natural Resource Management**

With regard to the management of natural resources, it is pertinent that the issues of access to and control of natural resources (especially crude oil which generates over 90% of government revenue) stands at the heart of the crisis in the Niger Delta region that is now threatening the very corporate existence of the nation. Development can only be actualized in an atmosphere of peace and this is only possible where the people are given increased access to the natural resources in their domains and its

benefits. In the Niger Delta region, it is a known fact that environmental problems consequent of oil exploration activities creates challenges for the people polluting their environment and denying them of access to and productive utilization of their land and water resources.

Yet, these natural resources are the critical resources for the poor and can provide a vehicle for promoting and consolidating the principles of participation, accountability and representation in governance. The ability of the poor to achieve sustainable livelihoods is often dependent on their ability to access the natural resources base and available common goods. There is thus the need to integrating Natural Resource Management into development programmes through budgetary processes, institutional changes, capacity building and appropriate rural investments (Lippold, 2003). The sustainable livelihood framework provides a tool that can be used to analyze and integrate these factors into development programmes.

## **Reforms**

A major criticism of government's recent economic reform programme in Nigeria is the assertion that government fails to respond to the (undesirable) effects of these reforms on the citizens. In the usual local parlance, the reforms are said to "lack a human face". There seems to be a rather inadequate perception by the government of the effects of reforms at the local level. The sustainable livelihood framework can be useful in gaining this understanding and engendering greater public support for reforms.

## **Migration**

Over time Nigeria has attempted to control the problem of extensive migration into the urban centres. Various programmes were initiated to encourage the youths to stay and be productively engaged in the rural areas. Such programmes include the Integrated Rural Development Programme, the National Directorate of Employment Programme, Better Life for Rural Dwellers Programme etc, but all of these failed. Not only is intra national rural-urban migration especially into Lagos, the former political and main commercial city a problem, hundreds of thousands of Nigerian youths in the productive age as well as highly trained and skilled professionals are also daily migrating mostly illegally and often under dangerous conditions, into Western Europe and North America. This is also a problem that could be well understood through livelihood analysis since migration is often a product of lack of access and opportunities to societal resources and productive ventures.

## **Challenges for Pro-Poor Policy**

The ultimate purpose of livelihood analysis is to inform policy. The policy implications of findings from livelihood studies provide "reality check" on the outcome of intended policies and thus indicate areas in which policy changes may be required (DFID, 2003). Given the problem of widespread poverty in many LDCs it is essential that development policies have a pro poor orientation. As Cabral, Farrington and Ludi (2006) noted, "if the poor are to be more fully included in the processes of development, larger questions of how to make public policy and expenditure more pro-poor will need to be addressed". Development strategies that are pro poor must:

- (i) lead to pro poor growth
- (ii) ensure reduction in vulnerability to poverty.

It must, in addition, increase participation of the poor in the policy formulation process if it is to be sustainable. Pro poor growth refers to (economic) growth "that enables the poor to actively participate in and significantly benefit from the economy" (Osinubi, 2003).

Economic growth and poverty reduction lie at the heart of development. However, the structure of economic growth is important if it is to aid rather than limit development. As the economies of many Less Developed Countries become liberalized, governments tend to (by omission or

commission) adopt policies that are biased in favour of the rich. This is because in a market economy the non-poor has inherent advantages in human and material capital over the poor and market forces induced growth generally benefits the non-poor proportionately more than the poor. Thus, to foster the overall well being of the populace government must deliberately pursue policies that will reduce this gap. This requires strategies that are deliberately biased in favour of the poor so that the poor benefits proportionately more than the rich. Such policies must ensure that economic growth improves the income of the poor and makes use of their skill while addressing the problem of inequality since growth enhances rapid poverty reduction when inter alia, it takes place in areas that are predominantly poor and is driven by labour (particularly unskilled) intensive activities (Kepe, Ntseheza and Pitchers, 2001).

Two sets of strategies are required for pro poor growth viz:

- (i) Removal of institutional and policy-induced biases against the poor.
- (ii) Adoption of direct policies to raise the income of the poor and reduce inequality (Osinubi, 2003).

The livelihood framework provides a useful analytical tool for identifying the institutional and policy induced constraints to pro poor growth, for analyzing the effectiveness of measures aimed at removing these constraints, and for determining the impact of economics and wealth relationships. It thus provides a basis for policy formulation on the one hand and for policy control on the other.

There are at least three areas in which challenges will have to be resolved if the livelihood method is to be used to formulate policies in Nigeria. These concerns:

1. The definition of the goals of development.
2. The design and management of programmes.
3. The design and re-orientation of institutions concerned with the formulation and implementation of policies.

## **Development Goals**

The key goals of development in Nigeria as enunciated in the several development plans and economic policies that have been formulated over the years are to:

- raise per capita income
- reduce unemployment
- alleviate poverty
- reduce inequality
- diversify the economy
- promote self-reliance and
- develop the agricultural sector.

Yet, it has been argued that in reality little attention is paid to the above “ultimate” goals of development. Rather, Nigeria’s development managers have largely pre-occupied themselves with the success or otherwise of intermediate indicators of economic performances such as GDP growth rate, inflation rate, interest rate, subsidy rates, external reserves etc. Because of the extreme pre-occupation with these indices little attention is paid to how policy affect poverty, employment, inequality and social well-being of the majority of the people, which are the real ends of development, leading to the loss of “positive participation, support and commitment of the people” (Phillips, 1997).

Due to its emphasis on local participation and its focus on the household as the reference unit for analysis, the livelihood approach can be useful in shifting policy makers attention to the real objectives of development which in the livelihood framework, are to generate more income, increased well-being and reduced vulnerability etc. Thus, the sustainable livelihood framework will ensure that policy actually addresses those problems really affecting people’s lives. These final ends of development are recognized in the Millennium Development Goals (MDGs), which Nigeria is committed to, as poverty reduction, improvements in health (infant and maternal mortality) and education (improved literacy). The sustainable livelihood framework will also help to highlight the



importance of sustainable utilization of environmental resources as a desirable end of development efforts.

### **Institutional Structure**

Institutions are the norms, rules, roles and structures developed by a group of people to guide and organise its activities. It is generally divided into two; formal and informal. Formal institutions are organized and includes government departments and agencies, enterprises, formal associations etc while informal institutions are unorganized, subtle and elusive. They include structures like the family, customs, belief systems etc of a group of people. Institutions, formal and informal, matter in policy making. Formal institutions inform the policy process, help in capacity building, offer policy advice and in some cases actually take part in policy formulation and implementation. In fact, the economic policies of many developing countries have since the 1980s come to be guided by the policy prescriptions of the Bretton Wood Institutions, the International Monetary Fund (IMF) and the World Bank.

The institutional arrangement for poverty eradication in Nigeria is under the National Poverty Eradication Council (NAPEC) with the National Poverty Eradication Programme (NAPEP) headed by a National Coordinator as its main Agency. The activities of NAPEP is coordinated at all the tiers of government – national, state and local. The NAPEC along with its sub-committees formulates, implements and coordinates all poverty alleviation activities in the country. Yet, the Independent Policy Group concluded that “even though the work of these institutions relate to the poor, the proportion that gets translated to poverty reduction is small” (IPG, 2003:12) which may be indication that the approach adopted by this institution is inappropriate.

It has been contended that the roles of informal institutions such as the family, clan and kinship relationships etc in moderating the effect of policy, especially in the rural areas, are often not explicitly considered in the policy process. Yet, these institutions significantly influence people’s responses to policy and their participation in the development processes and could constitute an effective mechanism for the delivery of development programmes. The sustainable livelihood approach provides a mechanism for internalising the effects of such informal institutions into the development process.

### **Programme Design and Management**

The poverty and inequality situation in Nigeria is a paradox given her abundance of natural resources especially oil. Rated the 6<sup>th</sup> largest exporter of petroleum in the world, about 70% of Nigerians live on less than \$1 a day while over 90% live on less than \$2 a day. The poorest 10% of the population holds only 1.6% share of the national income while the poorest 20% holds just 4% (UNDP, 2004). The Nigerian “Vision 2010” Committee noted that this situation arose inter alia, from the fact that programmes to alleviate poverty are poorly designed and implemented.

Phillips (1997:11) averred that in Nigeria, economic policies have failed at virtually every stage of the policy management process including the stages of:

- identification and articulation of the problem
- specification of the objectives and targets
- design of strategies and policy instruments
- implementation, evaluation and feedback.

He noted further that these have turned Nigeria from an under developed country to a “developing” country.

Development programmes in Nigeria are generally non-participatory in nature and where they are, they are only cosmetic and ineffective, and thus constitute one of the main reasons for the failure of such programmes (Centre for Advance Social Sciences, CASS, 2003). Three issues are germane if the poor are to be more fully included in the processes of development namely, how to strengthen their voice, improve their access to goods, services and rights, and how to ensure that public policies and

expenditure are more pro-poor. The Independent Policy Group (IPG) in Nigeria while reviewing the poverty eradication framework in place in the country came to the conclusion that:

*“poverty can indeed be reduced when poor people have a chance to influence the policy process. Policies that are developed with the full participation of the people who are considered as partners, not mere recipients, are more likely to achieve their goals than those that are top down” (IPC, 2003:11-12).*

Because of its participatory approach, the sustainable livelihood method can be very useful in providing the poor the required access to policy development.

## **Conclusion and Recommendations**

Formulating enduring development policy requires an understanding of people’s livelihoods. One of the key analytical frameworks that can provide this understanding is the Sustainable Livelihood Framework (SLF) which avers that people pursue their preferred livelihood outcomes (i.e. development goals) by drawing on a range of capital assets (livelihood resources) to pursue a variety of livelihood strategies that are influenced by people’s preferences and priorities, policies, and formal and informal institutions and processes that impinge on their daily lives. Sustainable livelihood approaches identify the current livelihood strategies and objectives of the poor in the context of what makes them vulnerable to poverty and the influence that policies, institutions and processes as well as current levels of access to assets and entitlements have on their ability to achieve their livelihood outcomes. The sustainable livelihood framework can therefore be useful in devising policies for overcoming identified specific development problems facing developing country like Nigeria.

In furtherance of this, it is recommended that:

- (i) Improved funding should be instituted for livelihood researches in Nigeria to further expand understanding on the nature and determinants of people’s livelihood in the different situations and regions of our country and thus provide an empirical source of relevant knowledge and data for development planning and poverty reduction programmes.
- (ii) In the realms of rural development, there should be a shift from “agricultural extension” to “livelihood extension” so that people could be assisted to improve their economic status based on their diverse livelihood sources rather than based on agriculture only. In other words, extension for rural development should be extended to other income generating activities in the rural areas other than agriculture alone.
- (iii) Researches should be commissioned on the effect of the on-going economic and social reform programme of government on people’s livelihoods as a basis for developing appropriate palliative measures to these reforms.
- (iv) Information support and capacity building should be given to policy makers and policy advisers to aid their understanding of the livelihood approach and how it can be useful in development programming.
- (v) Enabling environment should be created for the reorganization of public institutions and agencies to ensure local representation and greater local participation in their programmes.

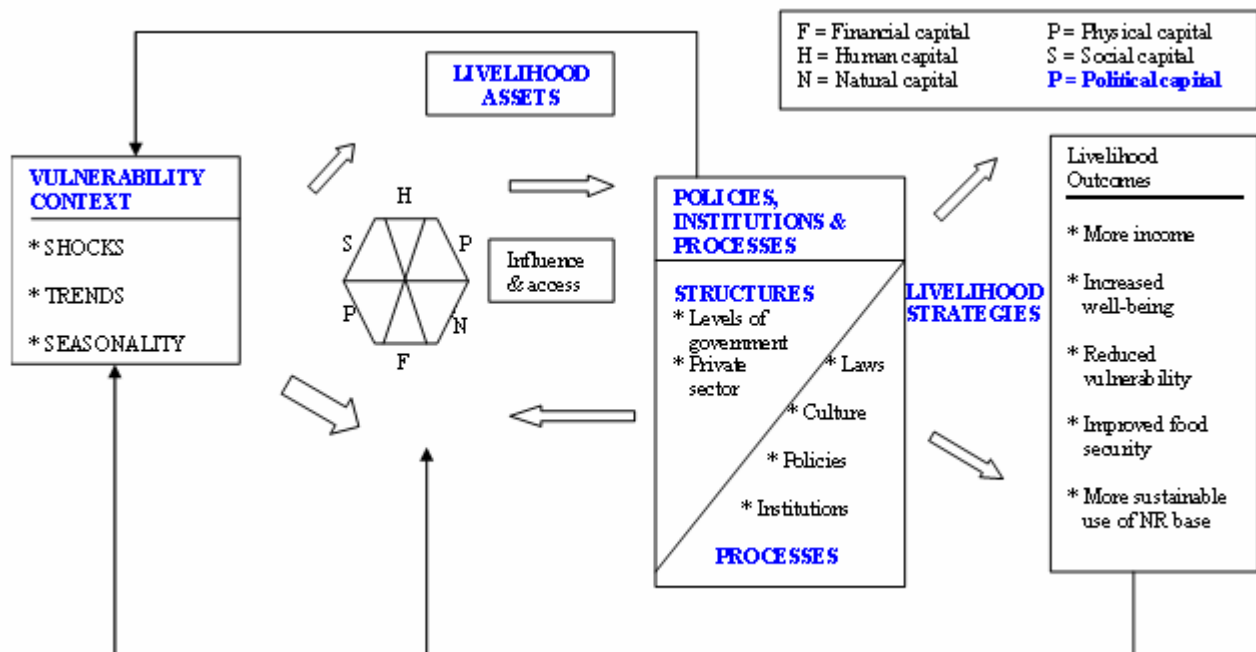
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## Appendix

Figure 1: The DFIDs Sustainable Livelihood Framework\*



\*With the inclusion of political capital as adapted by Baumann and Sinha (2001)  
 Source: Baumann & Sinha (2001)

## **Some School Environment Factors as Correlates of Mathematics Achievement in Southwestern Nigeria**

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### **Abstract**

The study found out the relationship among school environment factors (professional interest of teachers, adequacy of resource materials, workload, participation in development programmes, class size, teachers' attitude) and achievement in secondary school mathematics. The study is an ex-post facto type, which adopted descriptive survey design. Three research questions were answered in the study. The subjects for the study were one thousand seven hundred and fifty (1750) senior secondary two mathematics students and one hundred and twenty three (123) mathematics teachers selected from two secondary schools from each of the six senatorial districts in the Southwestern part of Nigeria. Three research instruments were used for data collection. The data were analyzed using multiple regression analysis. The findings revealed that there was significant positive multiple correlation among the six independent variables and the dependent measure-student achievement in mathematics ( $p < 0.05$ ). The independent variables, when taken together also accounted for 4.4% ( $R^2 = 0.044$ ) of the total variance in the dependent measure. Two out of the six variables have significant contributions to the prediction of achievement in mathematics. These variables are professional interest of teachers and adequacy of resource materials. The study established the fact that professional interest of teachers and adequacy of resource materials are variables that could predict achievement in mathematics. The importance of these variables to the prediction of achievement in mathematics points to the areas that our policy makers need to pay more attention to in addressing the issue of mass failure in mathematics at the secondary school level in Nigeria.

**Keywords:** School Environment factors, Achievement in mathematics, Southwestern, Nigeria

### **Introduction**

Mathematics is the study of patterns and relations expressed in numbers or symbols and it is the science of numbers, quantity and space. It is fundamental to the understanding of basic science that is necessary for the understanding of most other fields. The usefulness of mathematics in everyday life is obvious in areas like measuring, estimating the prices of goods when shopping, cooking, sewing and woodwork.

Kerlinger (1985) describes mathematics as the language of science while Okebukola (1992) refers to mathematics as the central intellectual discipline of the technological societies. Since mathematics is the language of science, it is important to give adequate attention to its teaching and learning in our schools. Fehr (1996) opined that mathematics has been found to be very important because it is needed for all scientific and technological research and technical training. According to Toumasis (1993), mathematics knowledge is essential not only for living effectively in the society but also for making useful contributions towards the development of one's environment. Skemp(1989) sees mathematics as a particularly powerful and concentrated example of the functioning of human intelligence. If we accept this view, it follows that learners at any age would not succeed at learning mathematics unless they are taught in ways that would enable them to bring their intelligence into use as they learn.

The importance of mathematics in the school curriculum has made it a core subject while the Federal Government of Nigeria has also made provision for it at the Primary and Secondary school levels (National Policy on Education, 2004). Its inclusion as a core subject in the secondary school calls for the need to teach it effectively. This is because effective mathematics teaching could lead to the attainment of scientific and technological greatness. Mathematics teaching could only be result-oriented when students are willing and the teachers are favourably disposed, using the appropriate methods and resources in teaching the students. The learning of mathematics depends on the way it is presented to the learner, the way the learner actively interacts with the learning experiences presented to him and the environment within which the learning takes place. With the current increase in scientific knowledge the world over, much demand is placed and emphasis is laid on the teacher, the learner and the environment in the whole process of teaching and learning of mathematics.

In spite of the recognition given to mathematics, the subject is not so popular among majority of secondary school students in Nigeria. According to Abdullahi (1985), the results of students in mathematics in secondary schools have been poor over the decades. Adetula (1992) in his findings reported that less than a quarter of the candidates who sat for mathematics in the Senior School Certificate Examination (SSCE) conducted between 1981 and 1991 passed at credit level. Various reasons have been given by people as to the poor performance of students in mathematics. Among these are shortage of qualified and effective mathematics teachers (Akinlua, 1996); shortage of mathematics textbooks that suit the comprehension level of students in secondary schools (Fajemidagba, 1991); lack of commitment to the profession (Osafehinti, 1985); nature of the subject and nature of examination questions (WAEC, 1994); strategy used for students by teachers (Ogunniyi, 1985); poor method of instruction (Olaleye, 1997) and negative attitude towards mathematics (Georgewill, 1990). These problems have made mathematics educators to pay more attention to how to improve the teaching and learning of mathematics in schools. They have suggested a number of methods that include the use of mastery learning approach (Akinsola, 1994); problem - solving approach (Olaleye, 1997); personalization approach (Heng-Yuku and Howard, 2000); computer and text -assisted programmed instruction approach (Udousoro, 2000) among others.

On professional development programme that could enhance the productivity of the teacher, mathematics teachers should update their skills and subjects by attending mathematics seminars and workshops. This will bring them up-to-date and thus closer to the frontiers of knowledge in their special subject area. Attending workshops will also improve their teaching, which hopefully will be evident in the performance of their pupils (Bajah, 1980). Furthermore, teacher-in-service opportunities accompanied by reduced classes will enhance development and reinforcement of appropriate teaching, which will in turn facilitate student achievement in the subject area (Wisconsin, Allen and Helming 1991).

Teachers' attitude towards the teaching of mathematics plays a significant role in shaping the attitude of students towards the learning of mathematics. Onocha (1985) reported in one of his findings that teachers' attitude towards science is a significant predictor of pupils' achievement in science as well as their attitude towards science. Ogunniyi (1985) found that students' positive attitude towards

science could be enhanced by teachers' enthusiasms, resourcefulness and helpful behaviour, teachers' thorough knowledge of the subject matter and their making science quite interesting. All these factors could also be applicable to mathematics learning since mathematics is regarded as the language of science.

Reporting class size as one of the school environment factors that affect student's achievement, Bennett (1987) found that (i) smaller classes appear to result in greater achievement gains for students with low academic ability (ii) smaller classes result in higher teacher moral and reduced stress and (iii) class size appears to have more influence on students' attitudes, attention, interest and motivation than academic achievement. Wisconsin, Allen and Helming (1991) found that large class sizes and excessive responsibilities contribute to high stress levels and high levels of job dissatisfaction. This condition will in turn adversely affect students' achievement.

This study is particularly interested in examining the relationship among school environment factors (teachers' attitudes towards mathematics teaching, professional interest, participation in professional development programme, adequacy of resource materials, work load of teachers and class size) and achievement in mathematics.

### **Research questions**

The study answered the following research questions:

1. What is the composite effect of school environment factors (professional interest, participation in professional development programme, adequacy of resource materials, workload of teachers, class size, teachers' attitudes towards mathematics teaching) on students' achievement in mathematics?
2. What are the relative effects of school environment factors (professional interest, participation in professional development programme, adequacy of resource materials, workload of teachers, class size, teachers' attitudes towards mathematics teaching) on students' achievement in mathematics?
3. Which of the school environment factors (professional interest, participation in professional development programme, adequacy of resource materials, workload of teachers, class size, teachers' attitudes towards mathematics teaching) will predict students' achievement in mathematics?

### **Significance of the study**

This study is very important because it would provide insight based on empirical evidence on the factors affecting the teaching and learning of mathematics at the secondary school levels to be improved upon. It would help mathematics teachers to discover the effects of their professional interest, participation in professional development programmes, adequacy of resource materials, their workload, attitudes towards teaching of mathematics and attitude of their students towards mathematics.

The findings of this study would lead to improving the qualities of mathematics teachers, as their professional interest would be taken into consideration during their engagement in the service. In addition, the findings of the study would provide the means on how attitude of teachers towards the teaching of mathematics could be improved upon for a better enrollment of students in mathematics that would eventually lead to improved learning outcomes in mathematics.

Above all, the study would add to the pool of knowledge in the area of improving the teaching and learning of mathematics and thus serve as a springboard for further research in mathematics education in Southwestern Nigeria and beyond.

Instruments

The instruments for data collection are the following

1. Mathematics Achievement Test (MAT)
2. Questionnaire for Mathematics Teachers (QMT)
3. School Environment Questionnaire for Teachers (SEQFT)

### **Mathematics achievement test (MAT)**

This test was developed by the researchers in order to assess the level of acquisition of mathematical concepts of the students. It covers the main topics of mathematics taught in SS2 up to the third term of the school year. It consists of 40-item multiple-choice questions with 4 options A to D and was based on three cognitive levels – “knowledge”, “understanding” and “application”. It measures the dependent variable – Student Achievement in Mathematics. The table of specification for the construction of MAT is presented in Table 1. The instrument was administered on 50 students in three different secondary schools, which were not part of the sample and Kuder Richardson formular 20 was used to determine the reliability coefficient. The value obtained was 0.74.

**Table 1:** Table of Specification for MAT

| SN | Topics                     | Knowledge %;<br>Item No. | Understanding %;<br>Item No. | Application %; Item<br>No. | Total % ; Item<br>No. |
|----|----------------------------|--------------------------|------------------------------|----------------------------|-----------------------|
| 1  | Mensuration                | 8;1,23,31,37             | 8;17,25,26,39                | 6; 7,19                    | 22; 10                |
| 2  | Numbers and Numeration     | 6; 5,24                  | 6; 9,30,36                   | 4; 14,22                   | 16; 7                 |
| 3  | Plane Geometry             | 6; 8,16                  | 10; 4,11,15,21               | 4; 3,10                    | 20; 8                 |
| 4  | Equations & Inequalities   | 4; 12                    | 4; 20                        | 4; 40                      | 12; 3                 |
| 5  | Algebraic expressions      | 4; 2,34                  | 6; 32,33,35                  | 4; 38                      | 14; 6                 |
| 6  | Statistics and Probability | 4; 6                     | 8; 3,18,27,28                | 4; 29                      | 16; 6                 |
|    | <b>Total (%)</b>           | <b>32; 12</b>            | <b>42; 19</b>                | <b>26; 9</b>               | <b>100; 40</b>        |

### **Questionnaire for Mathematics teachers (QMT)**

This consists of Section A, which is made up of 10 questions dealing with the name of the school, age, gender, qualification, years of experience, number of students in the mathematics class of teachers, number of periods of teaching mathematics in a week, number of hours spent on other activities outside the formal school day like keeping students’ records up to date and administrative tasks including staff meetings with the options “None”, “less than 1 hour”, “1-2 hours”, “3-4 hours”, “more than 4 hours”. Section B consists of 14, items which deal with the attitude of teachers towards the teaching of mathematics with the options “Strongly Agree (SA)”, “Agree (A)”, “Disagree (D)” and “Strongly Disagree (SD)”; Section C has 7 items, which deal with the participation in professional development activities of the teachers like the number of hours spent attending workshops, seminars, conferences. The teacher were expected to respond by writing the number of hours in figure and how this professional development activities has helped to develop their capacity to teach some topics like mensuration, indices and logarithms, equations, inequalities, algebraic expressions, statistics and probability, with the options “None”, “little”, “quite a lot” and “A great deal”. The instrument measures the following variables: (i) Teacher’s attitude towards mathematics (Section B, items 1 to 14), (ii) class size (Section A, item 6), (iii) participation in professional development programmes (Section C, items 1 to 7), (iv) workload of teachers (Section A, items 7 to 10). The instrument was trial-tested on 40 mathematics teachers who were not part of the sample and Cronbach alpha coefficient was found to be 0.67.

### **School environment questionnaire for teachers (SEQFT)**

This instrument consists of Section A with seven items relating to teachers’ personal data like age, gender, state, local government area, school name, educational qualifications, number of years of



teaching in the school year (items 1 to 7). Section B consists of 21 items relating to the school environment of the teachers with four options ranging from Strongly Agree to Strongly Disagree. This instrument measures the following variables: (i) Professional Interest (items 1,4,11,12,13,16,17 and 19) (ii) Adequacy of resource materials (items 2,5,9,14,18 and 20) and (iii) Workload of teachers (items 3,6,10 and 21). The instrument was trial-tested on 40 mathematics teachers who were not part of the sample and Cronbach alpha coefficient was found to be 0.94.

### **Data collection**

The researchers obtained the consent of the Principals, Heads of departments, Senior Secondary mathematics teachers and the SS2 students of the schools used for the study to discuss the importance of the research and the need for cooperation. The Mathematics Achievement Test (MAT) was administered to the SS2 students and was collected back after 50 minutes. The Questionnaire for Mathematics Teachers (QMT) and the School Environment Questionnaire for Teachers (SEQFT) were given to Senior secondary mathematics teachers to respond to and was collected thereafter. Teachers of mathematics of the selected schools, two research assistants and the researchers were involved in carrying out the administration and collection of the instruments.

### **Data analysis**

The data collected were analyzed using Multiple Regression Analysis. This was used to provide information on the composite and relative contributions of the six independent variables to the prediction of students' achievement in mathematics in order to answer the three research questions.

### **Results**

**Table 2:** Distribution of Teachers according to gender, teaching experience, age and qualification

|                                     |                    |    |      |
|-------------------------------------|--------------------|----|------|
| <b>Teachers</b>                     | No response        | 11 | 8.9  |
|                                     | Male               | 65 | 52.8 |
|                                     | Female             | 47 | 38.2 |
| <b>Years of Teaching Experience</b> | No response        | 6  | 4.9  |
|                                     | 0 - 10yrs          | 68 | 55.3 |
|                                     | 11 - 20 yrs        | 34 | 27.6 |
|                                     | 21 - 30yrs         | 13 | 10.6 |
|                                     | 31 - 40yrs         | 2  | 1.6  |
| <b>Age Range of Teachers</b>        | No response        | 5  | 4.1  |
|                                     | Less 25yrs         | 2  | 1.6  |
|                                     | 25 –30yrs          | 13 | 10.6 |
|                                     | 31 – 40yrs         | 58 | 47.2 |
|                                     | 41 –50yrs          | 37 | 30.1 |
|                                     | Above 50yrs        | 8  | 6.4  |
| <b>Teachers' Qualification</b>      | NCE,OND            | 26 | 21.1 |
|                                     | B.Ed.B.Sc,B.Sc(ed) | 84 | 68.3 |
|                                     | PGD,PGDE           | 3  | 2.4  |
|                                     | M.Ed,MSc,M.A       | 9  | 7.3  |
|                                     | PhD                | 1  | 0.8  |

### **Research Question One**

What is the composite effect of school environment factors (professional interest, participation in professional development programme, adequacy of resource materials, workload of teachers, class size and teachers' attitudes towards mathematics teaching) on students' achievement in mathematics?

**Table 3:** Summary of Regression Analysis of Composite effect of school environment factors on achievement in mathematics

| Multiple R | R <sup>2</sup> | Adjusted R <sup>2</sup> | Standard Error | F ratio | Sig. F Change |
|------------|----------------|-------------------------|----------------|---------|---------------|
| .212       | .045           | .044                    | 8.3938         | .909    | .491          |

**Table 4:** Analysis of Variance

| Source of Variance | Sum of Squares | Df  | Mean Square | F    | Sig. |
|--------------------|----------------|-----|-------------|------|------|
| Regression         | 384.463        | 6   | 64.077      | .909 | .491 |
| Residual           | 8172.870       | 116 | 70.456      |      |      |
| Total              | 8557.333       | 122 |             |      |      |

\*sig. at p<0.05

From Table 3 it could be observed that there is positive multiple correlation (R =0.212) among the six independent variables. These variables are professional interest, participation in professional development programme, adequacy of resource materials, workload of teachers, class size, teachers’ attitudes towards mathematics teaching and students’ achievement in mathematics, which is the dependent variable. This implies that the factors are relevant towards the determination of the dependent measure. Also the adjusted R<sup>2</sup> value of 0.044 implied that the six variables accounted for only 4.4% of the total variance in the dependent measure. The remaining 95.6% could be due to errors and factors that are not considered in this study.

The result in the analysis of variance in Table 4 showed that the F-ratio of the regression analysis is not significant ( $F_{(6,122)} = .909$ ;  $p>0.05$ ). This shows that the R value is due to chance.

### Research Question Two

What are the relative effects of school environment factors (professional interest, participation in professional development programme, adequacy of resource materials, workload of teachers, class size, and teachers’ attitudes towards mathematics teaching) on students’ achievement in mathematics?

**Table 5:** Estimate of the Relative Contributions of school environment factors on Students’ Achievement in Mathematics

| Independent Variables (Predictors) | Unstandardized Coefficients |                | Standardized Coefficients |      |        |       |
|------------------------------------|-----------------------------|----------------|---------------------------|------|--------|-------|
|                                    | B                           | Standard error | Beta                      | Rank | T      | Sig.  |
| Teachers’ attitude                 | 0.001042                    | .107           | .001                      | 6th  | .010   | .992  |
| Professional Interest              | -.489                       | .230           | -.304                     | 1st  | -2.125 | .036* |
| Participation                      | -0.003233                   | .009           | -.034                     | 4th  | -.360  | .719  |
| Adequacy of resource materials     | 0.633                       | .317           | .292                      | 2nd  | 1.999  | .048* |
| Workload                           | 0.01829                     | .043           | .039                      | 3rd  | .422   | .674  |
| Class size                         | -0.01742                    | .007           | -.024                     | 5th  | -.246  | .806  |
| Constant                           | 14.634                      | 5.261          |                           |      | 2.782  | 0.006 |

\*sig. at p<0.05

From Table 6 above, out of the six factors, professional interest of teachers made the greatest contribution ( $\beta = .304$ ) followed by adequacy of resource materials ( $\beta = .292$ ) and workload ( $\beta = .039$ ). The fourth in the rank of contribution is participation in development programmes ( $\beta = .034$ ). The fifth and sixth contributions in order of decreasing magnitude are class size ( $\beta = .024$ ) and teachers’ attitude ( $\beta = .001$ )

### **Research Question Three**

Which of the school environment factors (professional interest, participation in professional development programme, adequacy of resource materials, workload of teachers, class size, teachers' attitudes towards mathematics teaching) will predict students' achievement in mathematics?

### **Result**

From the results in Table 5, professional interest ( $B = -.489$ ,  $t = -2.125$ ,  $p < 0.05$ ) and adequacy of resource materials ( $B = .633$ ,  $t = 1.99$ ;  $p < 0.05$ ) are the two variables that could predict students' achievement in mathematics.

### **Discussion of Results**

The findings of the study revealed that of the six independent variables that were investigated, only two (Professional interest of teachers and adequacy of resource materials) were very significant and could be used to predict achievement in mathematics. It was further revealed that 4.4% of the total variance in mathematics could be accounted for by the eleven independent variables when taken together. This figure is significant in the sense that there are many variables that could cause variance in students' achievement in mathematics. Much emphasis should be given to these six independent variables in the teaching and learning of mathematics even though only two of the variables are very significant in predicting achievement in mathematics. The remaining 95.6% difference in variance might be due to other factors not considered in this study such as students' study habit, home background, effect of peer influence, teachers' teaching style, language of mathematics, culture of mathematics learning, motivation, student relationship with teachers, poor students' background in mathematics, cultural bearings of mathematics content and parents' influence on students.

Professional interest of teachers from the results of the findings is very significant. The finding corroborates that of Chacko (1981), Ogunwuyi (2000) and Adefioye (2002). The implication of this result is that the professional capability of teachers of mathematics should be taken into consideration while engaging them in the teaching of mathematics to students. A mathematics teacher that does not have the interest of the subject at heart and is professionally incompetent will do a lot of harm to the teaching. It is therefore important that the government, in recruiting mathematics teachers, should take into consideration their professional competence and interest in the teaching of the subject and not just allow any teacher to teach mathematics for the sake of it. Non-qualified mathematics teachers who do not have the interest of the subject and the students at heart have done a lot of damage to students' learning. This should be avoided at all levels of our educational system.

The fact that all secondary school students must offer mathematics whether they have the aptitude for the subject or not, places a great responsibility on the mathematics teacher. The other subject in this category is English Language, which is also compulsory for all students. Hence, the mathematics teacher must be helped in the discharge of this onerous duty if he/she is to perform a good job by motivating him in terms of providing the necessary resource materials like adequate mathematics laboratory, good and up-to-date textbooks, commensurate remuneration and prompt payment of their salaries and allowances.

The mathematics teacher should adopt modern methodologies, which have been developed through research by mathematics educators in their teaching. They should present mathematics topic/concept by using the three level of learning, which are concrete/real life situation stage, followed by the pictorial/semi-concrete stage before finally introducing the abstraction stage, which is the ultimate goal of mathematics learning. This strategy would help in motivating students to learn mathematics as it would arouse their curiosity as they are exposed to the relevance and importance of mathematics to real life and modern development.

A further look at the results of this study shows that adequacy of resource materials is significant. These findings are in consonant with the findings of Onwu (1980), Okegbile (1996),

Wisconsin (1991), Ezike and Obodo (1991), Soyibo and Nyong (1984). The implication of this result is that a well-equipped mathematics laboratory and other resource materials could positively change teachers' attitude to the teaching of mathematics and thus make the subject to be very interesting, meaningful and exciting to the students and hence, encourage mathematical exploration and manipulation by the students.

Workload of the teachers of mathematics from the result also made some contribution to the prediction of achievement in mathematics. The implication of this result is a pointer to the reality of what is happening in the classroom. Most teachers of mathematics have an average of five periods of teaching per day. This is apart from the other duties they are engaged in, in the school like preparation of the school time-table, examination committee and other school activities. It is therefore important that mathematics teachers should be allowed to teach at most three periods of mathematics a day to be able to attend to other important duties like marking of students' class work and assignment and giving attention to individual students needs.

Based on the results and findings from this study, it could be submitted that students' achievement in mathematics is jointly and significantly influenced by these variables: professional interest, adequacy of resource materials, workload of teachers, participation in development programmes, class size and teachers' attitude.

### **Recommendations**

Based on the results from the study, the following recommendations are made.

It is recommended that mathematics teachers should adopt the guided discovery method of teaching. Learners should be guided to find out information and understand concepts through appropriate activities and questioning techniques. Students should be encouraged to discover patterns in mathematics leading to rules and formulae because giving out the rule or formulae leads to rote learning without proper understanding.

Secondary schools, Faculties of Education, State Ministries of Education, National Union of Teachers and other stakeholders in the education industry should organize periodic seminars and workshops for students, parents, teachers and school administrators designed to promote positive attitudes towards mathematics.

The government and all stakeholders in the education industry should endeavour to recruit mathematics graduates to teach mathematics at our secondary school. Non-graduate of mathematics already teaching in our secondary schools should be made to undergo a professional training in education like postgraduate diploma in education or other related educational courses. This will help them to understand the theoretical concepts of teaching and practical models of teaching methodology. Such knowledge would definitely be of immense use in enhancing the teaching of mathematics in our secondary schools.

There should be continual professional development programmes put in place by the Ministries of Education (both Federal and State), Nigerian Union of Teachers (NUT), Mathematics Association of Nigeria (MAN) for mathematics teachers, which were expected to ensure improvement towards excellence in mathematics teaching and learning. This could take the form of specific mathematics education courses offered during school vacation. Mathematics teachers who complete the courses should be awarded a certificate of completion, which should be taken into consideration in determining their promotion.

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# **Moderating Effect of Emotional Intelligence on the Relationship Between Emotional Labour and Organizational Citizenship Behaviour**

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## **Abstract**

This study examined the moderating role of emotional intelligence on the relationship between emotional labour and organizational citizenship behaviour. The sample was 380 public servants randomly selected from some ministries and public institutions in southwest Nigeria. Measures of organizational citizenship behaviour (OCB), emotional labour and emotional intelligence were administered to the respondents. Data collected were analysed using hierarchical multiple regression. Results revealed significant relationships between OCB and surface acting, active deep acting and passive deep acting emotional labour but not non-acting. Emotional intelligence significantly moderated the relationship between surface acting and OCB but not the relationship between OCB and the other three emotional labour components. The results have implications for selection, training and evaluation of workers in service organizations.

**Keywords:** Emotional intelligence, emotional labour, organizational citizenship behaviour, moderator variable, relationship.

## **Introduction**

Studies on emotional labour and organizational citizenship behaviours (OCB) are often conducted in an independent manner (Abraham, 1998; 2000; Ashforth & Humphrey, 1993; Grandey, 2000; Hochschild, 1983; Podsakoff, Ahearne, Mackenzie, 1997; Podsakoff, Niehoff, Mackenzie & Williams, 1993). Some of the studies linked emotional labour with work performance, job satisfaction, burnout, job tension, organizational commitment, physical strain, emotional intelligence (Abraham, 1998; Prati, 2004); Self-efficacy and self-esteem (Ashforth & Humphrey, 1993; Diefendorff & Richard, 2003). However, organizational citizenship behaviours (OCB) have not been adequately studied. OCB are functional to the organization and may mediate the relationship between emotional labour components and work performance or work indicators.

Specifically, there is need to know the effects of emotional labour efforts on the OCB of the workers. This is important because OCB promote the effective functioning of the organizations and are related to organizational effectiveness and success. Another reason is that the health of most service-oriented organizations depends on the direct face-to-face interactions between employees and customers (Abraham, 1998; Podsakoff et al, 1997). Emotional labour has been found to contribute to the overall perception customers formulate about the organization and the quality of the organization's products (Abraham, 1998; Diefendorff & Richard, 2003; Prati, 2004). Emotional labour displayed by employees was referred to as "emotional front" by Surton and Rafaeli (1988). According to them, it serves as an organizational attribute. The "organizational fronts" could draw customers to the organizations or repel them depending on the individual customer's preferences of treatment.

Hochschild (1983) claimed that emotional labour acts as a signal function. The emotions directed at a customer will define the status of that customer according to the organization's emotional front. If the customer appreciates the status given by the organization through its associates, then the customer will continue to appreciate or patronize that organization. The perception of the organization may promote or prevent opportunities with third parties, such as the customer's close associates (Diefendorff & Richard, 2003). Given the high rate of job loss, retrenchment and compulsory retirement arising from government reform policy predicated on rightsizing which affects public service workers, those who remain on the job (survivors of layoffs) no doubt experience job insecurity (Nwachuckwu, 2005). As suggested by Hightsey (1996), certain relatively stable personality traits are likely to influence the behaviour and attitudes of survivors following a period of downsizing, rightsizing or layoff. Consistent with this suggestion, this study was designed to investigate the relationship between emotional labour and organizational citizenship behaviour. The moderating effects of emotional intelligence on the relationship between emotional labour and OCBs of public servants will also be investigated.

### **Emotional Labour**

Emotional labour is the management of feeling to create a publicly observable facial and bodily display, emotional labour is sold for a wage and therefore has exchange value (Hochschild, 1983). It is the compliance of the employee with established rules of emotional display. Organizations have rules of emotional display which may include rules to display positive or negative emotion, to hide negative emotion, to show empathetic concern, control of interaction process and emotional dissonance (Zapf, Seifert, Schmutte, Mertini & Holz, 2001). There are two types of emotional labour: surface acting and deep acting. Surface acting is the physical expression of an emotion that is not actually felt. An example is a retail clerk who must maintain a smile and put on generally sociable appearance even though his or her actual emotion may lean more toward anger, sadness or frustration.

Hochschild (1983) argued that surface acting was disguising what we feel, or usually pretending to feel what we do not. Zapf et al (2001) suggested that surface acting was the physical attempt to conceal emotional dissonance. Surface acting may be interpreted as superficial and insincere (Ashforth & Humphrey, 1993). Surface acting is detrimental to the organization-customer relationship and to the health of the portrayer of the insincere emotion (Grandey, 2000).

Deep acting is an attempt by organization member to feel the actual target emotion rather than maintaining the original felt emotion. In this case, the sales clerk may feel sad when he/she arrives at the job but because he or she is required to display positive emotion, the clerk may reprogramme felt emotions for more job appropriate emotions.

In deep acting, the employee controls his or her physical display and endeavours to modify internal thoughts and feelings (i.e. emotional dissonance) in order to fulfill expectations of emotional display (Brotheridge & Grandey, 2002). There are two types of deep acting. Passive and active passive deep acting means that the employee already feels the desired emotion and there is no emotional dissonance. Active deep acting however, involves some amount of emotional management because some emotional dissonance is felt as the interaction occurs. It requires some cognitive manipulation of feelings in order to fulfill emotional labour requirements.

### **Emotional Labour and Organizational Citizenship Behaviour**

Organizational citizenship behaviour (OCBs) have been defined as behaviour(s) of a discretionary nature that are not part of the employee's formal role requirements, but nevertheless promote the effective functioning of the organization (Podsakoff, Ahearne, MacKenzie, 1997; Organ, 1988). Several researches have focused on identifying the potential antecedents of OCBs based on the assumption that these forms of behaviour are functional to organizational effectiveness and success (Ball, Trevino & Sims, 1994; Podsakoff, MacKenzie & Williams, 1993; Podsakoff et al. 1997).



Although none of the listed studies have examined the relationship between emotional labour and organizational citizenship behaviours (OCBs), there are some evidences that emotional labour is related to workers' work attitudes and behaviours. For example, several researchers have found significant relationship between emotional labour and job satisfaction (Ashforth & Humphrey, 1993; Morris & Feldman, 1997; Zapf et al 2001; Abraham, 2000; Prati, 2004), organizational commitment (Abraham, 2000; Cropanzano, Rupp & Byrne, 2003; Prati, 2004) and turnover intentions (Grandey, 2000). Diefendorff and Richard (2003) found that the effective execution of emotional display requirements significantly influenced job performance in emotional labour tasks.

However, despite the research evidence on the role of emotional labour on work attitudes and behaviours, research has not investigated emotional labour in relation to organizational citizenship behaviours of workers. On the basis of previous research on the link between emotional labour and work behaviour, it was expected that emotional labour will be related to OCB.

### **Moderating role of emotional intelligence**

Emotional intelligence is one's ability to perceive and appraise emotion, facilitate thought using emotion, understand emotion, and regulate emotional thought and display toward goals (Mayer & Salovey, 1997). Emotional intelligence is an important determinant of the way we think, feel and act. Emotional intelligence may enhance helping behaviour, sportsmanship and civic virtue as it enables employees to comprehend their co-workers' feelings and to respond better than employees with low emotional intelligence. This is because of their ability to easily shift from negative to positive moods (Abraham, 1999; Carmeli, 2003). Being in good mood is reinforcing and engaging in helping behaviour is also rewarding. This helps employees to be in stable state of mind. Being in good moods can also help social interaction. When employees have positive emotional reactions to their jobs, they are more likely to be engaged in helpful behaviours. Therefore, it is expected that emotional intelligence will be significantly related to organizational citizenship behaviour (OCB).

Research has shown that emotional intelligence is a relevant concept in the study of emotional labour – work attitude and behaviour relationship, fulfilling a moderating role (Douglas, Frink & Ferris, 2004; Prati, 2004). For example, Douglas et al (2004) found that emotional intelligence moderated the relationship between the conscientiousness dimension of personality and individual performance.

Prati (2004) found that emotional intelligence moderated the relationship between surface acting and turnover intentions and passive deep acting and turnover intentions. No significant moderating effects were found on the relationship between emotional labour and job satisfaction, organizational commitment and job performance. It is expected that emotional intelligence will provide the skills necessary to function well in such roles involving emotional labour. However, research has not provided solid answers to this problem. Consequently, it is expected that emotional intelligence will moderate the relationship between emotional labour and organizational citizenship behaviours of workers.

### **Hypotheses**

1. Surface acting emotional labour will have significant negative relationship with organizational citizenship relationship (OCB).
2. Active deep acting emotional labour will have significant positive relationship with OCB.
3. Passive deep acting emotional labour will have significant positive relationship with OCB.
4. Non-acting emotional labour will have significant negative intelligence with OCB.
5. Emotional intelligence will moderate the relationship between OCB and each of the emotional labour components (i.e. surface acting, active deep acting, passive deep acting, and non-acting).

## **Method**

### **Participants**

Three hundred and eighty participants took part in the survey. Two hundred and ten (55.3%) were male and 170 (44.7%) were female. Their ages ranged from 24 to 55 years with a mean age of 36.85 (S.D. = 9.40) years. The educational qualifications of the participants also ranged from primary school certificate to university degree, 22 (5.7%) had primary school certificate; 84 (22.1%) had secondary school certificate, 80 (21.1%) had Nigeria Certificate in Education (NCE)/Ordinary National Diploma (OND), 48 (12.6%) had nursing/midwifery certificate, 93 (24.5%) had B.Ed./B.A./B.Sc./HND and 53 (13.9%) had masters' degrees. Participants' job status ranged from low, middle to high.

### **Instruments**

#### **Emotional Labour**

Emotional labour was measured by means of the emotional labour scale by Prati (2004) which had some items selected from scales by Brotheridge and Grandey (2002) and Grandey (2000). It is made up of 13 items of four components: surface acting scale (5 items)  $\alpha = .87$ ; Active deep acting scale (3 items)  $\alpha = .93$ ; Passive deep acting scale (3 items)  $\alpha = .63$ ; and non-acting scale (3 items)  $\alpha = .70$ . The response format adopts five-point likert type scale ranging from 1 = Never to Always = 5.

#### **Emotional Intelligence**

Emotional intelligence was measured with emotional intelligence scale by Law, Wong and Song (2004) referred to as Wong and Law EI scale (WLEIS). It is a sixteen-item scale consisting of four sections: Self Emotional Appraisal (SEA, 4 items), Other Emotions Appraisal (OEA, 4 items), Use of Emotions (UOE, 4 items) and Regulation of Emotion (ROE, 4 items) that adopted a 5-point scale ranging from 1 = strongly disagree to 5 = strongly agree. The Cronbach's alphas of the four subscales range from 0.83 to 0.90.

#### **Organizational Citizenship Behaviour (OCB)**

Organizational citizenship behaviour was measured with the scale of OCB developed by Podsakoff and MacKenzie, 1994 and validated by Podsakoff, Ahearne & MacKenzie (1997). It consists of three sections: helping behaviour, 5 items; sportsmanship, 5 items, and civic virtue, 3 items. The items were assessed on a five-point scale ranging from 1 = strongly disagree to 5 = strongly agree. The Cronbach's alpha for this OCB scale was 0.85.

### **Procedure**

The three research instruments were administered to the randomly selected public servants in all the ministries involved in the study from five states in southwest Nigeria. The researcher and five research assistants administered the instruments after obtaining the consents of the participants and explaining the purpose of the study to them. Of the 500 questionnaires distributed 380 were properly filled and were used for data analysis, 120 were incompletely filled and were discarded.

### **Data Analysis**

The data collected were analysed using hierarchical multiple regression analysis. The independent variable was emotional labour; the moderator variable was emotional intelligence while the dependent variable was organizational citizenship behaviour. The control variables were sex, age, tenure, education, and job status

**Results**

**Table 1:** Means, Standard Deviations and Intercorrelation of all Variables

|    | Variables         | 1     | 2     | 3     | 4     | 5    | 6     | 7     | 8    | 9     | 10   | 11    |
|----|-------------------|-------|-------|-------|-------|------|-------|-------|------|-------|------|-------|
| 1  | Age               | 1.00  |       |       |       |      |       |       |      |       |      |       |
| 2  | Gender            | .01   | 1.00  |       |       |      |       |       |      |       |      |       |
| 3  | Tenure            | .50*  | .01   | 1.00  |       |      |       |       |      |       |      |       |
| 4  | Education         | .35*  | .196* | .33*  | 1.00  |      |       |       |      |       |      |       |
| 5  | Job Status        | .197* | .18   | .27*  | .34   | 1.00 |       |       |      |       |      |       |
| 6  | EI                | .20*  | .14   | .16   | .18   | .13  | 1.00  |       |      |       |      |       |
| 7  | Surface Act.      | .22*  | .04   | .20*  | .19   | .17  | -.13  | 1.00  |      |       |      |       |
| 8  | Active Deep Act.  | .20*  | .19   | .12   | .13   | .24* | .21*  | .25*  | 1.00 |       |      |       |
| 9  | Non-Act.          | .02   | .18   | .01   | .10   | .07  | -.23* | .21*  | .24* | 1.00  |      |       |
| 10 | Passive Deep Act. | .03   | .20*  | .04   | .15   | .20* | .196* | .20*  | .20* | .198* | 1.00 |       |
| 11 | OCB               | .14   | .10   | .17   | .18   | .20* | .25*  | -.23* | .21* | -.18  | .24* | 1.00  |
|    | Mean              | 36.85 | 1.5   | 12.50 | 3.23  | 2.40 | 49.10 | 11.25 | 8.70 | 3.50  | 9.30 | 49.30 |
|    | S.D.              | 9.40  | .45   | 5.3   | 12.50 | 1.2  | 2.43  | 3.20  | 3.50 | 9.34  | 2.50 | 3.40  |

Note: EI = Emotional Intelligence, OCB = Organizational Citizenship Behaviour, S.D. Standard Deviation

The results on Table 1 show age, gender, tenure, and education had no significant relationships with OCB however, job status was significantly related to OCB. As indicated in the results, OCB was significantly correlated with surface acting ( $r = .23, P < .05$ ), Active deep acting ( $r = .21, p < .05$ ), passive deep acting ( $r = .24, P < .05$ ). However, Non-acting emotional labour was not significantly correlated with OCB ( $r = -.18, P > .05$ ).

**Table 2:** Hierarchical regression analysis of the prediction of OCB from emotional labour with emotional intelligence as moderator

| Variables              | R <sup>2</sup> | ΔR <sup>2</sup> | ΔF    | Df    | Beta | t     |
|------------------------|----------------|-----------------|-------|-------|------|-------|
| Step 1                 | .18            |                 | 2.10  | 5,374 |      |       |
| Age                    |                |                 |       |       | .12  | .09   |
| Gender                 |                |                 |       |       | .14  | 1.10  |
| Tenure                 |                |                 |       |       | .07  | .04   |
| Education              |                |                 |       |       | .15  | 1.3   |
| Job Status             |                |                 |       |       | .03  | .07   |
| Step 2                 | .25            | .07             | 5.70* | 1,373 |      |       |
| Surface Acting         |                |                 |       |       | -.20 | 2.8*  |
| Active Deep Act.       |                |                 |       |       | .24  | 3.2*  |
| Non-Act.               |                |                 |       |       | -.18 | 1.97* |
| Passive Deep Act.      |                |                 |       |       | .26  | 3.70* |
| Step 3                 | .28            | .03             | 3.60* | 1,372 |      |       |
| EI                     |                |                 |       |       | .19  | 2.00* |
| Step 4                 | .30            | .02             | 4.02* | 1,371 |      |       |
| Surface Act. X EI      |                |                 |       |       | .24  | 2.3*  |
| Active Deep Act. X EI  |                |                 |       |       | .20  | 1.90  |
| Non-Act. X EI          |                |                 |       |       | .15  | 0.97  |
| Passive Deep Act. X EI |                |                 |       |       | .13  | 1.200 |

Note: N = 380, OCB = Organizational Citizenship Behaviour, EI = Emotional Intelligence, Act = Acting, \* P < .05 (2-tailed test).

Table 2 presents the results of moderated hierarchical regression analyses. In step 1 all the control variables did not explain a significant amount of variance in OCB ( $R^2 = .18, \Delta F_{(5,371)} = 2.10, P > .05$ ). In Step 2, addition of emotional labour components explained a significant amount of incremental variance in OCB ( $R^2 = .25, \Delta R^2 = .07, \Delta F_{(1,373)} = 5.70, P < .05$ ). Each of the emotional labour components made significant contribution to the prediction of OCB, surface acting (Beta = .20,  $t = 2.8, P < .05$ ), Active deep acting (Beta = .24,  $t = 3.2, P < .05$ ), Non-acting (Beta = .18,  $t = 1.97, P < .05$ ), Passive deep acting (Beta = .26,  $t = 3.70, P < .05$ ).

.05), and passive deep acting (Beta = .26,  $t = 3.70$ ,  $P < .05$ ). These results indicate that Hypotheses 1, 2, 3, and 4 are confirmed.

Addition of emotional intelligence in step 3 explained a significant variance in OCB ( $R^2 = .28$ ,  $\Delta R^2 = .03$ ,  $\Delta F_{(1,372)} = 3.60$ ). In Step 4, the inclusion of the interaction terms (Surface Acting X EI, Active Deep Acting X EI, Non-Acting X EI, and Passive Deep Acting X EI) explained a significant incremental amount of variance in OCB ( $R^2 = .30$ ,  $\Delta R^2 = .02$ ,  $\Delta F_{(1,371)} = 4.02$ ,  $P < .05$ ). Surface acting X EI interaction term significantly predicted OCB, while the remaining three interaction terms did not. The negative relationship between surface acting and OCB is attenuated when EI is high and increased when EI is low. This is an indication that hypothesis 5 is partially confirmed.

## **Discussion**

Results of this study indicated that emotional labour components (surface acting, active deep acting, and passive deep acting) were significantly related to organizational citizenship behaviour of the workers. These results corroborate the findings of previous researchers who reported similar findings in the relationship between emotional labour and work attitudes and behaviour (Abraham, 2000; Ashforth & Humphrey, 1993; Cropanzano, Rupp & Byrne, 2003; Prati, 2004).

These results may be due to the fact that the respondents in this study were able to display necessary emotional labour behaviours, according to the organizational rules of emotional display, required for the employee-customer interactions. These workers, having displayed necessary emotional labour skills are likely to be in a position or mood to go extra mile to carry out organizational citizenship behaviours.

That non-acting was not significantly related to OCB is consistent with previous researches in which employee displaying non-acting emotional labour were either suffering from emotional exhaustion, burnout or have little or no organizational commitment. Such employees don't display any emotion required by the organizational rules.

Results of this study also showed that emotional intelligence was significantly related to organizational citizenship behaviour. This result is consistent with the findings of previous researchers who reported similar findings (Abraham, 1999; Carmeli, 2003; Prati, 2004; Wong & Law, 2002). This is due to the fact that emotionally intelligent employee likely possessed the necessary skills and controls of his or her emotions which probably assisted him/her to cognitively evaluate the affective elements of the job in order to have a less adverse reaction to enforced emotional display rules.

That surface emotional intelligence (EI) interaction term significantly predicted OCB support the work of previous researchers who found that EI moderated the relationship between surface acting and turnover intentions (Prati, 2004). An explanation for this finding is that emotionally intelligent individuals have several resources and skills that provide one with invaluable coping mechanisms to counter the effect of psychological stressors arising from emotional dissonance in surface acting. What we then have is attenuation of the negative effects of surface acting on OCB by high emotional intelligence, and increasing of negative effects of surface acting on OCB when emotional intelligence is low. That active deep acting x EI, passive deep acting x EI and non-acting x EI interaction terms did not significantly predict OCB are consistent with the work of Douglas et al (2004) and Prati (2004) who found similar results. This result is due to the fact that regardless of the employees' emotional intelligence, emotional labour activities had more influence on their OCB.

## **Implications of the Findings**

The results of this study demonstrated that emotional labour and emotional intelligence had significant relationships with OCB. Also emotional intelligence moderated the relationship between surface acting and OCB. These findings have implication for human resource professionals such as counseling, industrial and personnel psychologists especially in the areas of selection, training and evaluation. The findings have implications for counselling/industrial psychologists or recruitment officers who should

consider the assessment of emotional intelligence and emotional labour skills of candidates to be employed into service or sales organizations. These skills or abilities are necessary for job success in most organizations.

The findings of this study implicate the need to train the employees who are already on the job in service organizations, in the four abilities that comprise emotional intelligence as well as emotional labour tasks. They need to be trained in how to control their emotions and display acceptable emotional labour efforts when interacting with customers or clients even in stressful situations.

There is need to evaluate the emotional labour practices of employees in order to identify those who are using negative emotional labour skills that may drive away clients or customers from the organizations. This could form part of their annual performance evaluation protocols. Such identified employees could be trained in appropriate active deep acting emotional labour tasks or assigned according to the individual's circumstances.

### **Limitations and future research**

This study is limited in its use of cross-sectional design. Future researches could adopt a longitudinal design to be able to establish cause-and-effect relationship. Another limitation of this study is the use of self-report measures. Future researchers could add other methods of measurement such as interview and focus group discussion methods.

Despite these limitations, this study has succeeded in establishing that emotional labour efforts and emotional intelligence have significant relationships with organizational citizenship behaviour of public servants and that emotional intelligence moderate the relationship between emotional labour and OCB.

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## **Ethics of Next-Generation Entrepreneurs: A Case Study of German Student Management Consultants**

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### **Abstract**

This study aims to investigate perceptions, behaviors, and opinions regarding ethics of student management consultants that work at Kreaktiv e.V. Student Management Consultancy of Hochschule Ravensburg-Weingarten University of Applied Sciences, Germany. These factors are important since today's students are tomorrow's business people, while perceptions and behaviors they perform will influence the actions they take once they enter the business world in the future. Additionally, a country cannot be claimed to be a developed nation without ethical entrepreneurs. The findings revealed that ethics are a crucial thing in students' life but they want to balance between ethics and student life in a daily condition. However, they similarly agreed that ethics are the key important factor of the business success as they have learned from schools and then practiced in social institutes e.g. a social service program and a company. Thus, they behave jobs at Kreaktiv e.V. ethically base on their status and responsibility. In a critical situation, a working standard of German Student Management Consultancy Association (BDSU) will be employed as the decision making instrument. As they want to retain trust, reputation, and loyalty from members, customers, and related communities for the long-term sustainable operation. Furthermore, this behavior also demonstrates that their works are not different from professional consultants.



**Keywords:** Ethics, Entrepreneurs, Consultants, German Students

**Field of the Study:** Business Ethics

## **1. Introduction**

"There is no simple universal formula for solving ethical problems. We have to choose from our own codes of conduct whichever rules are appropriate to the case in hand; the outcome of these choices makes us who we are", Cadbury (1987, p.69).

Entrepreneurs are diversity, come in all races and from different levels of education. Entrepreneurship is not just for the wealthy-small business ventures often start with minimal cash, a good idea, and willing labor. Hundreds are fresh out of school, business plan in hand and ready to put new knowledge to work. Thousands of others leave their jobs to join a global competition in dotcom revolution, installing on-line businesses that succeed and fail at a staggering pace (Derry, 2002). Entrepreneurs are challenged by the need to make decisions each day to keep a company solvent. Therefore, entrepreneurs are frequently faced with choices in businesses that create tensions between their need to be ethical and their desire to optimize and maximize profits. This tension may sometimes appear as a fundamental choice between private gain and public good, though this is perhaps too simplistic a way to view the matter (Robinson, Davidsson, Mescht, & Court, 2007). Today, there has been some research attention given to global business ethics (Donaldson, 1989; DeGeorge, 1993; Enderle, 1999), it has been primarily concerned with large firms and multinational corporations (DeGeorge, 1999). A small amount of articles about ethics in small business or entrepreneurial firms have been published over the last twenty years (Longenecker, McKinney, & Moore, 1989a, 1989b; Dees & Starr, 1992; Serwinek, 1992; Vyankarnam, Bailey, Myers, & Burnett, 1997; Teal & Carroll, 1999; Freeman & Venkataraman, 2002).

Thus, this study aims to fill a gap especially business ethics of German student entrepreneurs since there are not any research about it in the search of the authors yet. The research explores how German students conduct management consulting business reason through general and business ethical perceptions because the study attempts to understand ethical thinking in this specific group of entrepreneurs. Kreaktiv e.V. Student Management Consultancy, a professional and certified student consulting firm in Baden-Württemberg state, is employed since it is one of successful student management consultancies in Germany (Piansoongnern, Anurit, & Hohl, 2007). German student management consultants are investigated in terms of perceptions of business ethics, and their ethical behaviors when they work as members of student management consultancy. Since students' beliefs regarding the need for and desirability of ethical behavior in the business world are important for several reasons. Firstly, today's students are tomorrow's business people and, as such, their beliefs are likely to affect the definition of acceptable business ethics. Secondly, students' perceptions of what constitutes ethical behavior, whether accurate or not, will influence the actions they take once they enter the business world. However, the approach in this paper involves thinking of the basis of ethical perceptions and behaviors, rather than focusing on the application of principles or the development of a virtuous character.

## **2. Objectives of the study**

- 1) To investigate importance of business ethics in perceptions of German students who are members of Kreaktiv e.V. Student Management Consultancy.
- 2) To investigate ethical behaviors when German students work as members of Kreaktiv e.V. Student Management Consultancy.
- 3) To investigate opinions regarding importance of business ethics in the future life of German student who are members of Kreaktiv e.V. Student Management Consultancy.

### **3. Literature Review**

#### **3.1. Entrepreneurs and ethics: a critical selection of values and survival**

At the dawn of the 21st century, the reputation of business has been seriously damaged by a range of financial scandals (Elliot and Schroth, 2002). Many of these cases have led to bankruptcy, personnel being dismissed and financial losses for investors. A common feature is unethical behavior by executives, entrepreneurs, and also professionals. As in most things, only a small proportion of companies have been guilty of misconducts. A minority of opportunistic unethical entrepreneurs, dishonest managers and corrupt business leaders has damaged the reputation of entrepreneurship as a whole (Hamilton, 2002). One important reason of entrepreneurs' unethical behaviors is entrepreneurs are pressured from all stakeholders since they operate in a dynamic environment with many uncertainties such as changes in competition, technology, supply and demand fluctuations, labor issues, legal and public environmental regulations (Hannafey, 2003). Shareholders desire higher stock price; managers want annual bonuses, and employees endeavor for higher wages and working conditions; customers anticipate a higher quality at a lower price; suppliers try to raise prices; banks look for interest and guarantees; the government anticipates collecting taxes and imposes constraints on businesses. All these stakeholders exert some pressure on entrepreneurs who have to juggle with all kinds of constraints and contradictory expectations. Thus, some people are ready to use all means, even to tread on corpses to conquer pressures and to achieve their ambitious goals. Ethics are, in the final analysis, a very personal issue: they are related to the personal integrity of the individual, to their values idea, and to their resistance to pressures (Andrews, 1989).

Yet an importance of ethics when initiating new enterprises is critical because unethical behavior does take place. A few possible explanations for misbehaviors include: (1) greed; (2) distinctions between activities at work and at home; (3) a lack of a foundation in ethics; (4) survival or bottom-line thinking; and (5) a dependence on other social institutions to reinforce ethics. Whatever reasons, ethical decision-making is a challenge that confronts every businessperson involved in large or small enterprises (Stoner, 1989). Even though ethics present complex challenges for entrepreneurs, a value system of an owner-entrepreneur is a key to establishing an ethical organization (Teal & Carroll, 1999). An entrepreneur has a unique opportunity to demonstrate integrity, honesty, and ethics in all key decisions. An entrepreneur's actions serve as a model for all employees to follow. In a small business an ethical influence and leadership of an entrepreneur is more powerful than in large corporations because his or her ethical leadership is not diffused through layers of management. An entrepreneur is easily identified, and usually employees constantly observe them in a small business. Thus, an entrepreneur have a strong potential to establish high ethical standards in all business decisions; and it has been suggested that an entrepreneur's personal integrity and ethical example will be a key to their employees' ethical behaviors that lead to positive performance of a firm, because his or her values can pervade and socialize an enterprise rapidly and effectively. (Serwinek, 1992; Kuratko, 1995).

#### **3.2. Previous researches on entrepreneurs and ethics**

In 1990, John Case (Case, 1990) conducted a survey for Inc. magazine, in which he provided vignettes about ethical points that occur in business start-up and development. The subjects were Inc. subscribers who chose to send in their survey responses. Results of the study indicate that, while ethical dilemmas are difficult, in the end, the ethically correct choice would be made. However, there were three limitations of this survey. First, the respondents were a self-selected group. Second, the respondents may have been business people who were prompted to respond the survey because they hold very high ethical standards. Finally, the respondents knew the survey focused on ethical issues. It is human nature to believe they would make the most ethical choice in a given situation. The fact that they were aware that their ethical responses were being judged may have biased their responses in the direction of more ethical, rather than less ethical, decisions. Smith and Oakley (1994) taking a different approach to the determination of ethical values of small business entrepreneurs, proposed that size of business

communities in which small business entrepreneurs operated was a determining factor in his or her ethical decision-making process. The study revealed that ethical values of small business owners in non-urban areas were higher than in urban areas and that formal education is beneficial, if not absolutely necessary, in furthering legal and ethical behavior.

A survey of 165 entrepreneurs and 128 managers (Bucar & Hisrich, 2001) aimed to compare whether or not there were differences in ethical attitudes revealed that two groups differed only slightly in their views regarding ethics of a variety of activities and their ethical perceptions regarding others. However, the findings did show that managers were more likely to sacrifice their personal values for organizations, while, entrepreneurs showed higher ethical attitudes in internal dealings of companies. Another investigation, to concentrate on behaviors of establishing entrepreneurs to structure ethical and socially responsible firms, found that those firms with initiators who led them by making ethical decisions guided by well-articulated values were able to succeed and develop strong cultures (Joyner, Payne, & Raiborn, 2002). The most important finding in the study was that none of the firms was satisfied to simply meet legal requirements of difficult situations they faced during the growth of their businesses. They repeatedly went beyond the specific requirements of the law in their interactions with stakeholders and contribute back to the communities of which they were a part. Morris, Schindehutte, Walton and Allen (2002) studied the context of the ethical climate of entrepreneurial firms. The researchers developed a framework to describe formal and informal ethical structures that emerged in firms over time and suggested a variety of factors that influence where firms may be found within the framework. The main results of this study suggested that those who create and develop small firms pursue diverse approaches to the question of ethics. However, many of the studies found in the literature search involved a comparison of large and small companies, and were general in nature, researching corporate social responsibility or small business ethics generally, rather than studying entrepreneurial ethical values.

### **3.3. Business and ethics: partners of success**

“The most powerful argument for ethics in business is success. Ethical businesses are successful businesses; excellence is also ethical” (Solomon and Hanson, 1985, p. 22).

For decades, neoclassical economic theory indicates that business organizations exist to maximize profits (Stornier, 2003). Increasingly, however, business organizations are beginning to realize that they have to behave not only economically but also ethically, as socially responsible corporate citizens. Economic behavior and ethical behavior can actually achieve a common corporate goal. This is because ethical behavior helps bring about economic rewards. The most comprehensive empirical evidence of this to date is provided by Orlitzky, Schmidt and Rynes (2003), who meta-analyzed 52 studies comprising a total of 388 correlations and 33,878 observations. They concluded that a positive association exists between corporate social/environmental performance and corporate financial performance across industries and across study contexts. Thus, a firm that is ethical will, necessarily, consider its customers' needs, consider society's needs, and consider the needs of its employees and suppliers. In that sense, it is simply following good marketing and management practices and ensuring the continuing success of the organization (Joyner & Payne, 2002). If a firm is not ethical, chances are that it is unethical in all of its relationships, including those with customers, society, employees, suppliers, and government. Thus, a firm which does not adhere to ethical practices will probably fulfill neither the marketing and management practices, which will likely result in low-quality products and poor relations with various publics with which it deals. Ultimately, the damage that such a firm does to itself as, for example, a firm which discriminates in its recruiting practices and thus deprives itself of valuable employees. Additionally, a firm that is concerned with ethical practices will maintain a long-term perspective in all of its dealings. This will do a lot to ensure the long-term success of an organization (Koh & Boo, 2004).

### **3.4. Leadership and ethics: a role model**

Unethical behavior may be inherent in business organizations because of their culture or climate (Cohen, 1993; Paine, 1994). The corporate illegality literature contains many examples of employees learning to engage in illegal activities as part of their job duties. An examination of price fixing in the heavy electrical equipment industry demonstrated that the firms involved had shared norms, beliefs and ways of doing things that included illegal or unethical practices; new employees learned unethical behavior as part of standard operating procedures (Geis, 1982). The organizational culture may intensely pressure employees for high performance or goal accomplishment, leading employees or managers to use any means possible, including illegal or unethical ones, to achieve management objectives (Staw & Sz wajkowski, 1975; Clinard, 1983; Baucus & Near, 1991). Middle managers interviewed by Clinard (1983) frequently mentioned pressure from upper managers as a major factor resulting in unethical or illegal conduct. Additionally, characteristics of an organization's leader and group processes may increase unethical behaviors and activities by reducing individuals' attention to ethical considerations. A study supported this, indicating that a group's moral reasoning decreased when a group leader operated at a low level of moral reasoning (Dukerich, Nichols, Elm, & Vollrath, 1990). Similarly, ethical leadership literatures maintain that a leader substantially impacts group or organization ethics (Brown & Treviño, 2006; Knights & O'Leary, 2006; Llopis, Gonzalez, & Gasco, 2007).

### **3.5. Students and ethics: facts of the next generation**

There are two main reasons in an investigation of ethical perceptions and opinions of students: (1) today's students are tomorrow's business people and, as such, their beliefs are likely to affect the definition of acceptable business ethics; (2) students' perceptions of what constitutes ethical behavior, whether accurate or not, will influence actions they take once they enter the real business world. However, studies involving students' beliefs regarding ethical behavior in the business world tend to be discouraging. Students have been found to make consistently less ethical choices than practitioners and to hold lower ethical standards than businessmen (Hollon & Ulrich, 1979; Stevens, 1984; Arlow & Ulrich, 1985; DeConick & Good, 1989; Glenn & Van Loo, 1993; Cole & Smith, 1996; Lord & Melvin, 1997).

Unethical behavior doesn't suddenly arise after one has reached the level of corporate vice president or CEO. Indeed, evidence suggests that cheating may be rampant among students, both at a college and a high school levels. In one recent survey of college students, at least 50% reported cheating on various behaviors (McCabe, Butterfield, & Trevino, 2003) and another study indicated a 59% cheating rate (Rael, 2004). Students were significantly more willing to engage in unethical behaviors than their professional counterparts (Wood, Longenecker, McKinney, & Moore, 1988). Students possessed lower ethical standards, that their perceptions of managerial values were inaccurate, and that they were generally more pragmatic than managers (DeSalvia & Gemmill, 1971). However, despite their generally lower ethical standards, students consider themselves more ethical than managers (Beggs & Lane, 1989; Tyson, 1990). With regard to students' perception about the importance of ethics in conducting business, a study revealed that students rate the importance of ethical conduct lower than managers (Kraft & Singhapakdi, 1991). A business student survey at a conference dealing with business ethics, noted that 97% of students agreed that good ethics is good business while 71% believed that being ethical in business could hurt them in some instances. Furthermore, 19% of respondents indicated they would trade stock on inside information (Magner, 1989). Correspondingly, Glenn (1988, p. 174) reported, "a majority (54%) of respondents (students) agreed (12%) or partly agreed (42%) with the statement that "a person in business is forced to do things that can conflict with his or her personal values." The lower ethical standard of students is cause for concern given Carroll's (1975, p. 77) conclusion that "the greatest pressure (to commit unethical acts) is perceived in the lower ranks." Thus, as Glenn (1988, p. 174) noted, students will be entering ranks

reporting the greatest pressure to perform unethical acts. It could be concluded that students generally hold the belief that people in the business world act in an unethical manner. Yet, at the same time, a substantial proportion of the students admit to having engaged in academic dishonesty.

### **3.6. Kreative e.V. Student Management Consultancy Overview**

Kreative e.V. Student Management Consultancy (Kreative) was founded in 2001 as a project of six technology-management students and then it was officially established as a student consultancy in association with and under the supervision of Hochschule Ravensburg-Weingarten University of Applied Sciences. This student organization is also supported by many leading German companies such as (1) MLP, the leading financial services supplier for academics and other discerning clients in Europe; (2) IHK Bodensee-Oberschwaben; and (3) ZF Friedrichshafen AG, one of giant automotive suppliers in the world. The organization employs students from different fields in order to contribute great professional solutions to the success of clients. Kreative's consultation is constantly based on proven methods and new knowledge from various research and science according to the advice of experts such as professors in the University and external ones. Public and private organizations in Southern Germany or the region upper Swabia are targeted as the principal customers as well as middle-class crafts enterprises, existing foundations and worldwide operating enterprises. As Kreative effectively and efficiently worked with clients as a consulting firm since the beginning, in December 2002, Kreativ was certified by the BDSU, a federation of German student management consultancies that is involved in the spreading of ideas of student management consultancies in colleges as well as in the economy and the general public in Germany. BDSU Certification show the quality of the management system and standard of Kreativ and this is one of crucial factors leading to organizational growth that can be employed by students to assist in training them in practical and entrepreneurial skills (Piansoongnern, 2007).

## **4. Research Methodology**

### **4.1. Methodology**

A qualitative methodology was employed as the principle in order to investigate data related to the objectives. Documentary evidence was utilized in the investigation of rules, discipline, and working standards while in-depth interview was employed in order to investigate ethical perceptions and behaviors of the target group. Additionally, unparticipated observation was also performed in studying of ethical behaviors of the targets. The period of study was 5 months, from March – July 2007. However, the authors felt that it is necessary to adopt an interpretivist methodology to discover details of a situation to understand a reality or perhaps a reality working behind them– the social constructionism (Remenyi, 1998). In accordance with this argument, it is necessary to explore subjective meanings and perceptions of students' ethics in their actual working environment in order to fully understand them. Students may place many different interpretations on the situation in which they find themselves. These different interpretations are likely to affect their actions and the nature of how ethical behaviors and decisions are made. In other words, students do not only interact with their environment, they also seek to make sense of the contextual environment through their interpretations of events and the meaning that they draw from them. In turn their own actions may be seen as being meaningful in the context of these socially constructed interpretations and meanings. Therefore, it can be argued that it is necessary to adopt such an interpretive epistemological strand to seek to understand the subjective social reality of students in order to be able to make sense of and understand their ethical perceptions and behaviors in a way that is meaningful for the research.

## **4.2. Sample**

Twenty-three student members of Kreaktiv e.V. Student Management Consultancy out of forty-five student members from different majors of studies participated in the study. They are students from the University of Applied Sciences Ravensburg-Weingarten where the authors worked in March – July 2007. They were randomly chosen from a selected list of past project records and positions. It was necessary to adopt such a quota sampling procedure to ensure that the selected sample of students were appropriate for the study and able to relate their ethical perceptions, opinions, and behaviors. All samples were men and their ages ranged from 20 to 31 years. The entire sample participated played different position in Kreaktiv e.V. Student Management Consultancy ranked from volunteer to director positions. This was validated from a pilot study. All students offered to co-operate fully in the study.

## **4.3. Data collection**

A Semi-structured interview was the key research instrument used in data collection. Other instruments e.g. unparticipated observation of meetings (formal and informal), minutes of meetings, informal dialogues with participants' colleagues and annual reports of Kreaktiv e.V. Student Management Consultancy and Bundesverband Deutscher Studentischer Unternehmensberatungen or BDSU, a federation of German student management consultancies were used to triangulate data for its factual accuracy. All interviews were conducted in private places of their choices e.g. in participants' study lab, home or student consulting office. A pilot study was carried out with a few participants to attest the appropriateness of the questions in the interview. Working in accordance with interpretivist and constructivist epistemological paradigm (Denzin & Lincoln, 2000), the interview questions were framed to detect participants' ethical perceptions, opinions, and behaviors like story telling (Sacks, 1974) – describing some behaviors and experiences related to ethical issues they encountered in management consulting business and how they were dealt with in their organizations and customers.

The main aim was to probe participants' perceptions, opinions, and experiences in terms of their constructs, premises, presumptions, presuppositions and practices that drive what and how ethical behaviors and decisions were made and implemented in their study life and business. The questions did not make any references to any models or approaches to ethics and ethical behaviors in order to avoid respondents' bias since if participants knew the questions focused on ethical issues. It is human nature for individuals to believe they would make the most ethical choice in a given question or situation (Case, 1990). However, prior to the interview began participants were informed of the tenets of business ethics to ensure that the experience and opinion they described was related to issues of a student management consultancy and not only confined to their daily life. All interviews were audio taped with prior consent of the participants. Each interview lasted approximately 2 hours.

## **4.4. Data analysis**

All interviews were analyzed individually and immediately after each interview. The aim of the analysis was to identify and consistent themes of the study. The process was both inductive and deductive. The inductive process looked for consistent themes to emerge from the data (Glaser & Strauss, 1967; Yin, 1994). A deductive approach was taken to supplement the inductive approach to ensure that the author did not over-interpret or misinterpret the data. The author's own foreshadowed theoretical constructs were used to sensitize the data. This overall iterative approach has been used successfully within an interpretive methodological paradigm to identify cluster emergent themes or categories whilst maintaining the richness of the data (Miles & Huberman, 1994).

A sample of interpretations was crosschecked by experienced academic researchers to enhance the dependability of the findings and enable a degree of confidence to be maintained about the credibility of the themes generated. This was important because many of the issues touched on were highly personal and emotive and they were related to the authors in the ways that did not rely on academic discourse. It also helped to balance the author's theories-in-use and espoused theories

(Argyris & Schon, 1996), a common problem experience by researchers. The overall iterative process has allowed the authors to refine the themes and categories when needed. Throughout the analytical process, the practical guidelines of conversation analysis were adopted (Silverman, 2001) to clarify and detect unanticipated themes i.e. deviant-case. Attention was paid to the sequences of related talk, how participants take on certain roles identified through their talk and particular outcomes in the talk such as laughter, request for clarification, unusual tones, and etc.

## **5. Results**

### **5.1 Importance of business ethics in perceptions of German student who are members of**

#### **Kreaktiv e.V. Student Management Consultancy.**

##### **5.1.1. Perceptions of ethics in general**

All participants agreed that ethics are an important factor in their daily life. Eight participants ranked ethics to be one of first priority in their consideration when doing something.

“When I want to do something I always think that what I will do will hurt someone or not and how because the result will attach me for long time. Who know one day I have to work with a person who I hurt.”

“Ethics are sincerity in my definition, for example, you should not lie to your friends if you cannot to complete a group assignment on time or forget their appointment. I do not want to fake to people around especially someone who I love, my girlfriend, because I will lose their trust and respect. Trust is the important thing for me. I cannot live with friends without their trust. If you call this as ethics I can tell you it is my priority.”

While five participants indicated that it is not so important since they are students and should do what they want because this is a freedom of students.

“Ethics is a good word if you talk to people but it is difficult to do it. What is ethics in your definition? I do not know. I think everyone has his or her own definition about ethics. For me, I want to do whatever I want, sometime it is not ethical behavior in another sight but I prefer it is my way.”

“Ethics? (laugh...) I never thought of it before. I do what I want. Yes, it is also an important thing if you want to live with others. But you sometime do not need it. I just behave like others I never made them unhappy or I have made? (quiet, think, and then laugh) I do not know because I never realized it before... In daily life I think ethics is not much important because I am a student if I do wrong I can try again even in the exam but I do not want (laugh).”

However, majority consider ethics in the middle position in their mind as they want to balance their student life.

“You do not have to change the whole world, but you also do not have to become corrupt if the world around you is corrupt. I agree that ethics are important but you should balance it between ideal and reality because we are students.”

“I want to have fun in parties during a semester. I want to start group assignments or projects whenever I want (silent for a while and then laugh) maybe two weeks before a final exam. But I cannot do it because I have to think of friends. If I do like that I have no friends and groups. So, I think fifty-fifty is the best solution because I can enjoy parties and keep good friends at the same time.”

### **5.1.2. Perceptions of ethics in business**

All participants similarly reported that ethics are one of the most important factors leading to achievement of projects they did including organizational success as a whole. The reason of this perception is ethics are widely encouraged by every social institute in Germany beginning from a school to a corporation. All participants were taught and socialized about business ethics when they were boys. German teachers always teach about how to behave as good team members and what desired manners in German working contexts. Additionally, they are also taught by their parents about a contribution to communities they are a part because it is very crucial thing to gain respect and credibility from people around.

“People have to work directly. They must tell what they want and do including what they can for a team. They should not tell a lie to their bosses and colleagues. It is the big problem in Germany. This is what I heard from teachers when I was in a high school.”

“Students will be rewarded and admired by teachers and friends when they behave something ethically such as to be voted as good leaders when they worked in an annual school party and when they help some handicap students to work as team members. These are examples of ethics at work that I learned from high school and I realize it is important now.”

“My father always talks to me about his work and how to gain progression in a company. One thing I recall is to be direct at work and do not cheat myself, friends, colleagues, and a company. The important thing is do not show that you know on what you do not really know because a project can be destroyed by your stupid words, and then you will lose everything in a career. Nobody trusts in you.”

Although some participants who indicated that ethics are not the most important factor in their daily life but they also agreed and considered ethics to be the key factor of business success both individual and mutual parts. In the individual part, they are experienced that having high ethical behavior helps them to gain trust and respect from colleagues. They can work happily as a team member and can practice their skills effectively. In mutual part, if every employee works and behaves ethically, an organization will also be gained trust, reputation, and positive image from customers, suppliers, and communities. The result affects long-term stability of an organization and their life. This perception is originated by apprenticeship since German people have to serve in a national service for 8 months after finishing high school, a selection of social work and military service. Moreover, they normally apprentice or intern as trainees approximately 5-6 months during undergraduate study in both domestic and international circumstances. Thus, they can practice and prove business ethics they have learned in actual business environments, and then have realized its effects, positive and negative, to their working life.

“Even I think that ethics are not so important in student life but they are needed at work. I experienced when I worked as a social worker after a high school. I had no friends when I inactive and cheated them. I had to work about 8 months I learned a lot of things from that job.”

“In a business, if you cannot gain trust from your colleagues and customers, it means you prepare to fail. Trust comes from ethical behaviors such as do not take advantage of someone and do not cheat your customers...I worked as a sale trainee at...(a premier German automotive company) last year. I learned that hiding some information to a customer was the cause of failure.”

“In the orientation day, trainees were trained about code of conduct, rules, and a working standard including organizational culture. My company concentrated on employee’s ethics as one of corporate



culture. The reason was ethical employees leading to customer's trust, loyalty, and then long-term profitability. This is what I learned from my internship abroad last semester."

"I should work as much as I can. I should dedicate my time for meetings in order to achieve a goal of a team. I should follow the corporate rules strictly. These were what a mentor taught me when I worked at a company. If I can perform all things I can come back and apply for a position when I graduate. I will have much possibility to get a job; she said...If you call this as ethics I think it is very important for me."

## **5.2. Ethical behaviors when German students work as members of Kreaktiv e.V. Student**

### **Management Consultancy**

#### **5.2.1. Ethical behaviors of volunteers**

Ethics are considered as one of the main factors in the acceptance of members at Kreaktiv. Ten volunteers similarly revealed that ethics are needed to be shown in all activities e.g. volunteer's trainings, individual projects, and group meetings. Since Kreaktiv works closely with big companies; without ethics Kreaktiv cannot be claimed as a professional consulting firm. Thus, volunteers are expected to have ethical behaviors.

"I have to complete an individual project by myself. I should not ask another one for helps because I must learn how to handle a job. If a project is difficult for me I will ask my mentor because he responsible for my problem."

"I always attend meetings both private and organizational levels. It is my responsibility. I have never asked my friends to sign a meeting attendance for me and I have never signed for others as well. It is considered as a very bad behavior for me because a volunteer is a position that proves a person's willingness prior to be a member of Kreaktiv. If you cannot do it you should leave it."

"Time management is one of my subjects at Kreaktiv (laugh) because I have to study and sometime a timetable does not match with other members. I usually choose to go to a meeting because it is my responsibility and I am expected by other members to behave like that. If I cannot participate in a meeting I will tell a team leader or a project manager in advance. It is very important for a professional consultant, even I am a student (laugh again)."

#### **5.2.2. Ethical behaviors of members**

Ten members reported that they were socialized about business ethics by Kreaktiv's seniors when they were volunteers. They were taught about how to behave like members because everyone respects volunteers and believes that they work ethically. Thus, when they were endorsed members, they can work ethically without any problem with others, organizational rules, and code of discipline both Kreaktiv and BDSU. Participants similarly revealed that ethical behaviors in terms of a member are to complete a project punctually, to help a firm saving operating cost e.g. electricity, telephone expenses, and another costs.

"When a project is assigned, I begin to schedule my time first and then I look for a working standard of BDSU because a project quality must be controlled and recorded by a project controller. Thus, I have to manage myself, work, and standard of BDSU. If I am assigned as a project manager I always ask for some agreements about a project first in order to

avoid conflict with members and customers. I also treat everyone equally both members and volunteers because they are parts of success.”

“I never asked for an extra wage for my over-time working because it is the responsibility.”

“Punctuality is the most important factor in German business context. I have learned both from my apprentice and when I was a volunteer. So, I always manage my schedule in order to complete a project punctually while I can enjoy some parties during a semester.”

“We never faced a problem with telephone expenses. I do not know how others behave but I never used a Kreaktiv telephone for my private business because I realize that it is a public telephone and I have to help an office saving budget. I expect everyone thinks like me.”

“A mentor taught me how to handle an individual project and how to solve problems especially in case of conflict with other members. Five months as a volunteer I learned much experience about Kreaktiv projects and organization. I must be direct and responsible for a project and an organization because we live together as a team.”

Additionally, members must follow an agreement signed with a customer in order to retain trust and respect from customers and related organizations, for instance, the university, student consultancy alliances, and German management association. Unethical behaviors e.g. changing of project conditions that affect quality of a project. This behavior demonstrated unethical characteristics of Kreaktiv as a whole. Positive image, reputation, trust, and professionalization can be simply destroyed that affect long-term growth of Kreaktiv.

“I always discuss with a director of acquisition about a project goal especially what a customer really need and what Kreaktiv promises to do for a client. It is considered as a key working standard of mine because a quality of a project reflects a quality of team members and Kreaktiv as a whole.”

“I do not guarantee a project that excesses my abilities and skills because I will lose my trust from friends (Kreaktiv members) and the organization will also lose trust and reputation from customers. I want to have experiences as much as I can; I do not want much money in working with Kreaktiv.”

“I can control satisfaction of a customer by controlling my project quality, I think. It is proved when I perform a project according to BDSU working standard and level of agreement with a customer. I never postponed a project deadline because every second is very important for a customer.”

“I always show presentation to customers professionally (I think and laugh) since I am a representative of Kreaktiv members. My image is attached with Kreaktiv when customers look at my presentation. So, I usually spend a week to prepare and practice a presentation.”

### **5.2.3. Ethical behaviors of executives**

Three executives participated in the study have responsibility in different functions. They similarly reported that they are expected to be high ethical people in the organization.

“All members especially volunteers always look at my behaviors. They learn Kreaktiv culture from what I perform. I know that it is true because volunteers usually perform what they observe from me to solve their problem in a same situation.”

“I know that my behaviors can influence some members because I am a leader of many teams. Members always ask me for a decision. So, I have to think a lot before to decide doing something.”

Executives sometime confront difficult situations related to ethics, to select between short-term praise and long-term reputation, e.g. an evaluation and reporting of annual project quality to BDSU. They always need to show high quality result but some key projects have limitations and conditions that affect final quality of a report. Thus, it is difficult for them to make a decision ethically but they select ethical side in order to retain long-term reputation of Kreaktiv. A professional working standard of BDSU is employed in case of an ethical decision is needed to be made.

“Some situations are difficult for me to decide, for example, I have to submit an annual performance report to BDSU. I want to show only satisfy and high performance projects but some projects should not show because it has limitations and conditions that affect quality of projects. In this case, I need much time to select between a decoration of a report and showing its reality. Finally, I select to show a reality since Kreaktiv’s reputation will be destroyed immediately if facts are revealed. I am right, I confident.”

“It is difficult to say right or wrong with friends. I select to follow a code of conduct and a working standard of BDSU as a working guide when I have to decide something regarding project controlling. It is easier than saying a word without references and it is normally also accepted by members because everyone commits to follow these rules.”

Executives pointed that making a decision ethically encourages them in two important ways. Firstly, respect can be structured, learned, and implemented by all members and volunteers since these people can employed their ethical behaviors to be an organizational standard in any situation. Secondly, trust, reputation, and professionalization can be gained from customers and related organization that will affect long-term organizational stability of Kreaktiv.

“My positive behaviors can be employed as an organizational culture because members can perceive and learn from what I perform. When members have to solve some problems, they will behave the same way, I think. Whilst we can serve customers as professional ones as well.”

“I believe that demonstration of ethical behaviors will encourage Kreaktiv reputation among customers and related communities. Since they can touch and feel our sincerity from what we deliver to them. Reputation of local community is also important for long-term stability of Kreaktiv. For example, if city of Weigarten trusts our performance and quality, we will have more opportunities to do many jobs of local government. It means members or other students will have more opportunities to select their jobs in order to practice their study and to secure the future.”

### **5.3. Opinions regarding importance of business ethics in the future life of German student who are members of Kreaktiv e.V. Student Management Consultancy.**

All participants revealed that having ethical behaviors are the important factor of working progression. Executive participants pointed that besides qualification and experiences German companies always search people who possess high ethical behaviors in order to promote to leading positions. Since ethical behaviors cannot be exactly examined in a recruiting process and interview, it needs to be observed in a workplace. They experienced this situation when they apprentice at companies since Kreaktiv executives are people who remain only two or three semesters study before the graduation.

“Ethical things cannot be completely proved by an interview. Time is needed to justify an ethical person especially in a turbulent situation. I gain experiences from Kreaktiv. I realize and practice how to make a better decision and compromise a conflict peacefully. I know that managing people is easier than leading them because leading needs many factors e.g. motivation and inspiration alongside ethics in order to achieve a goal. I think I cannot be a leader if I lack of these things.”

“Honesty and sincerity are needed for doing business in Germany. If I can establish my own venture I must adhere to these two things but if I cannot do it. I still need it for a position in a company because this is a German business culture for a person who desire a progression.”

Kreaktiv members and volunteers similarly agreed with executives even some participants have not much experience related to ethical behaviors in real working conditions since they have not apprenticed at companies. However, they think that having ethics in mind would be better than not and to have ethical behaviors will encourage their career growth in the future.

“I do not have opportunities to work in a company but I will go in next two semesters. I have learned from Kreaktiv that people cannot work without trust and respect from others. Trust and respect can be acquired by performing good things such as to follow the rules, to behave like a part of a team, to contribute something for a team, and etc.”

“Mutual benefits must be come first if a person wants to be accepted by colleagues. I experience from Kreaktiv. I have to reduce my greed and share personal resources especially private time with colleagues. This is a culture I perceive and learn from working as a member at Kreaktiv that will be employed for my career in the near future.”

“People do not judge professionals by a quality of a project but their behaviors are also included. Even a project contains a high quality but does not follow conditions and complete unpunctually, this project cannot be claimed as a professional work in Germany. Germans do not judge people by looking at a result but a process. This is the very important factor leading to career achievement in Germany.”

“Teamwork is widely encouraged in German companies. To be a good team member is not easy because a person have to adapt many characteristics to fit with a team. However, it is not a problem for me if I am employed in the future. Since I experience from Kreaktiv that sharing of resources is needed for a high quality project. First, I have to show my sincerity to colleagues. Secondly, I have to be honest to myself. Finally, I have to follow the rules and conditions of the organization and customers. Taking advantage must be avoided because it is the major cause of failure.”

## **6. Conclusions and Discussions**

All participants revealed that ethics have influenced their life both individual and business levels. In daily life, ethics seem to show low important because participants want to spend their time doing whatever they want since they are students. However, they similarly agreed that ethics are the important factor of a business management. This result is supported by studies of Beggs and Lane (1989), and Tyson (1990) which indicated that despite students generally show lower ethical standards but students consider themselves more ethical than managers. In addition, a business student survey at a conference dealing with business ethics, also noted that 97% of students agreed that good ethics is

good business (Magner, 1989). This perception is originated by the socialization of social institutes e.g. school, and family. Teachers are a key factor socializing students to aware about ethical behaviors and culture in German business context. Praise and reward of ethical behaviors when they were children are recalled by all participants. Additionally, the experiences of apprentice in a social service program they did after high school and internship at a company are also influenced their perceptions of ethics. Since they can learn, practice and prove what ethics are and how it important for them in terms of career advancement. It can be concluded that social institutes have significant roles in the process of ethical socialization. Positive experiences regarding ethical behaviors are always memorized by children that influence their behaviors when they have to decide something in their mature life.

As positive perceptions of ethics' importance, all Kreaktiv members similarly behave their jobs ethically base on their status and responsibility. Ethical behaviors demonstrate in terms of public orientation such as contributing private time for meetings, helping a firm to save any expenses, do not take advantage of colleagues, and follow the rules of a firm and BDSU. Executives and project managers are expected by all members as a role model of ethical behaviors (Serwinek, 1992; Kuratko, 1995; Brown & Treviño, 2006; Knights & O'Leary, 2006; Llopis, Gonzalez, & Gasco, 2007). In case of a critical situation, executives select to use a working standard of BDSU in order to make a decision (Stoner, 1989; Teal & Carroll, 1999). Since, they wish to retain long-term stability of Kreaktiv, trust, reputation, and loyalty (Koh & Boo, 2004). They recognize that praise can be gained by the decoration of information but Kreaktive will lose trust, reputation, and loyalty from its members, customers and communities e.g. local community and student consulting networks in long-term operation (Joyner, Payne, & Raiborn, 2002). All participants also similarly confirmed that trust is the key factor of business success (Joyner & Payne, 2002). Building of trust must be begun from performing a job ethically and strictly according to the agreement of a project and a working standard of BDSU. Since, an unethical working means an unprofessional performance in German business context. Therefore, ethics will be considered and employed by all members as the one of significant behaviors when they have to enter to a business in the future. As ethical behaviors is the key professional standard in German companies. An employee cannot be promoted to a leading position without ethics. Time and conditions are needed to prove an ethical person since an interview can merely assess personality and a problem solving skill in a limited condition and time. Thus, students similarly agreed that having ethics in mind and behaving ethically at work will encourage their career advancement in upcoming years.

## **7. Research Limitations**

1. Feedbacks and opinions of Kreaktiv's customers regarding ethical issues should be investigated but the study is limited by time, budget, and data accessibility. Since a German business has high power distance that time and familiarity are needed in order to access significant data sources.
2. To contact with a German company consumes long time for an approval of data collection. Moreover, a research period during March to July is a summer season, thus, a German company always closes that affects timetable of data collection as well as difficulty of key-informant accessibility.
3. The researchers cannot participate in all conferences and meetings since some meetings are sensitive.
4. Some information cannot be accessed simply because they are classified as confidential documents, for example, the BDSU working standard of a controlling director. This information cannot be accessed without the BDSU approval.

## **8. Recommendations**

### **8.1. For governments**

A young ethical entrepreneurial development program should be initiated as soon as possible in order to develop ethical entrepreneurs for the next developmental stage. Since a nation cannot be claimed to be a developed country without ethical businessmen. All entrepreneurial development programs usually concentrate on end rather than means. Every country want to have entrepreneurs who can help a government generates higher economic growth (GDP). An ethical entrepreneurial development seems to demonstrate in a program as a decoration. Thus, social and environmental problems are increasing its negative impact widely and rapidly at the moment because entrepreneurs use every means to achieve their ambition, maximizing profit. Now, it is a time of revision of entrepreneurial development. The governments around the world should rethink their existing entrepreneurial development programs. The ultimate goal of the program is to create people who run their own ventures and also encourage wealth of the nation sustainably and ethically.

### **8.2. For educational institutes**

Recommendations are divided into two levels. Firstly, a preliminary level is primary and secondary or high schools. Schools have to teach children regarding ethics in different ways e.g. ethical activity, reward and punishment method. Since children can simply absorb ethics by using different activities and tools. Schools should not merely teach ethics as a subject of a curriculum. Students do not like to study this subject in the authors' opinion because an ethical subject does not encourage their educational opportunities for the university level. Thus, ethics should be made as funny activities while it can socialize moral, and values in children's mind. Secondly, in higher education or university level, ethical practice should be employed as a teaching instrument. Ethical case studies in a specific culture should be produced in order to encourage students to learn how to make a decision ethically and peacefully. In conclusion, ethics should be learned rather than study. Educational institutes are the social institute that can encourage ethical perceptions and behaviors effectively because children spend most of time at schools and universities.

### **8.3. For corporations**

Ethical student activities should be encouraged. This can be claimed to be a part of a corporate social responsibility program (CSR) in an annual report because a social ethical role model is focused as a target of a program. Corporate reputation from public and investors can be gained by using this campaign. In developing countries or emerging markets, students cannot unleash their talent and competences as much as they can since the lack of budget and support of governments. Thus, corporations should offer some helps to encourage activities that develop ethical behaviors of students. This is not only a good thing for society but it is also benefit for companies because ethical students are ethical employees who will contribute their competences and talent for sustainable profitability in the future.

### **8.4. For researchers**

Levels of ethics are different depend on culture of each society. Thus, a comparative study is strongly recommended for future researches, since a comparison between two countries or more will offer several perspectives on entrepreneurial development. Political and economic distinctions will also be involved as well as culture. Furthermore, attitude of entrepreneurs toward ethics should be researched as well. Finally, an entrepreneurial development model or framework that fits a specific country would be appropriately structured and then a nation will be sustainably developed.

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## **Uniqueness of Academic Career: Voices of Malaysian Women Professors**

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### **Abstract**

This article discusses women professors' experience on what makes academia an attractive field for their career development. It starts by describing salient features of academic career. It then outlines the research procedures, using career history data of 31 women professors from eight Malaysian universities. Themes generated from the data are as follows: teaching is a noble duty, high value of research and publication, ability to work as academic-cum-administrator, establishment of international networking, provision of sabbatical leave, and involvement in professional training and consultancies. The study concludes that the respondents are fully satisfied with the three-in-one functions of teaching, research and services at the universities. Recommendations for policy and future research are put forth.

**Keywords:** academic career; career development, Malaysia; university; woman professor.

### **Introduction**

Literature has indicated that women academics face numerous career barriers. Forster's (2000) study in the United Kingdom, for instance, reports that very few women academics have progressed into senior positions despite equal opportunities policies and gender monitoring systems in place. Similarly, Bailyn (2003) describes aspects of academic career that make it difficult for women, specifically at Massachusetts Institute of Technology to go in line with academic demands of the institute and points to the fact that there are persisting gender inequities in terms of benefits and constraints. Jacobs and Winslow (2004) further highlight pressures facing men and women academics in the USA universities and its impacts on job satisfaction, earning and professional status.

There is, however, an extant literature on the unique features of academic career system, which made it dissimilar from other career systems (DeFillippi & Arthur, 1994; Baruch, 2004). Particularly in Malaysia, Sohail et al.'s (2001) study indicates that careers could also be developed in institutions of higher education due to their unique and innovative education career path. This is in line with the national policy towards preparing Malaysia as an international educational hub (Malaysia, 2006). The only limitation about the above literature is that they are without a gender perspective. It is therefore apparent that there is an unexplored link between women academics' career and the uniqueness of

academic career. Especially in Malaysia, not much is known about the experiences of women academics' especially those who have reached higher positions at universities. Evidence shows that there is a numerical increase of women professors in Malaysian public universities from 77 in 2000 (Singh, 2002) to 218 in 2004 (Maimunah & Roziah, 2006). Therefore, this article reports on a study which aims to answer the following research question: "What makes an academia a fertile ground for women professors to develop their career. Next section describes briefly the institutions of higher education in Malaysia, the context of this study.

### **Higher Education Institutions in Malaysia: The Study Context**

Table 1 presents Malaysian universities in 2004 and distribution of professors by gender at those universities. There were 17 universities located all over Malaysia and each has its own historical background. The oldest university is University of Malaya, founded in 1949 in Singapore and later set in Kuala Lumpur as an autonomous campus in 1959. It remained as the only university at the time Malaysia was formed in 1963. During the First Malaysia Plan (1966-1970), two more public universities were established to cater the needs of tertiary education in the country. They were the University of Science Malaysia (USM) founded in 1969 in Penang and the National University of Malaysia (Universiti Kebangsaan Malaysia, UKM) with its main campus in Bandar Baru Bangi, Selangor. Two more universities were set up during the Second Malaysia Plan (1971-1975), coincided with the implementation of the New Economic Policy (NEP) (1971-1990). They were the University of Agriculture (UPM) founded in 1973 in Serdang and later was renamed to the Universiti Putra Malaysia in 1996. The University of Technology Malaysia (UTM) was founded in April 1975 with its present campus Skudai, Johor and branch campus in Kuala Lumpur.

The country saw the setting up of two more universities during the Fourth Malaysia Plan (1981-1985). They were the International Islamic University (IIU) in May 1983 as a private university with strong government support. Another is the Northern University of Malaysia (UUM), founded in 1984 in the state of Kedah, with its academic focus in management-related areas. The seventh public university, University of Malaysia Sarawak (UNIMAS), was founded in December 1992, closely followed by the setting up of University of Malaysia Sabah (UMS) in November 1994. Both universities started their operation during the Sixth Malaysia Plan (1991-1995).

An interesting event was seen during the Seventh Malaysia Plan (1996-2000) in which there was the upgrading of MARA Institute of Technology (which was founded in 1959), to university status in 1998. Another historic development was the upgrading of the Sultan Idris Teachers' College (SITC) to university status (University of Sultan Idris Teachers' Training, UPSI), in 1998.

More new public universities were formed in 2004 as University College status, namely Islamic University College of Malaysia (Kuala Lumpur), College University of Science and Technology Malaysia (Trengganu), College University Technology of Tun Hussein Onn (Johor), National College University of Technical Malaysia (Melaka), College University Engineering of Northern Malaysia (Perlis) and College University of Engineering and Technology Malaysia (Pahang). Their main objective is to upgrade the development of education, which highlights the usage of information and technology in its academic function.

Several implications could be made with the setting up of more public universities. First, the country is serious with the role of tertiary education in providing qualified human resources in nation building. Second, the universities could absorb the ever increasing number of qualified candidates for tertiary education because the country could not afford to continuously send students abroad for higher education. Third, the country is in its initiatives to prepare Malaysia as a higher educational hub in the Asian region. Finally, in terms of human resource development of the academics, there is an increased demand for highly qualified teaching staff; hence, it is obvious that there is dynamism in the career development of the academics, one of which is the attainment of the status of professorship. A phenomenon observed in the population of public universities' campus is the exceeding number of girls compared to boys with a percentage of 65 for the former and 35 for the latter. This has implication

to employment opportunities of educated women, one of which is in the institutions of higher education. The study is, therefore, an initiative to look at the last implication, i.e. among the women professors due to the fact that there is an increased number of

**Table 1:** Malaysian Universities and the Distribution of Professors by Gender in 2004

| University  | Men |       | Women |       | Total |       |
|---|-----|-------|-------|-------|-------|-------|
|   | n   | (%)   | n     | (%)   | n     | (%)   |
| University of Malaya                                  | 153 | 19.9  | 79    | 36.2  | 232   | 23.6  |
| National University of Malaysia                       | 131 | 17.1  | 57    | 26.1  | 188   | 19.1  |
| Universiti Putra Malaysia                             | 110 | 14.3  | 31    | 14.2  | 141   | 14.4  |
| University of Technology Malaysia                     | 89  | 11.6  | 9     | 4.1   | 98    | 9.9   |
| International Islamic University                      | 75  | 9.8   | 7     | 3.2   | 82    | 8.3   |
| University of Science Malaysia                        | 55  | 7.2   | 11    | 5.0   | 66    | 6.7   |
| Universiti Teknologi MARA                             | 44  | 5.7   | 8     | 3.7   | 52    | 5.3   |
| University of Malaysia, Sarawak                       | 24  | 3.1   | 2     | 0.9   | 26    | 2.7   |
| University of Malaysia, Sabah                         | 19  | 2.5   | 4     | 1.8   | 23    | 2.3   |
| University of Sultan Idris Teachers' Training         | 14  | 1.8   | 4     | 1.8   | 18    | 1.8   |
| Northern University of Malaysia                       | 11  | 1.4   | 1     | 0.6   | 12    | 1.2   |
| Islamic University College of Malaysia                | 12  | 1.6   | 2     | 0.9   | 14    | 1.4   |
| College University of Science and Technology Malaysia | 10  | 1.3   | 2     | 0.9   | 12    | 1.2   |
| College University Technology of Tun Hussein Onn      |     | 1.2   | 1     | 0.6   | 10    | 1.0   |
| National College University of Technical Malaysia     | 9   | 1.2   | -     | -     | 9     | 0.9   |
| College University Engineering of Northern Malaysia   | 2   | 0.3   | -     | -     | 2     | 0.2   |
| Total   | 767 | 100.0 | 218   | 100.0 | 985   | 100.0 |

Sources: Maimunah, I. and Roziyah, M. R. (2006), p. 22.

women lecturers in the public institutions of higher learning of which a number of them have attained the professorial position.

Table 1 also shows that among the universities that have the most percentages of professors for both genders are the universities that have long history of establishment which were founded before and early 1970s. The University of Malaya has the most number of professors which is 153 (20.2 percent) for men and 79 (36.2 percent) for women. Following it is the National University of Malaysia which records a total number of 131 (17.3 percent) men professors and 57 (26.1 percent) women professors. Universiti Putra Malaysia also indicates encouraging statistics for both genders in the professorial position which are 102 (13.4 percent) for men and 31 (14.2 percent) for women. Other universities particularly the new ones such as Universiti Teknologi MARA, University of Malaysia Sarawak, University of Malaysia Sabah, University of Sultan Idris Teachers' Training and Northern University of Malaysia, display small percentages which are around 0.9 to 5.8 percent of professorial position in both genders. New emerging universities, founded in the beginning of the 21st century, which were given the college university status also signal the presence of this top rank position. However, the statistics are still very low (0.3 to 1.6 percent) and are expected to rise in order to strengthen their academic structure. Despite the fact that the professorial position exists for both genders, men professors seem to dominate women professors in terms of absolute numbers with a 3: 1 ratio (Maimunah & Roziyah, 2006). The next section explains some salient features of academic careers and the theoretical foundation of this study.

## **Salient Features of Academic Career**

Among the salient features of academia that are different from other careers are explained as follows: expectation on high level of competence, multiple academic responsibilities, and degree of independence and flexibility. These unique features are considered universal, have led to the innovativeness of its paradigm as indicated by concepts like intelligent career in academia (Baruch, 2004) as well as protean career (Hall, 1986), and boundaryless career (DeFillippi & Arthur, 1994). All those features point to the fact that there is dynamism in theory and practice of academic career.

### **Expectation on High Level of Competence**

The academia has been traditionally known as a source of wisdom. A university has been undeniably labeled as a centre for knowledge generation, and those who want to increase knowledge must pursue a university education. Pursuance of higher education means continuing academic learning that is beyond the primary and secondary levels. Various terms have been used to associate the noble nature of a university as a source of knowledge for the wellbeing of society, and the world of academia. Examples of such terms are ‘university as an ivory tower’ and the image of eight ‘Ivy League’ universities such as those in the USA, which are among the concepts that surround the learned nature of academics in any university.

In France, the very prestigious and elitist institutions are referred to *Grandes écoles*. It usually allows only a few hundred students due to very selective competitive exams at the entrance. There are *Grandes écoles* for literature, business, and engineering (Wikipedia (2005)). Curriculum provided in these institutions is usually of a better level than the rest of French universities. In Malaysia, there is no such a demarcation among the universities but those with long history of establishments and long-standing relationships with society in the process of nation building are considered toward having the characteristics of elite universities. With the above characteristics, it is therefore concluded that to be admitted to a university, whether as a student or a staff, it is expected to have a certain level of academic qualifications.

### **Multiple Academic Responsibilities**

An academic has to perform various responsibilities on a daily basis. Due to the pluralistic roles that go with being an academic, it makes an academic function particularly demanding. It is often said that an academic wears different “hats”, namely, a lecturer, professor, supervisor, researcher, consultant, administrator, coordinator, and an editor, to name a few. Those responsibilities emerge from the three universal functions in academia: teaching, research and services (Poole and Bornholt, 1998; Baruch and Hall, 2004). There may be some overlaps among those responsibilities, many do them quite simultaneously, or at times they are mutually exclusive in terms of when, where and for whom. Specifically in relation to academic positions, an academic in Malaysia is titled as follows: a tutor, lecturer, senior lecturer, associate professor, and professor. It is worth noted on the relative emphasis placed on the three functions of teaching, research and service of an academic which ranges from 10 percent to 50 percent for each function. The variation is dependent on many factors, such as seniority, academic position, managerial appointment and academic specialization.

It is also well understood that while teaching is the core business of an academic, doing teaching alone is incomplete if one goes without engaging on scholarly work or research. Scholarly work is needed in order to remain current and effective as an educator in any specialization. Moreover, Poole and Bornholt (1998) point out that the academic reward structure is biased toward research and publications. This shows that research should end-up with publication, and most important is the use of knowledge generated from the research through its direct use by society or through commercialization. Research-related activities are highly valued in assisting academics’ career advancement other than community service, and intellectual and social development of students. But in many Malaysian universities, the focus is on putting an equal balance in the three functions of teaching, research and service.

Another factor affecting the magnitude of teaching, research, and service functions of academics is the type of the university. “Research status” universities have higher emphasis on scholarly work through the various fundamental and applied research compared to “teaching status” universities. Research status universities are expected to have a good integration of research results in the teaching functions. Certainly, it needs longer time to achieve the research status universities. Therefore, only the more established public ones are easily referred to as the research universities and some Malaysian universities are moving towards the research status.

Participation in governance structures is another essential feature of academic function. It is broadly categorized under the service function. This is to ensure that programs and curricula are of high quality and are academic in nature. The rule of thumb says that the higher one’s position in the faculty governance or administration, the less is the proportion to teaching, but not at the expense of research and functions for student development. The indirect impact of participation in governance is one’s visibility in a university. According to Kram (1983) and Kloot (2004), visibility in any corporate governance is important in the process of managing the human resources, specifically in monitoring one’s performance.

Finally, the third function is service, i.e. the mandate given to the faculty members to share their knowledge outside academic campus community. Services range from providing economic advices to local governments, industrial institutions and development agencies at federal or state levels, as well as community organizations in terms of extension services in order to disseminate knowledge and good practices related to community development in urban and rural areas. The purposes of the service function are to bridge the gap between university and society as a whole, to make the university curriculum practical oriented, and as an avenue for students to undergo their internship or practicum. By having university-society-industry linkages, the technology transfer functions are performed. The specific tasks executed by academics in this regard are as consultants, subject matter specialists, extension agents, resource persons, or in general adult educators.

Due to the noble nature of an academic career, it is said that the contribution made is not only to a university where he or she belongs, but also to the profession as some academics move from one university to the other. Due to this, Bailyn (2003) strongly believes that the academic career is a profession with a great deal of overload. She defines overload not only as the amount of demands that are made on a person, but also the time taken to see outputs of a certain work. For instance, doing a field study, supervising a Masters or Ph.D. student, writing a book, are all work of which the output cannot be seen overnight.

Academics are, therefore, expected to know the multiple roles and responsibilities right from the beginning of their career. It is inappropriate if an academic is to concentrate on only one function e.g. teaching, which will be equated with the focus of a college or polytechnic; or research only, that is similar to the mission of a research institute; or on services only, like the functions of many development agencies providing public services. In a nutshell, academics from many universities including those from Malaysia do a three-in-one function, a characteristic that distinguishes them from pure educators, researchers and service providers of other corporate and public organizations.

### **Degree of Independence and Flexibility**

Another salient feature of the academic career is the degree of independence and flexibility, both are interrelated characteristics that explain the behavioral functions within the boundary of academic freedom. According to Wicks (2004), the academic freedom is therefore confined by the rules and regulations in the curriculum, scope of field of specialization, and vision as well as mission of the university in terms of the three functions i.e. teaching, research and services. Similarly, Bailyn (2003) refers to academic career as providing more freedom and autonomy than most high-level professions do. It allows one to work on things one really cares about and interested in that provide long-term job security.

There are strengths and weaknesses of academic feature of being in the state of independence and flexibility. Baruch and Hall (2004) argue that this feature makes the academic profession attractive because there are a free flow of thoughts and areas of research to embark on. However, if it is misperceived and abused, academics may be trapped in not being able to put into focus their roles in the three functions of teaching, research and service that may eventually hamper the development of one's academic identity. One of the ways for career-identity development is the establishment of a niche area in teaching and research that, by all means, should be developed early in one's career.

Independence and flexibility may lead towards intellectual freedom (Baruch and Hall, 2004; Wicks, 2004), which is an ingredient for an academic scholarship. This is based on the philosophy that the pursuance of knowledge knows no border, be they in terms of time, place, depth and breadth of the field, and methodology. The development of scholarship requires continuity and multiple academic contexts and experiences. However, there may be contradiction between expectations of flexibility and balance versus the reality of the pre-tenure experience that can be a source of conflict for many beginning academics unless they understand the strategic career paths they should undertake and the tenure requirements to be fulfilled.

In terms of time limit, academic freedom has continuously enabled the academics to view their career as boundaryless. The services of the academics are needed even though they have reached the age of retirement, e.g. Malaysia is up to 56 years (or may be more) and USA which is without age limit. In certain cases, an academic is given the position as an Emeritus Professor in a university due to his/her vast contribution in the academia. This shows that the field of academia constantly acknowledges the academics' even after they have completed their formal term as an educator. The degree of independence and flexibility in academic career may be a plus to women academics as they may capitalize on this fact in terms of balancing career and domestic demands. These academic career features encourage women academics with family to becoming career-oriented, rather than job-oriented, which forced them to adapt to limited opportunities. Therefore, the degree of independence and flexibility offer a kind of accommodation to the career of women academics.

### **The Intelligent Career in Academia**

The concept of intelligent career in academia was first used by Arthur, Claman and DeFillippi (1995), followed by Baruch (2004). This conception was inspired by previous work on the subjective side of the career reflecting the meaning that people ascribe to their own career situations, in contrast to the objective career reflecting the normative roles and sequences of roles suggested by prevailing organizational and occupational structures (Parker and Arthur, 2002). The intelligent career is based on three intrinsic nature of the work in academia: knowing why, knowing how, and knowing whom. In essence, the intelligent career refers to the fact that one knows how to work "smart" in academia.

Knowing why is the mental ability to explore, to be scientific, and to use innovative competencies. This is especially relevant to tasks in research. One has to have an inquisitive mind in doing research. Knowing how is the competencies that involve emotional intelligence and the ability to develop strategic procedures in conducting teaching and research especially towards long-term effectiveness. Teaching and research are two separate activities but in reality, an academic should be smart to make the two complement each other. Certainly, one should know how to make use of the research results in teaching or to make it interesting by continuously updating the contents with latest knowledge.

Knowing whom is associated with the ability to establish connection and networking. This professional relationship with the right person and time occurs locally such as within an organization, inter-organizations, and internationally. It is believed that the latter has more impact on career and it essentially takes time to develop unless one already has been involved in some networking activities during their graduate education or post-graduate program abroad.

The three ways of knowing also illustrate the underlying core competencies that every academic must possess in order to progress throughout their career. Those who are early in terms of

materializing the three ways of knowing, means they are early in putting themselves in their professorial track. Hall (1986) propose that scholars who recognize the spread of research projects, team-working and networking in today's flexible organizations would be able to locate his or her career in a relational environment in which connection, mutuality and interdependence influence an individual's experiences.

### **Other Specific Academic Career Characteristics**

***Flat Structure.*** The academic career is relatively called a flat structure even though some see it as having a linear and hierarchical pattern. It is based on a very few clearly identifiable hierarchical ranks. The stages within the structure do not necessarily mean a supervisor-subordinate kind of relationship except in terms of administrative functions.

As a whole, there are several layers of academic positions across universities in the Commonwealth countries (Baruch, 2004) including Malaysia. Various statuses requiring a Ph.D. that are neither for professorship nor post-doctoral fellowship vary from one university to another. Among these are lecturer and instructor. At some universities, those titles are held by persons without doctorates; at some others, they are held only by persons with doctorates. It should be noted that in most countries having a Ph.D. is essential at least for the position of lecturer. There is also a move towards making a Ph.D. qualification as the minimum requirement for a lecturer in Malaysia.

Within the situation of flat structure of academic career, there is uniqueness in terms of multi-directional career paths that one has to choose. Like in other research and development (R&D) or technical and industrial corporations, one can move within the managerial or technical line. The question of technical versus managerial career ladder (Bowden, 1997; Maimunah, 2003) is one of the important considerations for career development in the large industrial corporations. However, the convention in most corporate settings is that once you become a manager you will stay as one or its equivalent since it is an absolute position. However, in academic career one can become a dean, or a head of department, and then may return to the status of an ordinary member of teaching staff with the respective position of lecturer, associate professor or professor. The downward movement is normally not an indication of failure.

***Requirement of a Ph.D. Qualification.*** Being the highest degree in the formal education, it is often a prerequisite for tenure in academia. Countries like Malaysia and Singapore requires an academic to have a Ph.D. degree for tenure confirmation. The achievement of a Ph.D. degree implies many things. First, through a Ph.D. program, one is assumed to have specialized in the academic area with basic capability and skills in teaching and research. Second, the duration of a Ph.D. program, which is about three to five years, should have enabled an academic to build up an acceptable threshold level of academic endurance i.e. the ability to perform without doubt the triple functions of teaching, research and service. Third, a Ph.D. program is the basis towards building up one's scholarship in a chosen specialized area. This is because during the Ph.D. program, the person undergoes vigorous training through student-supervisor relationship, making contacts with other researchers in the same area and, most importantly, professional and international networking particularly for those who study abroad. A Ph.D. research is so specialized and focused, like making "an inch wide and a mile deep research". In short, having a Ph.D. is necessary to situate oneself in an area that will further navigate him or her throughout one's academic career.

***The Provision of Sabbatical.*** In practical term, sabbatical is a leave given to any academic after serving a minimum number of years in academic tenure. Malaysian academics are encouraged to take a sabbatical during their tenure as a form of incentive for their career development. There is normally a set of criteria required to fulfill for a sabbatical. The candidate must show a sufficient level of performance in the three functions of teaching, research and services, and must indicate a proposal of project or research that has to be undertaken during the sabbatical. The purpose of a sabbatical is to take a break or to be away from the regular duties and to engage on any teaching or research project in order to strengthen one's scholarship. The benefit is not only to the academic who takes the formal



leave, but also to the institution where he or she comes from, and to the organization at which he or she works with. Depending on the availability of staff and the spread of workload in a certain department of a university, an academic in Malaysia is allowed to take one or two sabbaticals throughout the entire work tenure.

**Specialization.** There are various professional qualities that determine career success in academia and one of which is the development of field of specialization. Martin (2002) asserts that the academic scholarship should be carried out where art and specialization coincide. Specialization is necessary to scientific progress as one could not be a master of all fields. Specialization indeed opens up the way towards one's niche area, and putting together all the niche areas of academics will lead to the development of a university's cutting-edge image. Yet specialization would be meaningless if there is no drive for discovery and innovation. Enhancement of one's scholarship within a field of specialization requires not only hard work and continuous thought but also inspiration to go higher day by day.

**Individual versus Teamwork.** In academia, however, both individual and teamwork have their own significance. When it comes to annual performance assessment and promotion exercise, individual accomplishment is sought after rather than group accomplishment. Individual accomplishment especially in research and publications denotes qualities such as resilience, self-efficacy, commitment and ability to make one belongs to a field of specialization. Teamwork in academia, on the other hand, helps the individuals involved, and develops the department, faculty and university's image. However, the team leader's contribution in teamwork seems to be very significant and it is almost equated to an individual's accomplishment. To what extent the team leader has transformed the status of the individuals and the group is indeed seen as an individual valuable contribution in terms of leadership development. The project leader is said to have exercised a transformational leadership, a situation that is different from the managerial or transactional leadership.

**Intellectual Capital.** Many universities in the world including Malaysia have adopted the principles of acknowledging the knowledge creation of an individual in the form of intellectual capital. This means that any new knowledge in the form of research breakthrough or innovation is the property of the researcher or inventor, with a certain percentage goes to the university. This concept of intellectual capital, also called intellectual property is one of the academic features which is similar to that in R&D institutions, and makes both types of institution very attractive to researchers or scientists. Due to this development, many established research universities in Malaysia and elsewhere in the world have their own business arms (e.g. University Business Centre or UBC for UPM), aim to promote knowledge or technology commercialization. The development of intellectual capital is said an important role of a university towards wealth creation.

**Expectation on Professor.** There is another aspect of the career that increases the psychological demands it makes on faculty member particularly a professor. A professor is supposed to be an expert in her or his field; one is expected to have answers to all questions. Bailyn (2003) puts it that there is an understanding that a professor should always appear knowledgeable. This can be taken as a special function or burden. Professors are expected to act like mentors because mentors are recommended for junior staff to lead them especially in research and networking. Professors in Malaysian universities are also expected to hold administrative responsibilities. For in instance, based on a Malaysian study by Zaharah (2003), the total number of women academics that held positions of a dean, deputy dean, director of a centre, and head of department was 13 at a university that consists of 11 faculties including a centre.

It is therefore obvious that there is an unexplored link between the unique features of career the academia and career development of women academics. Furthermore, the academic literature suggested that there is a need for women academics to voice their experiences not only on their role expectations, issues related to gender accessibility to management and leadership, promotions and career mobility (Bailyn, 2003; Forster, 200) but also on questions what makes the academia an attractive place for them to develop their career. This is important as Morley and Walsh (1995) suggest

that women academics should demonstrate how individual and psychological factors as well as organizational climate of the academia influence their dynamism in the academia; and this knowledge is shared with others especially the junior academics. Hence, this paper is an attempt to put forward the uniqueness of academia as experienced by a group of Malaysian women professors and how this experience helped them in their career development.

This article has adapted and adopted several models such as Super's (1990) developmental stages of career as the theoretical foundations and supported by Gottfredson's (1996) and Astin's (1984) studies on the unique nature of academia that influence women professors' career development by taking into consideration the influence of gender.

Super's (1990) work was focused on the individual discovery of self by investing in work and in social relationships with others in interactive life-spaces. The author identified five familiar life stages which helped him recognized the problems, activities and interests of various ages. These life stages of life career are childhood growth (before 13 years), exploration (14-24 years), establishment (25-45 years), maintenance (46-56 years) and decline (56 years onwards).

In the growth stage, individuals build up their early identity of specific aptitudes with the influence of biological background and process of adaptation to the environment. Specific developmental tasks occur such as becoming concern about the future, increasing personal control over life, developing a need for achievement and acquiring competent work habits and attitudes.

The exploration stage includes developmental tasks i.e. specifying and crystallizing of occupational choice towards individual and vocational identity. Astin (1984) and Newhouse-Maiden (2002) suggested that the concept of career and gendered self-schemes are first constructed at this stage.

Next is the establishment stage in which Super (1990) placed in the construct of career adaptability which concerns with the appropriateness of the career decisions previously made. Implementing career choice and stabilizing the chosen career choice happen along with the implementation and stabilization of self-concept. In the same vein, Baruch (2004) asserted that career and individual inner feelings tend to compliment to each other. Individual is expected to have promotions during this period or else to change vocation.

Subsequently, is the stage of maintenance where individuals become firmly entrenched in career and attain seniority through consolidating career tasks. Baruch (2004) suggests that an individual will be becoming more firmly entrenched in one's chosen occupation, or transition to a different occupation. Finally, the decline stage begins with retirement from public life. Baruch (2004) further simplified that this career stage of disengagement is all about phasing out, deceleration, and retirement. The decline stage is however, beyond the scope of this study.

Super's (1990) career and life stages i.e. exploration, establishment, maintenance and decline are also called under the vocational developmental tasks as specification, crystallization, stabilization, implementation, and consolidation. This study emphasizes what affects the last three tasks of stabilization, implementation, and consolidation of the women professors' career development based on the uniqueness of academia as they experienced.

### **The Career-History Study**

The data generated from this study were based on career-history method. Career history is essentially the description on career action resulting from an inter-play between life and career activities. The respondents of the study were women professors, who are from seven established public universities and one private university in Malaysia, representing various fields of specialization in the fundamental and applied sciences, as well as social sciences. A criterion used for selection was each professor has had (or currently holding) an administrative post at the university. The names and information of the respondents were obtained from the registrar office of the universities as well as website of the respective universities. A total of 78 respondents were selected from a population of 218 women

professors. The respondents were then contacted by ordinary mails, e-mails and telephone calls to invite them to participate in the study. Thirty-one women professors were interviewed, as the data obtained were believed to reach the saturation point. A recorder-cum-transcriber was used to facilitate the interviews and the transcribing processes. Each interview lasted from 1 to 2 hours and addressed topics related to the research questions. A total of 42 hours of recorded interviews was later transcribed verbatim. Constant comparative analysis of data (Ritchie & Lewis, 2003) was conducted to generate themes as they relate to respondents' academic and administrative experience and its contribution to their career growth. This method involved deriving themes from one part of the data and testing them on another by constant checking and comparison across different respondents.

## **Results And Discussion**

### **Profile of the Respondents**

The respondents' average age is 49.6 years, with 41 the youngest and 60 the oldest. The average age at which they were promoted to the position of professor is 44.5 years with a mode of 45 years. All respondents are married with one respondent who is a single mother due to death of her husband and another respondent is separated. The average family size is 5.6, with 18 respondents (58.1 percent) having 1-3 children, 7 respondents (22.6 percent) having 4-5 children, and 6 respondents (19.4 percent) having 6-8 children. Twenty-four of the respondents were specialists in the fields of technical sciences such as food science (2), chemistry (3), molecular biology (1), medicine (6), solar energy (1), engineering (3), veterinary science (1), agriculture (1), biochemistry (2), taxonomy and ecology (1), environmental biology (1), pharmacy (1), and aquatic ecology (1). Only seven respondents are in social sciences such as education (2), Malay studies (1), social and town planning (1), management (1), psychology (1) and economics (1). The majority of the respondents studied in non-coed or girls-only schools during their primary or secondary education. All respondents are full-time staff of the universities.

This study generates themes based on the uniqueness of academic career as experienced by this group of women professors. The uniqueness means their strong belief in the specialty of academic career as they love it so much and would make it as a career for life. The themes and the discussion are as follows:

#### **(1) Teaching is a noble duty**

In academia, teaching seems to be first priority, followed by research. Related to this, Zimmerman (2006) believes that a strong commitment to the classroom will affect their chances for promotion. For the women professors, they appeared to accept teaching as a noble duty, in which they formed their own teaching philosophy. By doing so, it affects how they develop lessons and how they treat their students. A respondent from taxonomy and ecology has this to say:

When I was a young lecturer, I had to teach about nine courses since at that time, everybody was doing their Ph.D. So I didn't publish. However, I did supervise many students. I think I just did teaching for about six years. Actually it is not easy to describe about my teaching experience, but I think it is wonderful. Moreover, I have my own way of teaching students. To me, a good lecturer is someone who makes things simple. I think as a lecturer even as a school teacher, we must have the sense of responsibility to develop people. A good teacher also should be proud to have better students and at the end of the day, the students are better than him or her. But it is energy demanding.

An academic should not only concern with the understanding of the course material, but also with the variety of styles necessary to cater to such diverse students. Realizing this, Tucker (2006)

stresses that educators should not just teach the content of courses but they should teach students how to become effective learners and guide them in honing their critical-thinking skills. This is another task that seems to make the academic task admirable. A respondent of chemistry describes:

I like teaching and being a lecturer, I really enjoy it. ... I used to on-stage speaker ... during my schooling days. I also get along with the students very well. I made a point that students could come and see me at any time. I don't have certain time for them. If they want to call me even at 10 o'clock at night, they may do so. I always encouraged my students to write as what I have experienced before during my student's days.

## **(2) High value of research and publication**

The theme on high value of research and publication has three sub-themes. First, is the active involvement in research and publication; Second, research is for improvement in teaching, and; Third, research impact to society at large.

*Active involvement in research and publication.* Poole and Bornholt (1998) and Shaw (2004) suggest that research and publications are highly valued in assisting academic career advancement in comparison to other community services. Data show that respondents' outstanding performance in research and publication has brought impact to their career development. A respondent of management emphasizes this idea:

Whatever the outputs are in research or writing... not everybody has the same skills. Nowadays we require visible outputs, which can be in any form, it may be books or research articles or any form of outcome. Administrative positions alone are not enough any more and, as I said, my promotion was mainly due to my books.

Above all, the respondents found their profession in the academia enjoyable and challenging. According to Nauta, Epperson and Kahn (1998), ability and self-efficacy have very much influenced the higher levels of career aspirations of these women professors. They garner competitive funding, publish refereed articles in the top-tier journals in their fields, and develop national reputations for their disciplinary research. Indeed, funding that comes into the universities is linked to their performance in research. The following statement from a respondent of psychology explains:

So far, I think I had involved in at least ten research projects. At the moment I have two IRPA projects. The National Unity Department keeps asking me to take on some projects for them in which I have to come out with a proposal. Then I was in the population base study on men's health which I just completed. It covered a big population.

*Research for improvement in teaching.* The respondents repeatedly mentioned the challenge of integrating quality teaching and research inputs into their curricula and they perceived it as their continuing professional development. In order to improve teaching quality, they give strong emphasis on active research input in order to be up-to-date with the current changes in their field. According to Peter and Giorgio (2005), the extent of teaching quality can influence the variations in the types of students coming in to any school. A respondent from solar energy explains her experience:

I was the first in Malaysia to do quantitative day-lighting. Architects were more to design where as mine was actually to measuring. I did the field work, computer simulation and lots of other things. At the same time, I was involved in writing a book for the students. In three years, I managed to get two books. The fact that I cannot detach myself from education had made me work with my colleagues. As such, we presented many papers on science education. Currently, I have a research grant and I still do teaching for four hours per week. I enjoyed teaching and I felt that there is no point I did research if I didn't pass the new knowledge to my own students.

Besides that, I am supervising postgraduate students, too. It is easy to get them because I have projects.

*Research impact to society at large.* The academic setting has a unique and expanding niche in the area of investigation through various research works. The research is maneuvered towards development and to some extent it will lead to another scientific discovery. All research findings are meant to bring positive societal impact. The respondents make sure that they go beyond the line of expectations in terms of doing their tasks. It is such a special quality that makes them different from others. A respondent from molecular medicine emphasizes her idea on the impact of research to society locally and internationally:

I made the discovery which was a contribution to sciences, until today. This scientific discovery was on the way to diagnose a very serious disease which killed many children. So we need a faster method to diagnose it. I learnt about the technology transformation to make the test faster and we came up with a diagnostic kit. Then we patented it and the kit is now in the market and it is making lots of money. It has been sold to more than twelve countries around the world and the impact was very good.

### **(3) Academic-cum-administrator**

The theme on academic-cum-administrator is divided into two sub-themes, namely, an opportunity to exercise leadership; and an encouraging image of women academics as leaders and administrators.

*Opportunity to exercise leadership.* Involvement in administrative function takes quality leadership to guide and direct a group of professionals to move forward in goal attainment. According to, Wajcman (1998) quality and balance is also reflected by vigour and rigour. Respondents unanimously admitted that the high performing academics are in their best position to exercise leadership in their respective universities. A respondent of chemistry who is presently an institute director has this to say:

When he (the former director) was leaving, he called me up and said, “I think it is time for you to be a director...” I accepted the post but I told him that there will be some changes. I am not the person who likes to follow what other people did. He conceded that I can be creative as long as it is good. So I took the challenge.

Besides teaching and doing research, the academic duty is unique in the sense that they should do administrative role at the department or faculty or even university. Being an academic-cum-administrator, they have to juggle their time wisely because the respondents realized that at the end of the day, their scholarship performance that matters. This is also an advantage for women academic, as they are used to juggle their time with multiple tasks in both work and non-work spheres. A dean who specializes in aquatic ecology explains the excitement being a leader while doing teaching and research:

When I came back from my doctoral study, I had to be the head of department because in those days there were not many lecturers with Ph.D. So I had to start everything from scratch... I have to set up the laboratory. I did write papers and most of the papers were written from my Ph.D. work as well as my previous work which I didn't have time to write. I found out later that in terms of career it paid off.

*An encouraging image for women academics as leaders and administrators.* A highly visible female administrator would provide encouragement and support for other women academics to participate in management. It would also signal that the university is serious about improving gender equity in terms of leadership in higher education. Kloot (2004) relates this to the expected cascade effect i.e. as the organization provides support and encouragement to women academics holding administrative position, those women administrators would become role models and provide goals and

encouragement for other junior women academics. This was illustrated when a respondent from education said:

My target was to uplift the status of the department, so that it is reputable as others or better than other faculties. So I worked very hard in that sense. They called me iron lady but I couldn't care less. I have my aspiration of what I want to do with my department. So much of brushing shoulders with the men. In research, I was also writing and presenting papers like any other academics that were not in the administrative positions.

Involvement in administration is a means towards one's visibility in a university. Hoschette (1994) asserts that the value of visibility is accelerated career advancement. Therefore he strongly suggests the essential of having visibility especially with the upper levels of management as visibility could also be associated with power.

#### **(4) International networking**

Richardson and McKenna (2003) view strongly that international experiences are becoming more valuable in building and sustaining a reputation through networking, writing and research. They further assert that internationalization of academic function brings benefit in terms of new skills and goal practices, better research networks and enhanced communication skills. Almost all respondents did mention that international networking was a crucial effort in consolidating their career. A respondent in theatrical studies explains her experience:

You need to project yourself internationally. There is no point in you being known here, but not known outside. For me, I'm more known outside as well in the field of social culture, not a theatre person per say. Here, it is more on theatre... Because my overseas mission is more on cultural elements surrounding theatre and theatrical arts. So I project a lot of the country's image. Last year I was in Russia presenting a paper. I also went to Hungary and New Zealand. As for the international organization, I am the secretary general for Asia-Eastern region. I am also involved in non-government organizations.

Almost all respondents did mention that international networking was a crucial effort in consolidating their career. They had the belief that local recognition would automatically follow international recognition. The respondents strongly feel that involving themselves in local and international networking is to let others know of their expertise and capabilities. A respondent from taxonomy and ecology emphasizes her idea:

I believe international recognition is one of the core activities in academic building. We met people at the conferences and began to network... And then my networking became stronger and I started to collaborate. So far, I had collaborated with an institute in Denmark and managed to get a 4.4 million dollar project. Again I managed to get a 40 million dollar project to set up a museum for taxonomic study but this time was from Japan. I believed that with strong international linkages, I have the bargaining power.

As asserted by Baruch (2004) networking with the right person, purpose and time is a manifestation of intelligent career as alluded to earlier. In this study most of the networking activities took place between respondents with institutions abroad. It is clear that the impact of networking to the respondents is very meaningful to their career.

### **(5) Sabbatical leave**

One of the most attractive provisions in academic line savored by these women professors is their sabbatical leave. Baruch and Hall (2004) refer to sabbatical leave as one of the specific characteristics of academia. They add that sabbatical leave adds to the notion of intelligent career in the academia. Sabbatical leave is usually offered by universities to their academic staff after they have completed certain tenure. It allows them to take a break away from teaching and administrative routines in any semester and to engage on any teaching or research project in order to strengthen one's scholarship. The respondents regard it as a period of self and career renewal in the journey of career development. One respondent from medicine explains how sabbatical leave helps her deal with work:

I had three sabbaticals. The first time I spent six months on breast surgery overseas. The second one, I went to Edinburgh to look at their breast clinic, how it was set up and run. The third one, I went to Australia because I thought that I have enough experience in the UK, I might as well go to the other side of the world.

The respondents said that they fully utilized such benefit for career enhancement because they always have a target or some targets along their career journey. The sabbatical leave is one of the means towards this end. Another respondent of psychology expresses her opinion on the importance of sabbatical leave:

I think sabbatical leave is very important, but a lot of people used sabbatical in a very different way. To some people, sabbatical is just like holiday. I think sabbatical is the time that we need to improve ourselves, attend courses, do attachment in an institution, and is the time for we reassess our performance or start on a new project.

### **(6) Involvement in professional training and consultancy**

Academic work has also allowed respondents to be involved in training services. In a way, doing such services have many advantages, such as a mechanism for the respondents to get relevant inputs to be used in the lecture and, thus, to become more visible among the practitioners and university management. A respondent from management stresses her idea on the importance of her involvement in professional training:

I did a lot of training services. It is an area that requires energy; despite that, it also helps my teaching. It is the only way of contacting people out there. When the training participants told me their stories, I will adapt and use them in my lecture. It helps the students to have a realistic picture and I found that this element was lacking in many lecturers.

Another respondent of engineering echoes the same idea:

Currently, I am the chairperson for lady engineers committee. It is a sub-committee for a big organization. Besides that, I was chosen as one of the counsel members for this organization. I was given a three-year term and I am into my second term now. All these are voluntary work and I like doing it.

This group of women professors seemed to agree on the uniqueness of the academic role that has led to their career excellence. The three-in-one function of teaching, research, and services had made the academic career attractive and a life enriching experience, while seeing students and society as the beneficiaries. However, the respondents did vary in their principles and conducts of teaching due to their diverse specializations. It was very clear that respondents' involvement in research and publication as the element that differentiated them from the rest of the academics.

Administrative position held was found very important as a service function in the university. This included leadership in various capacities such as program coordinator, head of department, deputy

dean and dean. This was not to mention the various committees that they were in at the various levels of department, faculty, and university and outside it. Other issues related to the uniqueness of academic role were the flexibility of working in a team or individually for research; the change in research focus from technical science to social science; the existence of sabbatical work; the involvement in professional training; and, the priority of teaching and research versus clinical, in the case of the medical academics. It has been observed that many respondents received awards during their career span in the academia. This is a testimony to their outstanding performance.

## **Conclusion and Recommendation**

The academic role that was perceived as unique and exciting to this group of women professors requires initiative, strategy, stamina and strong determination. The academics have the knowledge and skills how to get along with their peers, to balance research, teaching and services, and to manage their time wisely. They experienced that the academia is not only a place for them to exercise their roles in teaching, research and publication, but also to demonstrate their leadership ability as an administrator. All of the respondents have significant experience as a head of department, program coordinator, deputy dean and dean during their tenure as a professor or years before appointed to a professor. They were able to capitalize on the provisions provided by the universities for professional development purposes such as the sabbatical leave, involvement in international engagements through participation and networking at conferences and workshops and involvement in professional training and consultancies. Their career aspiration towards moving to a greater height in their career has guided them throughout their career development. They consciously acknowledged that there is attractiveness in academia in which they enjoyed the three-in-one functions of teaching, research and services.

The study recommends that the experience of women professors should be tapped down by other academics particularly the junior ones through various knowledge sharing sessions or in-built into various research projects that encourage team work. This is necessary to counter balance the notion that there are numerous career barriers faced by women academics (Forster, 2000; Bailyn, 2003).

From the gender perspective, the group of women professors has challenged the traditional organizational structure characterized by domination of men at the higher organizational rank. The uniqueness of the academic career has enabled them to integrate work and non-work functions in a balanced manner. This further strengthens the notion that teaching or generally academia is a fertile ground for women to develop their career as common wisdom used to say. It is also concluded that the women professors have, to certain extent, rejected the typical pattern of women's career of being flexible, transitory and temporary in nature. It is believed that this group of women academics has improved the image of working women in the academia that they, too, are able to perform like men, to use Wajcman's (1998) words. It could be implied that to be in high-ranking position in academia, the women have to work like what men could do without giving up their feminine characteristics because they are still perceived to exercise their normal duties as mothers, wives, and professionals, a condition what modern women should know and appreciate in the present scenario of employment.

Future research should be conducted among men professors in order to make comparative analysis. Since there is a preponderance of men academics in high-ranking positions in academia, relevant questions follow: "How do they perceive gender equality in the academia?" "What do they perceive on the future organizational role of women in the academia considering many women researchers outshine in the various fields of basic and applied sciences as well as social sciences?" The use of both qualitative and quantitative methodologies in future research endeavors will contribute to the development of a more robust understanding on academic career from a gender perspective.



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## **Orientation of University Seniors from Southeastern Turkey to the European Union**

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### **Abstract**

One of the most crucial requisites for the European Union to reach its ideal of becoming a fully and legitimate political community is the expectation that its constituent citizens are sufficiently oriented toward the EU. This requirement holds true for the communities of all candidate nations, including the Turkish community, whose adaptation to the EU generates a lot of discussion. Due to its expansive territory comprising areas extremely distinct from one another in terms of socio-economics and culture, the matter of the Turkish public's orientation to the EU is actually one that is much more challenging than it appears. This study attempts to analyze respondents' EU orientation, based on the results of a survey administered to university seniors in Diyarbakır; a city that would constitute one of the farthest points in a hypothetical map of the EU where Turkey is also a member. Because it is a region host to diverse ethnicities and cultures; its socio-economic status is lower than that of the national average and it frequently experiences political-social strife, Southeastern Turkey is often a point of contention in relations between Turkey and the EU. An assessment of the opinions of university students in this region revealed a rather pessimistic picture, including certain negative aspects in terms of respondents' level of knowledge and evaluation of the EU. However, it was also ascertained that this picture was not a rigid one that these young people would be more rational in their view of the EU, should the possibility of Turkey's accession as a full member become more attainable.

### **Introduction**

Becoming an EU member is undoubtedly the expression of an important preference, a decision to change for all states and their peoples. Any state, for instance Britain would have continued along its chosen path had it not become an EU member; however, there would have most certainly been significant differences between a Britain that was not an EU member and a Britain that is. Regarding Turkey's membership bid in this context, and taking into consideration a variety of historical-cultural-geographical reasons, it will not be difficult to estimate that the significance that EU membership bears for Turkey and her people far surpasses that of other nations to date. It is again a result of the same historical-cultural-geographical reasons that the EU also considers Turkey's accession to the Union as a critical decision that does not compare to any other nation.

Furthermore, the existence of an increasingly 'Euro-sceptic' public even in the member states has enhanced the importance of attitudes held by the citizens of candidate countries towards the EU in meeting the goals of the Union successfully. Therefore, due to the aforementioned distinction of the

Turkish case, knowing people's attitudes in Turkey towards the EU has a great deal of importance. Based on this rationale, this study attempts to present the selected results of a survey conducted among seniors at Dicle University in Turkey, via an investigation of respondents' level of awareness about and consciousness of the EU.

Dicle University is in Southeastern Turkey, within the Diyarbakır Province that is located close to Turkey's borders with Iraq and Syria. It is believed that results obtained from Diyarbakır, which would be situated on the farthest point on a hypothetical EU map inclusive of Turkey, will be significant in terms of finding out respondents' EU orientation. The complex socio-cultural and ethnic structure of both Diyarbakır, and the region, is also significant in evaluating obtained findings. Prior to an evaluation of the results, the two concepts frequently used in this article to imply level of orientation, namely EU awareness and a sense of belonging to the EU (sense of EU consciousness) will be explained briefly in this section. An outline of the survey and certain characteristics common to the respondents as determined by the survey will also be presented here. The following two sections will cover respondents' awareness of the EU and their various opinions regarding the EU based on the survey results, and analyses of the findings will comprise the final section.

### **Modes of People's Orientations towards the European Union**

Niedermayer and Westle (1995) classify the modes of orientation towards political systems (here the EU) in three parts:<sup>1</sup> The first one is psychological involvement, implying 'neutral' and 'non-evaluative' knowledge. It is naturally the first step because the development of any attitude towards a political institution should begin with people being aware of its existence and this overlaps with our concept of awareness of the EU.

The second mode is evaluation, representing 'any position a person has regarding a particular object in terms of a positive/negative continuum'. Depending on their knowledge and different variables, people develop positive, negative or indifferent attitudes towards institutions such as the EU. This evaluative orientation might be based on either a pragmatic, interest-driven and cost-benefit calculation (utilitarian/specific support) or more general, value-driven and idealist motives (affective/diffuse support). The utilitarian type of orientation is necessary in constructing attachments. However, the critical task in becoming a political community is to gain an affective/diffuse support beyond this cost-benefit evaluation. In this second mode, the EU means to people more than a matter of pragmatic evaluations, an internalized or 'being attached' object. Our concept of the sense of belonging to the EU mainly implies this affective and ideational orientation, and only in such a strong affiliation political community ideal, the ultimate aim of the EU, can be achieved. In fact, it is not always an easy and consensual matter to decouple and articulate these two modes. The theme of security is a salient case in point. If it is considered as people's demand for co-operation and peace, then it is the marker of ideal interest and affective support (Bosch and Newton, 1995, 75; Shepherd, 1975, 94). If an individual's demand for international co-operation for security is driven by self or especially national interests, as Shepherd (1975, 95) concluded from people's response to the survey questions, then it is utilitarian. In literature, however, a person's economic calculations about the EU, either on an individual or national basis, are widely accepted (almost synonymously) as the main indicator of utilitarian support. For the articulation of affective support, there are also some widely accepted question types. These questions mainly seek out people's general and abstract sentiments about the EU (i.e. trust in the EU).

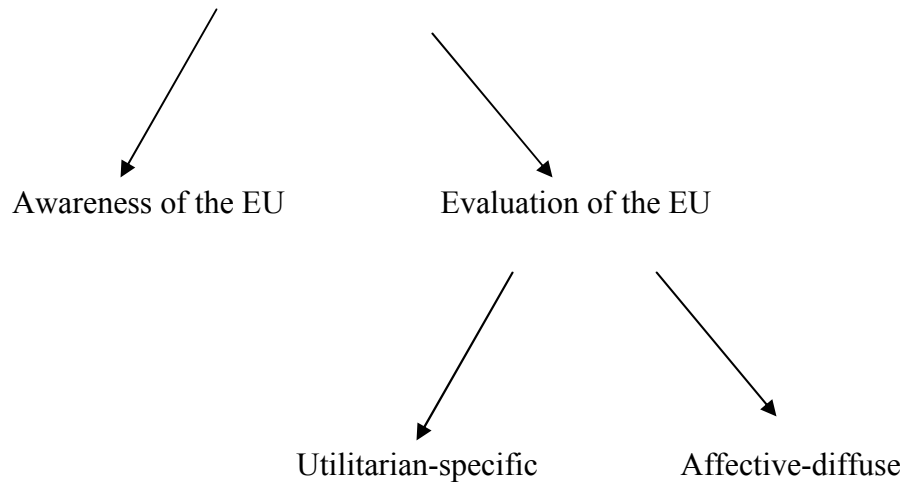
As the third mode of orientation, distinct from a mere positive/negative evaluation, the authors suggest 'behavioral intentions' which include active participation, e.g. voting, signing a petition.

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<sup>1</sup> Departing from three previous studies on this issue, namely Almond and Verba's (1963), Easton's (1965; 1975) and Lindberg and Scheingold's (1970), Niedermayer and Westle develop their modes of orientation to internationalized governance. The concepts used by the previous three authors to classify the modes of orientations are close to each other in many senses. Even the Niedermayer and Westle describe them "nearly identical" (p. 49). Therefore, instead of getting involved in long theoretical debates around the concepts, the classification of Niedermayer and Westle has been referred to in this article and summarized with some reservations.

However, in our opinion, this kind of active involvement is the outcome of already acquired positive or negative evaluation. Besides, in regard to Turkey, most of the channels for the active involvement of people have still been absent, for example voting in elections to the EU parliament or the right to petition EU institutions. Therefore, to assess the results of the survey, the course of this article covers two types of orientation (Scheme 1).

**Scheme 1:** People's Modes of Orientation to the European Union



### **Outline of the Survey**

A 30-item survey that took about 15 minutes to complete was administered between October 30 and November 7, 2006. Data were gathered from a total of 308 randomly selected respondents, drawn from among seniors from almost all of the departments at Dicle University that offer at least four or more years of study.<sup>2</sup> Because university seniors are both currently students and prospective professionals who will soon become a part of the workforce in various fields, their standing with regards especially to the European Union is crucially significant. This is why they were selected as the target group of this study.

Some of the questions were designed to gather information on respondents' demographic, socio-economic and cultural characteristics: namely age, gender, region, family income, visits to EU countries, language, religious affiliation, ethnicity, membership to non-governmental organizations and political party preference. The rest of the questions were designed to explore respondents' level of knowledge about the EU and their opinions about EU-related matters.

### **General Profile of the Respondents**

It is necessary to first present certain demographic, socio-economic and cultural aspects common to all respondents prior to initiating an assessment of the survey findings, so as to be able to generate an idea about their circumstances and overall profiles.

- In terms of gender, 60.7 percent of the respondents were male and 39.3 percent are female.
- With the exception of a negligible proportion (0.6 percent), all respondents were under the age of 30; most between the ages of 18 and 25 (85.4 percent). - While 56 percent of the participants were from Diyarbakir, nearly 90 percent were from the Eastern and Southeastern regions of Turkey. This means that the results of the survey in a sense reflect the opinions of young and educated people in those regions.

<sup>2</sup> These are the School of Medicine, the School of Education, the School of Agriculture, the School of Architecture and Engineering, the School of Divinity, and the School of Science and Literature

- While 27.3 percent of the respondents' monthly household income was between only 350 and 750 TRY, 7.8 percent was even lower; 40.6 percent of the students' monthly household income was between 750 and 1,000 TRY, only about 15 percent of households had a monthly income of over 1,500 TRY. In other words, the majority of the students were from a very low, low, or low-middle income group.
- Nearly all students (95.8 percent) reported they had never been to a European country since they were 15 years old, while only 2.2 percent said they had visited one or more countries.
- While 87 percent of the students said they were unable to speak any one of the official languages of the EU at a level where they could express themselves, only 11.7 percent reported they could speak one of these languages.
- In response to the question "What is your ethnicity?" 59.7 percent of the students responded "Kurdish," 24.7 percent said "Turkish," and 6.8 percent provided other answers, but mostly "Arabic." The remaining 8.4 percent marked the item 'no comment.'
- While 93.8 percent of the students noted they were believers of Islam, the remaining respondents said they were either not affiliated with any religion (3.6 percent) or chose not to answer the question (2.3 percent). Of the respondents that reported a religious affiliation, 33.1 percent said they worshipped regularly, 9.4 percent frequently, and 44.2 percent said infrequently. - Almost three out of every four students (73.7 percent) are not members of any given non-governmental organization. While 13.3 were members of one organization, 7.1 were members of more than one.

Based on the characteristics above, the students appear to comprise a nearly homogenous group in terms of religion, financial status, hometown, foreign languages and visits to EU countries. It should be noted here that the respondents differed in terms especially of 'ethnicity' and 'non-governmental organization membership;' correlations in relation to these two aspects will be employed at times in the following analyses. It should also be said here that the question on gender was included in the questionnaire as a means to construct an overall profile of the respondents.

## **1. Awareness of the European Union**

Raising EU awareness among the Turkish public is one of the most important issues in achieving legitimate and successful integration. Here, "EU-awareness" implies the acquisition of knowledge that is profound and true, not superficial and limited. People have to possess a certain level of knowledge about the EU to be able to evaluate and decide where they stand with respect to the EU. The questionnaire had three groups of questions on the matter of 'awareness.' First, respondents were asked whether or not they were interested in EU-related news, and if yes, which resources they used most to access information. Then, respondents' self-assessment of their knowledge about the EU was inquired. Finally, various questions were employed in an attempt to ascertain the respondents' actual level of knowledge in relation to the EU.

### **Respondents' Interest in EU-Related News**

Only 3.2 of the students said they were not interested in EU-related news, while 18.2 said they were not very interested, 57.1 percent said they were, and 19.8 reported being very interested. Accordingly, three fourths of the students (76.9 percent) are either interested or very interested in EU-related news (Table 1).

**Table 1:** Are you interested in EU-related news?

|  |      |
|--|------|
| Very interested                            | 19,8 |
| Interested                                 | 57,1 |
| Somewhat interested                        | 18,2 |
| Not interested at all                      | 3,2  |
| I don't know/I have no idea/I am undecided | 0,3  |
| No comment                                 | 1,3  |

While 82.9 percent of the respondents that said they were members of a non-governmental organization and 86.4 percent of those that reported being a member of more than one were interested or very interested in EU-related news, the 74.6 percent that were not a non-governmental organization member expressed interest. Consequently, it may be said that the students' lack of interest in activities of non-governmental organizations also results in their being more apathetic to political issues and having less interest in EU-related news.

### **Level of Self-Perceived Knowledge about the EU**

Despite respondents' high level of interest in EU-related news, self-assessments of their level of knowledge about the EU seem low. The administered questionnaire included two questions to gauge respondents' level of self-perceived knowledge about the EU. The first aimed to discern their sense of being informed about the EU in general, and the second was in relation to Turkey's accession process.

When asked how much they thought they were informed about the EU, the majority of the students considered their level of knowledge to be inadequate (55.8 percent) or somewhat inadequate (6.2 percent); while 29.2 percent thought they were adequately informed, only 3.9 percent considered themselves quite adequately informed.

When asked how informed they perceived themselves to be about Turkey's negotiations in the full membership process, although a slightly higher proportion of students considered their knowledge level to be quite adequate (4.9 percent) or adequate (39.9 percent), a greater total number found their level of knowledge to be inadequate (45.8) and very inadequate (5.2). The reason why a higher number of students that perceived their level of knowledge as sufficient compared to the previous question can be explained by the fact that news and issues in relation to the negotiations process are featured more in the media and other relevant circles.

Comparing the questions on interest and self-perceived knowledge (Table 2), it is no surprise that the small number of students (3.2 percent) that expressed no interest in EU-related news would consider their self-perceived knowledge about the EU as low. Indeed, 50 percent of these students considered their overall knowledge of the EU to be inadequate, and 20 percent considered themselves to be somewhat inadequate. Only 25 percent of the students perceived their level of knowledge as being adequate. The data that requires special attention here is the responses provided by the students who reported they were interested or very interested in EU-related news. Among the 19.8 percent group that reported being very interested in EU-related news, while 3.3 percent considered their level of knowledge about the EU to be somewhat adequate and 42.6 percent found themselves adequate, over half thought they were either inadequately (47.5 percent) or somewhat inadequately (3.3 percent) informed. The situation of the 57.1 percent majority that reported an interest in EU-related news is even more discouraging. Of these respondents, 56.3 percent considered their overall knowledge level to be inadequate, and 4.5 percent considered themselves to be somewhat inadequate.

**Table 2:** Interest to the EU News and Self-perceived Knowledge about the EU

| Interest to the EU news             | Overall, how would you rate your level of knowledge about the EU (its history, institutions, and policies)? |          |            |                  |                          |            |
|-------------------------------------|---|----------|------------|------------------|--------------------------|------------|
|                                     | Quite adequate  | Adequate | Inadequate | Quite inadequate | don't know/ have no idea | No comment |
| Very interested                     | 3,3   | 42,6     | 47,5       | 3,3              | 3,3                      | -          |
| Interested                          | 4,5   | 29,5     | 56,3       | 4,5              | 3,4                      | 1,7        |
| Somewhat interested                 | 1,8   | 16,1     | 66,1       | 8,9              | 3,6                      | 3,6        |
| Not interested at all               | 10  | 20       | 50         | 20               | -                        | -          |
| don't know/ have no idea/ undecided | -   | -        | -          | -                | -                        | -          |
| No comment                          | -   | -        | -          | -                | -                        | -          |

The percentages change somewhat for the responses provided to questions about level of knowledge on the negotiations process (Table 3). Of the small group of respondents that expressed no interest in EU-related news, 60 percent said they were inadequately informed and 10 percent, quite inadequately informed. Among the respondents that said they were very interested in EU-related news, 32.8 percent found themselves inadequate and 4.9 quite inadequate, whereas 57.4 percent found themselves adequate and 4.9 quite adequate. Of the respondents that expressed an interest in EU-related news, 43.8 percent considered their level of knowledge to be adequate and 5.7 percent, quite adequate. Among these respondents, 43.2 percent considered their level of knowledge to be inadequate, whereas 4.0 percent found themselves to be quite inadequate.

**Table 3:** Interest to the EU News and Self-perceived Knowledge about the Integration Process

| Interest to the EU news               | How would you rate your level of knowledge concerning Turkey's negotiations process for full EU membership? |          |            |                  |                            |            |
|---------------------------------------|---|----------|------------|------------------|----------------------------|------------|
|                                       | Quite adequate  | Adequate | Inadequate | Quite inadequate | I don't know/ have no idea | No comment |
| Very interested                       | 4,9   | 57,4     | 32,8       | 4,9              | -                          | -          |
| Interested                            | 5,7   | 43,8     | 43,2       | 4,0              | 2,3                        | 1,1        |
| Somewhat interested                   | -   | 19,6     | 64,3       | 7,1              | 1,8                        | 7,1        |
| Not interested at all                 | 20  | -        | 60         | 10               | 10                         | -          |
| I don't know/ have no idea/ undecided | -   | -        | -          | -                | -                          | -          |
| No comment                            | -   | -        | 75         | -                | -                          | 25         |

As can be seen, respondents that said they were interested or very interested in EU-related news also expressed being more informed about Turkey's negotiations process for full membership than about the EU overall. This situation confirms the view stated above. The negotiations process is featured more both in the media, and in other relevant settings.

### Level of Knowledge about the EU

As explained above, the majority of respondents were of the opinion that they lacked sufficient knowledge about the EU and Turkey's negotiations process. But was this really the case? Three questions were employed to gauge respondents' real level of knowledge about the EU.

The first question asked if respondents had heard of the listed four EU institutions (Table 4). As seen in the table, 92.5 percent of the respondents had heard of the European Commission, and 93.8 percent, the European Parliament. Although these figures are to be commended, it nevertheless needs to be said that these are two basic, highly visible EU institutions, and thus, the fact that they are well known by individuals attending an institution of higher education should not be exaggerated; figures in relation to the other two institutions should be considered as being more indicative. These two



institutions were the Economic and Social Committee, and the European Ombudsman, heard by 70.5 percent and the dreadfully low 13.3 percent of the respondents, respectively. As can be seen, most respondents had not heard of the latter institution.

**Table 4:** Have you ever heard of any of the international organizations below?

|                                 | The European Commission | The European Parliament | The European Economic and Social Committee | The European Ombudsman |
|---------------------------------|-------------------------|-------------------------|--|------------------------|
| I've heard of it                | 92,5                    | 93,8                    | 70,5                                       | 13,3                   |
| I haven't heard of it           | 3,9                     | 2,6                     | 21,8                                       | 70,5                   |
| I don't know/<br>I have no idea | 3,6                     | 3,6                     | 7,8  | 16,2                   |

An analysis of the relationship between these last two institutions and interest in EU-related news reveals that among respondents that reported a high interest, 78.3 percent had heard of the Economic and Social Committee, and 21.3 percent of the European Ombudsman. Among respondents that reported an interest in EU-related news, 70.5 percent had heard of the Economic and Social Committee and 13.1 percent of the European Ombudsman. And among respondents that reported very little interest in EU-related news, 62.5 percent had heard of the Economic and Social Committee and 5.4 percent of the European Ombudsman. Based on the question about institutions, it may be said that as interest in EU-related news increases, so does the respondents' level of knowledge. Nonetheless, other questions on knowledge should be analyzed to confirm this deduction.

The second question attempted to examine respondents' level of EU awareness by asking for the number of EU member states (Table 5).<sup>3</sup> Although the membership of Bulgaria and Romania had not yet been formally finalized in November 2006, the numbers 25 and 27 were both accepted as correct responses to this question. Only 29.9 percent of the students responded correctly to the question on the current number of EU-member states; 70.1 percent did not.

**Table 5:** How many EU member states currently are there?

|              |      |
|--------------|------|
| Right answer | 29,9 |
| Wrong answer | 70,1 |

This question was answered correctly by 36.1 percent of the respondents that were very interested in EU-related news, by 30.7 percent that were interested, by 25 percent of those that were somewhat interested, and by 20 percent of those not interested at all.

Another question asked to assess respondents' actual level of knowledge about the EU, was whether they were informed about educational and other programs offered by the EU to university students (Table 6). The purpose of this question was to see if the respondents knew about one aspect of the EU that directly concerned them. Only 5.8 percent of the students responded that they had sufficient information on this matter, while 45.8 percent said they had little information, and 40.9 percent, none at all. Keeping in mind that the respondents are seniors at schools that require study for four years or more, these answers become even more meaningful.<sup>4</sup> The fact that a very low proportion of respondents reported having sufficient information on this issue clearly indicates that promotion efforts to this end are extremely lacking. However, and more importantly, educational and job opportunities comprise one of the most significant reasons why students would vote in favor of the EU in a potential referendum. As will be explained in detail below, students that responded in the positive

<sup>3</sup> Actually, this is the question that requires priority in establishing level of knowledge rather than the question on institutions, because answers provided to it are clearly either correct or incorrect, unlike having or not having heard of something, which is impossible to test. Consequently, this is the question that will be focused on primarily in the following comparative analyses.

<sup>4</sup> The Framework Agreement that was signed with the EU and enables Turkey to benefit from EU education programs came into force on September 1, 2002

to a question on how they would vote in a referendum on EU membership were also asked about two major justifications for this; 75.6 percent said improved standards of living and economic circumstances, and 46.3 percent said increased education and job opportunities in EU-member states. However, while students support EU membership due to such expectations, they also lack sufficient knowledge on existing EU education programs they might benefit from.

**Table 6:** Are you informed about educational or similar programs of the EU that are geared toward university students?

|                                |      |
|--------------------------------|------|
| I am sufficiently informed     | 5,8  |
| I am not sufficiently informed | 45,8 |
| I have no information          | 40,9 |
| I don't know/I have no idea    | 5,8  |
| No comment                     | 1,6  |

When this question is evaluated together with the question on interest in EU-related news, 16.4 percent of the respondents very interested in such news said they were adequately informed about these programs, while 50.8 percent had very little information and 21.3 percent had none. Of the respondents that stated an interest in EU-related news, 3.4 percent said they were sufficiently informed about the issue. And 45.5 percent reported having very little information on the topic, while 46.6 percent said they had none. Of the respondents that were not very interested in EU-related news, 3.6 percent said they were sufficiently informed, 46.4 percent reported having little information on the issue, and 42.9 percent said they had none. None of the respondents that had no interest in EU-related news said they had sufficient information about these programs; while 20 percent said they had little knowledge on the issue, 60 percent said they had none.

The evaluation of all three information questions reveals that respondents are adequately informed neither about the EU overall, nor in relation to a matter than directly concerns them. However, as people become more interested in EU-related news, their level of awareness of the EU also increases.

### **Resources Used to Access Information on the EU**

As evidenced by the results above and in line with their self-assessments, the respondents' level of EU awareness cannot be defined as encouraging. In exploring the underlying factors of this state of events, the first issue that comes to mind may be the insufficiency of the information flowing from different channels to the Turkish public. At this point, it would be best to present the findings in relation to the resources used to access information (Table 7). The answers of the respondents who have at least a minimum interest in EU-related news reveal that information was accessed mainly from two sources: 82.9 percent from TV programs, and 71.3 percent from newspapers. The Internet was a third source of information, at 29.7 percent.

**Table 7:** (If you are even somewhat interested) Which two resources do you most frequently use to access information on the EU?

|                             |      |
|-----------------------------|------|
| Television                  | 82,9 |
| Radio                       | 2,4  |
| Newspapers                  | 71,3 |
| Journals/Magazines          | 2,7  |
| Books                       | 5,1  |
| The Internet                | 29,7 |
| The EU Information Bureau   | 1    |
| Conferences, seminars, etc. | 2,7  |
| Other                       | -    |
| I don't know/I have no idea | -    |
| No comment                  | 2,0  |

## 2. Evaluation of The European Union

In this section, an attempt will be made to analyze respondents' evaluations of the EU. As was illustrated above, respondents' opinions of the EU, regardless of what they may be, appear to be fashioned mainly by their lack of information.

### Trust in the European Union

A higher proportion of students reported they did not trust the EU (32.1 percent) than students that said they did (23.7 percent) (Table 8). Clearly, a significant amount of people are confused or uncertain on this issue. Students that said they neither trust nor distrust the EU (25.3 percent), were undecided (16.9 percent), or said no comment (1.0 percent) made up a total of approximately 44 percent.

**Table 8:** Do you trust the EU?

|                                     |      |
|-------------------------------------|------|
| I trust the EU                      | 23,7 |
| I neither trust nor distrust the EU | 25,3 |
| I do not trust the EU               | 32,1 |
| I'm undecided                       | 16,9 |
| I don't know/I have no idea         | 1,0  |
| No comment                          | 1,0  |

As can be seen in Table 9, an examination of the correlation between 'trust in the EU' and 'knowledge level' reveals that in all the different answers provided to the trust question, the proportion of respondents that did not know the number of EU member states is quite high. This results from the fact that respondents are mostly not well informed on the issue. Respondents that expressed 'trust' or 'distrust' in the EU knew the number of member states in almost the same proportion (35.6 percent and 31.3 percent, respectively). Nonetheless, lack of information is a significant reason for the uncertainty and confusion mentioned above; this is evidenced by the fact that among the respondents who expressed 'neither trust nor distrust' in the EU, comprising one fourth of the sample, knowledge of the number of member states correctly dropped to 20.5 percent.

**Table 9:** Trust the EU and Level of Knowledge

| Do you trust the EU?                | How many EU member states currently are there? |              |
|-------------------------------------|--|--------------|
|                                     | Right answer                                   | Wrong answer |
| I trust the EU                      | 35,6   | 64,4         |
| I neither trust nor distrust the EU | 20,5   | 79,5         |
| I do not trust the EU               | 31,3   | 68,7         |
| I am undecided                      | 32,7   | 67,3         |
| I don't know/I have no idea         | 33,3   | 66,7         |
| No comment                          | 29,9   | 70,1         |

The trust-knowledge level correlation can also be examined through an analysis of the question of EU education programs. Similar to the question on number of member states, the proportion of respondents that said they were sufficiently informed about such programs among those that expressed either ‘trust’ or ‘distrust’ in the EU, did not differ much (8.1 percent and 5.5 percent, respectively). When respondents that said ‘I have very little knowledge’ were included in the analysis, the proportion of those that expressed trust increased to 58.9 percent, and of those that expressed distrust to 51.5 percent. Keeping in mind that the respondents are university seniors, and considering that the programs in question directly address their expectations, it is seen that individuals’ trust in the EU increases slightly when they have even a little information about these education programs. Fifty percent of the respondents that said they had no information about these programs expressed ‘neither trust nor distrust’ in the EU, which, similar to the question on number of member states, again is evidence that insufficient information causes uncertainty and confusion.

In summary, it could be said that people are unable to make sound evaluations as to whether or not to trust the EU because they are inadequately informed, and make their decisions based more on sentiment. Consequently, the large majority does not have a clear idea on whether or not to trust the EU. In fact, answers provided to certain other questions that followed also reveal that many of the respondents that expressed a clear opinion, especially those that expressed distrust, actually have not formed these views through extensive evaluation, and that these views are not necessarily unchangeable.

**Who Profits in EU-Turkey Relations?**

Students that thought both parties profited from these relations were at 38.3 percent (Table 10). Nonetheless, one out of every three respondents (32.8 percent) argued that the EU profited, while 14.9 percent said the same of Turkey. Although not as high as was the case for the question on trust, respondents that were undecided (5.5 percent), did not know/had no idea (5.2 percent) or made no comment (3.2 percent) comprised a total of about 14 percent.

**Table 10:** In relations between the European Union and Turkey, who profits more?

|                             |      |
|-----------------------------|------|
| The European Union          | 32,8 |
| Turkey                      | 14,9 |
| Both parties                | 38,3 |
| I'm undecided               | 5,5  |
| I don't know/I have no idea | 5,2  |
| No comment                  | 3,2  |

A correlation assessment between the questions on ‘trust’ and ‘party that profits’ revealed that the large majority of respondents that expressed trust in the EU (79.4 in total) believed either Turkey (30.1 percent) or both parties (49.3 percent) profited. In other words, thinking that Turkey benefits from this process in one way or the other significantly impacts the increase in a sense of trust in the EU. The group that trusts the EU is also clear in their views regarding both parties. The fact that

respondents that were undecided, did not know/had no idea or made no comment came to a total of 5.5 percent, is in a way, a case in point.

The majority of respondents that expressed distrust in the EU (56.6 percent) said the EU was the party that profited. Still, the fact that almost one out of every four respondents (24.2 percent) in this group said both parties profit, or that 7.1 percent said Turkey profits more, illustrates that their views on not trusting the EU is not very rigid or fixed. The sum of the other three options increased to 12.1 percent.

A significant portion (43.6 percent) of the group of respondents that said they neither trust nor distrust the EU said both parties profit, while 26.9 percent said the EU and a small portion, 10.3 percent, said Turkey profits. The total proportion of respondents that were undecided, did not know/had no idea, or made no comment increased to 19.2 percent, which again illustrates that respondents are still hesitant or expectant about their assessment of the relationship between the two parties.

### **The Most Beneficial Option for Turkey**

Despite the negative or vague attitude that emerged in relation to trusting the EU, 45.1 percent of the students were of the opinion that becoming an EU-member state was the most beneficial option for Turkey (Table 11). While 17.5 percent of the respondents desired Turkey to remain a neutral country, 15.3 percent would prefer closer ties with Islamist nations, and 4.9 percent supported establishing closer relations with the US.

**Table 11:** Which of the below is the most beneficial option for Turkey?

|  |      |
|--|------|
| Becoming a member of the European Union                                | 45,1 |
| Establishing closer and more extensive relations with the US           | 4,9  |
| Establishing closer and more extensive relations with Islamist nations | 15,3 |
| Remaining a neutral country  | 17,5 |
| Other  | 6,5  |
| I'm undecided  | 4,9  |
| I don't know/I have no idea  | 1,9  |
| No comment   | 3,9  |

In an analysis of the relationship between the questions on 'trust' and 'most beneficial option' (Table 12), it is hardly surprising that 90 percent of the students that expressed trust in the EU, also saw the EU as the most beneficial option for Turkey. However, the fact that 17.2 percent of the students that expressed distrust in the EU still considered the EU to be Turkey's best option, verifies the interpretations made above in relation to this group. In other words, not trusting the EU is not a rigid and absolute sentiment for the respondents, but a relative and reviewable idea. Respondents that expressed 'neither trust nor distrust' in the EU considered Turkey's best alternative as becoming an EU-member state the most, at 41 percent. Again, a significant number of respondents that were undecided on the question on trust also selected EU membership as the 'most beneficial option' (38.5 percent). In the last three groups discussed, it is interesting to note that only a negligible amount of respondents were 'undecided,' 'did not know/had no idea,' or made 'no comment.' A significant number of respondents that 'neither trust nor distrust,' are 'undecided,' or even 'do not trust' the EU also supported the EU alternative; thus it is my contention that unfavorable opinions of the EU are not deep-rooted and fixed, but that the students are hesitant or pessimistic due to various reasons, especially because there is very little hope that Turkey will become an EU-member state in the foreseeable future.

**Table 12:** Trust the EU and Most Beneficial Option for Turkey

| Do you trust the EU?                | Which of the below is the most beneficial option for Turkey? |      |                  |         |       |                |                             |            |
|-------------------------------------|--|------|------------------|---------|-------|----------------|-----------------------------|------------|
|                                     | EU   | US   | Islamist nations | Neutral | Other | I am undecided | I don't know/I have no idea | No comment |
| I trust the EU                      | 90,4   | 1,4  | 2,7              | 4,1     | 1,4   | -              | -                           | -          |
| I neither trust nor distrust the EU | 41   | 10,3 | 14,1             | 19,2    | 6,4   | 3,8            | 2,6                         | 2,6        |
| I do not trust the EU               | 17,2   | 4,0  | 23,2             | 27,3    | 12,1  | 7,1            | 2,0                         | 7,1        |
| I am undecided                      | 38,5   | 3,8  | 21,2             | 17,3    | 3,8   | 9,6            | 1,9                         | 3,8        |
| I don't know/I have no idea         | 66,7   | -    | -                | -       | -     | -              | 33,3                        | -          |
| No comment                          | 66,7   | -    | -                | -       | -     | 33,3           | -                           | -          |

When the ‘option’ and ‘knowledge level’ questions are taken together, half of the 30 percent of the respondents that knew the number of member states (48.9 percent) considered EU membership as the best alternative. The majority that did not know number of member states correctly (70 percent) also chose the EU option the most (43.5 percent). However, as is seen, the group that is more informed about the EU chose this option slightly more. This deduction can be confirmed by comparing the other question on knowledge.

Taking into consideration the preferences of the respondents that said they were sufficiently informed about EU education programs, which comprise only a small portion at 5.6 percent, could be misleading if taken on their own. While 43.3 percent of the respondents in this group considered EU membership as the best alternative, 51.1 percent of those that had limited information and 42.1 percent that had no information on this matter expressed the same opinion.

To clarify this point even more, a connection can be made between the questions on institutions and the best option. Respondents that had heard of the Economic and Social Committee of the EU were at 70.5 percent and 48.8 percent of these respondents chose the EU as the best option for Turkey the most; 35.8 percent of the respondents that had not heard of this institution, also chose the same alternative. Of the 13.3 percent group that had heard of the European Ombudsman, 43.9 percent considered EU membership as the best option; 44.2 percent of the respondents that had not heard of this institution were of the same opinion.

In summary, compared to respondents less informed about the EU, those better informed were found to view EU membership as the most beneficial option slightly more.

### Referendum to Join the European Union

When asked how they would vote in a hypothetical referendum to be conducted this coming Sunday, 63.6 percent of the students said they would vote in the affirmative, and 18.2 percent against (Table 13). Including respondents that said they would not participate in the referendum, those that are against membership come to 23.1 percent.<sup>5</sup> It must also be noted that about 10 percent of the students were undecided.

<sup>5</sup> According to us, ‘not taking part in the referendum’ is another way of saying ‘no’. Therefore, due to their negative attitudes to EU membership, respondents that said they would not take part in the referendum will taken together with those that would vote no in the assessments made in relation to this question.

**Table 13:** If a referendum was held this Sunday on Turkey’s EU membership, what would you do?

| Answer                      | Frequency | Proportion |
|-----------------------------|-----------|------------|
| I would vote yes            | 196       | 63,6       |
| I would vote no             | 56        | 18,2       |
| I would not take part in it | 15        | 4,9        |
| I’m undecided               | 27        | 8,8        |
| I don’t know/I have no idea | 7         | 2,3        |
| No comment                  | 1         | 0,3        |

In our examination of the correlation between the questions on ‘trust’ and ‘best option,’ it had been shown that a significant portion of the respondents that were undecided about whether or not to trust the EU, or even said they did not trust the EU, still considered EU membership as the best option for Turkey. An analysis of the correlation between trust and the referendum reveals that the situation gains clarity at this point, and confirms the interpretations made about the trust-option outcomes (Table 14). As can be expected, a large majority of the respondents (94.5 percent) that expressed ‘trust in the EU’ also said they would vote yes in a hypothetical referendum. Among respondents that said they ‘neither trust nor distrust’ or ‘do not trust’ the EU, those that had a favorable view of EU membership were much higher when compared to the question on best option. While 66.7 percent of the respondents that said they ‘neither trust nor distrust the EU’ stated they would vote yes in a hypothetical referendum, this rate was 42.4 percent for those that did not trust the EU.

**Table 14:** Trust in the EU and Attitude in Membership Referendum

| Do you trust the EU?                | What would you do in the referendum? |      |                     |                |                             |            |
|-------------------------------------|--------------------------------------|------|---------------------|----------------|-----------------------------|------------|
|                                     | Yes                                  | No   | Not take part in it | I am undecided | I don’t know/I have no idea | No comment |
| I trust the EU                      | 77                                   | 14,8 | 0                   | 8,2            | -                           | -          |
| I neither trust nor distrust the EU | 67,6                                 | 16,5 | 4,5                 | 6,8            | 2,3                         | 2,3        |
| I do not trust the EU               | 46,4                                 | 21,4 | 8,9                 | 14,3           | 5,4                         | 3,6        |
| I am undecided                      | 10                                   | 50   | 20                  | 20             | -                           | -          |
| I don’t know/I have no idea         | -                                    | -    | -                   | -              | -                           | -          |
| No comment                          | 50                                   | 25   | -                   | -              | -                           | 25         |

An examination of the relationship between the questions on ‘interest in EU-related news’ and the ‘referendum,’ reveals that the proportion of respondents that would vote in the affirmative in the referendum increases as interest in EU-related news increases (Table 15).

**Table 15:** Interest to the EU News and Attitude in Referendum

| Interest to the EU news             | What would you do in the referendum? |     |                     |                |                             |            |
|-------------------------------------|--------------------------------------|-----|---------------------|----------------|-----------------------------|------------|
|                                     | Yes                                  | No  | Not take part in it | I am undecided | I don’t know/I have no idea | No comment |
| Very interested                     | 54,1                                 | 3,3 | 6,6                 | 1,6            | 24,6                        | 9,8        |
| Interested                          | 45,5                                 | 9,7 | 4,0                 | 4,0            | 27,3                        | 9,7        |
| Somewhat interested                 | 28,6                                 | 8,9 | 5,4                 | 8,9            | 33,9                        | 14,3       |
| Not interested at all               | 10                                   | 20  | -                   | -              | 50                          | 20         |
| don’t know/ have no idea/ undecided | -                                    | -   | -                   | -              | -                           | -          |
| No comment                          | -                                    | -   | -                   | -              | 25                          | 75         |

A linear relationship was not found between the general level of EU knowledge and attitude toward the referendum. While 57.6 percent of the respondents that knew the number of member states correctly also said they would say yes in a referendum, the proportion of mistaken respondents that said they would vote was higher, at 66.2 percent (Table 16).

**Table 16:** The Number of Member States and Attitude in Referendum

| The number of member states | What would you do in the referendum? |      |                     |                |                             |            |
|-----------------------------|--------------------------------------|------|---------------------|----------------|-----------------------------|------------|
|                             | Yes                                  | No   | Not take part in it | I am undecided | I don't know/I have no idea | No comment |
| Right answer                | 57,6                                 | 20,7 | 5,4                 | 10,9           | 3,3                         | 2,2        |
| Wrong answer                | 66,2                                 | 17,1 | 4,6                 | 7,9            | 1,9                         | 1,9        |

This outcome can also be tested via the correlation between the question on ‘institutions’ and the ‘referendum’ (Table 17). Of the respondents, 70.5 percent had admitted to hearing of the Economic and Social Committee of the EU; 66.4 percent of them said they would vote yes in a referendum. And 59.7 percent of the respondents that had not heard of the Committee also said they would vote yes. In contrast, of the 70.5 percent that expressed they never heard of the European Ombudsman, 65 percent said they would vote yes in a referendum; among those that had heard of the institution, 58.5 percent provided the same response. In other words, the extent of general knowledge of the EU was not found to have a direct impact on attitudes to the referendum.

**Table 17:** The EU Institutions and Attitude in Referendum

| The European Economic and Social Committee | What would you do in the referendum? |      |                     |                |                             |            |
|--|--------------------------------------|------|---------------------|----------------|-----------------------------|------------|
|  | Yes                                  | No   | Not take part in it | I am undecided | I don't know/I have no idea | No comment |
| I've heard of it                           | 66,4                                 | 18,4 | 4,6                 | 7,8            | 0,9                         | 1,9        |
| I haven't heard of it                      | 59,7                                 | 16,4 | 7,5                 | 9,0            | 4,5                         | 3,0        |
| I don't know/ I have no idea               | 50,0                                 | 20,8 | -                   | 16,7           | 8,3                         | 4,2        |
| The European Ombudsman                     |                                      |      |                     |                |                             |            |
| I've heard of it                           | 58,5                                 | 29,3 | 2,4                 | 9,8            | -                           | -          |
| I haven't heard of it                      | 65,0                                 | 16,1 | 5,5                 | 8,3            | 2,3                         | 2,8        |
| I don't know/ I have no idea               | 62                                   | 18   | 4                   | 10             | 4                           | 2          |

However, it must also be said that being acquainted with the Union, especially through something specific with direct, personal benefits, has a positive impact on voting pro-membership in the referendum: 72.2 percent of the small group of respondents that reported being sufficiently informed of EU education programs, 69.5 percent of those with very little information, and 59.5 percent of those that had no information on these programs said they would vote in the affirmative in a referendum.

About one fourth of the respondents had said they were of Turkish ethnicity; among them, 59.2 percent said they would vote yes in a referendum, and 27.6 percent said the opposite. Kurdish respondents comprised 59.7 percent of the survey sample; among them, 66.3 percent said they would vote in the affirmative in a referendum, while only 19.5 percent said they would not (Table 18).

**Table 18:** Ethnicity and Attitude in Referendum

| Ethnicity                   | What would you do in the referendum? |      |                     |                |                             |            |
|-----------------------------|--------------------------------------|------|---------------------|----------------|-----------------------------|------------|
|                             | Yes                                  | No   | Not take part in it | I am undecided | I don't know/I have no idea | No comment |
| Turkish                     | 59,2                                 | 23,7 | 3,9                 | 7,9            | 1,3                         | 3,9        |
| Kurdish                     | 66,3                                 | 14,1 | 5,4                 | 9,8            | 2,7                         | 1,6        |
| Other                       | 52,4                                 | 33,3 | 9,5                 | 4,8            | -                           | -          |
| I don't know/I have no idea | -                                    | -    | -                   | -              | -                           | -          |
| No comment                  | 65,4                                 | 19,2 | -                   | 7,7            | 3,8                         | 3,8        |



### Reasons for Supporting Membership in the European Union

Students that said they would vote pro-EU membership in a referendum were asked the *two* most significant reasons why they would vote yes; 75.6 percent said improved standards of life and economic circumstances, 46.3 percent put forth increased education and work opportunities in EU member states, and 48.9 percent argued for improved democracy and human rights (Table 19). While 14.8 percent believed Turkey’s credibility would receive a boost in the international arena, 10.2 percent thought cultural rights would improve. As can be seen, economic-utilitarian expectations play a significant role in determining a pro-EU stance.

**Table 19:** If you said you would vote ‘yes’ in the referendum, what are the two most important reasons for your vote?

|  |      |
|--|------|
| Standards of living and economic circumstances will improve          | 75,6 |
| Education and job opportunities in EU member states will increase    | 46,3 |
| Democracy and human rights will improve                              | 48,9 |
| Turkey’s credibility will receive a boost in the international arena | 14,8 |
| Secularism will be more secure                                       | 1,5  |
| Cultural rights will improve   | 10,2 |
| Other  | 1,0  |
| I’m undecided  | -    |
| I don’t know/I have no idea  | -    |
| No comment   | 1,5  |

In analyzing the referendum question, respondents of Kurdish ethnicity were observed to say yes to the EU more than those of Turkish ethnicity. Are there any differences in the grounds for why these two groups were pro-EU? (Table 20). For both groups, the justification put forth the most was improvement in standards of living and economic circumstances (Turks, 82.2 percent; Kurds, 74.8 percent). However, while the second most repeated reason for Turks was increased education and job opportunities in EU member states (62.3 percent), for Kurds it was improved democracy and human rights (56.9 percent). This justification was repeated by only 24.4 percent of the respondents of Turkish ethnicity. Another significant difference between the two groups was in relation to the justification on improved cultural rights. While 13.1 percent of the respondents of Kurdish ethnicity argued this point, only 4.4 percent of the respondents of Turkish origin did the same. Thus, when the two grounds in relation to rights and freedoms are taken together, respondents of Kurdish origin were found to argue these two points at a rate of around 70 percent.

**Table 20:** Ethnicity and Reasons to Vote Yes in Referendum

| Reasons  | Turkish | Kurdish | Other | I don’t know/I have no idea | No comment |
|--|---------|---------|-------|-----------------------------|------------|
| Standards of living and economic circumstances will improve          | 82,2    | 74,8    | 72,7  | -                           | 70,6       |
| Education and job opportunities in EU member states will increase    | 62,3    | 36,8    | 63,7  | 100                         | 23,5       |
| Democracy and human rights will improve                              | 24,4    | 56,9    | 54,6  | -                           | 41,2       |
| Turkey’s credibility will receive a boost in the international arena | 22,2    | 20,8    | 9,1   | -                           | -          |
| Secularism will be more secure                                       | 2,2     | 0,8     | 100   | -                           | 5,9        |
| Cultural rights will improve   | 4,4     | 13,1    | -     | 100                         | -          |
| Other  | -       | 1,6     | -     | -                           | -          |
| I’m undecided  | -       | -       | -     | -                           | -          |
| I don’t know/I have no idea  | -       | -       | -     | -                           | -          |
| No comment   | 2,2     | 1,6     | -     | -                           | -          |

The two reasons put forth the most by respondents that reported sufficient knowledge of EU education programs and said yes to the referendum question were improved standards of life and economic conditions (76.9 percent) and increased education and job opportunities in EU member states (69.2 percent). Respondents that said they did not know much about the programs were also seen to repeat these two reasons at rates of 72.4 and 54.5 percent, respectively. Students that had no information chose the improved standard of living and economic circumstances justification the most (77.6 percent); improved democracy and human rights was their second most repeated reason (47.4 percent). The education and job opportunities option was put forth by 38.2 percent of this group. At this point, I would like to point especially to the education and job opportunities alternative. As can be seen, as knowledge of EU education programs increases (and people become more acquainted with opportunities the EU can offer them), the rate of their being pro-EU membership also increases.

### Reasons for Opposing Membership in the European Union

Students that said they would vote against EU membership in a referendum were asked to provide *two* most significant reasons as to why; the most repeated response was worries that there would be interference in Turkey’s domestic affairs, at 66.3 percent (Table 21). While 38.2 percent of the students thought national identity and culture would weaken, 37.8 argued national resources would pass into foreign hands. Students that thought agriculture and small industry would suffer were at 16.7 percent; 16.6 percent said it would make it easier for foreigners to purchase property.

**Table 21:** If you said you would vote ‘no’ in the referendum, what are the two most important reasons for your vote?

|   |      |
|---|------|
| They will interfere with Turkey’s domestic affairs      | 66,3 |
| It will be easier for foreigners to purchase property   | 16,6 |
| National resources will pass into foreign hands         | 37,8 |
| National identity and culture will weaken               | 38,2 |
| Sectors like agriculture and small industry will suffer | 16,7 |
| Unemployment will rise                                  | 12,1 |
| Turkish money will no longer be used                    | 3,1  |
| Other   | 6,2  |
| They will interfere with Turkey’s domestic affairs      | -    |
| It will be easier for foreigners to purchase property   | -    |
| National resources will pass into foreign hands         | -    |

There is not much difference between the grounds put forth by respondents of Turkish or Kurdish ethnicity in terms of responding in the negative in the referendum. Both groups were worried most about outside interference in internal affairs (Turks, 70.3 percent; Kurds, 68 percent). Other arguments that followed were worries that national resources would pass into foreign hands (Turks, 46.3 percent; Kurds, 41.2 percent); national identity and culture would weaken (Turks, 41.8 percent; Kurds, 32.3 percent); it would be easier for foreigners to purchase property (Turks, 15.3 percent; Kurds, 17.1 percent) and other reasons.

### Timing of European Union Membership

The majority of the respondents had said they would vote yes if a referendum was held in the very near future about EU membership. When the hypothetical referendum was put aside and respondents were asked when they thought Turkey would actually become an EU member, only a small portion, 3.9 percent foresaw this happening in the short term (within 5 years); 14.3 percent said this would happen in the coming 5 to 10 years, and 38.3 percent said it would take longer than 10 years for Turkey to become an EU member. While one out of every four respondents (24 percent) believed Turkey would never become an EU member, 6.5 percent were undecided, 9.1 percent did not know/had no idea and

3.9 percent made no comment. These responses illustrate that although the respondents endorse EU membership, they do not foresee this happening, at least not in the near future.

## **Discussion**

With this study, an attempt was made to analyze respondents' orientation to the EU, based on findings collected in a study conducted among seniors at Dicle University that were attending programs that offer at least four or more years of study.

In truth, even the findings about the general profiles of the randomly selected respondents comprise noteworthy information in terms of conducting analyses on this issue. In examining their orientation to the EU, it is important to note that the majority of respondents are students at the only university in a major city in Southeastern Turkey, have not visited an EU member state, and some 90 percent of them do not speak any one of the official languages of the EU fluently. What such a student profile means is that many of these respondents so far have not, and apparently will not be able to establish direct dialogue with EU-member states and peoples. Yet, in a country like Turkey, an EU candidate nation and still at the beginning of a long and complicated negotiations process, there should be efforts to equip the public with real and multi-faceted information about the EU, and establish bridges of communication, introduction and cohesion between current members and their people, with the people in Turkey. Given the profile of these university students, where rates of *visit to an EU member state* or *speaking one of the languages of the EU* are close to zero, it will take a long time to realize the meeting and cohesion mentioned above. Without a doubt, had this study been conducted in Western Turkey among university students studying in a large city like Istanbul or Ankara, higher rates would hardly be considered surprising. And actually, this is the point we wish to focus on. In terms of population and geographical area, Turkey is a large country, and if there exists a desire to prepare and ensure her citizens are oriented well to the EU in terms of both knowledge and mentality, then policies should not be developed based on observations and data gathered in the West; special measures must be taken for the weakest link(s). The same also holds true for EU circles. These circles view Southeastern Turkey and the city of Diyarbakır as a region addressed and perceived within the context of rights and freedoms of Kurdish people. However, boosting a sense of Europeanism and raising awareness and enabling affective/diffusive supports in line with the aims and practices of the Union both in Turkey, and among people living in this region, is actually a much more comprehensive matter; one that is not within the scope of this study.

Based on these responses, another important point that comes to the fore is that the respondents are interested in EU-related news and they access this information mostly via TV and newspapers. Meanwhile, although students that were more interested in EU-related news were relatively better informed about the EU, this does not mean that respondents are equipped with sufficient information in general. Respondents' level of self-perceived knowledge and actual knowledge about the EU is in no way satisfactory. As many as 70 percent of the respondents do not know the number of countries that comprise the political entity they will be expected to become citizens of in the future. Although they are interested in EU-related news, their level of knowledge of the EU is lacking. Their willingness to learn about the EU can be considered an encouraging factor in equipping them with information pertaining to the EU. Therefore, reasons why these respondents lack relevant knowledge should be explored in other areas (perhaps the amount, context and channels of news and information).

It was found that respondents were rather lacking in terms of membership to non-governmental organizations, but that membership to a non-governmental organization has a positive effect on showing interest in EU-related news. This means that the lack of a strong civil society mentality is one of the reasons underlying the lack of awareness and/or further attachment to the EU.

Actually, in an environment where level of EU awareness is low, investigating other aspects of people's orientation to the EU and being certain that they make healthy decisions is no easy task. Consequently, it would not be wrong to point to lack of EU-awareness as one of the major reasons why

respondents at times provided contradictory responses or a high proportion of undecided/I don't know/I have no idea answers to questions geared toward assessing their evaluation of the EU.

It is my contention that the most significant findings revealed by this study are found in responses to the question on 'trust' and the correlation of this question with other questions. Although the proportion of students that said they do not trust the EU, or feel the EU is profiting in EU-Turkey relations was noticeably higher than those that supported an opposite view, neither group constituted a majority, either. The fact that about 44 percent of the respondents were either undecided or unable to clearly state an opinion in relation especially to the question on 'trust' is significant in that it illustrates the current status of EU-Turkey relations, and the true orientation mode of the part of society the respondents represent. Actually, this 44 percent can also be interpreted from a positive point of view. It could be said that the respondents in this group still have expectations in relation to the EU, and that despite the fact that Turkey's decades-long efforts toward full membership have yet to bear fruit, they have not yet given up hope of becoming an EU-member state. The same holds true for some respondents that said they did not trust the EU. Of the respondents that expressed distrust in the EU, 17.2 percent still considered EU membership as the best possible option for Turkey, and more importantly, about 42 percent reported they would say yes in a referendum on potential membership.

I believe that the reason why a high rate of respondents do not trust the EU or are undecided, has a lot to do with feeling they are being strung along by the EU or that the EU will never accept Turkey into the Union as a full member. Consequently, there are many respondents that feel Turkey will become an EU-member state either in the very long run, or never.

On the other hand, it appears not too difficult to eliminate the sense of distrust or indecision people are experiencing, if they can be convinced that EU membership can indeed be realized, especially if the EU makes favorable statements to this end, and finally, if these favorable statements are backed by policies that would bring benefits to people. This is evidenced by the fact that respondents became more positive when asked about a potential referendum that would open the path to Turkey's EU membership. Yet, there is also a 7.6 percent group among the respondents who seem set on their opposition to the EU (this reflects the respondents that express a distrust in the EU and would say no in a referendum).

In addition, despite the fact that the problematic aspects of EU-Turkey relations have increasingly been featured in the domestic agenda and used by those in opposition to the EU (such as the Cyprus issue, problems in Southeastern Turkey, land purchases by foreigners) especially after the December 1999 Helsinki Summit when Turkey was announced as a candidate for full membership, providing favorable or cautionary responses in EU evaluations is positive in terms of developing relations between the two sides and preparing the public for the EU. It could also be said that the fact that these issues were discussed on the domestic agenda in the time period after 1999 was largely influential in shaping the views of those that would say 'no' in a referendum. Similarly, it is possible that the undecided and hesitant portion of society could slide into the group that does not trust the EU if the negotiations process, which is the final hurdle on the path to full membership, goes on for too long, or if during this process, the EU does not leave a positive mark on people's daily lives.

Opinions that Turkey will benefit from the relations between the two parties is also a significant aspect that would increase trust in the EU and enable people to view full membership in a more positive light. Another important factor in this context is for respondents to be informed about approaches and policies of the EU that have a direct positive impact on them (in this case, education programs). It is also very possible to hypothesize about the opposite, and state that individuals that learn of a specific EU policy that has a direct negative effect on them would view the EU and Turkey's integration to it, unfavorably. One vital outcome that can be deduced from the above is as follows: As the negotiations process gains speed and more concrete issues and policies are discussed in the domestic agenda, various groups in society will become better acquainted with EU policies that impact them directly, and conduct a personal cost-benefit evaluation. In such circumstances, it will be necessary for both general institutions in relation to the EU, and governmental or non-governmental

organizations that address various groups in society to explain to their target audiences the aspects of the EU that directly impact them, to ensure a healthy integration process. Based on our respondent profile and the education programs that impact them directly, it is apparent that the promotional activities of the National Agency responsible for such matters, is lacking. Since television programs and newspapers appear to be the media that individuals interested in the EU use as information resources the most, they should be given priority, and the National Agency must take the lead in activities that promote education programs.

It was found that respondents embrace pragmatic and utilitarian expectations in their support of the EU, and that their desire for full membership is related to hopes their economic circumstances and life standards will improve, or they will have access to education and job opportunities. Most of these respondents are from relatively low income families, who are college seniors from Eastern and Southeastern Turkey, where the overall unemployment rate is over 40 percent, living in a country where the overall unemployment rate is about 20 percent; thus, it is not unreasonable for them to have such expectations. Although it is difficult at this point to gauge whether or not it might be possible to transform such utilitarian orientations to a more closer attachment and effective-diffusive one; nevertheless, to make this possible, it is necessary to first remedy the 'trust' issue in people's minds.

All respondents, regardless of Turkish, Kurdish or from other ethnic origin, were found to respond in the affirmative in high proportions regarding the matter of EU membership. Nevertheless, respondents of Kurdish ethnicity were seen to endorse becoming an EU member, more. In addition, unlike respondents of Turkish ethnicity, for respondents of Kurdish ethnicity, expectations in relation to democracy, rights and freedoms through EU membership are just as important expectations as economic circumstances and living standards. This is reminiscent of behavior patterns by other ethnic, cultural or social groups in other areas in Europe that are unable to secure rights and freedoms expected from national governments, who view the EU as a transnational path to solve their problems.

The findings in this survey, namely low EU awareness, instability of people's orientation to the EU, and basically its utilitarian rather than affective character, are not original to Turkey. Nonetheless, it is significant that an educated portion of a nation that is generating the most discussion with regard to EU membership, refrain from an excessively negative point of view in their evaluation of the EU. One of the vital points underlined by the renowned 1985 Adonnino Reports, a milestone that comprises recommendations on enabling cohesion among citizens of member states, forming a common identity, and developing an EU orientation in the European Union, is as follows: most of the achievements of the European Community until that day had been the work of a generation that experienced the destructiveness of war. Thereafter, future generations would know and appreciate each other across borders and benefit from closer co-operation and solidarity (CEC 1985, 18). To be able to apply this well-intentioned mentality to the Turkish case, and establish closer collaboration and a common future among the young people in both parties by putting aside all the troubles and destruction of the past, will be possible primarily by making the EU a trustworthy and tangible figure in their lives. Despite the decades-long distractions on the path to full membership, which according to statements by EU politicians will apparently not be possible in the near future, the fact that university students in Southeastern Turkey still do not embrace an attitude that completely rejects the Union but adopt a flexible and expectant mode toward the Union, is an indicator that they are ready to do their share in building a common future. It also illustrates what the multi-cultural, commonsensical people of the East can contribute to the multi-cultural, democratic and peace-loving community the European Union is trying to establish, when given the chance to embrace the EU.

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## **Should India Add More Gold to its Foreign Exchange Reserves?**

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### **Abstract**

India's accumulation of foreign exchange reserves has been on an unprecedented scale in recent years. Given the cost of holding huge foreign exchange reserves, the cost of holding these reserves is also on the increase. The source of accretion to the foreign exchange reserves is mainly the capital flows and is portfolio flows more recently. Hence, given the cost and the volatility of the capital flows which is the main source of accretion, India needs to decide on the composition of its foreign exchange reserves. Central banks of many of the countries are considering the re-engineering of their foreign reserves. The share of gold in the total foreign exchange reserves is very high in the US and in the Europe. But, the Asian economies hold a very low proportion of their foreign exchange reserves in gold. This paper analyses the trends in the accumulation and sources of accretion of Indian foreign exchange reserves from the view point of if India should increase its gold holdings.

**Keywords:** Foreign Exchange Reserves, Central Banks

### **Introduction**

Shri. S. S. Tarapore, a former Deputy Governor of the Reserve Bank of India (RBI) and Chairman of the Committee on Fuller Capital Account Convertibility, has suggested that India should increase the share of gold in its foreign exchange reserves. He said, "Gold is unique, in the sense that it is both a commodity and a store of value. More importantly, gold invariably moves inversely with the US dollar and also rises in value when international inflation gathers momentum. Thus, there are strong reasons for holding a reasonable proportion of Indian foreign exchange reserves in gold". (Financial Express, November 28, 2006) This suggestion is made when the central banks of some of the countries are considering re-engineering of their foreign exchange reserves. World Gold Council (WGC) has reported that Argentina bought 42 tonnes of gold bullion. Russian Central Bank Chairman, Sergei Ignatyey, has said that the central bank may increase the weighting of gold in its reserves. There are indications that China is planning to diversify its foreign reserves. Hence, the question, "Should India increase the share of gold in its foreign exchange reserves?" requires a serious study.

In the aftermath of Asian crisis, the Emerging Market Economies (EMEs) have started accumulating foreign exchange reserves on an unprecedented scale. As reported by the Bank for International Settlements (BIS), the EMEs have accumulated reserves at an annual rate of US \$250 billion (or 3.5% of their annual combined GDP) during 2000 and 2005. This is almost five times higher than the level that was prevalent in the early 1990s. (Mohanty and Turner 2006) The accumulation, as ratio to GDP, is particularly rapid in China, Korea, India, Malaysia, Russia and Taiwan (China). The accumulation of foreign exchange reserves by the EMEs is to insure against the risks of capital volatility and to protect the monetary system from shocks like the speculative attacks by the currency traders. High foreign exchange reserves are often seen as a strength indicating the backing that a currency has. To some extent, the holding of huge foreign exchange reserves also indicates the lack of confidence on the global financial architecture. With the high foreign exchange reserves accumulation, concern mounts on the costs and benefits of holding it. Hence, the composition of assets in which these

foreign exchange reserves are invested, the risks they represent, the return they yield and the risk-return trade off involved become important issues. If the reserves are held as an insurance against financial crisis, then the assets need to be highly liquid and most safe. The emphasis will not be as much on earning a high yield. But, if the reserves are far greater than what is required for withstanding financial crisis, the choice of assets for investment of these reserves will be guided by return maximization as the costs of holding huge foreign exchange reserves is also high.

This paper discusses the role that gold can play as a reserve asset in Indian context. Section 1 traces the historical role that gold played in the international monetary system. Section 2 gives an account of the official holdings of gold. Section 3 brings out the benefits that gold can offer as a reserve asset. Sections 4 to 8 are on the trends, accumulation, sources of accretion, adequacy of and concerns in managing foreign exchange reserves in India. The final section discusses the issues in increasing the share of gold in Indian foreign exchange reserves.

## **1. Gold in the International Monetary System**

Gold has played a very important role in the international monetary system until the collapse of the Bretton Woods system of fixed exchange rate in 1973.

Prior to the 1870s, many countries had bimetallism. Free coinage was maintained for both gold and silver. The first full fledged gold standard was established in Britain in 1821. The currency of Britain was made fully redeemable in gold. France was effectively on gold standard from the early 1850s and formally adopted the standard in 1878. Germany discontinued silver and moved over to the gold standard in 1875. The United States adopted the gold standard in 1879, Russia and Japan in 1897. It can be said that the international gold standard existed between 1875 and 1914. Under the gold standard, the exchange rate between any two currencies was determined by their gold content. The currency of the country under the gold standard was convertible into gold at a fixed rate. Hence, for the country on gold standard, the amount of money in circulation was linked to its stock of gold. World War I ended the gold standard as many countries got off gold. Efforts made to restore the gold standard were destroyed by the Great Depression and the financial crisis that accompanied. Gold formally re-entered the world's monetary system in 1944, when the Bretton Woods agreement fixed all the world's paper currencies in relation to US dollar. US dollar in turn was tied to gold. President Nixon suspended the convertibility of dollar into gold in August 1971. The Smithsonian agreement entered into by 10 major countries in an attempt to save the Bretton Woods system also failed. By March 1973, European and Japanese currencies were allowed to float, completing the decline and the fall of the Bretton Woods system. The Jamaica agreement in 1976 demonetized gold as an international reserve asset.

## **2. Official Stock of Gold**

During the gold standard the central banks started accumulating gold. In 1870, Bank of England had a gold reserve of 161 tonnes. It rose to 248 tonnes in 1938. But, the gold holding of the other countries were even higher. US had 2293 tonnes, Russia 1233 tonnes, France 1030 tonnes, Argentina 440 tonnes, Germany 439 tonnes, Austria 378 tonnes and Italy 355 tonnes. Australia had 309 tonnes. The world's total official gold reserves were estimated to be around 8000 tonnes in 1913 well above the 700 tonnes in 1870. US official gold holdings increased from 6000 tonnes in 1925 to 18000 tonnes at the end of World War II. This was about 65% of all the official stocks of gold. In the 1960s, the official gold stock was about 38000 tonnes. This was around 50% of all above ground stocks. Even during the Bretton Woods system, central banks held gold reserves because the official dollar price was fixed in gold. Gold was still at the core of the international monetary system as dollar was freely convertible into gold. But, after the Jamaica agreement IMF sold half of its gold holdings to help the poor nations and returned the other half to the members. Many countries also reduced their stock of gold. In 1978 the articles of IMF was altered forbidding the countries from pegging their currencies against gold. The



stock of gold in foreign exchange reserves, as a result, has changed radically over the past three decades. Gold holdings valued at market prices fell from about 60% in 1980 to as low as 9% in 2005. (Woolridge, 2006) The policy on management of gold reserves has also undergone a change over time. Initially, the gold reserves were segregated from other reserves assets and the physical holdings of gold were left unchanged even if prices fluctuated. Since the 1970s, reserve managers gradually diversified into higher yielding and higher risk instruments. Hence, holding of gold in high proportion was considered inefficient when viewed from current yield perspective. Gold does not earn any interest other than the return that it fetches if lent. That is why many central banks decided to reduce their gold holdings. Foreign currency assets started replacing gold as the main reserve asset. According to WGC, central banks held around 18% of the above ground stocks of gold as a reserve asset in 2005. This figure has been decreasing over time. In recent years, all the newly mined gold is being absorbed by the jewellery fabrication, industries and private investment. The official sector is a net supplier of gold rather than the buyer. Between 2001 and 2005, the central banks had contributed an average of 562 tonnes to annual supply flows. As of March 2006, the value of gold held in the official reserves was only \$0.5 trillion at market prices. The value of foreign currency assets and the reserve positions in the IMF and SDRs were \$4.3 trillion and \$57 billion respectively. The gold's share of reserves was above 10% in early 2006. This is more because of the sharp rise in the price of gold. The physical holdings of gold had actually fallen at a rate of 2% per year. The total stock of gold held by all the countries as of September 2006 is estimated to be 27247 tonnes. It is around 10.7% of the total reserves. That the average gold holding is around 10.7% of the total reserves as of now is not due to the fresh purchases made by the official sector. It is because of the rise in the gold prices from US \$ 300 to the current levels. A look at the regional distribution of gold holdings shows that the US and Europe hold a large part of their reserves in gold, while the Asian gold holdings are very low in comparison.

**Table 1:** World Official Gold Holdings as of September 13, 2006

| Country       | Tonnes | % of Total Reserves |
|---------------|--------|---------------------|
| Unites States | 8133.5 | 74.5                |
| Germany       | 3423.5 | 61.4                |
| France        | 2768.0 | 62.9                |
| Italy         | 2451.8 | 66.1                |
| Switzerland   | 1290.1 | 42.1                |
| Japan         | 765.2  | 1.8                 |
| ECB           | 662.9  | 25.8                |
| Netherlands   | 654.9  | 57.3                |
| China         | 600.0  | 1.3                 |
| Spain         | 457.7  | 48.9                |
| Taiwan        | 423.3  | 3.2                 |
| Portugal      | 402.5  | 80.3                |
| Russia        | 385.5  | 3.0                 |
| India         | 357.7  | 4.4                 |
| All countries | 27247  | 10.7                |

Source: World Gold Council at [http://www.gold.org/value/reserve\\_asset/gold\\_as/reserve\\_stats.html](http://www.gold.org/value/reserve_asset/gold_as/reserve_stats.html)

It can be noticed from the above table that large Asian central banks have a lower proportion of their foreign exchange reserves invested in gold than their counter parts in Europe. But, it should also be noted that Japan with 765 tonnes and China with 600 tonnes of gold are among the top 10 largest holders of gold. It is only that the share of gold in the total foreign exchange reserves is low for these countries.

### **3. Gold as a Reserve Asset**

The International Monetary Fund's (IMF) Balance of Payments Manual contains the following definition of foreign exchange reserves: "Reserve assets consist of those external assets that are readily available to and controlled by monetary authorities for direct financing of payments imbalances, for indirectly regulating the magnitude of such imbalances through intervention in exchange markets to affect the currency exchange rate, and/or for other purposes." Archer and Halliday (1998), Nugee (2000), Williams (2003) and IMF (2004) discuss the purpose of maintaining reserves. The purposes of maintaining foreign exchange reserves may be viewed from (i) monetary policy perspective and (ii) financial stability perspective.

- (i) **Monetary policy perspective:** For a country that follows a fixed exchange rate regime, foreign exchange reserve has an important function. In order to keep the currency exchange rate fixed, the central bank of the country has to trade in the currency market to balance the demand and supply. This requires foreign exchange reserves. However, the need for maintaining foreign exchange by a country that follows a floating exchange rate is questioned. But, such a country also requires foreign exchange to intervene in the market if a misalignment between the real exchange rate and market rate occurs. Besides, the central bank may also feel compelled to intervene in the foreign exchange market to counter inflation that may be caused by rising import prices due to depreciation in the domestic currency. The rating agencies consider that the quantum of foreign exchange reserves kept by a country enhances the credibility of its monetary policy. Hence, a country wanting to get a good rating should keep sufficient reserves.
- (ii) **Financial stability perspective:** Reserves act as shock absorbers and soften the impact of shocks like unexpected fluctuations in the currency account, changes in access to foreign markets or natural catastrophes. The reserves could ensure a balanced currency inflows and outflows under unexpected circumstances. In general, foreign exchange reserves will ensure that the forex market is functional and in the event of any market failure, the central bank can intervene. If the foreign exchange reserve maintained by a country is considered not adequate, the investors may get speculative on the currency and affect its pricing. If the reserves are adequate the confidence in the currency will get boosted and the currency will not come under such a speculative attack by the investors. Holding of adequate foreign exchange reserves by a country ensures that sufficient funds are available to service the treasury's foreign liabilities.

Y.V. Reddy (2006) summarizes the benefits of holding foreign exchange reserves, which also the purposes for holding them: "In any country risk analysis by rating agencies and other institutions, the level of reserves generally has high weights. Moreover, it is essential to keep in view some hidden benefits which could accrue to a country holding reserves, which may, inter alia, include: maintaining confidence in monetary and exchange rate policies; enhancing the capacity to intervene in foreign exchange markets; limiting external vulnerability so as to absorb shocks during times of crisis; providing confidence to the markets that external obligations can always be met; and reducing volatility in foreign exchange markets." (pp.2). Gold can serve all these purposes. Gold is a unique asset in the sense that it is liability to none. Gold is not a subject to any country's economic policy. Hence, it stays unaffected by the monetary and fiscal policies of any country. World Gold Council (2001) argues that the monetary problems of the modern economy would see resurgence in the importance of gold. It can hedge the risk of inflation. Aggarwal (1992) shows that gold may be an inflation hedge in the long run but it is also characterized by significant short run price volatility. Ghosh and others (2002) prove using monthly gold price data and co-integration regression techniques that gold can be regarded as a long run inflation hedge. Mani and Vuyyuri (2004) have shown that the prices of gold and inflation have moved in the opposite direction from 1978-79 to 1986-87. Subsequent to this, till 1991-92 the prices have moved parallel to each other. Inflation started to fall after 1991-92, but the price of gold moved up. Between 1978-79 and 1999-2000, the prices of gold have shown an upward trend. The correlation between inflation and gold prices was -0.13658. Hence, gold can act as a store of value.

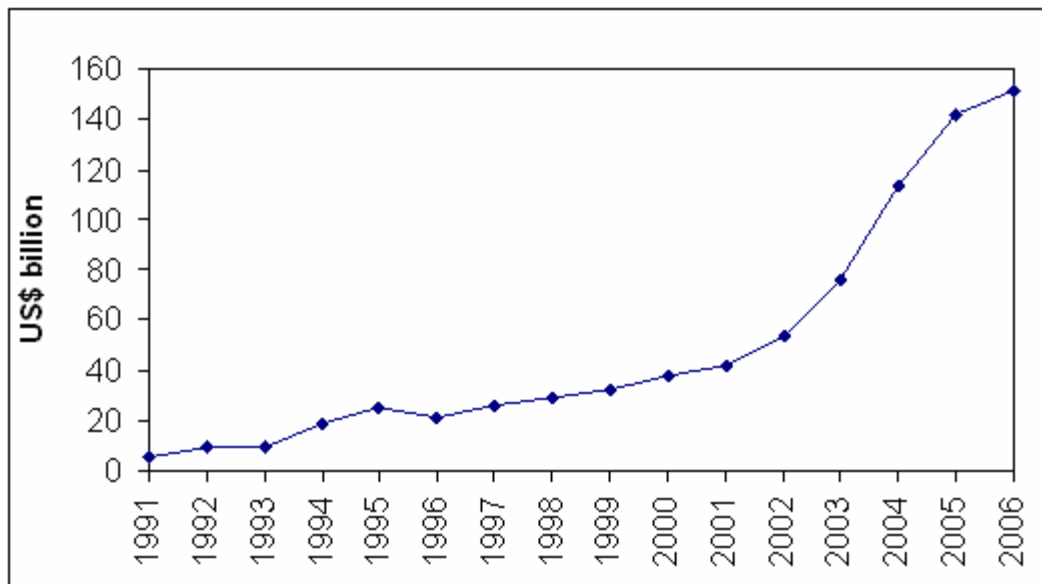
Gold is highly liquid and can mobilize the necessary funds in case of emergencies. To meet the balance of payments crisis on account of oil price rise, Italy pledged gold with Bundesbank and secured a \$2 billion loan. Romania also used gold as collateral to secure a loan to repay external debt in 1974. In 1991 India had to tackle a balance of payment crisis. It sold 20 tonnes of gold in Swiss market and offered 46 tonnes of gold to Bank of Japan as collateral. Russia, when encountered with financial crisis in 1998 sold off 33% of its gold reserves. In 2001, the country sold its gold holdings once again to generate funds to tackle the series of natural disasters that had befallen on the country. In the aftermath of 1997 Asian financial crisis, Malaysia, South Korea and Thailand appealed to their residents to lend their gold against local government bonds to facilitate the countries to reduce their debt. This helped to stabilize their currencies. Alan Greenspan said in 1999, "... gold still represents the ultimate form of payment in the world. It's interesting that Germany could buy materials during the war only with gold. In extremis fiat money is accepted by nobody and gold is always accepted and is the ultimate means of payment and is perceived to be an element of stability in the currency and is the ultimate value of the currency. And that historically has always been why governments hold gold." (Remarks by Alan Greenspan to US Congress in 1999)

#### **4. India's Foreign Exchange Reserves**

The Reserve Bank of India (RBI) is the custodian and the manager of foreign exchange reserves of the country. This is provided for in the Reserve Bank of India Act, 1934. The preamble of the act defines the objective of the reserve management in India as, "keeping of reserves with a view to securing monetary stability in India and generally to operate the currency and credit system of the country to its advantage." Accretion to foreign exchange reserves arise out of purchases by the RBI from Authorized Dealers and from the income on foreign exchange assets deployed. Government aid receipts also add to the foreign exchange reserves.

Although both US dollar and Euro are the intervention currencies, the foreign exchange reserves are denominated and expressed only in the US dollar. India's foreign exchange reserves have been steadily increasing since 1991. The foreign exchange reserves were US \$5.8 billion as at the end of March 1991. Reserves increased to US \$25.2 billion by March 1995. At the time of Asian financial crisis in December 1997 it was US \$27.355 billion. It further rose to US \$38.0 billion by March 2000. The foreign exchange reserves at the end of every year from March 2003 to March 2005 were US \$76.1 billion, US \$113.0 billion and US \$141.5 billion respectively. The figure as at the end of March 2006 stood at US \$151.6 billion. The chart below illustrates the growth of foreign exchange reserves of this country from 1991 to 2006. It can be seen from the chart that Indian foreign exchange reserves have been registering a steady growth and it is more rapid in the recent years. It should be noted here that the foreign exchange reserves data prior to 2002-03 do not include the Reserve Tranche Position in IMF.

Chart 1: Movements in Foreign Exchange Reserves



Source: Report on Foreign Exchange Reserves, RBI, 2006

## 5. India's Accumulation of Foreign Exchange Reserves

India was a closed economy till 1991. The opening up of Indian economy happened in the wake of a balance of payments crisis it encountered in 1991.

Current account was in surplus for most years until 1980. India's economic policies were emphasizing import substitution rather than export led growth. But, from the beginning of 1980s the current account started showing a deficit. During the first half of the 1980s, the current account deficit stayed well below 2% of GDP. In the second half of 1980s, current account deficit widened because of oil price hike. Prior to 1991, capital flows to India predominantly consisted of aid flows, commercial borrowings and non-resident Indian deposits. (Chopra and others 1995) India's external debt was at US \$69 billion by the end of 1990-91. Medium and long-term commercial debt stood at US \$10.5 billion. Short-term external debt grew sharply to US \$6 billion. The ratio of debt-service payments to current receipts was as big as 30%. India's balance of payments also suffered from capital account problems due to erosion of investor confidence. India's foreign exchange reserves were US \$ 5.8 billion at the end of March 1991. It further depleted to US \$975 million on July 12, 1991. It was barely enough to pay for a week's imports. The country had to sell 20 tonnes of gold in Swiss market to raise finance. It shipped another 46 tonnes of gold to London to offer as collateral for a loan of about US \$415 million from Bank of Japan, as an adhoc measure before a loan could be arranged with International Monetary Fund (IMF). This forced the country to initiate liberalization of economic policies that led to opening up of the domestic markets to international investors. Its current account was opened up only in August 1994. The capital account is being gradually liberalized. As a result, the foreign exchange reserves which stood at US \$5.8 billion as at the end of March 1991 registered a phenomenal increase. It was at US \$151.6 billion at the end of March 2006.

## 6. Sources of Accretion to Foreign Exchange Reserves

The main source of accretion to foreign exchange reserves during the period 1991-92 to 2005-06 is the capital account surplus. The increase in foreign exchange reserves is caused by an increase in the annual quantum of foreign direct investment from US \$129 million in 1991-92 to US \$57.7 billion in

2004-05 and future to US \$7.2 billion in 2005-06. The outstanding NRI deposits grew from US \$13.7 billion at the end of March 1991 to US \$35.2 billion at the end of March 2006. Foreign Institutional Investors (FIIs) are allowed to make portfolio investments in India since 1993. The cumulative FIIs investments increased substantially from US \$827 million in December 1993 to US \$45.3 billion in March 2006. India's exports, which stood at US \$17.9 billion in 1991-92, rose to US \$100.7 billion in 2005-06. Net invisible inflows grew from US \$1.6 billion to US \$40.9 billion in 2005-06. India's current account was in deficit at 3.1% of GDP in 1990-91. It turned into a surplus of 0.7% in 2002-03. A surplus in the invisibles account helped to post a surplus in the current account to the tune of US \$14.1 billion in 2003-04. However, this could not be sustained. In 2004-04, the current account registered a deficit of US \$5.4 billion. The deficit continued in 2005-06 and was at US \$10.6 billion.

**Table 2:** Sources of Accretion to Foreign Exchange Reserves since 1991 (US\$ billion)

| Items  |  | 1991-92 to 2005-06 (up to end-March 2006) |
|--------|--|---|
| A      | Reserve Outstanding as on end-March 1991 | 5.8                                       |
| B.I.   | Current Account Balance                  | -28.8                                     |
| B.II.  | Capital Account (net) (a to e)           | 170.3                                     |
|        | a. Foreign Investment                    | 93.9                                      |
|        | b. NRI Deposit                           | 25.3                                      |
|        | c. External Assistance                   | 11.8                                      |
|        | d. External Commercial Borrowings        | 20.3                                      |
|        | e. Other items in capital account        | 19.0                                      |
| B.III. | Valuation change                         | 4.4                                       |
|        | Total (A+BI+BII+BIII)                    | 151.6                                     |

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## 7. Components of Indian Foreign Exchange Reserves

The three components of the foreign exchange reserves of India are Gold, Special Drawing Rights (SDRs), and Foreign Currency assets (FCAs). The RBI Act permits investment of foreign exchange reserves only in the following categories:

- i. Deposits with other central banks and the Bank for International Settlements. (BIS).
- ii. Deposits with foreign commercial banks.
- iii. Debt instruments representing sovereign/sovereign-guaranteed liability with residual maturity not exceeding 10 years.

Other instruments/institutions as approved by the Central Board of Directors of the central bank. The following table gives the investment of Indian foreign exchange reserves

**Table 3:** India's Foreign Exchange Reserves US \$ million

| As at the end of March | Gold 2 | SDRs 3 | Foreign Currency Assets 4 | Reserve Position in IMF 5 | Total 2+3+4+5 |
|------------------------|--------|--------|---------------------------|---------------------------|---------------|
| 2000                   | 2974   | 4      | 35058                     | 658                       | 38694         |
| 2001                   | 2725   | 2      | 39554                     | 616                       | 42897         |
| 2002                   | 3047   | 10     | 51049                     | 610                       | 54716         |
| 2003                   | 3534   | 4      | 71890                     | 672                       | 76100         |
| 2004                   | 4198   | 2      | 107448                    | 1311                      | 112959        |
| 2005                   | 4500   | 5      | 135571                    | 1438                      | 141514        |
| 2006                   | 5755   | 3      | 145108                    | 756                       | 151622        |

Source: RBI Annual Report, 2005-06

It can be noticed from the table that the country has increased its investment in foreign currency assets over time with the increases in the level of foreign exchange assets. This is very much in line with the global trend. From the 1970s, monetary authorities have gradually shifted out of gold. They

started reallocating their reserves to foreign currency assets that offer more attractive risk adjusted returns. Bank deposits have gained importance in recent years. Wooldridge (2006) says, “Monetary authorities have since the 1970s gradually diversified into higher-yielding, high-risk instruments. Nevertheless, official reserves are still invested mostly in very liquid assets, with limited credit risk. After falling markedly, the proportion invested in bank deposits has increased slightly in recent years. This is mainly because of the rapid accumulation of reserves by developing countries, which tend to place a larger share of their reserves with banks than do industrial countries”. (pp.31) As at the end of March 2006, of the US \$145108 million invested in the foreign currency assets, US \$109936 was kept as deposits with other central banks, BIS and foreign commercial banks. This was the case in March 2005 as well. Of the US \$135571 million invested in foreign currency assets, US \$98752 million were held as deposits. The increase in the value of gold holdings is because of the increase in the global prices of gold rather than from fresh investment.

**Table 4:** India’s Gold Holdings

| Country        | Tonnes | % of Total Reserves |
|----------------|--------|---------------------|
| March 2000     | 357.8  | 9.4                 |
| March 2001     | 357.8  | 7.4                 |
| March 2002     | 357.8  | 7.2                 |
| February 2003  | 357.8  | 5.7                 |
| March 2004     | 357.8  | 4.5                 |
| March 2005     | 357.7  | 3.8                 |
| March 2006     | 357.7  | 4.6                 |
| September 2006 | 357.7  | 4.4                 |

**Source:** World Gold Council at [http://www.gold.org/value/reserve\\_asset/gold\\_as/reserve\\_stats.html](http://www.gold.org/value/reserve_asset/gold_as/reserve_stats.html)

The table above gives the physical holding of gold. It can be seen that the physical holding of gold has not changed at all over March 2000 to March 2006. But, the share of gold in the foreign exchange reserves as come down as US \$ 112928 millions were added to the reserves during this period. As at the end of 1990 India had 333 tonnes of gold. It increased to 398 tonnes at the end of 1995 partially due to the acquisition of confiscated gold. The physical holding of gold reduced by about 39 tonnes and the stock stood at 358 tonnes in 1998. This is due to the repayment on maturity of gold backed bonds issued in 1993. Since then the stock of gold has remained unaltered.

## **8. Adequacy of Foreign Exchange Reserves**

Traditionally, the adequacy of foreign exchange reserves was measured by the import cover. About three to four months of import cover was considered adequate. However, the South East Asian Crisis questioned the validity of this measure. The crisis lasted for a long period and a few months import cover was insufficient to absorb the external shock. In addition, the integration of global financial markets has facilitated a free flow of capital across the geographical boundaries of the countries. This has created a need for fresh measures of foreign exchange reserves adequacy. The measure needs to take into account a number of parameters like size, composition and risk profiles of various types of capital flows. It also needs to consider the various types of external shocks that a country is exposed to. Aizenman and Marion (2003) argue that reserve holdings in the period 1980 to 1996 could be explained by ‘traditional factors’, but had become significantly underestimated since the Asian crisis. The High Level Committee on Balance of Payments chaired by Dr. C. Rangarajan had suggested that payment obligations should be considered while determining the reserves adequacy in addition to import cover. Money-based and debt-based indicators were recommended in addition to trade-based indicators by the Report on Committee on Capital Account Convertibility. Invariably multiple indicators are to be used to assess the adequacy of reserves. Y.V.Reddy (2006) rightly summarizes:

“Thus, while the traditional indicators of adequacy of reserves are based on trade, debt and monetary indicators, or even the ‘Guidotti Rule’ or ‘Liquidity at Risk’ Rule suggested by Alan Greenspan may help explain the adequacy of reserves, they need to be supplemented with, what may be described as, multiple indicators to assess the adequacy of reserves of any country at a given juncture.” (p.1)

The import cover of reserves, the traditional trade-based indicator of reserve adequacy, was at the lowest at 3 weeks in December 1990. This improved to 11.5 months of import in March 2002, only to rise further to 14.2 months in March 2003. The import cover of reserves stood at 17.0 months at the end of March 2004. Subsequently, it declined to 14.3 months in March 2005 and further to 11.6 months in March 2006.

The ratio of short-term debt to foreign exchange reserves declined from 146.5% at the end of March 1991 to 5.3% at the end of March 2005 and to 7.0% at the end of March 2006.

The ratio of volatile capital flows (which includes cumulative portfolio inflows and short-term debt) to reserves dropped from 146.6% as at end-March 1991 to 35.2% as at end-March 2004. The ratio registered a moderate increase and stood at 36.6% at the end of March 2005. It was at 43.2% at the end of March 2006.

Three to four months import cover is considered fairly adequate. Rodrik and Velasco (1999) and Garcia Soto (2004) argue that typically a country is considered prudent if it holds foreign currency reserves in the amount of its total external debt maturing within one year. IMF (2003) also suggests that a ratio of reserves to short-term foreign debt much above one does not further reduce the risk of a crisis. India seems to hold foreign exchange reserves very much in excess of what is suggested as adequate by these measures. India is not alone in the crowd of countries that hold excess reserves.

**Table 5a:** Emerging Market Adequacy Reserve Ratios, 2005

| Country     | Reserves/Short-Term Debt | Reserves/M2 | Reserves/Months of Imports |
|-------------|--------------------------|-------------|----------------------------|
| China       | 11.58                    | 0.22        | 15.72                      |
| Taiwan      | 5.95                     | 0.35        | 15.65                      |
| South Korea | 2.63                     | 0.21        | 7.93                       |
| Russia      | 4.43                     | 0.93        | 16.40                      |
| India       | 4.29                     | 0.80        | 13.17                      |
| Mexico      | 2.71                     | 0.18        | 3.78                       |
| Malaysia    | 3.09                     | 0.43        | 3.49                       |
| Benchmark   | 1.0                      | 0.05 – 0.20 | 3.00                       |

**Table 5b:** Excess Reserves beyond Greenspan-Guidotti Rule

| Country      | Excess Reserves (millions of US\$, Q3 2005) | Excess Reserves as a % of 2004 GDP |
|--------------|---|------------------------------------|
| China        | 724,080                                     | 41%                                |
| Taiwan       | 210,134                                     | 69%                                |
| Korea        | 136,711                                     | 18%                                |
| Russia       | 118,154                                     | 20%                                |
| India        | 107,703                                     | 15%                                |
| Malaysia     | 58,613                                      | 50%                                |
| Algeria      | 50,518                                      | 60%                                |
| Mexico       | 47,083                                      | 7%                                 |
| Thailand     | 35,489                                      | 21%                                |
| Saudi Arabia | 73,897                                      | 29%                                |

Source: Summers 2006, pp.16

Summers (2006) argues that the wealth tied up in reserves, if invested either domestically in infrastructure or in a fully diversified portfolio in the global capital markets for a long-term, can fetch 6%. The resulting gain could be estimated to be around US \$100 billion a year. The opportunity cost of the aggregate reserves of the 10 leading holders of excess reserves works out to 1.85% of their combined GDP. He says if India were to invest the foreign exchange reserves in global capital markets,

the extra returns that would result could be between 1 and 1-1/2% of GDP each year. If annualized and valued as a stock, it is around 40% of the market value of all the traded stocks on the Bombay stock exchange.

## **9. India's Concerns in Managing Foreign Exchange Reserves**

India is faced with a current account deficit unlike many other emerging economies. The current account deficit has increased from US \$5.4 billion in 2004-05 to US \$10.6 billion in 2005-06. As a proportion to GDP this is an increase from 0.8% to 1.3%. This is an indication of growing openness and integration of the Indian economy with the global economy. The ratio of current receipts to GDP grew increased from 22.0% in 2004-05 to 24.5% in 2005-06. Similarly, trade openness measured as the ratio of merchandise exports and imports to GDP increased from 28.9% during 2004-05 to 32.7% in 2005-06. (RBI Annual Report, 2005-06) With the growth of domestic industry and higher oil prices in the international markets this current account deficit may be expected to widen in the coming years. This will require more foreign exchange reserves to manage the foreign exchange demand that will arise from current account transactions.

As mentioned earlier, the major source of accretion to foreign exchange reserves in India is portfolio capital flows. Foreign investment flows into India comprises of Foreign Direct Investment (FDI) and Foreign Portfolio Investment (FPI). The cumulative foreign investment flows which were very negligible in 1990-91 registered a huge rise and were at US \$106 billion in 2005-06. The share of FDI was US \$49 billion and that of FPI was US \$57 billion. From 1993-94 to 1997-98, the FDI flows exceeded the FPI flows. But, subsequently the trend had reversed. The rise in FPI flows had been particularly sharp since 2003-04. During 2003-04, their share of total foreign investment inflows was at 79.4%. It stood at 68.2% in 2005-06. FPI flows are considered less stable than FDI flows. Hence, with the expansion of FPI flows, an increasing level of foreign exchange reserves is required to be kept liquid to ward off any sudden shocks of capital flight. RBI's approach to reserves management is summarized in the RBI Annual Report, 2006 as follows: "The overall approach to the management of India's foreign exchange reserves takes into account the changing composition of the balance of payments and endeavors to reflect the 'liquidity risks' associated with different types of flows and other requirements. The objectives of reserve management in India are preservation of long-term value of the reserves in terms of purchasing power and the need to minimize risk and volatility in returns" (p.102). Hence, gold being highly liquid can serve this purpose.

## **10. Issues in Increasing Share of Gold in Indian Foreign Exchange Reserves**

Given the precautionary motive of holding foreign exchange reserves in India, as is evident from the high level of deposits with banks, gold can be a prominent asset in the portfolio. What should be the quantum of increase? The international average for the share of gold in the foreign exchange reserves is around 10.5%. While the European countries have over 40%, USA has over 70%. But, the share of gold in Asian countries has been well below the level that India holds. In India, the share of gold is less than 5%. This is in line with many of the Asian economies. This is evident from the following table.



**Table 6:** Gold Holdings of Asian Economies as of September 13, 2006

| <b>Country</b> | <b>Tonnes</b> | <b>% of Total Reserves</b> |
|----------------|---------------|----------------------------|
| Japan          | 765.2         | 1.6                        |
| China          | 600.0         | 1.3                        |
| Taiwan         | 423.3         | 2.9                        |
| India          | 357.7         | 4.4                        |
| Singapore      | 127.4         | 1.9                        |
| Thailand       | 84.0          | 2.9                        |
| Malaysia       | 36.4          | 0.9                        |
| Korea          | 14.3          | 0.1                        |

Source: World Gold Council at  
[http://www.gold.org/value/reserve\\_asset/gold\\_as/reserve\\_stats.html](http://www.gold.org/value/reserve_asset/gold_as/reserve_stats.html)

As mentioned earlier India is accumulating foreign exchange reserves to meet the requirements of its increasing current account deficit and to protect against volatile capital flows. Though this purpose is served by gold there are other issues. For an emerging economy like India, the reserves should work and earn yield. Keeping large amounts in precious metals which do earn a very low yield cannot meet this objective. If India were to increase the proportion of gold in its foreign exchange reserves to 10%, it would require an outflow of about US \$15 billion at the current level of gold prices. Can India afford this is a question to be answered. Though gold is described as a liquid asset, its liquidity vis-à-vis foreign exchange market is low. Average daily turnover in gold is around US \$7.3 billion while that of the foreign exchange market is US \$1200 billion. Hence, exiting large physical quantities of gold in case of an emergency may be one difficult and secondly will not go unnoticed by the market watchers.

To conclude, while it is a clear fact that gold can help diversify and hedge the foreign exchange reserves, how much of it should be held has to be decided carefully given the economic circumstances of an emerging economy like India.

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