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# Contents

**Editorial** 5

Participation and Development Outcomes: Evidences from the Poor Districts of India

*Amar K J R Nayak* 7

The Over-educated, Under-utilized Public Professionals: Evidences from Oman and Saudi Arabia

*Khalid O. Al-Yahya* 28

Managing Banking Liquidity Risk in the Current Economic Conditions: A Conceptual Framework

*Rifki Ismal* 48

Public-Private Partnership in India’s Urban Water Public Utilities: A Case of Sonia Vihar Water Project –Delhi

*Nalin Bharti & G. Ganesh* 65

Antecedents of Inter-personal Conflicts at Workplace

*Shweta & Srirang Jha* 75

Demographic Profiles as Determinants of Job Satisfaction in Indian Insurance Sector

*Anita Singh* 81
It is a pleasure to present the second issue of Journal of Management & Public Policy (JMPP) to the august community of scholars and practitioners. We have received encouraging feedback from our readers. Moreover, a larger number of academics have desired to contribute papers to the journal. This gesture is quite heartening especially for a start-up journal. We shall surely try to meet expectations of our scholarly patrons. This issue is a little different. We have changed the format so as to accommodate more papers in each issue. In this edition, we have included six papers from diverse areas.

‘Participation and Development Outcomes: Evidences from the Poor Districts of India’ by Amar K J R Nayak examines the degree of impact of participation of primary stakeholders on the development outcomes; viz., poverty alleviation, drought proofing and quality of life on people in the eight poorest districts of Orissa, India. The empirical evidences show that (a) the degree of participation of the primary stakeholders has a strong positive and varying impact on the three development outcomes, viz., alleviation of poverty, drought proofing, and quality of life of the poor, and (b) Homogeneity of culture and values among the primary stakeholders yields superior long-term development outcomes. The paper provides fresh perspective on participation with specific reference to the three long-term development outcomes, viz., Poverty Alleviation, Drought Proofing and Quality of Life. It provides the relationship of the 114 development output variables with the three Development Outcome variables. It suggests that the Government and development agencies should recognize the significance of homogeneity within community for better development outputs and outcomes.

‘The Over-educated, Under-utilized Public Professionals: Evidences from Oman and Saudi Arabia’ by Khalid O. Al-Yahya provides public administrators’ perceptions of organizational human capital utilization (and underutilization) and its relationship to organizational policies and practices in Saudi Arabia and Oman. The study findings expose a widespread under-utilization problem. Skills and abilities of civil employees, although relatively and increasingly abundant, are invariably underutilized. It is found that competence utilization is closely associated with factors related to HR policies and practices and organization design, namely power-influence sharing in decision making, utilization and empowerment of work teams, matching jobs to people, and use of competence as a basis for advancement and authority. The study suggests that without effective utilization mechanisms, additional skill development might prove ineffective and largely irrelevant to performance and overall effectiveness of governance system.

‘Managing Banking Liquidity Risk in the Current Economic Conditions: A Conceptual Framework’ by Rifki Ismal presents the conceptual basis for managing banking liquidity risk in the current economic conditions. After identifying and profiling risks in banking institution, the current concept of liquidity risk management requires the banks to set up a liquidity risk management process. It consists of determining liquidity risk management policies, setting the roles of ALCO, establishing an effective information system and, conducting internal control system for liquidity management. Further, after analyzing factors triggering asset-liability imbalance, the banks prepare techniques to mitigate liquidity imbalance and liquid financial instruments to fulfill the demand for liquidity. Finally, this comprehensive concept is expected
to help banks to properly manage liquidity in the challenging economic/business condition nowadays.

‘Public-Private Partnership in India’s Urban Water Public Utilities: A Case of Sonia Vihar Water Project –Delhi’ by Nalin Bahrti & G. Ganesh presents a critique of public private partnership model in the context of urban water public utilities. As such, efficient management of public utilities is absolutely important for proper urban development. These days, developing and managing public utilities are not easy for the government. In a country like India, full privatization of public utilities is also difficult to achieve. Partial privatization with a public - private partnership (PPP) can therefore be a viable option. Lease, contracting out, transfer, build operate own and build operate transfer are some of the techniques which can be practiced for efficient management of public utilities. This paper deals with the need, modus operandi and precautions required for public private partnership through privatization of public utilities in India with special reference to the recently implemented PPP in Sonia Vihar Water Project in Delhi.

‘Antecedents of Inter-personal Conflicts at Workplace’ by Shweta & Srirang Jha presents a comprehensive view on the antecedents of interpersonal conflicts at the workplace that would facilitate development of a holistic framework of conflict resolution based on the root causes rather than the individual incidents on a piecemeal basis. The antecedents of interpersonal conflicts have been classified into four dimensions viz. individual differences, interpersonal issues, organizational factors and extra-organizational issues. Even within different sets of antecedents, there are several sub-factors that interplay with each other leading to a full-fledged clash at the workplace. This paper sets an agenda for more empirical researches on the antecedents of interpersonal conflicts as against the current focus on exploring the factors affecting conflict resolution styles of individuals. The researchers believe that the skewed focus of the researches on interpersonal conflicts has resulted in the casual manner in which conflicts are resolved today.

‘Demographic Profiles as Determinants of Job Satisfaction in Indian Insurance Sector’ by Anita Singh decodes the role of demographic profiles of employees vis-à-vis job satisfaction. Growth of any organization depends on the employee willingness to achieve the objectives of the organization. The human resource of an organization play a crucial part and it becomes necessary and inevitable on the part of the management to ensure and nurture an atmosphere where the employees feel satisfied both with their work and with their standards of living. The HR strategies need to be molded according to the demographic profile of the employees in order to understand their drivers and motivators. The research is exploratory in nature and it has been carried out in the entire insurance sector.

We invite feedback on the papers from our distinguished readers to add further value to our efforts.

--Srirang Jha
Participation and Development Outcomes: Evidences from the Poor Districts of India

Amar K J R Nayak

Abstract

This paper examines the degree of impact of participation of primary stakeholders on the development outcomes; viz., poverty alleviation, drought proofing and quality of life on people in the eight poorest districts of Orissa, India. The empirical evidences show that (a) the degree of participation of the primary stakeholders has a strong positive and varying impact on the three development outcomes, viz., alleviation of poverty, drought proofing, and quality of life of the poor, and (b) Homogeneity of culture and values among the primary stakeholders yields superior long-term development outcomes. The paper provides fresh perspective on participation with specific reference to the three long-term development outcomes, viz., Poverty Alleviation, Drought Proofing and Quality of Life. It provides the relationship of the 114 development output variables with the three Development Outcome variables. It suggests that the Government and development agencies should recognize the significance of homogeneity within community for better development outputs and outcomes.

Keywords: Development outcomes, Stakeholders, Quality of Life, Poverty alleviation

Introduction

From Habermasian democratic principles of participation in polity and economy to rights based perspective in development processes have argued for increased participation of primary stakeholders in the development processes in the developing countries. On the field, Participatory Rural Appraisal with an open framework of Robert Chambers has been largely in vogue over the last two decades. However, participation of primary stakeholders for long term sustainability of development projects is yet to be realized and the issues of underdevelopment in the developing countries remain unresolved.

Through a survey of 4000 primary stakeholders; 114 variables and 10 case studies of development projects in the poorest region of India, the eight KBK districts, this paper shows the significance of participation and development outcomes. Based on the detailed case studies, the paper also discusses the issues of delivery in a top-down institutional set-up of development (RLTAP) schemes of the Government of India and the role of the nature of primary stakeholders in achieving the outcomes of a development project.

The analysis of the paper distinguishes between the outputs that are short term in nature like say monthly earning and outcomes that are long term in nature like quality of life. It measures development in form of three different long term outcomes like poverty alleviation, drought proofing and quality of life. One of the key issues that the paper investigates in the above

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sample and project area is how strongly participation of primary stakeholders in development projects influences the development outcomes.

**Theoretical Context**

The importance of participation of people in development process has been recognized since the beginning of development efforts of the Governments and international agencies. The argument for democratization of the process of development has been argued with the beginning of development assistance from USAID in 1960s. Literature provides a rich description on the importance of participation of the beneficiaries in development projects. The process of engaging the beneficiaries and the various stakeholders in the process of implementing development projects has been the most debated topic in the present literature on participation and development.

It has been argued that participation can be strengthened if the spirit of ownership and partnership is encouraged. Large scale consultation with the poor and institutional change at all levels including, primary stakeholders NGOs, Host Governments, World Bank and other donor agencies are necessary for increasing the level of participation. Further, the participation of the primary stakeholders or the beneficiaries in monitoring and evaluation of a project can enhance ownership and accountability in the project (Blackburn, et al, 2000).

The significance of participation of the beneficiaries of a project by way of the nature of civil liberties and democratic process in country on the performance of development projects has been shown. Isham, et al , 1997 show that better civil liberties lead to better performance of Government Projects. While the democratic process itself did not show any effect on project performance, the authors argue that democratic set-up is the basis for civil liberties and hence the democratic or the participatory process is significant to project performance. While the study here has used only binary indicators of satisfactory and unsatisfactory that leaves out a lot in terms of information on the kind of performance, it nevertheless provides some indirect indication of the role of participation for outcomes in a development project.

Participation of the various stakeholders in complex projects has always been beneficial for long term sustainability not only in rural communities but across the broader cross-section of the society. It is argued that such planning can lead to positive political change in the community and result in consensus about the nature of desired development. McGuire, et al, 1994 showed that engaging the beneficiaries in the planning process through community-wide strategic planning exercises can serve as a capacity building tool in non metropolitan communities. At a country level too, participation by way of consensus building, open dialog and the promotion of an active civil society are key ingredients to long-term sustainable development. Conditionality imposed on countries through the development funds may fail to produce lasting change. Indeed, conditions would undermine the people’s incentives to develop their own capabilities and weaken their confidence in using their own intelligence. Rather, transparency and accountability are necessary for effective participation and democracy (Stiglitz, 2002).

Further, the rights-based approach in development attempts to take participation from a mere voluntary and consciousness level of the development agencies to engage the beneficiaries in the development process to the rightful demands of the beneficiaries to determine the development process for themselves. However, it is feared that simply using the language of
rights-based approach to development largely to invoke the discursive power of the concept of rights, without intending to bear the weight of the entirety of consequences that flow from it has little impact on enhancing participation (Cornwall & Nyamu-Musembi, 2004).

From application of simple techniques to engage the primary stakeholders in small scale projects in the late 1980s, Robert Chambers (1974, 1988, & 1997) developed the Participatory Rural Appraisal (PRA) technique to let the beneficiaries participate in the development projects. With its three key dimensions viz., it is a mindset, a philosophy, and a repertoire of methods, the PRA technique has been widely popular with the NGOs and development agencies for nearly two decades. It also argues that the wellbeing of the “uppers” lie in empowering and privileging the realities of “lowers”. Five methodologies have been suggested to achieve this, viz., enable realities and priorities of poor and marginalized people to be expressed and communicated to policy-makers, enable trainers to facilitate attitude and behavior change, make normal bureaucracies more participatory, build self-improvement into the spread of participatory methodologies and enable people with power to find fulfillment in disempowering themselves (Chambers, 1998).

From the middle of 1990s, there have also been quite a number of debates on the problems with the wide range of open ended techniques in PRA. Issues of power and value, critical in large scale development projects, are often ignored in PRA techniques. The question of whether the PRA movement has led to voicing the policies and policy making processes of the Government or whether the PRA agenda involves changes in the mind sets and behavior of development professionals, in the poor themselves, in organizations involved in the development remains unresolved (Holland & Blackburn, 1996).

The three major problems identified with the PRA techniques have been (a) it does not recognize that poor people are diversely embedded in unequal meso, macro and global and social power structures, (b) scanty local knowledge on the part of PRA practitioners, and (c) ethical principles focused on development professionals and not on the poor (Bevan, 2000). Years of implementation of PRA has revealed new understanding of the problems in PRA techniques. This technique has not taken into account the issues of inclusiveness, role of PRA facilitators, and the personal behavior of elites overshadow or sometimes even ignore the questions of legitimacy, justice, power and the politics of gender and difference (Kapoor, 2002). In other words, the author argues that the PRA technique does not take into account issues like differences among various stakeholders and the power play of community.

Further, while PRA techniques is primarily a technique to involve the primary stakeholders to participate in the data collection process about their needs and their context, it does not explain whether this process leads to participation of primary stakeholders in the implementation of the same project for which the data was collected. Most often engaging primary stakeholders for data collection may serve only to get the people accept the desired output of project implementers. Many development projects like the credit schemes and forest protection schemes in rural India for the poor that have adopted PRA have served little beyond data collection and understanding of local context by the external project implementers.

Jurgen Habermas and Max Weber have sufficiently critiqued the problems in Enlightenment theories based on reason. Extending his analysis of reason, Habermas (1984) discusses how reason in political sphere and economic sphere is embedded with the false notion of equity of
participation in politics and economic growth among citizens. The political power play among
the various actors in the publicly constituted institutions and community organizations for
development schemes of the Government and other agencies are likely to influence the nature of
outcome of development projects.

While several research issues relating to participation and development have been raised, there
has not been much discussion with regard to the impact of participation on different measures of
development. Impact of development project on the target beneficiaries have been largely
assessed from project effectiveness through an input-output model. The economist approach to
development has been to measure change using the standard economic indicators such that
income levels, employment levels, production levels, etc. Input-Output Model has been most
used. It has been suggested that labor, capital, technology and resources as input components
and facilities, training, technology, organization, production, total economic costs and non-
economic costs and equity consequence as the output indicators (Finsterbusch & Wicklen,
1987).

Development project outputs in terms of economic indicators like income, employment,
production are good measures as they only measure immediate impact. However, as the
development process is an involved and long-term change process, development outcomes in
terms of quality of life is the ultimate objectives of development efforts. Indicators like poverty
alleviation and drought proofing can be the medium term development outcomes. With the
above context, the primary focus of this paper is to empirically show the relationship of
participation with specific development outcomes. It measures development from three different
long term outcomes viz., poverty alleviation, drought proofing and quality of life. It also looks
into how the institutional mechanisms of the Government and the nature of primary
stakeholders affect the development outcomes. With the above backdrop, the following
hypotheses have been tested and discussed in this paper:

1. The lower the degree of participation of the primary stakeholders in the development
   project, the lower the development outcomes.
2. The top-down institutional set-up of the Government tends to be driven by financial
targets and not by development outcomes of primary stakeholders.
3. The greater the homogeneity in culture and values among the primary stakeholders, the
greater the development outcomes.

**Methodology**
The study consists of Survey Methodology and Case Methodology. The perception of the
program beneficiaries on the impact of the selected program was based on survey of over 4000
beneficiaries from the eight development (RLTAP) schemes in 60 blocks of the total of 80
blocks in the eight KBK districts of Orissa, India.

From the eight development schemes, a total of 114 output indicators on a 1-5 point ordinal
scale were taken to assess the perceived output among the primary stakeholders of respective
schemes. These indicators were classified into three broad categories of indicators, viz.,
economic, social and participation-action variables. The economic indicators relates to direct
economic benefit to the beneficiary, the social indicators relates to the systems, processes and
social dimensions at the block/village level that is intermediate to flow of benefits to the
targeted primary stakeholders. The participation-action indicators relates to the nature of
primary stakeholders and the political process that assist in better absorption of the benefits from the government and social institutions designed to deliver the benefits. It also reflects on the sustainability of scheme towards improving the overall quality of life of the primary stakeholders.

A number of bi-variate and multivariate statistical tests using SPSS software were undertaken to assess the impact in terms of outputs and outcomes of the different schemes. Social groupwise and genderwise differences in outcomes were also tested for using the various multivariate statistical techniques. Based on the Factor Analysis, the model used to explain the different outcomes, viz., poverty alleviation, drought proofing and quality of life was the following:

\[
Outcome = \alpha \text{ECON} + \beta \text{SOCIAL} + \gamma \text{PA}
\]

Where, ECON refers to composite economic indicator, SOCIAL refers to composite social indicator and PA refers to composite participation-action output indicator.

While each composite output indicator is an arithmetic average of all the relevant variables of an output, the outcome indicator is the weighted (\(\alpha\), \(\beta\), and \(\gamma\)) averages of the composite output indicators. The values of \(\alpha\), \(\beta\), and \(\gamma\) were computed using principal component method of Factor Analysis of the composite economic, social, and participation-action output indicators.

The survey of primary stakeholders was complemented with ten detailed case studies of the individual development schemes to get deeper insights into the implementation process, segments that benefited from the schemes, and impact of the schemes on the targeted beneficiaries. The case studies analyzed various layers of people and institution to assess the impact of each scheme on the targeted beneficiaries in the context of economic, social, participatory phenomena of the primary stakeholders and to capture the nuances of the outputs and outcomes of the various schemes on the beneficiaries. The four levels of study used for individual case analysis included the analyses of the key issues at four levels, viz., (a) physical and financial targets achieved as per the Government records, (b) systems and processes adopted by the Government for implementing the development projects, (c) immediate physical and economic benefits received by the primary stakeholders, and (d) long-term sustainable benefit of improving the quality of life of the primary stakeholders. Focus group discussions, discussions with village communities, individual interviews with the primary stakeholders and the government officials at the state, district, block, and panchayat level and subsequent analysis of data from the state and district governments were the different methods used for data collection and analyses.

**Participation & Development Outcomes**

*Development Outcome 1: Poverty Alleviation*

Poverty alleviation is one of the three development outcome that we have considered in this study. Schemes such as Rural Employment (IAY, SGSY, SGRY) and Rural Connectivity of RLTAP were designed to cater directly to increase income of poor people by way of creating labour man-days through various economic activity and public works in KBK region. Biju Krushak Vikas Yojana scheme was designed to increase farm income of poor and marginal farmers in KBK region. Hence, all the relevant economic, social, and participation-action related indicators of these schemes were used in computing the poverty alleviation index.
Although schemes like Watershed Development and Afforestation had long-term objective of overall development of village communities, the initial activities of these schemes at the village level had a large component of daily-wage employment opportunities especially for poor people. Therefore, the economic indicators of both Watershed Development and Afforestation were added to the list of indicators from Rural Employment and Rural Connectivity for computing the poverty alleviation index. From the survey, the selected indicators accounted for about 2500 primary stakeholders with 76% of male and 24% female in the sample. The sample consisted of 56%, 20% and 24 % of primary stakeholders from scheduled tribes, scheduled caste and other castes respectively.

In order to fine-tune the impact of each of the economic, social, and participation-action indicators, weight of each indicator was computed using Principal Component Method of Factor Analysis. KMO measure of sampling adequacy and Barlett’s test of sphericity (see Table 1) confirmed that the data was appropriate for Factor Analysis. The scree plot and component matrix of Factor Analysis confirmed that the three indicators formed a single component, suggesting that they all referred to one parameter that has been named as Poverty Alleviation indicator (PALLEV). The relationship of different output and outcome poverty alleviation variables is given below.

**Poverty Alleviation (PALLEV) = f (AECON, ASOCIAL, APA, BECON, BSOcial, BPA, CECON, DECON)**

Where, the first letter viz., A, B, C & D of a variable refer to Rural Employment, Rural Connectivity, Watershed Development and Afforestation respectively. The second portion of a variable ECON, SOCIAL, PA refer to gross economic indicator, gross social indicator, gross participation indicator of respective schemes)

Further, 

- \( ECON = f (AECON, BECON, CECON, DECON) \)
- \( SOCIAL = f (ASOCIAL, BSOcial) \)
- \( PA = f (APA, BPA) \)

Finally, \( PALLEV = 0.770 \, ECON + 0.748 \, SOCIAL + 0.708 \, PA \) \textit{ Equation 1}

Participation of the primary stakeholders or the beneficiaries in the development schemes seems to be a significant factor for achieving the development outcome of poverty alleviation of the beneficiaries. Participation and poverty alleviation outcome shows a strong correlation of 0.735 at a 0.01 level of significance. Further, the analysis shows that participation has a higher level of correlation of 0.423 with gross social output than on gross economic output with correlation of 0.37 (see Table 2).

The study also investigated on whether the impact of RLTAP on poverty alleviation differed across different segments of population across the eight districts. ANOVA test results suggest that there was difference in both the level of participation and the level of poverty alleviation outcomes with regard to the various social classes (SC, ST, & Other Castes). Further, all the gross economic, gross social and gross participation-action indicators seem to have had different impact on different categories of social classes (see Table 3). This raises questions of why and how the level of participation differs among different social groups.
With regard to the male and female population, while the poverty alleviation outcome differed from each other, the gross participation-action output did not seem to differ from each other (see Table 4). The question therefore is whether participation is not related to development outcomes. However, the case studies of various development schemes show that people including women in these communities believe that women need not participate in the decision making process and that men alone can take the decisions.

**Development Outcome 2: Drought Proofing**

Drought proofing is an important development outcome in the region under study as this region largely consists of hilly terrain and upland prone to drought conditions that significantly affect the livelihood of people in the region. Schemes such as Watershed Development and Afforestation were aimed to reduce the drought conditions in KBK region. From the beneficiary survey, the selected indicators accounted for 944 with 90% of male and 10% female of the total sample. Scheduled tribes beneficiaries constituted 54%, scheduled caste constituted 23% and other castes constituted the balance 23%.

Based on the Principal Component method of Factor Analysis as discussed in the previous section, the drought proofing outcome indicator was constructed (see Table 1). The relationship between the outcome and output variables of the drought proofing schemes is given below.

\[
\text{Drought Proofing (DP)} = f(\text{CECON, CSOCIAL, CPA, DECON, DSOCIAL, DPA})
\]

Where, the first letter viz., \(C\) & \(D\) of a variable refers to Watershed Development and Afforestation respectively. The second portion of a variable \(ECON, SOCIAL, PA\) refers to gross economic indicator, gross social indicator, and gross participation indicator of respective schemes.

Further, \(ECON = f(\text{CECON, DECON})\)

\(SOCIAL = f(\text{CSOCIAL, DSOCIAL})\)

\(PA = f(\text{CPA, CPA})\)

Finally, \(DP = 0.726 \: ECON + 0.868 \: SOCIAL + 0.864 \: PA\)  \(\text{Equation 2}\)

The correlation between participation and development outcomes and associated development outputs shows a very strong relationship of participation on the drought proofing outcome. The correlation between participation and drought proofing outcome is 0.883 at a 0.01 level of significance. The correlation of participation with drought proofing related gross social outputs and gross economic outputs were 0.667 and 0.425 (see Table 2).

It has also been observed from the Analysis of Variance (ANOVA) that there are differences among different social classes, viz., SC, ST, and other communities with regard to the participation in the implementation of drought proofing schemes (see Table 3). Although there is a significant difference among male and female groups on the overall drought proofing outcome, there does not seem be a significant difference on the level of participation in project implementation and sustenance (see Table 3). Why such phenomena exist is a point yet to be answered.
Development Outcome 3: Quality of Life

In principle, improvement in Quality of Life is the ultimate objective of any development project. Among the various RLTAP development projects or schemes such as Rural Drinking Water, Mobile Health Unit, and Watershed Development have primarily been directed towards improving quality of life in KBK region. However, all the other schemes viz., Afforestation, Rural Employment, Rural Connectivity, BKVY, and Emergency Feeding have also been designed to contribute indirectly to the overall Quality of Life. Therefore, Quality of Life index was computed using all the economic, social and participation-action indicators of the eight development schemes. The survey consisted of over 4000 beneficiaries with 71% of male and 29% female. Beneficiaries from scheduled tribes, scheduled castes, and other castes constituted 56%, 21% and 23% respectively.

In order to fine-tune the impact of economic, social, and participation-action indicators, weight of each indicator was computed using the Principal Component method of Factor Analysis. KMO measure of sampling adequacy and Barlett’s test of sphericity (see Table 2) confirmed that the data was appropriate for Factor Analysis. Bi-variate correlations among the gross economic, gross social and gross participation-action indicators showed correlation at a 0.01 level of significance, suggesting that factor analysis can be carried out. The scree plot and component matrix of Factor Analysis confirmed that the three indicators formed a single component, suggesting that they all referred to one parameter that was named as Quality of Life (QL) indicator. The relationship of different output and outcome poverty alleviation variables is given below.

\[
\text{Quality of Life (QL)} = f \left( \text{AECON, ASOCIAL, APA, BECON, BSOCIAL, BPA, CECON, CSOCIAL, CPA, ... HECON, HSOCIAL, HPA} \right)
\]

Where, the first letter \text{A, B, C, D, E, F, G, H} of a variable refer to Rural Employment, Rural Connectivity, Watershed Development, Afforestation, BKVY, Emergency Feeding, Rural Drinking Water, and MHU respectively. The second portion of a variable \text{ECON, SOCIAL, PA} refer to gross economic indicator, gross social indicator, gross participation indicator of respective schemes.

Further, \text{ECON} = f \left( \text{AECON, BECON, CECON, ... HECON} \right)

\text{SOCIAL} = f \left( \text{ASOCIAL, BSOCIAL, CSOCIAL, ... HSOCIAL} \right)

\text{PA} = f \left( \text{APA, BPA, CPA, ... ... HPA} \right)

Finally, \text{QL} = 0.743 \text{ECON} + 0.777 \text{SOCIAL} + 0.782 \text{PA} \text{ \quad Equation 3}

The importance of participation of the primary stakeholders in the ultimate development objective of improving quality of life of these stakeholders appears to be paramount. The correlation between participation and quality of life outcome is as high as 0.803 at a 0.01 level
of significance (see Table 1). Participation has a significant correlation of 0.42 and 0.323 with the gross social output and gross economic outputs relating to quality of life.

Analysis of variance (ANOVA) shows that the level of participation in the various schemes towards the improvement of Quality of Life outcome significantly differs among different social groups, viz., scheduled tribes, scheduled castes, and other castes in the KBK region (see Table 3). However, as we saw in the other development outcomes, while the outcome is perceived differently by male and female groups, the level participation in the execution and sustenance of projects are not seen differently by beneficiaries of different gender (see Table 3). Indeed, we find that while male and female perceived differently on all the output and outcome variables of quality of life, there was no significant difference on gross participation between the male and female groups.

The three equations 1, 2, and 3, empirically show that participation-action (PA) is significant to the development outcomes. The coefficient of participation-action (PA) is higher than the coefficient of gross economic (ECON) and gross social (SOCIAL) outputs in the quality of life outcome.

Taking the whole population into account, the mean values of participation-action indicator is the lowest among the gross economic, social and participation outputs for all the three development outcome indicators (see Table 4). Further, when we look at the district-wise development outcomes of poverty alleviation, drought proofing and quality of life, we find that participation and these development outcomes show a strong positive relationship. The box plot of participation-action and quality of life outcome is illustrative of this point (see Fig. 1). Participation-action indicator is very poor in the districts of Malkangiri (Ma) and Sonepur (So) and all the three development outcomes are poor in these two districts. Similarly, Nawarangpur (Na) district shows a high level of participation and accordingly, all the three development outcomes are high for this district.

**Institutional issues**

The problems of non-delivery and non-performance of developmental works in rural and scheduled areas of the country have often been attributed to institutional voids at the state, district, or department levels. Many projects in watershed development and afforestation have been abandoned by the people for whom the projects were meant for. Given the diversity of administrative and development work, many bureaucrats are equally unaware of several issues and details of several projects.

Given the limitation in the age old style of project planning and implementation, it has been argued that the development assistance programs must be a part of holistically perceived learning process as opposed to a bureaucratically mandated blue-print design. Rural development programs could be better implemented when adopted on a learning mode for learning to be effective, efficient and to expand rather than directly executing a centrally planned scheme (Korten, 2001).

From the experiences of the various development experts, it has been observed that there are many issues of concern as the route to participation has been pointed out for better effectiveness of development projects. Delays, additional costs, sabotage by powerful economic and social groups, hostility to or distrust of the government, intensification of community conflicts, and
diversion of benefits, to the well established rather than to women or the disadvantaged (Bamberger, 1991). Whether differences in objectives between the individuals operating the institutions and the stated objectives of the institutions lead to delays and diversion of funds?

What are the issues in the government institutional set-up in implementing and sustaining the development projects? How far does the present government-institutional structure tend to be driven by financial targets and not by the long-term beneficiary outcomes? Does the bureaucratic structure, planning and execution process themselves inhibit participation of primary stakeholder affects adversely the long term development outcomes?

Let us look at the case of RLTAP development schemes of the Government of India to explore into the above institutional issues. The total expenditure on all the eight schemes during 2001-06 was estimated to be about INR 1800 crores (see Table 5). While the allocation and expenditure of funds on different districts of KBK has been proportional to the population of the district, the distribution of funds on different projects lacks the direction for long term development outcome in the region.

Rural Employment scheme including IAY, SGRY and SGSY constituted 50% and Rural Connectivity constituted 24% of the total expenditure. Watershed Development and Afforestation constituted 8% and 5% respectively. Rural drinking water supply, BKVY, and Emergency Feeding constituted 4% each and Medical Health Units constituted only 1% of the total expenditure (see Fig. 2).

The allocation of funds shows that projects that can absorb larger sums of money in shorter time period seems to take precedence over projects that take longer time to implement. During one of the case studies on rural connectivity, the author attended the three hour meeting of the executives of District Rural Development Agency (DRDA) and found the following: The meeting was of the Executive engineer, Assistant engineers, and several road work contractors of the districts. The only issue this team discussed was how much will be amount of bills (invoices) that they can generate over the next one and half month. This team then met the Project Director, DRDA; here the discussion on which single road proposal they should execute so that they can spend the maximum amount of money at one go. There were indeed many proposals of shorter village roads, broken culverts, and small bridges from several villages that would connect people from many villages and hamlets to the main road. However, the executives of DRDA decided to implement a longer concrete road so that most of the budget for the financial year could be utilized.

On the one hand the district officials complain that the state government delays the transfers the funds to the district and expects the district to utilize the funds within a financial year. On the other hand, the state officials complain about late receipt of proposals from the districts. The local project executives and work contractors complain about the rent seeking behavior of local executives in sanctioning projects. Indeed, there are several structural and motivational issues among the executives that shape the delivery of development projects; the outcome issues are hardly the concerns of the various layers of executives.

On the one hand the district officials complain that the state government delays the transfers the funds to the district and expects the district to utilize the funds within a financial year. On the other hand, the state officials complain about late receipt of proposals from the districts. The
local project executives and work contractors complain about the rent seeking behavior of local executives in sanctioning projects. Indeed, there are several structural and motivational issues among the executives that shape the delivery of development projects; the outcome issues are hardly the concerns of the various layers of executives.

While it is true that the superstructure at the centre and state, the leadership and the administration at different layers from centre to district level is yet to deliver its potential, the issues of governance and the institutional mechanisms at the grass root level also plays a significant role in the development processes. The actor network dynamics at the grass root level and the institutional mechanisms arising out of these dynamics seem to be much stickier phenomena to understand and that the actor network in the first layer of community more often than not add in diverting the large portions of the funds for few select individual gains and not for community gains.

The local representatives (agents) may be living in a village which they apparently represent; they may be relatively better educated, communicate better with government officials and have some mode of personal transport. All these make them very good intermediaries for project implementation at the village level. However, it is quite revealing to note from the case studies that most of these local intermediaries are migrants from the urban areas and are not the original inhabitants of the village that they officially represent. Most primary health workers and school teachers, local contractors, shop keepers are people from outside the village communities. The conception and motivation of urban migrant towards the long term development of the primary stakeholders is likely to differ from that of the local primary stakeholders. The institutional arrangement for program delivery at the grass root level therefore needs to seriously look into this aspect.

Nature of the Beneficiaries
It appears that the demographic, social and economic characteristics of people in a community and people among them who lead the institutions at the grass root level are likely to affect the development outputs and development outcomes. The engagement of people with each other within the institutions needs to remains fluid in order to facilitate innovative solutions to complex problems and situations. While participation of the beneficiaries in the project implementation plays a role, the nature of beneficiaries plays a significant role on the effectiveness of a development project or scheme. As it has been pointed out that the level of development of the host country contributes towards the positive impacts of participation on project effectiveness. A large scale study of 52 USAID development projects showed that participation improved the project in terms of building community capacity and that participation was more effective in more developed host countries (Finsterbusch & Wicklen, 1987, 1989).

Increase in heterogeneity of tribal village communities with migrants from urban areas and other social groups seem to affect the culture and values in the communities of the primary stakeholders. It apparently reduces the level of participation, cooperation and decision making process in the villages. In one of cases of Rural Drinking Water scheme in Nawarangpur district, the study found a drastic difference in the maintenance of tube wells and piped water supply systems in villages with homogenous communities and heterogeneous communities. Water supply systems were very well maintained by the tribal villages with homogenous population; whereas the tube wells and piped water systems in heterogeneous villages of locals,
urban migrants, different social groups were poorly maintained and no one seemed to be responsible for the maintenance of the water supply systems; with most tube wells or water pipe stands either broken or it is filled with filth around it.

Participation of women also has been different depending on the homogeneity or heterogeneity of the village communities. Tribal villages with out the urban migrant tended to give more space to women to participate in the development activities. Villages with heterogeneous population of scheduled castes, tribes and urban migrants had lesser role for women to participate in the developmental projects. From studies elsewhere, it has also been noticed that after several years of implementing PRA techniques, many raise the question whether the development work undertaken has benefited the women and men equally. With simplistic assumptions of socio-cultural aspects in rural communities, women have often been the losers (Gujit & Shah, 1998).

Surprisingly, in the present study, gender-wise analysis of variance (ANOVA) on participation-action indicator across all the development outcomes did not show any significant difference (see Table 4). It implied that the level of participation of women was similar to that of men. Lack of difference in participation of women and men in the statistical analysis could be due to the smaller sample size of women who are vocal and actually participate in the decision making of development projects and came forward to participate in the survey.

However, the detailed case studies of several development schemes revealed that most women hardly participated in the decision making process. This phenomenon is more acute in villages with heterogeneous population; with such villages increasingly forming the bulk of villages in the KBK region. In fact, most women are unaware of their right to participate in the decision making process. Most women being illiterate, women self groups depend on others for managing their banking and business transactions. Except for some primitive tribal communities, in most socially disadvantaged groups, it has been a tradition that men tend to take the decision for the whole family and women are not involved in the decision making process.

**Summary & Further Questions**

In the final analyses, the empirical evidences from the KBK districts of India show that (a) the degree of participation of the primary stakeholders has a strong positive impact on the development outcomes, viz., alleviation of poverty, drought proofing in the KBK region and overall improvement in the quality of life in the long run. (b) By design, the top-down institutional set-up of the Government lead to a systemic error of being driven by financial targets and drifts away from the long-term objectives of achieving long term development outcomes. (c) Homogeneity of culture and values among the primary stakeholders yields superior long term development outcomes.

The argument that participation of primary stakeholders in the development projects is significant to development has been vindicated from the present empirical evidence from the eight poorest (KBK) districts of India. The paper provides fresh perspective to participation in development with specific reference to 114 short-term development outputs like monthly income, employment generation, etc, and the long-term development outcomes, viz., poverty alleviation, drought proofing and quality of life.
However, the present study throws up several complex issues for further investigation so that participation of the primary stakeholders especially the weaker groups as a concept will be practical. Some of the key issues that arise from the study are (a) how can the governance structure be designed to make it dynamic and responsive to the primary stakeholders, (b) how do we break through the strong actor-network at the grass root level of communities that often divert the development funds meant for a community in favor of a select few influential people, and (c) how do we complement the strengths of the weak primary stakeholders so that they can effectively participate in the development process.

References


Table 1: Factor Analysis of 3 key variables (outputs) of different Development Outcomes

<table>
<thead>
<tr>
<th>KMO and Bartlett’s Test</th>
<th>Poverty Alleviation</th>
<th>Drought Proofing</th>
<th>Quality of Life</th>
</tr>
</thead>
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<tr>
<td>Kaiser-Meyer-Olkin Measure of Sampling Adequacy</td>
<td>0.631</td>
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<td>0.653</td>
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<tr>
<td>Bartlett’s Test of Sphericity</td>
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<td>653.830</td>
<td>1298.645</td>
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<td>Approx Chi-Square df</td>
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<td>3</td>
</tr>
<tr>
<td>Sig.</td>
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<td>0.000</td>
<td>0.000</td>
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Component Matrix

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<tr>
<th>ECON</th>
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<th>PA</th>
</tr>
</thead>
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<td>0.726</td>
<td>0.743</td>
</tr>
<tr>
<td>0.748</td>
<td>0.868</td>
<td>0.777</td>
</tr>
<tr>
<td>0.708</td>
<td>0.864</td>
<td>0.782</td>
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</table>
Table 2: Correlations among key variables of Participation & Development Outputs & Outcomes

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<tr>
<th></th>
<th>Poverty Alleviation (PALLEV)</th>
<th>Drought Proofing (DP)</th>
<th>Quality of Life (QL)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td>SOCIAL</td>
<td>PA</td>
</tr>
<tr>
<td>ECON</td>
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<td></td>
<td></td>
</tr>
<tr>
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<td>0.370**</td>
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<tr>
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<td>0.000</td>
</tr>
<tr>
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<td>2857</td>
<td>2005</td>
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<tr>
<td>SOCIAL</td>
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<tr>
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<td>1</td>
<td>0.423**</td>
</tr>
<tr>
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<td>,</td>
<td>0.000</td>
</tr>
<tr>
<td>N</td>
<td>2005</td>
<td>2009</td>
<td>1143</td>
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<tr>
<td>PA</td>
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<tr>
<td>Pearson Correlation</td>
<td>0.370**</td>
<td>0.423**</td>
<td>1</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
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<td>0.000</td>
<td>,</td>
</tr>
<tr>
<td>N</td>
<td>1139</td>
<td>1143</td>
<td>1143</td>
</tr>
<tr>
<td>PALLEV/DP/QL</td>
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<td></td>
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<tr>
<td>Pearson Correlation</td>
<td>0.754**</td>
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<td>0.735**</td>
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<td>Sig. (2-tailed)</td>
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<td>0.000</td>
<td>0.000</td>
</tr>
</tbody>
</table>

**. Correlation is significant at 0.01 level (2-tailed)
### Table 3: One way Analysis of Variance (ANOVA)

#### Social Groups: Scheduled Tribes, Scheduled Castes, & Other Castes

<table>
<thead>
<tr>
<th></th>
<th>Poverty Alleviation (PALLEV)</th>
<th>Drought Proofing (DP)</th>
<th>Quality of Life (QL)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F Sig.</td>
<td>F Sig.</td>
<td>F Sig.</td>
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<td>ECON</td>
<td>10.600 0.000</td>
<td>7.443 0.001</td>
<td>19.687 0.000</td>
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<td>SOCIAL</td>
<td>8.469 0.000</td>
<td>2.235 0.108</td>
<td>9.831 0.000</td>
</tr>
<tr>
<td>PA</td>
<td>19.649 0.000</td>
<td>5.378 0.005</td>
<td>17.574 0.000</td>
</tr>
<tr>
<td>PALLEV/DP/QL</td>
<td>15.765 0.000</td>
<td>1.734 0.177</td>
<td>16.480 0.000</td>
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</tbody>
</table>

#### Gender - Male & Female

<table>
<thead>
<tr>
<th></th>
<th>F</th>
<th>Sig.</th>
<th>F</th>
<th>Sig.</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON</td>
<td>1.245</td>
<td>0.265</td>
<td>2.369</td>
<td>0.124</td>
<td>18.849</td>
<td>0.000</td>
</tr>
<tr>
<td>SOCIAL</td>
<td>71.423</td>
<td>0.000</td>
<td>2.898</td>
<td>0.089</td>
<td>65.646</td>
<td>0.000</td>
</tr>
<tr>
<td>PA</td>
<td>1.130</td>
<td>0.288</td>
<td>2.277</td>
<td>0.132</td>
<td>0.089</td>
<td>0.766</td>
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<tr>
<td>PALLEV/DP/QL</td>
<td>11.383</td>
<td>0.001</td>
<td>3.630</td>
<td>0.057</td>
<td>15.023</td>
<td>0.000</td>
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</table>
Table 4: Descriptive Statistics of Development Outputs & Development Outcomes

<table>
<thead>
<tr>
<th>Poverty Alleviation (PALLEV)</th>
<th>Drought Proofing (DP)</th>
<th>Quality of Life (QL)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ECON</strong></td>
<td><strong>SOCIAL</strong></td>
<td><strong>PA</strong></td>
</tr>
<tr>
<td>N Valid</td>
<td>2857</td>
<td>2009</td>
</tr>
<tr>
<td>Missing</td>
<td>442</td>
<td>1290</td>
</tr>
<tr>
<td>Mean</td>
<td>3.138</td>
<td>3.118</td>
</tr>
<tr>
<td>Std. Error of Mean</td>
<td>0.0163</td>
<td>0.0206</td>
</tr>
<tr>
<td>Median</td>
<td>3.143</td>
<td>3.0000</td>
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<tr>
<td>Mode</td>
<td>0.8737</td>
<td>0.9224</td>
</tr>
<tr>
<td>Range</td>
<td>0.7633</td>
<td>0.8509</td>
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<tr>
<td>Skewness</td>
<td>-0.029</td>
<td>-0.121</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>-0.056</td>
<td>0.055</td>
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<tr>
<td>Variance</td>
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<td>Range</td>
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<tr>
<td>Minimum</td>
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<td>Percentile</td>
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<td>2.5000</td>
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<tr>
<td>20</td>
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<tr>
<td>25</td>
<td>3.143</td>
<td>3.0000</td>
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</tbody>
</table>

Note: Ratings were on an ordinal scale of 1-5, PA – Participation-Action
Figure 1: Participation-Action and Quality of Life

Participation-Action (PA) indicators:

Quality of Life:
Table 5: District-wise expenditure for 8 selected schemes, 2001-06
(INR in crores)

<table>
<thead>
<tr>
<th>Scheme</th>
<th>Wings</th>
<th>Kalahandi</th>
<th>Nuapada</th>
<th>Bolangir</th>
<th>Sonepur</th>
<th>Koraput</th>
<th>Rayagada</th>
<th>NGP</th>
<th>Malkangiri</th>
<th>Total</th>
<th>Share</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Rural connectivity</strong></td>
<td>Works</td>
<td>7.9</td>
<td>3.09</td>
<td>5.69</td>
<td>5.59</td>
<td>9.87</td>
<td>9.48</td>
<td>6.32</td>
<td>8.22</td>
<td>56.16</td>
<td>24%</td>
</tr>
<tr>
<td></td>
<td>RW</td>
<td>7.05</td>
<td>2.72</td>
<td>4.89</td>
<td>0</td>
<td>17.76</td>
<td>7.09</td>
<td>5.46</td>
<td>8.87</td>
<td>53.84</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PMGS</td>
<td>77.19</td>
<td>24.55</td>
<td>63.21</td>
<td>25.55</td>
<td>45.47</td>
<td>31.5</td>
<td>32.23</td>
<td>13.09</td>
<td>312.79</td>
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<tr>
<td></td>
<td>Total</td>
<td>92.14</td>
<td>30.36</td>
<td>73.79</td>
<td>31.14</td>
<td>73.1</td>
<td>48.07</td>
<td>44.01</td>
<td>30.18</td>
<td>422.79</td>
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<tr>
<td></td>
<td>Share</td>
<td>21.8%</td>
<td>7.2%</td>
<td>17.5%</td>
<td>7.4%</td>
<td>17.3%</td>
<td>11.4%</td>
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<td>7.1%</td>
<td>100.0%</td>
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<tr>
<td><strong>Drinking Water</strong></td>
<td>Total</td>
<td>10.94</td>
<td>7.79</td>
<td>8.95</td>
<td>4.87</td>
<td>9.4</td>
<td>8.46</td>
<td>10.27</td>
<td>5.45</td>
<td>66.13</td>
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<tr>
<td></td>
<td>Share</td>
<td>16.5%</td>
<td>11.8%</td>
<td>13.5%</td>
<td>7.4%</td>
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<tr>
<td><strong>Rural Employment</strong></td>
<td>IAY</td>
<td>85.07</td>
<td>13.31</td>
<td>33.11</td>
<td>16.57</td>
<td>38.45</td>
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<td>274.4</td>
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<td>Total</td>
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<td>6.4%</td>
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<td><strong>Afforestation</strong></td>
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<td>12.79</td>
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<td>16.6</td>
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<td>7.91</td>
<td>5.97</td>
<td>84.49</td>
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<td>Share</td>
<td>15.1%</td>
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<td>5.1%</td>
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<td>29.32</td>
<td>15.45</td>
<td>23.94</td>
<td>11.34</td>
<td>28.42</td>
<td>15.22</td>
<td>14.96</td>
<td>11.72</td>
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<td>Share</td>
<td>19.5%</td>
<td>10.3%</td>
<td>15.9%</td>
<td>7.5%</td>
<td>18.9%</td>
<td>10.1%</td>
<td>10.0%</td>
<td>7.8%</td>
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<td></td>
<td></td>
<td>347.51</td>
<td>149.61</td>
<td>249.32</td>
<td>128.98</td>
<td>298.97</td>
<td>226.43</td>
<td>234.57</td>
<td>156.36</td>
<td>1791.75</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>Share</td>
<td>19.4%</td>
<td>8.3%</td>
<td>13.9%</td>
<td>7.2%</td>
<td>16.7%</td>
<td>12.6%</td>
<td>13.1%</td>
<td>8.7%</td>
<td>100.0%</td>
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<td><strong>Population (in '000)</strong></td>
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<td>1334</td>
<td>531</td>
<td>1336</td>
<td>541</td>
<td>1178</td>
<td>823</td>
<td>1018</td>
<td>480</td>
<td>7241</td>
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<td></td>
<td>Share</td>
<td>18.4%</td>
<td>7.3%</td>
<td>18.5%</td>
<td>7.5%</td>
<td>16.3%</td>
<td>11.4%</td>
<td>14.1%</td>
<td>6.6%</td>
<td>100.0%</td>
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</tr>
</tbody>
</table>

Source: Office of the Principal Accountant General, Orissa

Note: 1 crore = 10 million
Endnote

KBK districts comprises of eight poorest districts of Orissa, a state of India. The districts include Koraput, Rayagada, Malkangiri, Nawarangpur, Bolangir, Sonepur, Kalahandi, and Nuapada. A brief statistics describing the KBK district is elicited in the Endnote Exhibits 1 & 2.

Exhibit 1: Demographic & Literacy Indicators in the KBK districts: 2001

<table>
<thead>
<tr>
<th>District</th>
<th>Popu-Density</th>
<th>Population Indicators</th>
<th>Literacy Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total (000)</td>
<td>Female (%)</td>
<td>Rural (%)</td>
</tr>
<tr>
<td>1. Koraput</td>
<td>134</td>
<td>1,178</td>
<td>49.96</td>
</tr>
<tr>
<td>2. Malkangiri</td>
<td>83</td>
<td>480</td>
<td>49.91</td>
</tr>
<tr>
<td>3. Nawarangpur</td>
<td>192</td>
<td>1,018</td>
<td>49.81</td>
</tr>
<tr>
<td>4. Rayagada</td>
<td>116</td>
<td>823</td>
<td>50.71</td>
</tr>
<tr>
<td>5. Bolangir</td>
<td>203</td>
<td>1,336</td>
<td>49.56</td>
</tr>
<tr>
<td>6. Sonepur</td>
<td>231</td>
<td>541</td>
<td>49.13</td>
</tr>
<tr>
<td>7. Kalahandi</td>
<td>168</td>
<td>1,334</td>
<td>50.00</td>
</tr>
<tr>
<td>8. Nuapada</td>
<td>138</td>
<td>531</td>
<td>50.15</td>
</tr>
<tr>
<td>KBK Districts</td>
<td>152</td>
<td>7,241</td>
<td>49.91</td>
</tr>
<tr>
<td>Orissa</td>
<td>236</td>
<td>36,707</td>
<td>49.29</td>
</tr>
</tbody>
</table>

Note: Popu-density - population density (persons / sq.km). * As per 1991 Census
### Exhibit 2: Census of Families below Poverty Line (BPL): 1992 & 1997*

<table>
<thead>
<tr>
<th>District</th>
<th>HCR (%)</th>
<th>1992 Census</th>
<th></th>
<th>1997 Census</th>
<th></th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Total BPL (lakh families)</td>
<td>BPL Percent (%)</td>
<td>Total BPL (lakh families)</td>
<td>BPL Percent (%)</td>
<td></td>
</tr>
<tr>
<td>1 Kalahandi</td>
<td>80.19</td>
<td>2.41</td>
<td>2.07</td>
<td>85.77</td>
<td>3.08</td>
<td>1.93</td>
</tr>
<tr>
<td>2 Nuapada</td>
<td>0.94</td>
<td>0.79</td>
<td>0.79</td>
<td>83.64</td>
<td>1.27</td>
<td>1.09</td>
</tr>
<tr>
<td>3 Bolangir</td>
<td>48.89</td>
<td>2.39</td>
<td>1.81</td>
<td>75.82</td>
<td>3.30</td>
<td>2.01</td>
</tr>
<tr>
<td>4 Sonepur</td>
<td>0.92</td>
<td>0.57</td>
<td>0.57</td>
<td>62.29</td>
<td>1.10</td>
<td>0.80</td>
</tr>
<tr>
<td>5 Koraput</td>
<td>92.24</td>
<td>1.88</td>
<td>1.63</td>
<td>86.59</td>
<td>2.65</td>
<td>2.22</td>
</tr>
<tr>
<td>6 Malkangiri</td>
<td>0.80</td>
<td>0.68</td>
<td>0.68</td>
<td>84.81</td>
<td>1.09</td>
<td>0.89</td>
</tr>
<tr>
<td>7 Nawrangpur</td>
<td>1.52</td>
<td>1.38</td>
<td>1.38</td>
<td>90.56</td>
<td>2.15</td>
<td>1.59</td>
</tr>
<tr>
<td>8 Ravagada</td>
<td>1.42</td>
<td>1.22</td>
<td>1.22</td>
<td>86.04</td>
<td>1.88</td>
<td>1.36</td>
</tr>
<tr>
<td>Total (Southern Orissa)</td>
<td>87.14</td>
<td>12.28</td>
<td>10.14</td>
<td>82.60</td>
<td>16.52</td>
<td>11.89</td>
</tr>
</tbody>
</table>


Note: HCR – Headcount ratio as per 1999-00

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ii. The Revised Long Term Action Plan (RLTAP) has been a development and action plan of the Government of the India that consisted of the following development schemes, viz., (a) rural employment, (b) rural connectivity, (c) watershed development, (d) afforestation, (e) biju krushak vikas yojana, (f) emergency feeding, (g) rural drinking water supply, and (h) mobile health units. Under the rural employment scheme, three schemes included are indira awas yojana (IAY), swarnjayanti gram swarojgar yojana (SGSY), and sampoorna gramin rojgar yojana (SGRY). RLTAP has been under implementation since 1997-98 and our study has considered data till 2006-07.

iii. Various players or actor or people representing different groups, viz., village shop keepers, local contractors, etc., in the first contact layer of the community refer to the actor network. These actors have different power relationship among themselves, which in turn leads to the coordination and decision making in the development process and these process are referred to the actor network dynamics.
The Over-Educated, Under-Utilized Public Professionals: Evidences from Oman and Saudi Arabia

Khalid O. Al-Yahya*

Abstract
Integrating multiple perspectives, this comparative study examines public administrators’ perceptions of organizational human capital utilization (and underutilization) and its relationship to organizational policies and practices in Saudi Arabia and Oman (N=540). The study findings expose a widespread under-utilization problem. Skills and abilities of civil employees, although relatively and increasingly abundant, are invariably underutilized. It is found that competence utilization is closely associated with factors related to HR policies and practices and organization design, namely power-influence sharing in decision making, utilization and empowerment of work teams, matching jobs to people, and use of competence as a basis for advancement and authority. The study suggests that without effective utilization mechanisms, additional skill development might prove ineffective and largely irrelevant to performance and overall effectiveness of governance system.

Keywords: Public Professionals, Human Capital Utilization, Effectiveness of Governance

Introduction
Building and strengthening human capital resources through education and training programs has been a major goal of work organizations in developing countries. These activities are consistent with organization development and economic modernization models that emphasize the role of the competent workforce in organization success in particular and economic development of a society in general (Esman, 1991; Becker, 1993, 1975; Barney, 1991; Lado and Wilson, 1994; Kuruvilla, 1996; Karasek and Theorell, 1990; Kiggundu, 1989).

While organization-wide adoption of various skill-knowledge building schemes is quite widespread in both public and private sectors, research on the problem of human capital resources underutilization and underemployment and its correlates has been relatively scant. There is an abundance of research on almost all employment policies and work attributes but little that is relevant to the assessment of competence activation and utilization and their effect on work-related outcomes. For example, skill level and type or the number of skills required for a job is often included in defined employment policies and HR practices, but this is not the same as the utilization and retention of talent and the opportunity to use existing skills and capabilities in work roles (O’Brien, 1980). There is a general tendency among some economists and management development specialists to naively assume that all good things go together; that improvements in performance will automatically ensue as investment in human capital resources and adoption of technical innovations increase.

This study builds on critical research by Al-Yahya (2004; 2009) suggesting that most development policies and activities applied in work organizations, particularly in developing nations, have focused extensively and often solely on ‘technical improvement’ and ‘investment in and accumulation of human capital resources’ as a strategy to enhance effectiveness, efficiency, and overall performance, as suggested by classical human capital and economic development theorists and planners.

As the review of the existent human and organization development conditions below reveals, these applied approaches have done little to produce desired improvements in performance. As a first attempt to diagnose this problem, this study uses data collected from not frequently researched Arab public organizations (Saudi Arabia and Oman) to address the following questions: Are human capital

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resources underutilized in work organizations? If this is the case, what is the extent of underutilization? What are the factors that affect utilization?

This study draws attention to the importance of linking HR practices and organization design to competence utilization as integral part of organization strategy and development. More specifically, it proposes a human capital utilization model that captures the influences of five factors on utilization: power-influence sharing (IPC) in decision making (participation); use and empowerment of work teams, compatibility between area of expertise and job content; qualification-job requirements matching; and reliance on competence, not only seniority as a basis for advancement and involvement opportunities.

Although empirical research on competence utilization is limited, a few studies suggest that opportunity to use important skills and abilities is a significant determinant of important employee attitudes and work-related outcomes. Some studies suggested that competence utilization can improve job dissatisfaction and mental strain in the U.S. (Kornhauser, 1965) and in Australia (O'Brien, 1980; Humphreys and O'Brien, 1986), employee turnover (Hakim, 1989; Al-Meth'heb, 1998; Al-Yahya, 2009). On the other hand, utilization was found to improve as a result of adoption of participative decision making in Europe (IDE, 1977, 1987, 1993; Heller and Wilpert, 1981) and China (Wang, 1994), and the clarity of managers' mission and the amount of authority and responsibility (Bolino and Feldman, 2000).

To advance our understanding of human capital utilization (and underutilization) and address these questions, the study proposes a model that captures some factors related to HR practices and organization design that enhance or impede human capital utilization in work organizations. Our research suggests that the problem in many work organizations is not necessarily the lack of ‘competent and motivated people’ as generally believed. Rather it is that they are caught in positions or more generally organizational systems that fail to recognize, empower, and effectively utilize their skills and abilities, generating inequality in occupational placement and empowerment schemes.

**Human Capital Development and Utilization**

Human capital refers to the aggregate skills, abilities and knowledge, and other competencies of an organization’s workforce (Ployhart, Weekley, and Bauchman, 2006; Becker, 1993; Flamholtz and Lacey, 1981). Davenport (1999) refined the definition by breaking it into elements: ability, behavior, and effort. According to him, “ability comprises “knowledge”—command of a body of facts required to do a job, skill—facility with the means and methods of a accomplishing a particular task, and talent—inborn faculty for performing a specific task” (Davenport, 1999:19-20). In the management literature, the term “competence” or “competency” is often used instead of human capital which consists of “skilled, educated people” (Crawford, 1991:5). In this article, we use both terms “human capital resource” and “competence” interchangeably.

The predominant theoretical approaches to examining the importance of skills and abilities are human capital and labor economics in economics, occupational psychology, human resource development in management, and capacity development in international development administration. Neoclassical development economists make the argument that human capital and technological advances are necessary prerequisites for the growth and prosperity of societies. Organizations and management researchers are also consistent in maintaining that organizational performance or productivity and efficiency is determined by the accumulation of skills and adoption of technological innovations (Kuruvilla, 1996; Barney, 1991; Dess and Shaw, 2001; Davenport, 1999; Karasek and Theorell, 1990; Aoki, 1984). In recent decades, investment in human capital development emerged as a major
component of modern organizations’ “intended” and “deliberate” strategies, using Henry Mintzberg’s strategy typology (Mintzberg, 1994: 23-4). “Human capital” has become the top priority and slogan of both governments and companies around the world.

**Human Capital Resource Under-Utilization**
Underutilization and underemployment have been generally conceptualized and examined by two groups of researchers. Economists generally focus on the “objective underemployment” in domestic arenas. They define it in term of returns to schooling and whether skilled and knowledgeable individuals are fully absorbed by employment markets and focus on situations when workers work in jobs where they have education or skills which exceed normal job requirements. In recent decades, the preoccupation with accumulating human capital resources and mechanizing the workplace has led some researchers in the U.S. and a number of European countries to be concerned about the potential problem of “overqualification” or “overeducation”. In the U.S., for instance, the rate of managers completing 13 or more years of schooling rose from 40% in 1970 to 56% by 1980 (Clogg and Shockey, 1984; Smith, 1986). These concerns were brought about by several publication including Richard Freeman’s *The Overeducated American* (1976), Lester Thurow’s *Generating Inequality* (1975), Russel Rumberger’s *Overeducation in U.S. Labor Market* (1981) and more recently ‘Over- and Undereducation in the UK Graduate Labor Market’ (Alpin, Shackleton and Walsh, 1998), and ‘The Overeducated Worker’ (Borghans and de Grip, 2000).

Sociologists and organizational behavior researchers, on the other hand, commonly focus on “subjective or perceived underemployment” and use self-report data to examine situations where individuals feel that their abilities are not fully utilized in their work roles. This group of researchers also draws attention to underemployment’s negative impact on job attitudes and work-related outcomes such as job satisfaction, motivation organizational commitment, and citizenship behavior (O’Brien, 1983; Smith, 1986; Feldman and Turnley, 1995; Feldman and Bolino, 2000; Lee, 2005; Khan and Morrow, 1991; Kornhauser, 1965). There is a pressing need for research and policy practice in the area of human capital underutilization. The extent of under-utilization can represent a serious challenge to modern organizations. This is because if human capital resources are not activated and used or not used properly, the desired effects of their accumulation are “lost.” In cases of underutilization, organizations experience considerable losses due to reductions in effectiveness, productivity, satisfaction, and worker alienation (Kornhauser, 1965; O’Brien, 1980; Humphreys and O’Brien, 1986; Heller & Wilpert, 1981; Al-Yahya, 2004; Karasek and Theorell, 1990). The greater the level of under-utilization, the lower the return from investment in human capital and the lower the benefits accruing to the organization’s stakeholders, including the public, which ultimately pays for such investments and benefits immensely from the nurturing of a knowledgeable and engaged workforce. Furthermore, motivational energy is likely transformed into adverse reaction—stress, passivity, frustration.

**Human Capital Development and Performance: The Case of Arab Organizations**
In the early days of administrative state building, there was a general consensus among policy makers in the Arab world and international agencies’ economic and management consultants regarding the importance of human capital resources in the development process. This was due to the shortage of a skilled domestic workforce “national skill deficit” which presented a major challenge to the modernizing Arab states and led to their dependence on foreign experts and labor. For example, foreign workers account for about 70 percent in Saudi Arabia and 80 percent in Oman of country total workforce (Looney, 2004; Al-Lamki, 2000).
Consequently and since the 1970s, both public and private organizations in the Gulf States including Oman and Saudi Arabia have invested generously in management development activities aimed at strengthening their administrative and organizational capabilities. Governments and their private sector partners incrementally allocate resources for education and technical and vocational training for public sector employees. For example, in the Saudi first development plan (1965-1970), allocations to human resources development stood at $2 billion. This pattern continues through the Seventh Plan (2000-2004) with allocations standing at $74 billion, or 56.7 percent of the total expenditures. This is done through an extensive network of national educational and training institutions and international human resource development programs. For example, enrollments in technical and vocational colleges (with special commercial, industrial, computer science, and managerial programs) have jumped from 840 in 1971 to over 50,000 student trainees in 2003. For the same period, the number of higher education graduates also increased from 1909 to over 40,000 per year (from local universities) and from 202 to more than 5,000 graduates (per year) from universities abroad mostly in the U.S. and Europe (Saudi Arabia Ministry of Planning, 2004; SA Ministry of Higher Education, 2005; Alsahlawi, 2004).

In the area of special management and human resources development, the public sector in both countries has experienced considerable quantitative improvements in terms of additional qualifications and increase in skill accumulation, as a result of extensive management development programs. In the period between 2000 and 2003, more than 27,000 administrators attended the in-service management programs in one management development school—the Institute of Public Administration (IPA, 2004). Moreover, many public organizations arrange for their employees to go abroad for training and other skill-knowledge exchange activities with universities and governmental agencies in the U.S. and Europe.

These policies and programs have fostered burgeoning professional middle classes and relatively high growth in per worker human capital (certainly not eliminating the shortage of highly skilled workforce completely in some specializations). However, research on development and growth rates in the region continues to report that this considerable expansion in human capital does not seem to have had effect on both economic output and organization-level performance (Pritchett, 1999a, 1999b; Ali, 2002, Benhabib and Spiegel, 1994; Thomas et al. 2000; UNDP, 2002; Makdisi et al, 2000; Psacharopoulos, 1994; Alsahlawi, 2004). For example, Ali (2002) reviewed studies that examined the relationship between the accumulation of human capital and the rate of growth in Arab countries during 1960-1998 and concluded that in spite of the apparent surplus human capital in the region, the desired rate of return of human capital stock on performance was very minimal if not negative noting the lack of association between the two (Ali, 2002). At the organizational level, a large number of studies have reported similar persistent patterns of unaffected performance and development in work organizations (Al-Abdullatif, 1995; Hakim, 1989; Al-Yahya, 2004; Al-Meth’heb, 1998; Alkahtani, 2000; Ali, 1996; Kassim, 1994; Abualjadail, 1990). This gap between the considerable expansion in the stock of human capital and performance outcomes emerged as a **puzzle** in the empirical literature.

Some studies conducted in limited sectors alluded indirectly to the problem of underutilization and retention of competent human resources. For instance, research on Arab universities observed a new tendency among university faculty to quit their jobs in their respective
institutions and seek employment elsewhere, a phenomenon known in management as employee turnover. As a result of an increasing rate of turnover, the government accrued great losses because the majority of faculty members had received their graduate degrees (mostly from the United States and Europe) through scholarships awarded by the government. To gauge the satisfaction level among faculty members, for instance, Hakim (1989) conducted a study on 378 members at King Abdul Aziz University, the second largest university in Saudi Arabia. He found rigid administrative procedures (including stick reliance on seniority) and inadequate opportunities for research and advancement.

In another study on faculty turnover, Al-Meth’heb (1998) found that 78 percent of faculty think of leaving the university temporarily (short-term leave to work for another organization) while 20 percent prefer to quit their job permanently. The majority (67 percent) indicated that they prefer to work for the private sector because of their belief that it provides greater opportunities for recognition, self-actualization, and advancement. Respondents also indicated their dissatisfaction was due to the lack of effective use of their capabilities and to centralized decision making regarding resources for research and academic conferences. As a result of an increasing rate of turnover, the government accrued great losses because the majority of faculty members had received their graduate degrees (mostly from the United States and Europe) through scholarships awarded by the government.

In spite of these studies, the extent, causes, and effects of underutilization is still largely ignored in serious policy considerations. A review of recent publications (Looney, 2004; Alsahlawi, 2004; Al-Lamki, 2002; UNDP, 2003, 2004; SAMP, 2005) shows that the issue of human resources development and technology transfer is still the main emphasis, if not an obsession, of management practitioners and researchers alike. One of the few available international studies on competence utilization was conducted by Heller and Wilpert (1981). In their study of business organizations in Europe, Heller and Wilpert found that under-utilization of skills among managers averaged 28 percent in Spain, 22 percent in Sweden, 19.5 percent in Germany, 17.7 percent in France, and 17.7 percent in Netherlands.

In this study, I attempt to examine the nature and patterns of human capital resource underutilization within the context of Arab work organizations. Due the limitations of the current analytical approaches to organization development and the apparent omission of under-utilization and its effects on performance, I suggest that the problem in many modern organizations may not be the lack of skills and knowledge embedded in individuals and groups. Rather it might be the absence of appropriate mechanisms to empower, utilize, and integrate them in the process of decision making and organization change and performance. Based on these views, and as a first step to diagnose the potential ‘under-utilization’ in Arab work organizations, we predict that

H1. Human capital resources (employees’ skills and capabilities) in Saudi and Omani public organizations are invariably underutilized.

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1 In other parts of the Middle East, underutilization and frustration lead many high-skilled professionals and scientists opt to leave their countries to seek better opportunities in the U.S. or Europe continuing what is has been called “brain migration” and “brain drain”.
Determinants of Human Capital Utilization

The activation and utilization of human capital entails understanding motivational needs for achievement, empowerment, and self-actualization and thus considering organizational adjustments (not only additional development of human and technical capabilities) aiming at increasing influence-sharing in decision making and competence-authority matching. Purcell and his colleagues (2003) provided evidence that organizational success and employee performance was dependent on having the right mix of human resources (HR) and organization development (OD) policies in place. Their model—ability, motivation and opportunity (AMO) posits that performance is based on the capacity of organizations: (a) to recruit people with the right ability, (b) to motivate them, and (3) to provide them with the opportunities to use their skills in well-designed jobs. Furthermore, the resource-based view of management (Barney, 1991; 1992) and the subsequent theoretical and empirical activities springing from it provide insights on constructing arguments for the potential of human resource systems to enhance or impede the development and utilization of organizational competences (Lado and Wilson, 1994; Reed and DeFillippi, 1990; Snell, 1991). These competences, according to the resource-based view, are presumed to result in organization’s sustained success and competitive advantage.

Notwithstanding the importance of previous research efforts to study organizational competencies, few provided explicit and comprehensive treatment of the potential of under-utilization, why it occurs, and what management can do about it. A general weakness of most previous research efforts is the fact that they did not define competence utilization separately; neither did they measure it in a systematic and comprehensive manner as multidimensional phenomena. For instance, Turner and Lawrence (1965) and Hackman and Lawler (1971) examined job attributes such as job variety, autonomy, and skill and knowledge and their effect on job satisfaction. Although all of these attributes are positively correlated with job outcomes, competence utilization was not directly tested. The two studies often confused job variety and skill/knowledge level or skill variety with competence-utilization and skill-match. Variety refers to the range of skills required to perform a job, and it does not guarantee high utilization (Humphrys and O’Brien, 1986). In addition, studies concerning skill utilization and job content are often descriptive and concentrate on jobs held by skilled manual and clerical workers, with little attention paid to professional or managerial jobs.

In the case of Gulf states, I argue that human resource practices and organizational design (e.g., strict bureaucratic control and decision mechanisms) that were in place to mitigate the general ‘historical’ human capital deficit problem are no longer effective in managing a new generation of increasingly capable workers and channeling their efforts and motivations toward greater accomplishment and performance. These conditions may have contributed to what we perceive a growing “human capital utilization deficit” in work organizations. This can hamper organization’s ability to integrate new competencies and adapt to new work demands, particularly during transitional periods as suggested by research on job performance and organization change (Murphy, 1989; Hofmann, Jacobs, and Baratta, 1993; Barney, 1991).

Competence utilization and power-influence sharing

Bolino and Feldman (2000) investigated the issue of utilization among expatriate managers working in over 30 countries. They examined the impact of skill utilization (specifically, eight skills critical to expatriate success) on job attitudes. Unlike previous studies, Bolino and
Feldman attempted to answer “Why skill utilization problems occur?” and found that high levels of utilization were positively correlated with the clarity of their missions and the amount of authority and responsibility they were given (Bolino and Feldman, 2000: 373). This study, however, was based on a small sample of expatriate managers in industrialized countries, who often deal with a different set of situations and arrangements than those in regular work environments, makes the findings of such study of limited general applicability.

One of the few available comprehensive cross-national studies of decision making and competence utilization was conducted by Heller and Wilpert (1981). The study employed a sample drawn from business organizations in six countries—Netherlands, Germany, France, Sweden, Israel, and Spain. Their main instrument, the Power-Influence Continuum (IPC), has five alternative decision methods ranging from (1) decision without prior explanation or information, (2) fairly detailed information about the decision being made, (3) explaining the problem and giving employees opportunity to give advice then the superior makes the final decision (consultative), (4) participative—decisions are made jointly by superiors and subordinates (participative), (5) authority to make decision is given to the employee or work group (delegative). Their study found that skill utilization was associated with participative decision-making. I intend to empirically test this presumption in Arab work organizations.

H2. There is a positive relationship between utilization and power-influence sharing (IPC). Employees who identify decision making in their work units as more participative are more likely to exhibit higher levels of utilization.

Utilization and empowerment of teams
Another factor often cited within the context of power-influence sharing is the reliance on empowered teams in professional and increasingly knowledge-based organizations. Work teams can provide opportunities for the integration and utilization of human resource assets and thus improved commitment of workers, especially the new comers, and their performance (Anderson and Thomas, 1996; Klimoski and Zukin, 1999; Feldman, 2002; Chen, 2005). In the last 15 years, the number of new graduates and young professionals entering the workforce has almost double in the Gulf states (Al-Yahya, 2004). Therefore, the use and empowerment of teams ensure that knowledge workers remain motivated and acquire and use new knowledge and skills that will help them progress in their careers (Chen, 2005; Katz, 1997). Maintaining this motivating and empowering team environment permit workers to initiate and direct greater effort toward improving organizational performance (Spreitzer, 1995; Thomas and Velthouse, 1990). Therefore, the following hypothesis is suggested:

H3. The use of work teams in organizations has a positive effect on competence utilization. Employees who have the opportunity to work in teams are likely to exhibit higher levels of utilization.

Over-education and matching people to jobs
The compatibility between skills/capabilities a worker possesses and the job and responsibilities she can play a major role in competence utilization and organization development. Although the publication of Richard Freeman’s The Overeducated American (1976) and Lester Thurow’s Generating Inequality (1975) popularized the mismatching problem and drew the attention of economists and organization and management specialists to it, this phenomenon remained relatively understudied in empirical research. Some researchers
point out that although intermittent overeducation might not represent a major problem in the short run, its frequency and persistence can discourage individuals (especially students and low-skilled workers) from pursuing “additional schooling when faced with the prospect of overeducation and reduced earnings” (Rumberger, 2002: 1267). This also has unsettling implications for the longstanding assumption in neoclassical economic theory that posits that compensation schemes should be tied to the skills workers possess, not the jobs they hold. However, as pointed by Thurow (1975), compensation increasingly is tied to jobs, not workers; generating inequalities in compensation and access.

Here I am interested in depicting potential interaction between underutilization and the poor matching between people and jobs. The gap between qualification level and job requirement demonstrates the “the extent to which some workers are employed in jobs which they may have more education than the job requires” (Rumberger, 2002). Hence, if job content is not properly matched with area of expertise or skill level, underutilization is likely to occur and persist. As discussed earlier, this problem is most-often referred to as “overqualification”, or “over-education” (Borghans and de Grip, 2000; Freeman, 1975) especially among recent graduates and newly hired managers who have gone through extensive skill development and training programs. Therefore, I intended to test empirically the following:

**H4.** There is a positive relationship between utilization and the matching of employee’s area of expertise with his/her job content. Employees who perceive their job content to match their area of expertise are more likely to experience higher levels of utilization.

**H5.** There is a positive relationship between utilization and the fit between qualifications and job requirements. Employees who perceive their job requires most of their qualifications are more likely to report higher levels of utilization.

**Reliance on seniority or competence**

Finally, a widely prevalent practice in many organizations that may affect motivating and utilizing human resources is the strict reliance on seniority, rather than competence, as a basis for advancement and involvement opportunities. Public sector organizations traditionally are characterized by high degree of and adherence to formal hierarchy and bureaucratization that may hinder organization ability to identify existing stocks of skills and abilities and utilize them in the decision process. Hakim (1989) attributed low levels of satisfaction and productivity to rigid administrative procedures (including stick reliance on seniority) in education agencies. This pattern, however, was not examined beyond educational settings, and thus, we will test the following hypothesis in general employment organizations:

**H6.** There is a positive relationship between utilization and the use of competence, rather than seniority, as a basis for advancement and involvement opportunities. Employees who perceive their work units are less reliant on seniority are likely to report higher levels of utilization.

**Methodology**

**Sample and data collection**

Data for this study come from a standardized instrument distributed to a random sample of 540 employees from 10 public organizations in Saudi Arabia (n=390) and 7 organizations in Oman (n=150). The difference in the two samples’ size is a function of proportional sampling reflecting the relative larger size of the Saudi bureaucracy and its workforce. Participating
organizations include agencies like departments of Finance, National Economy Affairs, Education, Information and Communication, and Health. Public bureaucracy in Saudi Arabia and Oman provides a suitable ground for testing our study’s propositions. Public organizations currently employ about 75 percent of national workforces in both countries (Looney, 2004). As a whole, the sample represents three hierarchal groups—top managers/directors who account for 25 percent, middle managers for 39 percent, and subordinates for 36 percent. The sample includes employees from various occupational functions including general management, office administration, personnel, finance and accounting, legal, technical, and research and development. The average respondent is a 37 year old male, university graduate with 14 years of work experience, and has completed at least two extensive (4 months or more) on-the-job training programs in their respective field of expertise.

The original questionnaire was designed in the English language then translated into Arabic by the researcher with the help of two faculty members at the Institute of Public Administration (IPA) in Saudi Arabia and the Institute of Public Administration in Oman. A standard back-to-back translation was subsequently used to further guarantee authenticity and accuracy of translation. The results were compared and a few minor errors in translation and wording problems were discovered and corrected accordingly. Before the beginning of the fieldwork and before sending the questionnaire to the actual subjects, a pilot test of the questionnaire was conducted with a selected sample of twenty-eight participants in the in-the-service seminars held at the IPA. This was important to ensure that the survey respondents understood the questions and issues raised in the questionnaire, and to account for any vague questions, ambiguous concepts, and items sensitive to the local culture. After addressing most of the questionnaire’s problems raised during the translation and pre-testing period, the questionnaire instrument was ready for distribution to the actual subjects.

The researchers distributed the questionnaire to 700 employees in Omani and Saudi public organizations. Five hundred eighty one (581) responses were successfully completed and collected with a response rate of 83%. The questionnaires were screened for non-response, validity and completeness. Forty one questionnaires were omitted because of errors in the way they were filled out or because of extensive missing data. Therefore, only 540 surveys were used for the analysis.

**Measures**

*Competence utilization* is measured in two ways. First, a comprehensive competence utilization scale consisting of 18 items which refer to a number of human capacities or skills identified in the literature particularly the works of Heller and his colleagues in Europe (1981, 1988, 1998). To ensure the reliability of this multi-item scale, we conducted the Cronbach’s Alpha test. The index was highly reliable (Alpha score was .947 in Saudi Arabia and .921 in Oman). The index assesses the extent to which the relevant capacities and experiences of the competent persons or groups had been recognized and utilized in their work, leading to a rating scored as Low, Medium, or High utilization. Employee responses were solicited using a five-point scale (1=never, 2=seldom, 3=sometimes, 4=almost invariably, 5=all the time—always) to 18 items such as:

- “Initiative (ability to initiate changes or recommendations about work design, policies and procedures)”;
- “Verbal ability to freely articulate ideas and opinions”; “Being decisive”;


The second measure of competence utilization uses a single-item scale of 0 to 100 to assess the degree of utilization in percentages. The questionnaire asked respondents to indicate to what extent in percentages they feel their skills are utilized.

Power-influence sharing in decision making was assessed by using the Power-Influence Continuum’s (IPC) (Heller et al., 1988, 1981). The IPC helps extend the analysis of decision-making and participation and further understand the dynamic interactions between decision styles and important outcome variables. The IPC has five alternative decision methods ranging from (1) authoritative—decision without prior explanation or information, (2) benevolent authoritative—fairly detailed information about the decision being made, (3) consultative—explaining the problem and giving employees opportunity to give advice then the superior makes the final decision, (4) participative—decisions are made jointly by superiors and subordinates, (5) delegative—authority to make decision is given to the employee or work group. In order to measure power-influence sharing in decision process, 19 items (common administrative decisions and functions related to personnel, planning, coordinating, organizing, and cooperation and so on) are used. The 19 items are drawn from instruments used by Heller et al (1981, 1988) and Al-Yahya (2004). Respondents are asked to indicate (1) the actual decision making method across all decision types and how much power or influence they have over them, and (2) the ideal or preferred decision making style pertaining to the different decisions. To ensure the reliability of IPC, we conducted a reliability analysis for and found that the index was highly reliable (Cronbach’s Alpha was .862 in Saudi Arabia and .850 in Oman).

To measure the effect of using work teams as a basis for sharing information and authority within organizations, I used Glaser, Zamanou, and Hacker (1987) measures of organizational culture and climate which are grounded in both management and communication research. Employee responses were solicited using a Likert five-point scale (Strongly disagree, Disagree, Undecided, Agree, Strongly agree) to several questions such as “In general there is not enough information about the state of affairs in the organization”, “Everyone in the group knows what the other people do”, “in this unit, most problem-solving decisions are made by a team”, “There is strong interest among employees in this organization to function as teams”, “People in this organization are provided with clear vision about the future”. The reliability of the scale was again conducted indicating a good reliability (Cronbach’s Alpha is .742 in Saudi Arabia and .720 in Oman).

The questionnaire instrument also examines job content-area of expertise match. It estimates the extent to which assigned work is related to the job-holder’s skill and area of expertise. In the survey instrument, respondents were asked to indicate whether employees are assigned to jobs that match their expertise and skills gained through either formal education before employment or developed during service. Furthermore, another aspect of the underutilization problem examined in this study is the gap between qualification level and job requirement. It
demonstrates the “the extent to which some workers are employed in jobs which they may have more education than the job requires” (Rumberger, 2002). We used a single-item scale soliciting responses about the extent to worker’s current job content requires using his skills and abilities (Heller et al, 1988).

Results and Analysis
Patterns of Competence Utilization
Recall that one of the major objectives of this study is to examine utilization levels of human capital resources in work organizations. First we report the results from the first measure of utilization which consisted of 18 items covering a wide range of human capacities or skills. It assesses the extent to which the relevant capacities and experiences had been recognized and utilized in one’s work, leading to a rating scored as Low, Medium, or High. After aggregating the data, results show that about 56 percent of civil servants in Saudi Arabia reported medium utilization (compared to 65 percent in Oman), 32 percent low (21 percent in Oman), 12 percent high (14 percent in Oman). The mean and standard deviation scores are reported in Table 2.

The second measure of perceived skill underutilization uses a single scale of 0 to 100 to assess competence utilization in percentages. The analysis shows the extent of perceived skill underutilization (in percentages) in Saudi Arabia and Oman is high. Overall competence underutilization averages 46 percent in Saudi Arabia and 40 percent in Oman compared to an average of 20 percent in Europe. Dutch and Israeli administrators report the low level of skill underutilization, while Saudi, Omani, and Spanish respondents report the high levels of skill underutilization. Based on these results, Hypothesis 1, which posits that human capital resources in Saudi and Omani public organizations are invariably underutilized, is supported.

Factors Influencing Utilization
The previous section examined the extent of competence underutilization in Saudi and Omani public organizations. In this section, we test a set of factors that influence utilization. Five factors are found to be correlated with utilization: Power-influence sharing, work-teams, information-flow, job task-area of expertise matching, reliance on seniority-competence as a basis for promotion. Table 1 presents the means, standard deviations, and correlations. We investigated the relationship between utilization and these factors by way of hierarchal ordinary least square analyses (OLS) in order to determine which predictor, or combinations of predictors, account for variations in human capital resource utilization (results are shown in Table 2). The first, and strongest, predictor is participation in organizational decision making (influence-power sharing). The regression analysis procedure indicates a significant linear relationship between power-influence sharing and skill utilization; an increase in IPC leads to higher skill utilization ($\beta = .36, p < .001$ in Saudi Arabia, and $\beta = .33, p < .001$ in Oman). Consistently with past research in Europe (Heller et al, 1981; 1988) and in China (Wang, 1994), this provides additional evidence from the Arab region that participative management reduces the extensive underutilization of knowledge and skills, as suggested in Hypothesis 2. With regard to the form of participation, the results show that collective (joint) decision making rather than individual autonomy and delegation is the widely preferred decision making style.

Hypothesis 3 suggests a positive relationship between utilization and use of work-teams in work organizations. Results show that employees who work in teams reported higher levels of utilization ($\beta = .28, p < .001$ in Saudi Arabia and $\beta = .16, p < .01$ in Oman), providing support to Hypothesis 3. The attitudes toward team-work may also reflect general attitudes of collective
orientation, prevention of conflict, informal exchanges of information, and maintenance of
good social relationships in Arab organizations.

Hypotheses 4 and 5 concern the matching between area of expertise and job on one hand, and
between qualification level and job on the other. As expected in Hypothesis 4, a better
matching between one’s area of expertise and job content was found an important predictor of
competence utilization ($\beta = .19, p < .001$ in Saudi Arabia and $.21, p < .001$ in Oman). In the
question of “To what extent it is true that your current job is related to the field of formal
education”, about 31 percent of the respondents in Saudi Arabia and about 25 percent indicated
that their current job is not related to the field of formal education compared to 52 and 64
percent who agreed it is related. Although it is not unusual that some employees end up taking
on jobs whose contents don’t adequately relate to their field of formal education, unexpectedly
the findings show similar patterns with regard to the congruence between special on-the-job
training and current jobs. About 20 percent of Saudi respondents and 28 percent of Omanis
indicate that the special training they received on the job is not related to their current jobs.

The analysis also supports hypothesis 5 regarding the disconnect between qualification level
and job held by employees. This is examined by looking at “the extent to which some workers
are employed in jobs in which they may have more education than the job requires”
(Rumberger, 2002). In this study, the extent to which workers perceive their job requirement is
matched with their level of qualification is found to influence the perception of competence
utilization. The better the matching between competence level and job, the higher the
competence utilization ($\beta = .18, p < .01$ in Saudi Arabia and much stronger in Oman (.30, $p <$
.001).

Table 3 provides additional detailed comparison of the responses across managerial levels in
both countries. 11 percent of respondents in Saudi Arabia compared to 5 percent in Oman
reported that their current jobs require little or none of their available skills and capabilities.
About 20 percent of respondents in SA and 25 percent in Oman reported only one-half of their
capabilities are required, compared to 47 in SA and 33 percent in Oman who said their jobs
require most of their skills. Only 21 percent in SA and 36 in Oman reported that they use all
their skills on the job (Table 3).

Finally, for Hypothesis 6, which suggests that the perceived competence underutilization is
influenced by the strict reliance on seniority rather than consideration of competence in
advancement and empowerment opportunities was supported. The regression coefficient shows
a significant positive relationship between competence underutilization and reliance on
seniority in Saudi Arabia ($\beta = .16, p < .01$) and stronger in Oman (.18, $p < .001$). This finding
depicts a degree of and adherence to formal hierarchy and bureaucratization that may hinder
identifying existing stocks of skills and abilities and their utilization in the decision process.

**Discussion and Implications**

The results of this study unveil a major, albeit often understudied, problem in capacity
development and performance improvement activities, particularly in public sector
organizations. It exposes a troubling deficit in human capital resource utilization. Administrators reported significantly low levels of competence utilization. This was found
correlated with five factors related to HR practices and organization design—power-influence
sharing in decision making, the use of work teams, area of expertise-job content compatibility,
qualification-job requirements matching, and use of competence, not only seniority, as a basis for advancement and involvement opportunities.

The study has several implications for management and organization development. Although it amplifies the importance of improvements in human capabilities, the factors identified above seem to influence the application of skills and knowledge. In particular, the findings support the frequently made claim that greater power-influence sharing in decision making and matching people to jobs affect desired organizational effectiveness. Leaders of contemporary organizations should be aware of the challenges facing their organizations as society becomes more and more integrated in the global environment that puts new pressure on organizations to be more “knowledge-intensive, radically decentralized, participative, adaptive, flexible, efficient, and responsive to rapid change” (Stohl and Cheney, 2001: 350) (also see Hastings, 1993; Monge and Fulk, 1999; Miles and Snow, 1992). Keeping and cultivating highly competent and motivated individuals may become a top priority as the country opens to international firms and networks that are looking exactly for the same individuals. A replication of the study in the next few years can confirm the nature, rate and direction of change.

An important issue emerging from the study is the apparent disconnect between human resource development and the larger process of organizational development and change. Capacity development has focused on the development of physical capabilities and accumulating and upgrading personal skills and technical aspects of the process; naively assuming automatic and direct effects on performance will ensue. There seemed to be no adequate attention to the possible mediating mechanisms necessary for facilitating the utilization of generated capabilities. They are overshadowed by the limits of narrow skill-management development approaches that are often divorced from the broader enabling “administrative” environment within which strengthened capabilities and empowered individuals must operate. This potential imbalance between the level of individual development and organizational/institutional development (including measures to increase participation and representation in decision making) represents a serious challenge to sustainable development and effective organizations.

While management development ends once the individual trainee leaves the training institution, organization development and change programs entail continuous efforts to make sure that the accumulated knowledge and skills are utilized in an effective way to enhance individual and ultimately organizational performance. Hence, institutional development can be conceptualized as a system that integrates human resource development and structural changes/adjustments to utilize them and link them to performance. Increased empowerment, matching competence to authority, and effective incentive structures that reward competence are central goals and fundamental values of such an integrated system (French and Bell, 1999; Quinn and Spreitzer, 1997; Peters, 1992; Kouzes and Barry, 1990). Ultimately, these adjustments can help in creating the ‘missing’ link between human capital and performance.

**Limitations and Future Research**

The implications of this study must be considered in light of its limitations. First, the competence utilization model constructed and tested in the present study showed considerable robustness and usefulness. However, other factors that facilitate or impede integration and utilization of human capital resources should be considered in future research to increase the generalization and reliability of the model proposed in the study. Researchers may want to
examine interaction between the factors identified above and new ones at the organizational, sector, and societal levels across countries with an understanding and treatment of these complexities and paradoxes in contemporary organizations. Empirical research may also focus on including and comparing both public and private sector organizations in the study and increasing the sample size to improve the case-to-variable ratio for statistical analysis.

Second, although the study findings highlight the potential positive impact of enacting certain programs and avenues for participation and relaxing of control structures, their specific applications should not be treated uncritically. Heller et al. (1998) surveyed cases of power-influence sharing schemes in diverse national milieus and concluded that participation works, given appropriate conditions. One difficulty obscuring the centrality of the concept of organizational participation is the segmentation in the treatment of topics related to the concept at different levels of analysis and organizational and national settings. The varied and often confused meanings and applications of participatory management and of organizational governance have led to limiting their appeal and thus adoption on the basis that they may be incompatible with other principle values of management especially in the public sector that puts great emphasis on accountability and control (Perry and Rainey, 1988; Bozeman, 1987; Bozeman and Straussman, 1990; Nutt, 2006).

Finally, with respect to operational measurements, the survey was based mostly on respondents’ perceptions and attitudes towards issues being raised. Some analysts may some reservations regarding the use of self-report measures because of the concern that respondents may give the socially expected answers or because people can adapt to or tolerate certain unfavorable situations (O’Brien, 1980; Taylor and Wright, 2004). Moreover, this is sometimes associated with a respondent’s desire for consistency or social desirability.

Conclusion
The present research takes a significant step forward and sheds some interesting comparative light on the concept of human capital utilization and its relationships with organization design and HR practices. The study concludes that one of the major weaknesses in the design, management, and implementation of human capacity development programs is a due consideration of how knowledge and skills are managed, activated, and shared to serve organizational and social goals. Therefore the problem in many organizations, particularly in the developing world, may not be the lack of skills and capabilities, but the absence of appropriate mechanisms to activate, motivate and utilize them.

In addition to increasing skill utilization through flexible and inclusive practices—which are not advocated here as the sole everlasting remedies for underutilization, other methods can be helpful to improve the matching of qualifications with job content and knowledge-authority.

2 Within public management literature, the limited research on these issues correspond to widely discussed views of most classical studies of public sector administration and development that either stress bureaucratic control measures or portray public sector culture as well as the orientations of public bureaucrats as less receptive to the need for change and less comfortable, for instance, with power and responsibility sharing. Even if leadership and participative decision making are studied, most studies fall short of identifying the organizational conditions that facilitate power and knowledge sharing and how managers can utilize strategic human resources available in their organizations.
Job reform and job selection processes can be done on the basis of an objective analysis of the skill-requirements of various jobs. As a long-term strategy, there should be an emphasis on organizational design and improving the match between educational training and organizational requirements. This strategy emphasizes that individual learning is no longer adequate. Without effective utilization schemes, investments in human resource development programs will do little to improve organizational performance and increase the legitimacy of the governance system.

References


Table 1: Descriptive Statistics and Correlations

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>s.d.</th>
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<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
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</thead>
<tbody>
<tr>
<td>Utilization</td>
<td>3.67</td>
<td>.800</td>
<td>.800</td>
<td>.800</td>
<td>.800</td>
<td>.800</td>
<td>.800</td>
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<tr>
<td>IPC</td>
<td>3.0</td>
<td>.970</td>
<td>.970</td>
<td>.970</td>
<td>.970</td>
<td>.970</td>
<td>.970</td>
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<tr>
<td>Expertise-Job</td>
<td>3.9</td>
<td>1.08</td>
<td>.523**</td>
<td>.523**</td>
<td>.523**</td>
<td>.523**</td>
<td>.523**</td>
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<tr>
<td>Qualification-Job</td>
<td>3.76</td>
<td>.976</td>
<td>.425**</td>
<td>.425**</td>
<td>.425**</td>
<td>.425**</td>
<td>.425**</td>
</tr>
<tr>
<td>Teams</td>
<td>3.5</td>
<td>1.05</td>
<td>.257**</td>
<td>.257**</td>
<td>.257**</td>
<td>.257**</td>
<td>.257**</td>
</tr>
</tbody>
</table>

Oman Scores in Parentheses
** Correlation significant at the 0.01 level (2-tailed)
** Correlation significant at the 0.05 level (2-tailed)

Table 2: Regression Analyses with Competence Utilization as Dependent Variable

<table>
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<th>Saudi Arabia</th>
<th>Oman</th>
</tr>
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<tr>
<td></td>
<td>Standardized Beta</td>
<td>Estimate (B)</td>
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<tr>
<td>IPC</td>
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<td>Teams</td>
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<td>Expertise-Job</td>
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<td>Qualification-Job</td>
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<td>Seniority</td>
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<td>1.503</td>
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<tr>
<td>Constant</td>
<td>0.690</td>
<td>10.744</td>
</tr>
</tbody>
</table>

** p < .01
*** p < .001
All two-tailed tests.
Table 3: To what extent you think your current job content require using your skills and abilities?

<table>
<thead>
<tr>
<th></th>
<th>Requires none</th>
<th>Requires little</th>
<th>Requires half</th>
<th>Requires most</th>
<th>Requires All</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Saudi Arabia</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>Top Managers</td>
<td>0</td>
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<td>20</td>
<td>47</td>
<td>18</td>
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<td></td>
<td>.0%</td>
<td>4.5%</td>
<td>22.5%</td>
<td>52.8%</td>
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<td>Middle Managers</td>
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<td>20</td>
<td>78</td>
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<td>150</td>
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<td></td>
<td>2.7%</td>
<td>6.7%</td>
<td>13.3%</td>
<td>52.0%</td>
<td>25.3%</td>
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<td>31</td>
<td>45</td>
<td>20</td>
<td>119</td>
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<tr>
<td></td>
<td>5.0%</td>
<td>14.3%</td>
<td>26.1%</td>
<td>37.8%</td>
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<tr>
<td>Employees</td>
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<td>2.1%</td>
<td>25.5%</td>
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Managing Banking Liquidity Risk in the Current Economic Conditions: A Conceptual Framework

Rifki Ismal*

Abstract

The paper attempts to analyze the conceptual basis for managing banking liquidity risk in the current economic conditions. After identifying and profiling risks in banking institutions, the current concept of liquidity risk management requires the banks to set up a liquidity risk management process. It consists of determining liquidity risk management policies, setting the roles of ALCO, establishing an effective information system and, conducting internal control system for liquidity management. Further, after analyzing factors triggering asset-liability imbalance, the banks prepare techniques to mitigate liquidity imbalance and liquid financial instruments to fulfill the demand for liquidity. Finally, this comprehensive concept is expected to help banks to properly manage liquidity in the challenging economic/business condition nowadays.

Keywords: ALCO, Board of Directors, Maturity mismatch, Asset-liability balancing

Background

In the theories of financial intermediation, the two most outstanding reasons regarding the existence of financial institutions, especially banks, are their provision of liquidity and financial services. The banks are valuable as the providers of liquidity services because they provide depositors with liquidity insurance (Brynt, 1980; Diamond and Dybvig, 1983 as cited in Santos, 2000:4). However, the bank role in transforming the short-term deposits into the long term loans makes it inherently vulnerable to liquidity risk (BIS, 2008b:1).

Principally, the concept of liquidity in finance lies in two areas: (a) the liquidity of financial instruments in the financial market and; (b) the liquidity related to the solvency. The former is about liquid financial market and financial instruments. For examples are marketable financial instruments, smooth transactions and no financial barriers. The latter, where this paper is focusing, discusses with the obligation of a bank to make payments to the third parties (Fiedler, 2000:442). For examples are setting up liquidity management policies, reserving liquidity, and preparing liquid financial instruments. Actually, the main idea in liquidity management is to balance the demand for liquidity from the liability side of the bank balance sheet and the supply of liquidity from the asset side. If the banks fail to balance those two sides, do not have sufficient internal liquidity reserves and, fail to obtain funds from the external sources, they are in liquidity risk problems.

The paper attempts to analyze the conceptual basis for managing banking liquidity risk in the current economic conditions. The forthcoming sections will identify and describe the profile of liquidity risks in banking institution. Then, the main output of the paper is to explain the liquidity risk management process. Finally, after analyzing factors triggering asset-liability

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imbalance, the paper investigates the techniques to mitigate liquidity imbalance and propose some liquid financial instruments to fulfill the demand for liquidity.

**Liquidity Risk in Banking Institutions**

**Risks in Banking Institution**

Risk in financial terms is usually defined as the probability that the actual returns may differ from the expected returns (Howells and Bain, 1999: 30). In the financial system, there are at least three broad categories of risks: (1) financial risks; (2) business risks and; (3) operational risks (Khan, 2006: 5) as seen in figure 1. Financial risks are related to the risks coming from banking activities while business risks and operational risks are related to the internal affairs of the banks. In this respect, liquidity risk is classified under financial risk category along with credit risks and market risks.

![Figure 1 Risks in Banking Institution](image)

However, the treatment of risks should be arranged within the casual and interactive systems because the impacts of one type of risk cannot be isolated from the other types of risks. All risks have correlations and influence each other (see figure 2). For example, market risks and credit risks might cause liquidity risk and vice versa; business risks and operational risks can trigger liquidity risk as well. In the case of banks, liquidity risk can appear because of the asset-liability imbalance or maturity mismatch risk. As such, the banks should alert and foresee the factors causing financial risks, business risks and operational risks, as these can contaminate factors leading to liquidity risk. They may not ignore the other types of risks while handling liquidity risk.

As illustrated by figure 2 below, there are economic and non-economic environments affecting the operations of a bank. Both of them may cause financial risks, business risks and operational risks to happen which in the end can cause liquidity risk because of the interconnection between liquidity risk, market risk and credit risk. Indeed, the global financial crisis 2007-2008 occurred because of the failures in derivatives markets which impacted the ability of banks to provide liquidity to the third parties (Siddiqi, 2008: 3-9).
Figure 2. Interconnections among Risks and Affecting Environment

Source: Adapted and modified from Arani (2006), Moreno (2006), Sach (2007) and Zhu (2001). Therefore, managing liquidity risk is more challenging nowadays. The financial innovations and global markets development have transformed the nature of liquidity risk (BIS, 2008a:2). There are currently less reliance on bank deposits, increased reliance on capital market and an easy access to the global financial markets. These conditions have made the banks volatile with the financial market issues such as the one happened during the global financial crisis. Moreover, it has to be noticed that the banks should not mitigate the problem of liquidity risk as a single entity because the liquidity problems in one bank does not only impair the bank itself but also a financial system even the overall economy.

Therefore, the cooperation among bank management, stakeholders, banking regulators and public is required to set up the strong foundation for a sound banking liquidity management. In addition, the 2007-2008 global financial crisis has given important messages for the banks to prudentially deal with the unsecured derivative markets, avoid excessive and imprudent bank credits and, increase the market discipline (Chapra, 2008: 2-15).

Particularly, to successfully manage liquidity, the banks should currently establish a robust liquidity management framework (BIS, 2008a:3). The framework, first of all, prevents the banks from the negative impacts of unfavorable economic conditions. Secondly, it helps the banks to provide liquidity on the liability side and extend credit on the asset side. The last but not the least, it avoids the banks from liquidity risk problems, bank rush and government’s bail out to the default banks. In fact, most of the failures of banks occurred due to insufficient liquidity management system solving adverse circumstances.

Profile of Liquidity Risk in Banking

In a simple word, liquidity risk management in banks is simply the risk of being unable to raise funds without incurring unusually high costs (Moreno, 2006:74). This happens when the depositors collectively decide to withdraw more funds than the bank has immediately on hand.

Hence, liquidity risk applies symmetrically to the borrowers in their relationship with the banks\(^4\) and to the banks in their relationship with the depositors\(^5\) (Greenbaum and Thakor, 1995:137).

In practice, the banks regularly find imbalances (gap) between asset and liability sides that need to be equalized because, by nature, banks issue liquid liabilities but invest in illiquid assets (Zhu, 2001:1). If a bank fails to balance such gap, liquidity risk might occur followed by the other exposures such as insolvency risk, government’s bail out the default banks and, reputation risk. These failures or inefficient management of liquidity is somehow determined by how strong is the liquidity pressure, how well the banks prepare the liquid instruments, how is the bank conditions in the time of liquidity pressure and, the inability of the banks to find liquid sources either inside or outside the banks. Figure 3 below lists some internal and external factors in banks that may potentially lead to the liquidity risk problems.

### Figure 3. Internal and External Factors Leading to Liquidity Risk Problems

<table>
<thead>
<tr>
<th>Internal Banking Factors</th>
<th>External Banking Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>High off-balance sheet exposures</td>
<td>Very sensitive financial market and depositors</td>
</tr>
<tr>
<td>The banks rely heavily on the short-term corporate deposits</td>
<td>External and internal sudden economic shocks</td>
</tr>
<tr>
<td>A gap in the maturity date of asset and liability</td>
<td>Low economic performances</td>
</tr>
<tr>
<td>The banks rapid asset expansions exceed the liability side</td>
<td>Decreasing depositors trust on the banking sector</td>
</tr>
<tr>
<td>Short-term deposit concentration</td>
<td>Non economic factors (political unrest, etc),</td>
</tr>
<tr>
<td>Less allocation in the liquid government instruments</td>
<td>A sudden depositors withdrawals</td>
</tr>
<tr>
<td>The banks do not attract placement in the long term deposit</td>
<td>Government needs liquidity for the public projects</td>
</tr>
</tbody>
</table>

**Source:** Adapted and modified from Mirakhor and Iqbal (2007), Antonio (1999), Alsayed (2007) and Tariq and Ali (2005)

One of the tools used in finance to analyze the position of bank liquidity and detect potential liquidity problems is financial ratios. First of all is the ratio of liquid assets to liquid liabilities. This ratio might be higher in a country with (a) no government intervention on meeting the funding gaps; (b) risk averse financial institutions; (c) fixed interest rates deposits and; (d) difficulty in hedging (Moreno, 2006:73). The survey from Bank for International Settlements (BIS) in 2006 identified that Korea, Czech Republic, Turkey, Poland, Hong Kong, Mexico, Saudi Arabia and Hungary are in high liquidity ratio.

Secondly is the ratio of demand deposits to private sector credits. Given that the credits to private sector are illiquid, a raising share of demand deposits could trigger liquidity mismatch and invite liquidity risks. Thirdly is the non performing loan (NPL) ratio. In a high NPL, the banks might be difficult to facilitate any liquidity withdrawal from the depositors. The last but not the least is the loan to deposit ratio (LDR) ratio. The higher LDR ratio should be accompanied by the higher liquidity reserves in the banks.

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\(^4\) The banks decide to terminate the loans while the borrowers cannot afford it.  
\(^5\) The depositors decide to redeem the deposits while the banks cannot facilitate such redemptions.
The Process of Liquidity Risk Management

With respect to the current economic conditions, Bank for International Settlements recommends banks to organize the liquidity management process to identify, measure, monitor and control the liquidity risk (BIS, 2008b:3). Such process entails at least four elements: (i) the liquidity management policies of the Board of Directors (BOD); (ii) the roles of asset liability committee (ALCO); (iii) the roles of internal control system for liquidity management and; (iv) the effective information system for monitoring and reporting liquidity risk. The following sections will explain each elements of the process in detail.

Liquidity Management Policies

The liquidity management process begins with the stipulation of liquidity management policies by the BOD as the ultimate guidance for all entities in the organization. For this purpose, there are at least three requirements for the BOD to do (BIS, 2008b:3-4): (a) The BOD have to understand the bank liquidity risk profiles, the internal and external business environments and stipulate the liquidity risk tolerance; (b) The BOD have to determine and approve the strategies, policies and practices of liquidity risk management; (c) The BOD have to disseminate, communicate and guide senior managers to manage liquidity effectively and; (c) The BOD have to align risk-taking incentive of each bank business line with the liquidity risk exposures their activities create for the bank as a whole.

Certainly, liquidity management policies are vary across banking institutions, but at least four components below should be incorporated in the policies (Greenbaum and Thakor, 1995:521-559):

1. The policies must contain the specific goals and objectives with respect to managing liquidity, including the short-term and long-term liquidity management strategies;
2. The policies determine the roles and responsibilities of the bodies involved in liquidity management process, including asset and liability management policies and, relationship with the other financial institutions and regulators.
3. The policies determine the structure of identification, reporting, monitoring and reviewing the bank liquidity conditions;
4. The policies set the liquidity risk tolerance and prepare the contingency plan to handle and mitigate liquidity pressures.

When preparing and formulating the liquidity management policies, BOD may entail and incorporate ideas from the bodies in charge with managing liquidity risk such as the Chief Executive Officer (CEO) and the heads of risk management departments (divisions). Even, inputs from the banking regulators and stakeholders are also very important to be considered (see figure 4). This intensive and integrative cooperation and coordination will make the board fully understand the real conditions of the internal and external business environment in order to be able to formulate the applicable and sound liquidity management policies.

Asset Liability Committee (ALCO)

In order to implement the liquidity management policies, the BOD assign a body to carry out the policies in the lower level, namely Asset Liability Committee (ALCO) (see figure 4). ALCO arrange the strategies to implement the liquidity management policies in the practical level in cooperation with the business risk management committee, operational risk management committee and, financial risk management committee. Particularly, ALCO: (i) manage and monitor the daily liquidity position and collaterals on the asset and liability sides; (ii) detect any liquidity imbalance; (iii) determine strategies to mitigate the liquidity imbalance and; (iv) maintain relationship with the external parties to cooperatively manage and anticipate
any liquidity pressure. In conducting all of its roles, ALCO continuously consults with the BOD and the three cooperating bodies above.

Meanwhile, in the operational level, the application of the liquidity management policies and ALCO’s strategies are carried out by the senior managers in every subordinate level. The senior managers manage the liquidity under instructions and cooperation of the upper level bodies. The primarily responsibilities of the senior managements are amongst others:

a. Transforming the liquidity management policies, objectives, and strategies of the upper level bodies into the operational level and managing the liquidity adhering to their lines of authority and responsibility.

b. Ensuring the effectiveness and soundness of the liquidity management process within their area of responsibility;

c. Monitoring the implementation of liquidity management process and delivering the related information to the upper level bodies.

Effective Information System for Monitoring and Reporting
Following the liquidity management policy and, the role of ALCO and its counterparts, the effective information system comes to support the liquidity management process (BIS, 2008a:6). This system enables the banks to monitor and control liquidity risk exposures and funding needs inside and outside the organization. In general, the effective information system comprises of two actors: (i) the top decision makers and; (ii) the decision followers in operational level. The former, who consist of BOD, ALCO, heads of risk management departments and CEO, deliver the full information on liquidity management policies,
strategies and guidance to the latter who consist of senior managers and their subordinates (see figure 5) to be implemented.

**Figure 5. Liquidity Management Information System, Monitoring and Reporting**

Practically, the senior managers assign their subordinates, monitor the implementation of liquidity management process and report to the decision makers based on the internal reports of the subordinates. Meanwhile, the decision makers coordinate and monitor the entire implementation of liquidity management process. The decision makers also receive internal reports, prudential reports and market information from the decision followers. In some cases, the management of the banks publishes such reports for the public disclosure to enable market participants to make an informed judgment about the soundness of the bank liquidity risk management framework and liquidity position (BIS, 2008b:4-5). These effective information system, comprehensive coordination and communication between the decision makes, decision followers and all related parties in the organization create a strong mechanism to manage and control liquidity risk.

**Internal Control System for Liquidity Management**

In order to maintain the soundness of the liquidity management process, the banks should have an internal control system to ensure the compliance of the implementation of liquidity management policies by the decision followers with the one stipulated by the decision makers (BIS, 2008a:6) (see figure 5). This internal control system can be assigned to ALCO as a representative of BOD to bridge between the decision makers and decision followers. In the case of liquidity risk problems, ALCO investigate the level of liquidity risk and mitigate it based on the guidance of the decision makers. But in a serious liquidity risk problem, ALCO consult with the decision makers for the necessary and immediate actions.

However, the regular functions of the internal control system are to comprehensively assess the liquidity management framework, liquidity position and, when necessary, propose revision or enhancement of the liquidity management process to the BOD (decision makers). Further, the organization can cooperate and communicate with the external
supervisors such as government body to assess the adequacy of a bank’s liquidity risk management framework and level of liquidity (BIS, 2008b:2-5).

**Asset-Liability Imbalance and Maturity Mismatch Risks**

The two main causes of liquidity risk are asset-liability imbalance and maturity mismatch which can happen because of two conditions (Helmen et al., 1994:164-165); (a) the liquid assets are available in larger portion than the volatile liabilities, namely liquidity gap or (b) the predicted amount of funds needed on the asset side for financing is bigger than the predicted amount of funds available on the liability side, namely liquidity need (see figure 6). Identifying and mitigating these two causes of liquidity risk may eliminate: (i) the funding liquidity risk when the depositors withdraw their short-term deposits and; (ii) the market liquidity risk when there is a disruption in the financial markets that make normally-liquid assets illiquid (Sharma, 2007).

One way to balance asset and liability of a bank is by matching the maturities or popularly known as maturity mismatch risk anticipation (Greenbaum and Thakor, 1995:172). To match the maturities of asset and liability, the bank deposits should be allocated in well-organized maturities assets. Hence, the demand for liquidity from the matured deposits could be fulfilled from the liquidity of the matured assets.

**Figure 6. Asset Liability Balancing and Liquidity Plan**

![Figure 6. Asset Liability Balancing and Liquidity Plan](image)


**Factors Triggering Asset-Liability Imbalance and Maturity Mismatch Risks**

The first factor is when the depositors prefer depositing their funds in the short-term deposits. The banks then use some of such deposits to finance the long-term investment projects (Sharma, 2007:2). The asset-liability imbalance potentially occurs because the short-term deposits are liquid whilst the long-term investments are illiquid. Thus, when the depositors execute their short-term deposits, the banks are difficult to terminate their long-term investments.
investments to obtain immediate liquidity. Indeed, the excessive reliance on short-term debts leaves the banks vulnerable in the financial distress (Beakley and Cowan, 2004:2). The second factor is because the banks tend to offer a high deposit rate to attract more funds from depositors. Consequently, it is followed by a high credit rate to the entrepreneurs. Unfortunately, when the business is in down turn, a high credit rate reduces the ability of the entrepreneurs to repay the interest and principal of the debts and leave the banks in a difficult liquidity problem to repay the depositors deposits. Further, if the banks do not have access to borrow funds from the money market, this asset-liability imbalance problem could become liquidity run.

The third factor is if the big companies become the dominant depositors and locate the funds in the short-term deposits. Since the investments need long-term tenor, the maturity mismatch occurs. The banks would need an immediate liquidity if such big companies redeem their deposits without prior notice. The forth factor is asymmetric information among depositors, banks, borrowers and regulators (Greenbaum and Thakor, 1995:173). For examples, when there is hidden (opaque) information among parties involved in bank financing activities or; unorganized liquidity behaviors between depositors and banks.

The last but not the least is business cycle that plays an important role in generating asset liability imbalance (Allen and Gallen as quoted by Zhu, 2001: 2). For example, the unfavorable business/economic conditions may disrupt the performance of the asset side which in the end may impact the balance between asset and liability sides.

Related Risks Following Asset-Liability Imbalance and Maturity Mismatch Risks
When the asset-liability imbalance and maturity mismatch risks take place, there are related risks potentially following these two risks. This might happen if the banks fail to handle asset-liability imbalance and maturity mismatch risks. Such risks are insolvency risk, government take over (bail out) risk and reputation risk.

A. Insolvency Risk
Insolvency risk, which is the inability of the banks to fulfill their obligations to the depositors, happens if the banks fail to manage liquidity risk by having liquidity reserves, selling the liquid assets, or borrowing from money market. In particular, insolvency risk is the conditions where the bank liabilities exceed the bank assets causing a negative net worth in the bank balance sheet (Greenbaum and Thakor, 1995:172).

B. Government Take Over (Bail Out) Risk
Referring to the experience during the global financial crisis 2008-2009 and the other poor economic conditions (such as Asian economic crisis 1997), the government commonly acted as the lender of the last resorts for the banks. They provided emergency liquidity for the banks which faced liquidity distress or even took over the banks to save the entire economy.

C. Reputation Risk
The failures of the banks to balance the asset and liability, manage the demand for liquidity and mitigate the unexpected liquidity pressures can drop their reputation in front of the depositors and stakeholders. In the severe cases, a low banking reputation may not only endanger the function of the banking industry but also impact the performance of the entire economy.
Techniques to Mitigate Liquidity

One of the common techniques used in the banking theory to analyze the performance of asset and liability is called gap analysis and stress test. The former assists the outputs of the assets side particularly from the interest rate returns of the bank credits and the liability side in a certain time period (Heffernan, 2001:189). It suggests the banks to maintain the higher returns of the asset side than the returns paid on the liability side. In particular, the ratio of total returns from bank credits to total payments of interest on deposits should always be positive. If it is found negative, the banks can (i) increase total equity or; (ii) increase interest on bank credit, to prevent them from asset-liability imbalance and maturity mismatch risk. Meanwhile, the latter identifies potential weaknesses or vulnerabilities of the bank liquidity position. It suggests the diversification of funding sources or an increase in contingent liquidity sources (BIS, 2008a:6).

However, in practice, the banks need to maintain available liquidity to resolve the depositors’ regular and irregular demand for liquidity. The regular demand for liquidity comes from the daily business activities of depositors (BIS, 2008a:5). Meanwhile, the irregular demand for liquidity can be further regrouped as: (a) the predictable irregular demand for liquidity and, (b) the unpredictable irregular demand for liquidity. The first sub group is for example the government liquidity withdrawals with respect to the fiscal operations. The second sub group is for examples the contagious banking crisis, the economic or global financial crisis, the world oil price shock (economic issues), and social and political unrest, natural disasters (non economic issues).

To manage the regular demand for liquidity, the banks had better have a stand by account on the asset side. It is a pool of funds that can be withdrawn to provide liquidity in the daily basis (BIS, 2006:4). The larger banks are required to hold larger liquid assets than the smaller banks (BIS, 2008a:6). Such account consists of (Helmen et all, 1994:151):

- **Currencies (cash in vault).** These are the liquidity that the banks hold to meet the daily transaction needs and will be placed in the central bank if there is a surplus;
- **Central bank certificates.** These are the bank deposits which are very safe and liquid;
- **Other commercial bank deposits.** These are the banks short-term deposits in the other commercial banks. Although these are less liquid than the central bank certificates, they can be redeemed shortly;
- **Cash items in the process of collection.** It includes the cheques deposited in the central bank or the other commercial banks for which the credits have not been received yet.

Further, Greenbaum and Thakor (1995:176) proposed three techniques to mitigate the regular demand for liquidity: (a) investing more funds on liquid loans and/or keeping more cash on hand, (b) diversifying sources of funding through various depositors and (c) using the lender of the last resort which is the central bank to facilitate emergency liquidity for the depositors regular liquidity needs.

Next, for the predicted irregular demand for liquidity, the banks should arrange an estimation of the short-term demand for liquidity which is based on the past experiences (patterns of liquidity needs). Specifically, the estimation process starts from the idea that the predicted irregular demand for liquidity is built by seasonal, cyclical and trend factors (Helmen et all, 1994:162-165). Therefore, unless there is an error condition, the predicted irregular demand for liquidity should be identified. The banks can also communicate with their clients to know the information about the schedule of their withdrawals to further strengthen the bank estimation.
Lastly, the unpredicted irregular demand for liquidity is the most difficult one to trace. It is because the unfavorable economic/business conditions and non supportive non economic issues are sometimes unpredictable. For this type of depositors demand for liquidity, there are proactive actions that the banks can organize, such as:

**Contingency Funding Plan (CFP)**

CFP is composed of policies, strategies and procedures that serve as a blue print for a bank to address liquidity shortfalls in emergency situations at reasonable costs (BIS, 2006:13-16 and 2008b:4). The main purposes of CFP are to ensure that the banks can prudently and efficiently manage the extraordinary liquidity fluctuations and mitigate urgent liquidity needs both in the short and long-term periods. It is conducted through a proper estimation of the liquidity needs by the bank management under hazardous scenarios. The sophistication of CFP as an emergency liquidity plan depends on the size, nature and complexity of the business, risk exposures, and structure of organization.

Particularly, CFP anticipates the needs for liquidity through three treatments (BIS, 2008b:4). First of all is analyzing and making quantitative projections of all funds in both on and off balance sheets. CFP identifies, quantifies, and ranks all of the sources of funding based on the preference. Secondly is matching the potential sources of cash flow and usage of the funds. CFP determines the strategies on the asset and liability in the case of liquidity crises for examples selling money market securities, selling longer-term assets (on the asset side) or pricing policies for funding, regulation for the early deposit redemption and, the usage of discount window (on the liability side). Finally is setting up indicators to alert the bank management against predetermined level of potential liquidity risks.

**Combination of Cash Flow Matching and Liquid Assets (Mixed Approach)**

With this mixed approach, the banks attempt to match cash outflows in each time bucket with the combinations of contractual cash inflows and inflows from selling of the assets, repurchase agreement or the other secured borrowing (BIS, 2006:4). The most liquid assets are counted in the earliest time buckets, while the less liquid assets are counted in later time buckets.

However, in the current dynamic financial markets and high frequency economics activities, analyzing the bank cash flows is very complicated. Hence, in order to have accurate and reliable results, the banks could combine the projections of customer behaviors and the roll over expectation of deposits. Furthermore, the banks should develop databases of the types of depositors, their types of deposits, and the geographic diversification.

**Prudential Allocations of Assets (PAA)**

This technique could potentially reduce the refinancing risk and the risk of redemption or repurchasing the bank borrowings prior to their contractual maturities. Some courses take place to implement this technique, which are:

- Placing a substantial portion of the deposits to the secured and short-term investment alternatives that are very liquid and may be repurchased before the maturity dates;
- Requiring collateral to the debtors to secure the long-term investments (BIS, 2008a:4).
- Joining syndication loans to share the risk of credit among parties involved;
- Avoiding credit concentration on the certain types of placements (debtors)
Integrated Structure of Banking Organization
The modern banking organizations are indicated by the existence of the bank holding company and the bank subsidiaries. Consequently, in relation to the management of liquidity, there are two modes of liquidity: (i) liquidity of the bank holding company as the owner of the bank subsidiaries and; (ii) liquidity of the bank subsidiaries. These conditions create two styles of liquidity managements in an organization, which are centralized and decentralized liquidity managements (BIS, 2006:3). Selecting one of them and knowing how deep is their relationship depend on a number of factors, such as the bank business models, the efficiency of the banking operations, the minimization of costs of credit, the diversification of credits, the management of knowledge and, the feasibility of movable funds and collaterals.

The management of liquidity in the holding and subsidiaries companies is essential because both of them have different funding needs and sources, and is also subject to the certain regulatory guidelines and requirements (Bank of America, 2007). In practice, the subsidiary companies depend on the holding company liquidity management policies. For example, when the subsidiary companies face liquidity risk problems, while the sources of funds such as deposits, wholesale market-based funding, and asset securitization are not enough or could not be used, they need instant liquidity from the holding company. Nevertheless, the holding company often expects the subsidiaries to handle such liquidity problems themselves in the first stance, although finally they still provide the required funds and management assistance if the liquidity risk escalates up into a certain limit (BIS, 2006:4).

Therefore, establishing an integrated organization structure is very important to coordinate the liquidity management between the holding company and the subsidiaries companies. For example, the bank holding company decides a standard regulation on the necessary capital for all of their subsidiaries. Hence, the purposes of the holding company to release emergency liquidity to the subsidiaries may not only cover the demand for instant liquidity but also fulfill the capital requirement. Further, by doing this, the holding company has imposed a control to their subsidiaries. On the other hand, the subsidiary companies easily obtain the liquidity needs from the holding company rather than borrow the funds from the other companies, money market or selling the marketable assets.

Deposit Insurance
The deposit insurance is another contemporary technique to mitigate liquidity risk although in some extents it invites moral hazard problems (Zhu, Haibin, 2001:1). For the depositors, deposit insurance increases their deposit costs although it guarantees the repayment of deposits if the banks are default. Meanwhile, for the banks, the prevailing of deposit insurance reduces the liquidity risk exposures because there is now an external body (deposit insurance company) which covers the failure of the deposits repayment.

The deposit insurance might invite moral hazard of the banks because they face less liquidity exposures on the liability side so the financing activities are less cautious against the potential of business losses. Hence, in order to be effective, the application of deposit insurance still has to be followed by the market discipline and prudential banking supervisory (Batunanggar, 2002:8).
Financial Instruments as Source of the Banks Liquidity

After setting up the liquidity management process, knowing the causes of liquidity risk and applying some techniques for mitigation, the banks prepare financing strategies in the forms of liquid financial instruments with an effective diversification of sources and tenor of investment. Initially, the bank liquidity management decisions to place some funds into several liquid financial instruments have to consider some factors (Helmen et all, 1994:170):

- The bank liquidity management policies;
- The purposes of the placement of funds with respect to the need for liquidity;
- The access to the financial markets;
- The costs and characteristics of the financial instruments and;
- The forecast of the interest rate returns.

It is also suggested that, before redeeming the financial instruments for liquidity, the banks had better determine the types of liquidity they need and the types of instruments to be terminated. For instance (Helmen et all, 1994:170), the seasonal liquidity needs fit with the timely manner financial instruments; the cyclical liquidity needs match with the well-estimated liquid assets and; the long-term liquidity needs suit with the combination of long-term liquid assets and, offering (issuing) the short-term debt instruments to the other banks bilaterally or through the money market.

Therefore, there are typically two sources of the liquid financial instruments to fulfill the demand for liquidity: (i) the internal sources of bank liquidity and; (ii) the external sources of bank liquidity. The former is further recomposed as the short-term placements and the long-term placements (see figure 2.7). In the short-term placements there are negotiable certificate of deposit (NCDs), repurchase agreement (Repos), banker’s acceptance (BA), treasury bills (T-bills), and short-term central bank certificate. In the long-term placements there are long-term central bank certificates and government securities which can be traded locally and internationally. Finally, the external sources of bank liquidity consist of new liquidity from the shareholder, short-term money market loans, parent company’s supporting liquidity, central bank emergency funds and, government’s bail out.

However, before using such internal sources, the banks should have initial internal liquidity such as cash reserves and reserves requirement in the central bank to capture the regular demand for liquidity. If those instruments are not enough, the banks come to the second alternative which is from the internal sources of bank liquidity by terminating the short-term financial instruments. The first alternative instrument to be terminated before its maturity date is the negotiable certificate of deposit (NCDs) which is a marketable short-term instrument. Besides NCDs, the banks can repurchase the securities under repurchase agreement (Repos) facilitated by the issuer of the security.
Figure 7. Sources of Liquidity for Banks

Next, the banks might sell the bankers acceptance (BA) in the secondary market. Banker’s acceptance is a future payment guaranteed by the issuer of BA to the BA’s holders. Besides selling BA, the banks can also sell the treasury bills (T-bills) which is one of the most marketable and secured money market instruments issued by either government or central bank. T-bills are offered by the issuer for the short-term placement which are redeemable with a discount prior to their maturity date. Finally is executing the central bank certificates to the issuer or reselling to the money market. Currently, there are some complex instruments to be used for instances credit default swap (CDS), mortgage back securities (MBS) and, collateralized debt obligation (CDO). But, they are not suggested even prohibited because of the complicated assessment, non tradable and unpredicted cash flow (BIS, 2008a:4).

However, besides selling the short-term financial instruments, the banks also have an alternative to terminate the long-term financial instruments to fulfill the short-term demand for liquidity. Such long-term instruments are for examples central bank certificate (bond) or government securities (bond). These two long-term instruments are not only safe (zero risk) but also very liquid (marketable) locally and internationally.

Later, when the internal sources of bank liquidity are still not enough to serve the demand for liquidity, the banks can occupy the external sources. The first alternative is asking for the supporting liquidity from the shareholder. However, this alternative has a consequence in the internal side of the banks for example the bank management has to explain it to the shareholder. The second alternative is borrowing some funds from the parent company. Fortunately, those
two alternatives only require the internal bank agreement with the shareholders and parent company which are well-known for them.

The third alternative, which needs extra requirements, is borrowing some funds from the money market by issuing the short-term loans contract to the bank lenders. In the developed countries, the big banks tend to be the borrowers while the small banks tend to be the lenders in the money market (Ahmed, 2001:34). Unfortunately, using money market should alert with the liquidity run risk because of the public negative image if the certain banks permanently stand as the borrowers. One of the good anticipations is establishing a good relation banking networks in the money market.

Finally, the quickest way to obtain liquidity is from the central bank. Due to its function as the lender of the last resorts, the central bank has an emergency liquidity facility with a very short (daily) loan maturity and strict requirements for examples collateral, certain level of capital requirement and bank performance indicators and, penalty in the deferred payment of the loans.

Conclusion
In their operations, the banks might face liquidity risk as the results of asset-liability imbalance and maturity mismatch. In order to manage liquidity risk, the banks have to conduct liquidity management process which consists of determining liquidity management policies; establishing asset liability committee (ALCO); having an effective information system and internal control and; preparing techniques to mitigate liquidity risk. The Board of Directors (BOD) are responsible for setting up the bank liquidity management policies in cooperation with ALCO and the head of risk management departments/divisions. They are decision makers in the top level. Following them, there are senior managers as the decision followers in the operational level. After that, effective information system and internal control on liquidity management complement the liquidity management process. Finally, after analyzing the triggering factors of liquidity risk, the banks prepare the internal and external sources of liquidity to fulfill demand for liquidity from depositors.

References

6 Such as collateral, certain level of capital requirement, certain level of bank’s performance, time proposing schedule, default punishment, etc.
risk.cfm> Access Date: May 2nd, 2007.
DFIs. Pakistan.
Management, Great Britain.
Baffins Lane, Chichester, West Sussex, England.
Wesley Series in Economics, Person Education Inc, New Jersey.
Howells, Peter and Bain, Keith. (1999). The Economics of Money, Banking and Finance, a
Program in Finance) number 272, University of California, Berkeley.
Santos, Joao. (1986). Bank Capital Regulation in Contemporary Banking Theory: A Review of
Helmen, George; Simonson, Donald; Coleman, Alan. (1994). Bank Management: Text and
Internal Unpublished Paper, Jakarta.
the long distance IDB courses in Islamic Banking and Finance.


Public-Private Partnership in India’s Urban Water Public Utilities: A Case of Sonia Vihar Water Project

Nalin Bharti* & G. Ganesh**

Abstract

Efficient management of public utilities is absolutely important for proper urban development. These days, developing and managing public utilities are not easy for the government. In a country like India, full privatization of public utilities is also difficult to achieve. Partial privatization with a public-private partnership (PPP) can therefore be a viable option. *Lease, contracting out, transfer, build operate own (BOO) and build operate transfer (BOT)* are some of the techniques which can be practiced for efficient management of public utilities. This paper deals with the need, modus operandi and precautions required for public private partnership through privatization of public utilities in India with special reference to the recently implemented PPP in Sonia Vihar Water Project in Delhi.

Keywords: Privatization, Public Utilities, Public-Private Partnership

Theorizing Public-Private Partnership through Privatization

Public-private partnership (PPP) is an exciting catchphrase in the world today. The concept of PPP is very much linked with the concept of privatization. While privatization needs public support for its implementation without any guarantee of success for private sector, PPP involves public support for private sector participation and success. In a dual preference economy like India, the concept of PPP has a long theoretical history with less practical exercise. Public-private partnership through privatization practically presents so many changes. It is the transfer of assets and service functions from public to private hands. It may be the partial or total transfer of enterprises from public to private ownership. As such, it is the precise reverse of nationalization. The sale of public assets, the introduction of competitive tendering deregulation and the establishment of surrogate markets within public sector organizations are examples of the generic policy referred to as ‘privatization’. Privatization, in a broader sense, means giving private actors a greater role in decisions about what, where and how to produce goods and services. A great deal of experience has now accumulated regarding this process. Some of it shows the great potential that privatization has for increasing productivity, income and welfare. It has come to symbolize a new way of looking at society’s needs, and a rethinking of the role of government in fulfilling them. It means relying more on society’s private institutions and less on government to satisfy the needs of the people (Hanke, 1987, Bos, 1991, Galal et.al., 1994, Savas, 1987). In theories, PPP is a helping hand in the public decisions and welfare.

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Methods in public-private partnership in public utilities through Privatization

The public-private partnership is exercised through various methods in the world today as discussed below:

Management Contracts: Management contracts are also a method of privatization through PPP. The key issues in success or failure are whether performance is related to the contract terms, and whether managers have true autonomy in hiring and firing. Management contracts privatize management, leaving ownership in the hand of the state. The results of management contracts have shown remarkable improvement in productivity and profitability in some countries. This method is also less controversial since ownership continues to remain in the hands of the state.

Lease Contract: Lease contracts are of different types, varying mainly by who is responsible for financing the project. Under straightforward leasing (sometimes called afterimage) the contractor or lessees pays the public owner a fee for the right to operate a public facility and bears the financial risks of its operation. This method is widely used in power, ports, urban transport, waste disposal and industry. Recently, this method has been in vogue in state-run transport, water and electricity departments in India and Bangladesh.

Concession: Concession is also termed as build operate transfer (BOT) and build operate own (BOO). This involves longer contractor responsibility than leases. They also last longer normally within 15 to 30 years. Water supply, waste disposal, toll roads and ports are among the common areas of usage. Lease and concession are same in the resonance but different in practice on the basis of the time factor. If government is really looking for a change in responsibility but at the same time also trying to retain the ownership then all these methods are easy to work with. Lease contracts are very popular in developing country because it cannot provide any great political obstacle on the way of privatization. Government can stop anybody if it does not generate any positive move. India and Bangladesh both are practicing the method of concession in various public utilities.

Contracting out: This is a process whereby government hires, under contract, a private firm to perform, over a defined period of time, some specific service that might otherwise be provided by public employees using government equipment and facilities. According to Attiat and Hartly (1991), contracting out is identical with outsourcing or subcontracting. This method is widespread in public-sector service provision. It is an extremely diverse form of privatization, especially common for municipal service, and is widespread in the United States. This method is creating right buzz even in a country like India.

Rational behind PPP in public utilities through privatization

Due to growing population in urban areas it is very difficult for the State to run the public utilities efficiently by itself. The need for public–private participation is an easy and important option for dual preference economies like India. However, full privatization of the public utilities is a difficult choice for India. ‘These days the local/state authorities are finding that their existing water, sanitation, energy and other urban infrastructures are unable to service their rapidly expanding urban population. In addition, governments realize that their limited financial resources are not sufficient to cover the needed expansion of these services. Even where governments do find the resources to subsidize public utilities service is often poor and sectors of the population largely unserved. It is becoming increasingly clear that governments...
cannot meet the continually growing demand for water, waste disposal, energy and other urban services acting alone. Local governments are finding that their tax revenues are not providing sufficient resources to meet these needs, and official development assistance has not been able to fill the gap. It is in this backdrop that we are forced to think of alternative sources of finance, technical excellence and support. One of the most viable options is to involve PPP entailing a spectrum of possible relationships between public and private actors for the cooperative provision of infrastructure and services. The only essential ingredient is some degree of private participation in the delivery of traditionally public-domain services. Private actors may include private businesses, as well as non-governmental organizations (NGOs) and community-based organizations (CBOs). Through PPPs, the advantages of the private sector – innovation, access to finance, knowledge of technologies, managerial efficiency, and entrepreneurial spirit – are combined with the social responsibility, environmental awareness, and local knowledge of the public sector in an effort to solve problems’. (Kumar and Prasad, 2004).

Sonia Vihar Water Project: A case study of public-private partnership in water public utilities through privatization

How is it that water which is so useful, has such a low price; while diamonds, which are quite unnecessary, have such a high price? Such observation by Adam Smith is not too convincing today in the age of globalization where water has become a costly commodity. Supplying the growing demand of water is a big challenge for the government. Generally in urban areas processing, preserving and distribution of water is an expensive affair. In the post-independence India, many state governments started providing basic necessity such as water as a part of the welfare activities. However, the governments have now realized that meeting such cost is difficult because of a host of problems such as non-payments, illegal connections and free ridings, political interference and the inefficient distribution.

The Delhi Jal Board (DJB) reform agenda: The actual water supply available to the residents is intermittent and inequitable. Despite concerted efforts the demand-supply gap is on the rise. This imbalance is further exacerbated by the high level of non-revenue water – including both technical and commercial losses – estimates of which range around 40-50%. The ability to identify the losses is further constrained due to lack of bulk metering for transmission and distribution systems except for supply to New Delhi Municipal Corporation (NDMC) and Delhi Municipal Corporation (DMC). The present zoning arrangements are not conducive for effective monitoring and control. Customer metering is ineffective under the prevailing condition of intermittent supply which further leads to increased health risks from possible contamination of leaking pipes. There are shortcomings at treatment works and the equipment is inefficient. The obvious manifestation of the poor supply situation is high customer coping costs and low level of customer satisfaction (Delhi Jal Board, 2004).

Due to these reasons Delhi Jal Board (DJB) has decided to reform the water treatment and distribution style. Main vision behind the reform is shown on the diagram below.

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Adam Smith, The Diamond-water paradox.
DJB plans to undertake first phase of implementation of continuous supply as an essential part of a comprehensive improvement in the distribution services in two of its own operational distribution zones – South II and South III having 91,000 and 72,000 connections respectively. It is understood that NDMC will also undertake a similar upgrading of distribution in a zone within its own jurisdiction and this will be included in the Phase I project with the overall project responsibility resting with DJB. Apart from the suitability of their size covering 12% of the total DJB connections and the range of social and economic conditions they exhibit, they receive water from the new Sonia Vihar Water treatment Plant (WTP) thereby ensuring optimum use of the water produced by the plant. In order to introduce best water service industry operational standards into DJB, it is proposed to award 5-year Management Contract(s) to implement the first phase of distribution improvement (DJB, 2004).

Specialist contractors will be procured on a competitive bidding basis for each zone and they will be required to work with the management and staff of the two zones to meet performance targets. The management contracts will cover the operation and maintenance of the water supply and sewerage services in the selected distribution zones as well as rehabilitation works required to bring about the changes necessary for continuous supply. The operator will be paid fixed management fee plus certain incentives (or imposed penalties) depending upon performance and achievement of...
output-based milestones. An independent monitoring of the performance of the contractor will be done (DJB, 2004).

The entry of ‘Degrémon’

Degrémont, subsidiary of Suez Lyonnaise des Eaux Water Division, was awarded a 2 billion rupees contract (almost 50 million euros) for the design, building and operation (10 years) of a 635 MLD Drinking Water Production Plant at Sonia Vihar in New Delhi (India). Won through the collaboration of all the group companies, within the context of an international call for tenders, it was the first contract of this size in India, after Bombay, for Degrémont.

In 2001 Degrémon assured that it would produce 635,000 m$^3$ per day from two river sources i.e. the Ganges and the Yamuna. To be operational in three years, the plant would be equipped with Degrémont proven technologies of pre-settling and sludge, sand filtration (Aquazur), settling (Pulsator Turbocirculator treatment) (Suez, 2001).

In Delhi, the French company, Ondeo Degremont has been awarded the project of treating the Ganges water to be supplied to posh South and East Delhi colonies (Kaur, 2003). The Sonia Vihar Water Treatment Plant is built on the basis of a design-build-operate contract with Degremont. Designed to treat and supply 140 million gallons a day (MGD) of water to South and East Delhi” (Sethi, 2005). The Sonia Vihar treatment plant is being developed on a BOT (Build-Operate-Transfer) basis for a fixed period of 10 years, and profit from it has been guaranteed to Suez by the government. It is clear from this project that the guarantee will ultimately be backed by public money. The fear is that while Suez is getting the raw water for free, the amount it will get as fee for treating the water will be much in excess of what the DJB would charge the consumers when selling the water. International corporations can easily expect to make a 20 percent to 30 percent margin of profit from investment in water service. Multinational water-providing giants Veolia, Suez, and RWE are hugely profitable corporations. In 2006, Veolia made a consolidated net income of €759 million (nearly $1.12 billion) according to its 2006 annual report. In addition, Food and Water Watch reports that 35 percent of Veolia’s total revenue came from water, with 10 percent from North America. In the same year Suez earned a gross operating income of €7,083 million (nearly $10.38 billion), and RWE had a net income of €3,847 million (almost $5.66 billion). Some €689 million ($1.02 billion) of RWE’s EBITDA (earnings before interest, taxes, depreciation, and amortization) came from its water division, known as U.S. water provider American Water.

The DJB is also providing Suez with land, electricity and treatment cost. At the same time, Suez has been kept free from transmission losses and revenue collection (Frontline, 2003). The contract provides incentives and bonuses for over-production and energy savings. While performance-based incentives make sense, the parameters set for Degremont are far below those set for other DJB plants. The Degremont plant has been allowed 232 Kwhr [kilowatt hour] per million liters of water treated while DJB plants, of similar capacity, consume between 170-180 Kwhr per million liters of water. The contract is designed in a way to ensure that the company always meets its targets. The contract is solely for the management of the plant. The DJB owns the plant and must pay for its maintenance and major repairs. The contract requires

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8 World leader in water treatment engineering, Degrémont is a subsidiary of Suez Lyonnaise des Eaux Water Division. With a turnover of 810 million euros in 1999, Degrémont is present in more than 70 countries with 3,600 employees.
that Degremont pay for minor repairs, but union members explain that if left unattended, minor
snags soon attain major proportions. What is particularly disturbing is that the issue is not about
one bad contract that can be re-negotiated in five years. Sonia Vihar must not be evaluated as a
stand-alone project, but as a template for the future of water production and distribution in the
national capital. According to a DJB report published in July 2004, the 24X7 water supply
scheme is expected to cost approximately $185 million over the next 10 years, with at least 60
percent of the funding coming via loans from the World Bank (Frontline, 2005).

What went wrong with Sonia Vihar water project?
Sonia Vihar Water project has also been questioned on various grounds. Here two major issues
are discussed:
Less-transparent government decision: The Sonia Vihar plant has been mired in
controversies since inception. The Central Vigilance Commission (CVC) had raised
doubts over its tendering process (The Hindu, 2006). Not only is the contract
restrictive, but the CVC has also raised concerns regarding the tendering process. The
CVC had asked its technical examination committee to probe why the contract, which
was originally worth Rs.295.75 crores, has been awarded for almost Rs.900 crores
without a re-tendering process (Frontline, 2005). The government has not explained the
reason behind such a lapse till date. Since the cost of the project is now very high, the
people would have to pay higher price for water.

Less Accountable Customer Service: Another loophole that is bound to be exploited is that the
contract does not force the company to ensure that every household in the zone gets water
24X7. The contract requires every operating zone to be divided into several district metering
areas (DMAs). As long as the input point of the DMA is provided with a constant supply of
water, the company is deemed to have done its duty and can claim its incentives. Thus,
contractually, there is nothing to stop the company from supplying water for a limited period of
time to each house in a DMA and still claim to supply water 24X7. Essentially, the entire
project revolves around paying private companies to distribute water from the operating zone
input to the DMA input (Frontline, 2005).

Regardless of the controversies involved in Sonia Vihar water project, the DJB has recently
awarded Degrémont a contract for the design, construction and 10-year operation of a
wastewater treatment and reuse plant at Okhla in the south of the city for a total cost of 27
million euros (Rs 1.5 billion) (Suez, 2008)

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Why a new company was not chosen by the DJB? Is it good to depend only on a single
company in the national capital of Delhi or in any part of India? Will the next project also be
awarded to the Degrémont? Or the Degrémont is on the way to monopolize India’s water
distribution. To find this answer it is imperative to see the results of privatization globally.

9 The treated water produced by the plant will be mainly recycled for use in irrigating the surrounding
agricultural land.
What went wrong with ‘Water’ privatization globally?

Higher Rates and Profits: Global experience in water privatization suggests that the price of the water after privatization is very high.\(^\text{10}\)

Serving the Rich: Critics of the water utilities privatization often raise a hue and cry over the target group which is the rich. Since water is the basic rights for the people, the public agencies carry a moral responsibility to provide water to everyone while private companies don’t. In Pennsylvania, thousands of people unable to pay their bill lost their water in 2005.\(^\text{12}\)

\(^{10}\) U.S based NGO, Food and Water Watch revealed the fact about the water privatization in U.S. The six largest private water providers in New York State charge an estimated average of $34.25 to families consuming an average of 1,000 cubic feet (7,480.52 gallons) of water per month. A survey conducted by the American Water Works Association estimated that the average monthly water charge for households in this region consuming the same amount of water is $27.29, making privately owned New York utilities 25 percent more expensive than the average public utility in their region. Data from Black and Veatch’s 2006 California Water Rate Survey show that households in districts with privately owned systems are paying, on average, 20.28 percent more per month for clean drinking water than households served by either municipal systems or special water districts created by citizens and overseen by government officials. In France and the United Kingdom, where governments have given private companies much greater control of water it was found that choosing to involve private companies in water distribution over direct public management increases the average retail price of water.

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\(^{12}\) A flagship water privatisation scheme for Africa has collapsed amid claims that the British company involved has failed to improve the supply for millions of people. In Tanzania the deal with Biwater was contracted to bring clean water to the capital, Dar es Salaam, and the surrounding region within five years by installing new pipes. The $140m (£76.5m) World Bank-funded privatisation scheme - which was supported by the UK government - was one of the most ambitious in Africa and was intended to be a model for how the world's poorest communities could be lifted out of poverty and countries could meet their millennium development goal targets. Tanzania has made a series of allegations against Biwater, which is working in Dar es Salaam with the German engineering firm Gauff under the name City Water. See: The Guardian, Wednesday May 25, 2005.
Less Accountable and Less Transparent Customer Service: It has also been observed that the private firms initially take interest in the services to the customer and once they establish their name they are less accountable for the customer service. Water firms, as long as they work as public utilities, are required to maintain open meetings and open records. However private firms are free to meet in private and keep all financial reports secret. Isn’t this against the Right to Information?

Is regulation required in urban water utilities?
In a dual preference economy like India, the market forces cannot be stopped but at the same time the role of the government is also very crucial for carrying out certain constitutional obligations.
The International Environmental Law Research Centre (2006) has included the recognition of a fundamental right (or human right) to water, together with a strong revulsion from the statement that water is an economic good or tradable commodity, often leads some (not all) advocates of these views to the extreme position that water cannot and should not be sold but must be supplied free. At the other extreme is the view that water as an economic good and hence should be priced on economic principles with the objective of moving towards ‘full cost recovery’. Neither of these extreme views appears tenable.

- In the first place, when the ‘right to water’ is essentially linked with the water as life-support, i.e., water needed for drinking with a minimal addition for cooking, washing and sanitation (but not necessarily flushing toilets), is the basic water requirement or BWR which is not less than 50 liters per person per day. There is no fundamental right to water for economic uses, such as irrigation, industrial use, recreation, etc.
- Secondly; even a fundamental right does not necessarily have to be free. Food is certainly a basic human need, but no one seriously argues that it should be supplied free; people produce or buy their food. What many argue for is a degree of subsidization of food to the poor, until poverty is eliminated and the problem disappears. A similar approach may be called for in the case of water as well.
- Thirdly, leaving aside private supplies which will of course have to be paid for by the user, nothing that the state or its agencies provide is really free. The supply of water involves costs (storing, purification, pumping, piping, etc), and if the user does not pay for the service, then the general tax-payer pays for them.

An uncertain and insecure regulatory environment is a major deterrent to investment and entrepreneurship. Even when investment occurs in such an environment, aggressive rent seeking and short-term profit taking tend to replace more beneficial long-term investment. Policymakers should ensure that laws and regulations are consistent with the needs of a free market, where contracts and property rights are enforced, due process is efficient in correcting abuses, and legal requirements are transparent and accessible (World Development Report, 2005).

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13 Africa Action an oldest organization in the U.S. admitted in 2001 that five multinational corporations have bid for the urban water service in Accra, most of them with annual sales larger than the GDP of Ghana, and all of them with proven records of socially irresponsible practices. See: The Accra Declaration, Ghana, May 16-19, 2001.
India should also work on the legal and judicial reforms through a proper regulatory mechanism for a bright and conducive climate for investment in PPP. Because ‘A successful legal reform is not confined to the revision of exiting laws and introduction of new laws and regulations. Comprehensive legal and judicial reforms can make an important contribution to the overall development process’ (World Bank, 2004). The efficacy of legal institutions can be judged on the ground as how quickly are contractual disputes resolved and how major feature of a regulatory institution is to ensure the expected number of disputes is as low as possible (Gangopadhyay and Mohanty, 2003). World Business Environment Survey suggests that the weak investment climate condition with macroeconomic instability, regulatory and tax constraints and weak governance all play a role in an officialdom and affect the size of the ‘shadow’ economy (Batra et.al, 2003). An effective legal regulatory and enforcement framework is essential for creating the right incentive structure for market participation. The legal and regulatory framework should focus on the improvement of internal monitoring of risk (Thomas et.al, 2004). India more correctly to say the New India is positively looking for the legal and regulatory reforms in coming years.

Can Privatization work for PPP in India?
It is clearly realized that the Sonia Vihar Water project is not too different from the other projects in the world. Less-transparent government decision and less accountable customer service including no assurance for 24X7 water supply and the high price of the water are some of the points which have been noticed from the day of inception of this project. Right to water is an integral part of the right to life. In the absence of any privatization law and the absence of an umbrella law, India is in conflicting situation between the right to life and the economic reforms such as public-private partnership through privatization. Developed economy like U.S as well as least developed economy like Ghana has seen the outcome of privatization in water.

The Sonia Vihar water project should be seen in the global context not only in the local context. Hall and Lobina (2008) have shown how the introduction of private operators’ interests into the water supply and sanitation sector may conflict with public interests in a number of socio-economic, environmental and political dimensions and prove unnecessarily risky. Hall and Lobina (2008) have also provided a detailed analysis of the problems with private water concessions and operating contracts, looking at the factors explaining the discrepancy between the theory and practice of private sector participation (PSP). Such factors include the high transaction costs required to attract private operators and the multinational companies’ ability to engage in interest seeking behaviour in view of their superior technical, legal and economic resources vis-à-vis local authorities and regulatory agencies.

The main issue which goes against the water privatization is high price. India is at a critical juncture of economic reforms where it cannot say no to PPP in water public utilities where the public sector water distributors are in loss but at the same time it cannot say water may be provided on high price where the majority of the people earn less than one dollar a day. Public-private partnership should therefore be regulated through the active social responsibility so that the benefits of that partnership could be shared efficiently by both public as well as private players.
References

Delhi Jal Board, (2004), Delhi water supply and sewerage sector reform project. P.7
Antecedents of Interpersonal Conflicts at Workplace

Shweta* & Srirang Jha**

Abstract

This paper presents a comprehensive view on the antecedents of interpersonal conflicts at the workplace that would facilitate development of a holistic framework of conflict resolution based on the root causes rather than the individual incidents on a piecemeal basis. The antecedents of interpersonal conflicts have been classified into four dimensions viz. individual differences, interpersonal issues, organizational factors and extra-organizational issues. Even within different sets of antecedents, there are several sub-factors that interplay with each other leading to a full-fledged clash at the workplace. This paper sets an agenda for more empirical researches on the antecedents of interpersonal conflicts as against the current focus on exploring the factors affecting conflict resolution styles of individuals. The researchers believe that the skewed focus of the researches on interpersonal conflicts has resulted in the casual manner in which conflicts are resolved today.

Keywords: Interpersonal conflicts, Individual differences, Organizational factors, Extra-organizational issues

Introduction

Interpersonal conflicts are quite common at workplace as we spend long hours in the offices dealing with boss, subordinates and peer. Broadly speaking, moderate levels of interpersonal conflicts are received as sign of healthy and dynamic work culture. However, higher incidences of interpersonal conflicts are viewed detrimental to individual, team and organizational effectiveness. At times, interpersonal conflicts may jeopardize the otherwise conducive environment at workplaces. Thus, the overall impact of interpersonal conflicts may aggregate into deteriorating organizational climate, organizational culture, team spirit, morale, motivation, and productivity.

Often the employees voluntarily quit the jobs as a result of unceasing interpersonal conflicts at the workplace even though he or she may not be affected directly with the continuous brawl at the shop floor or the offices. Interpersonal conflicts invariably have negative consequences for the organization in terms of higher employee turnover/attrition, loss of time in peacekeeping negotiations/counselling, withholding of efforts (both discretionary and routine) on the part of the employees, lack of organizational commitment and lack of trust. So the seemingly minor scuffles between two or more employees have the spiralling impact on the fortunes of the concerned organization. Managers can ignore the incidence of interpersonal conflicts at workplace only at the risk of blunting the competitive edge of the firms.

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Unfortunately, the interpersonal conflicts are generally handled by the managers in the most casual manner. They often prefer to resolve the interpersonal conflict as a peacemaker and the immediate purpose is to somehow douse the ‘fires’ engulfing both the parties. The managers hardly reflect on the roots of the mêlée. They focus on the individuals involved in the fracas. No wonder, most of the researches on interpersonal conflicts revolve around the conflict resolution styles of the managers as well as employees and the factors that might contribute/strengthen a particular conflict resolution style or the effectiveness of particular conflict resolution styles. There are only a few studies that actually examine the causes of interpersonal conflicts at the workplace and fewer researches on the antecedents of this menace. As result, the interpersonal conflicts remain a formidable feature in the firms despite the presence of some of the finest peacemakers.

This paper presents a comprehensive view on the antecedents of interpersonal conflicts at the workplace that would facilitate development of a holistic framework of conflict resolution based on the root causes rather than the individual incidents on a piecemeal basis. The antecedents of interpersonal conflicts have been classified into four dimensions viz. individual differences, interpersonal issues, organizational factors and extra-organizational issues.

Defining Interpersonal Conflicts
Generally speaking, interpersonal conflicts at workplace relate to disagreements, differences or incompatibility between an individual and his/her superiors, subordinates or peers (Rahim, 2001). Interpersonal conflicts may take the shape of task conflict when two or more organizational members disagree on their task or content issues or emotional conflict when two interacting social entities, while trying to solve a problem together, become aware that their feelings and emotions regarding some issues are incompatible (Rahim, 2001). Jehn (1997) has added a third dimension to interpersonal conflict typology by suggesting the occurrence of process conflict when the members differ on how task accomplishment should proceed in the work unit and who is responsible for what and how things should be delegated.

While scholars have tried to define interpersonal conflict in varied way, the essence of their scholarship is summarized in the preceding paragraph. For example, Schmidt & Kochan (1972) have defined conflict as the interference by one individual or group in the attempts by another individual or group to achieve a goal. According to Robey (1994), conflict may be defined as manifest disagreements among group members. Conflict is the perceived incompatibilities by parties of the views, wishes and desires that each holds (Jehn, 1992). Conflict is likely to develop where there is a mix of collective goals, coupled with managers’ self-interest, under conditions of interdependence (Ruekert and Walker, 1987). Further, interpersonal conflict is a dynamic process that occurs between interdependent parties as they experience negative emotional reactions to perceived disagreements and interference with the attainment of their goals (Barki & Hartwick, 2004). All the researchers in fact indicate similar things in different manner. For the purpose of this essay, we will stick to the definition given by Rahim who happens to be the most quoted scholar on the subject.

Antecedents of Interpersonal Conflicts
Conflicts may arise due to activities that are incongruent with needs and interests; incompatibility of behaviour; differences in attitudes and values; exclusive preferences in joint activities; contention for limited resources; and interdependence in the performance of functions or activities (Rahim, 2002). However, a holistic view on the antecedents of...
interpersonal conflict at workplace has not been taken in the extant literature on the subject so far. In this section, we have taken four types of potential antecedents viz. individual differences, interpersonal; issues, organizational factors, and extra-organizational issues that may be sources of interpersonal conflicts at workplace.

**Individual Differences**

Every employee or manager has a different personality. Individual differences reflect in the manner in which conflicts arise at workplace. Besides, individuals also differ in terms of attitudes, opinion, beliefs, culture, emotional stability, maturity, education, gender, language etc. Hence their responses to particular stimuli at workplace also vary. As a result, people across all levels in the offices or shop floor tend to be incompatible or hostile when they view a particular matter to undermine their position or negate their worldview or value system. In fact, disagreements emerging out of individual differences often assume emotional or moral overtones. For example, a disagreement about who is factually correct may easily turn into a bitter squabble over who is morally correct (Whetten & Cameron, 1991).

It is imperative to study how people are drawn towards interpersonal conflict thanks to their temperament, aggressiveness, emotional instability and other dimensions of individual differences. Current literature is generally silent on the issue although a few scholars have tried to study the relationship between various traits of Big Five Factor model of personality and interpersonal conflict. However, more empirical researches may establish a definite connection between individual differences and interpersonal conflicts at workplace or elsewhere.

**Interpersonal Issues**

The employees expect dignified interpersonal behaviour from their team leaders/managers based on mutual respect and equality. Similarly the supervisors also expect decent behaviour from the subordinates at the workplace. An absence of such behaviour generally leads to interpersonal conflicts. For example, hard influence tactics of the supervisors such as pressure, coercion, or authority may lead to a scenario of conflict (Tepper et al., 1998). On the other hand, refusal of the subordinates to carry out assigned tasks, using abusive language at the workplace, bullying the boss or the peers may also lead to interpersonal conflict between the boss and the concerned employees.

Psychological distance is another factor that leads to interpersonal conflict. When two managers are psychologically distant from each other, they are likely to approach problems differently, and disagree on important issues (Dawes & Massey, 2005). For example, managers sitting in different offices with restricted opportunities of face-to-face interactions may have different priorities and approaches to accomplish a task. They may also differ on resource allocation, resource utilization, use of technology, manpower requirements, project deadlines, etc.

Perceptual interface i.e. belief about another's intentions is a major factor that generally leads to interpersonal conflicts at workplace. According to Wall & Callister (1995), interpersonal conflicts arise when one party perceives that its interests are being opposed or negatively affected by another party. Perceptual interface is based on individual differences. It results in distrust, non-cooperation, withholding of efforts, withholding of information, and other regressive tactics. There may be other interpersonal issues contributing to workplace conflict and the researchers can very well attempt exploratory surveys on role of interpersonal issues as antecedent of workplace conflict.
Organizational Factors
There are several organizational factors which contribute to interpersonal personal conflicts at workplace. In this section we have discussed bureaucracy and departmentalization, dysfunctional leader-member exchange, perceived organizational injustice harassment and sexual abuse, and bullying at workplace as potential antecedents of workplace conflicts.

Bureaucracies and departmentalization have often been linked to stifling basic human instincts of independence and self-actualization, thus causing hostilities and negative emotions. The problem arises as the authority of making decisions, allocating resources, rewarding the employees for good performance and punishing them for missed deadlines or poor quality rest in those hands which are remotely placed as compared to the actual worksite. A sense of frustration and helplessness at the level of employees responsible for implementation of a project lead to interpersonal conflict as each one of the employees tries to look at the issue from his or her singular worldview sans any peacemaker at the helm. Higher degree of departmentalization prevents cooperation and undermines interdependence. Thus organizational structure with rigid hierarchies, specializations and centralization become source of interpersonal conflicts across all levels in the firm.

Interpersonal conflicts between the supervisor and subordinate may persist due to a dysfunctional leader-member exchange arising out of supervisors’ tendency to indulge in biased attributions. More specifically, in case the supervisor attributes negative outcomes to the incapacity and inefficiency of the subordinate as well as his lack of initiative, even the subordinate will react in a fitting manner in terms of non-cooperation, resentment, detachment and withdrawal. So the negative emotions both on the part of the supervisor and subordinate would continue to fuel interpersonal conflict for a longer period. Kim & Shapiro (2007) observed that the employees who were rudely (rather than politely) treated when receiving explanations for organizational decisions were more likely to engage in retaliation.

Perceived organizational injustice whether distributive, procedural or interactional are compelling antecedents of interpersonal conflicts at workplace. For example, unfavourable procedural justice could instigate the employees to not cooperate with organizational procedures, and consequently to a dilemma of compliance with formal rules (see Zoghbi-Manrique-de-Lara, 2009).

Harassment at workplace is a major antecedent of interpersonal conflicts. Harassment constitute all those acts that constantly torment, wear down, or frustrate a person, as well as all repeated behaviours that ultimately would provoke, frighten, intimidate or bring discomfort to the recipient (Brodsky, 1976). Examples of harassment are sexual abuse, physical abuse, name-calling, excessive work pressure etc. Harassment often culminates into interpersonal conflicts.

Bullying occurs when someone at work is systematically subjected to aggressive behaviour from one or more colleagues or superiors over a long period of time, in a situation where the target finds it difficult to defend himself or herself or to escape the situation (Einarsen, 1999). Examples of bullying include intimidation, exclusion, abuse, humiliation and insult aimed at denigrating the ego and identity of the victim. Bullying is a significant source of interpersonal conflict. Initially the victim quietly accepts the bullying as a routine affair. However, after
reaching a threshold of tolerance which varies from person to person, the victim retaliates with aggression or withdrawal.

Extra-organizational Issues
Conflict may occur even when group members do not have differences in goals, interests, or motivations (Steele, 2009). Marginal issues arising out of personal, intra-organizational or external elements which may not be directly connected to profession in any manner, have led to interpersonal conflicts (Bousari, et al 2009). For example, conflicts at home, disputes with spouse, differences with in-laws, social exclusion in the community, disputes with the neighbours, marital status, loneliness, etc. may trigger an interpersonal conflict at the workplace quite indirectly. However, this suggestion needs to be verified through empirical surveys.

Conclusion
It is assumed that there are four sets of antecedents of interpersonal conflict at workplace viz. individual differences, interpersonal issues, organizational factors and extra-organizational issues. While no single antecedent may be held responsible for triggering interpersonal conflicts at workplace, all the four sets of antecedent work in tandem towards eruption of a brawl. Even within different sets of antecedents, there are several sub-factors that interplay with each other leading to a full-fledged clash at the workplace.

This reflective essay is based on readings of extant literature on the subject and interactions/conversations with managers in varied sectors. So there is possibility of extending the study further by concerted efforts on developing a holistic model for explaining the antecedents of interpersonal conflicts at workplace and testing the same through empirical research. Moreover, each of the four sets of antecedents may be verified through empirical studies by discerning researchers.

References


Demographic Profiles as Determinants of Job Satisfaction in Indian Insurance Sector

Anita Singh*

Abstract

Growth of any organization depends on the employee willingness to achieve the objectives of the organization. The human resource of an organization play a crucial part and it becomes necessary and inevitable on the part of the management to ensure and nurture an atmosphere where the employees feel satisfied both with their work and with their standards of living. The HR strategies need to be molded according to the demographic profile of the employees in order to understand their drivers and motivators. In this research, efforts have been made to study the dependency of job satisfaction on the demographic profile of employees. The research is exploratory in nature and it has been carried out in the entire insurance sector.

Keywords: Job Satisfaction, Demographic profile, Tenure of job, Employee referrals

Introduction

Over the years Job satisfaction has been an area of research for scholars and researchers. Many studies have aimed to find out the factors which are responsible for increase or decrease of satisfaction level in employees. Many writers draw on Locke’s definition of job satisfaction: “...a pleasurable or positive emotional state resulting from the appraisal of one’s job or job experiences”. According to Gibson et al, (2000:352 - 353) job satisfaction may be defined as an individual’s expression of personal well-being associated with doing the job assigned. Job satisfaction depends on the demographic profile of employees. It is observed that tenure, age and gender play a vital role in increasing or decreasing job satisfaction level of employees. The basic reason may be that psychology of employees depends heavily on their demographic profiles. This study highlights the dependency of job satisfaction on age, gender, tenure of an employee and the dependency of employee referrals on job satisfaction.

Literature review

Job Satisfaction

Job satisfaction is simply how people feel about their jobs and different aspects of their jobs. It is the extent to which people like (satisfaction) or dislike (dissatisfaction) their jobs. (Spector, 1997) Three thousand studies had been done on job satisfaction alone by the time Locke prepared his study nearly 20 years ago. Edwin A. Locke’s Range of Affect Theory (1976) is arguably the most famous job satisfaction model. The main premise of this theory is that satisfaction is determined by a discrepancy between what one wants in a job and what one has in a job. Further, the theory states that how much one values a given facet of work (e.g. the degree of autonomy in a position) moderates how satisfied/dissatisfied one becomes when expectations are/aren’t met. When a person values a particular facet of a job, his satisfaction is

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more greatly impacted both positively (when expectations are met) and negatively (when expectations are not met), compared to one who doesn’t value that facet. According to him job satisfaction is “… a pleasurable or positive emotional state resulting from the appraisal of one’s job or job experience.” That is, it is the discrepancy between what an employee values and what the situation provides.

Smith et al. (1969, p. 6) suggested that “… job satisfaction are feelings or affective responses to facets of the situation.” Dawis and Lofquist (1984) defined job satisfaction as the result of the worker’s appraisal of the degree to which the work environment fulfills the individual’s needs. (Timothy A. Judge , 1998) There are four Core Self-evaluations that determine one’s disposition towards job satisfaction: self-esteem, general self-efficacy, locus of control, and neuroticism. This model states that higher levels of self-esteem (the value one places on his self) and general self-efficacy (the belief in one’s own competence) lead to higher work satisfaction. Having an internal locus of control (believing one has control over her/his own life, as opposed to outside forces having control) leads to higher job satisfaction. Finally, lower levels of neuroticism lead to higher job satisfaction.

These definitions, as Lease (1998) pointed out, are similar to other definitions where job satisfaction is viewed as the degree of an employee’s affective orientation toward the work role occupied in the organization (Bhatti Komal Khalid and Qureshi Tahir Masood 2007).

**Job Satisfaction and organizational performance**

Henry Ford summarized the connection between job satisfaction and organizational performance thus: The object of living is work. There is joy in work. This joy in work is job satisfaction. Lasting happiness comes from job satisfaction. Professional qualification facilitates empowerment. Empowerment is the encouragement and reward for the people for their effort. An employee possessing professional qualification is able to provide faster, accurate and quality service to the customer. He is able to take decisions himself. This sense of ability and competency increases the level of job satisfaction.

Michie and Sheehan-Quinn (2001) surveyed over 200 manufacturing firms in the UK to investigate the relationship between corporate performance and the use of flexible work practices, human resource systems and industrial relations. They found that 'low-road' practices - including short-term contracts, lack of employer commitment to job security, low levels of training and unsophisticated human resource practices - were negatively correlated with corporate performance. In contrast, they established a positive correlation between good corporate performances and 'high-road' work practices - 'high commitment' organizations or 'transformed' workplaces. They also found that HR practices are more likely to make a contribution to competitive success when introduced as a comprehensive package, or 'bundle' of practices.

**Job satisfaction and Work-Life balance**

According to a survey conducted by European Foundation for the Improvement of Living and Working Conditions (2007), there is an unclear relationship between working time and job satisfaction. Results indicated that there is a positive relationship between job satisfaction and working time flexibility, but a negative relationship between job satisfaction and overtime work. There is some relationship between work-life balance and job satisfaction.
Job satisfaction and retention
Measurement of job satisfaction is being used as a tool for applying employee retention techniques. Enhanced job satisfaction leads to a higher level of employee retention. A stable and committed workforce ensures successful knowledge transfer, sharing, and creation—a key to continuous improvement, innovation, and knowledge-based total customer satisfaction.

Tyilana, Xolani Enoch, (2005) cited in his study that Kirkman and Shapiro (2001:557) maintain that job satisfaction and organizational commitment are important because they have, in turn, been associated with other positive organizational outcomes. For example, Kirkman and Shapiro cite other authors who assert that employees who are more satisfied with their jobs are also absent less (Hackett & Guion, 1985) and less likely to leave (Carsten & Spector, 1987), and they are more likely to display organizational citizenship behavior (Organ & Konovsky, 1989) and to be satisfied with their lives overall (Judge & Watanabe, 1993). Employees who are more committed are less likely to intend to leave their jobs (Mathieu & Zajac, 1990) or to actually leave (Netemeyer, Burton, & Johnston, 1995); less likely to experience stress (Begley & Czajka, 1993); and more likely to perform well (Mathieu & Zajac, 1990) and behave prosocially (O'Reilly & Chatman, 1986). Internationally, commitment has been linked to lower intent to leave in India (Agarwal, 1993) and Japan (Marsh & Mannari, 1977) and to higher organizational citizenship behavior in Israel (Koslowsky, Caspy, & Lazar, 1988) and New Zealand (Inkson, 1977).

Job satisfaction and demographic profile
Sarker (2003) the search for an understanding of the causes of job satisfaction or dissatisfaction is an ongoing area of interest for social scientists and managers; the premise being that satisfied workers will be more productive and remain with the organization longer, whereas dissatisfied workers will be less productive and more inclined to quit. Early studies (Myers, 1934; Maslow, 1954; Herzberg et al., 1959) concentrated on the importance of intrinsic and extrinsic motivation and rewards towards satisfaction, but few paid adequate attention to the impact of demographic and occupational variables. More recent research has investigated differences in job satisfaction levels according to age (Ang et al., 1993; Oshagbemi, 1998; Luthans and Thomas, 1989; Groot and Maassen van den Brink, 1999; Hickson and Oshagbemi, 1999) or tenure (Hickson and Oshagbemi, 1999; Oshagbemi, 2000a). Studies that report on the impact of the interaction between age and tenure on job satisfaction are relatively few (Gibson and Klein, 1970; Bamundo and Kopelman, 1980; Lee and Wilber, 1985; Luthans and Thomas, 1989). Therefore, tenure and age need to be considered simultaneously for better understanding of their effect on the level of job satisfaction.

Lambert et al. (2001) age, gender, educational level, and tenure have been theorized and empirically shown to be significant predictors of job satisfaction (Mobley et al., 1979; Williams & Hazer, 1986) and/or turnover, including intention to leave (Mobley, 1982; Mobley et al., 1978, 1979). Other demographic characteristics, such as race or marital status have been found to be either poor or inconsistent predictors of job satisfaction and/or turnover (Camp, 1994; Mueller, Boyer, Price & Iverson, 1994; Wright & Saylor, 1992). In addition, demographic characteristics are commonly included in job satisfaction studies as control variables.
Research methodology

The main objective of this study was to elucidate the dependency of job satisfaction on the gender, age and tenure of employees and also finding the dependency of employee referrals on Job Satisfaction of the employees in the insurance sector. This study is exploratory in nature and through this study the researcher has tried to find out the factors which satisfy male and female employees and to answer the research question as to whether older employees are more satisfied than their younger counterparts. The researcher has also tried to examine whether the tenure of an employee i.e. his/her period of service has any impact on his/her job satisfaction level and whether employee referral has any effect on the satisfaction an employee derives from his job. In this study Likert scale questionnaire has been used. The questionnaire was developed after extensive literature review (Murray Richard A. 1999; Oswald Andrew 2002; Bhatti Komal Khalid and Qureshi Tahir Masood 2007; Mehta Seema and Singh Tarika 2007; Employee Job Satisfaction & Retention Survey 2007 / 2008). There were twenty-nine questions based on Likert scale and for the veridical research work demographic data of the respondents including name of the organization, their designation, age, gender and their tenure with the organization was also collected. The questions were based on parameters like leadership, team work, work environment, authority, training and development requirements and many more similar parameters to ascertain the Job satisfaction agents. The respondents were requested to answer all questions up to the best of their knowledge with reference to the working practices implemented in their respective organizations. They had to rate each of the question on a 5-point scale with 1 being Strongly Agree to 5 being Strongly Disagree. The target sample of this study was Sales Managers of Life Insurance companies. A total of 10 Life Insurance companies were selected for this study. In order to draw an even sample, 15 questionnaires were distributed in each of the 10 selected companies so that the total sample size came out to be 150 respondents, consisting of Sales mangers.

Tools used

Non-Parametric tests namely Cross tabs, Mann-Whitney test and regression have been used to study the impact of various variables on job satisfaction level.

Results of Mann-Whitney test for Gender and Job satisfaction in insurance sector

H0: There is no significant difference between the gender and job satisfaction in insurance sector

H1: There is a significant difference between the gender and job satisfaction in insurance sector

In order to test the difference in Job satisfaction of males and females a non-parametric test; Mann-Whitney was applied on the data and it was found that the Asymp. Sig. value is .000 which is less than 0.05 hence the null hypothesis was rejected (Refer Appendix- A; Table 1.2). This shows that there is a significant difference in the Job satisfaction of males and females. It is seen that the mean rank and the sum of ranks of females is more (89.95) then males (61.05) (Refer Appendix- A; Table 1.1) which leads us to conclude that females are more satisfied in their jobs in the insurance sector than males. It can also be concluded from table 1.4, 1.5, 1.6 and 1.7 ( Appendix- A) that there is difference in the satisfaction of males and females particularly on four major factors namely salary being in compliance with abilities, salary being equitable with competitors in the industry, receiving of fringe benefits and helpful superiors. It is seen from table 1.3( Appendix- A) that females are more satisfied with the fringe benefits that they receive from their company and they also feel that their salary is equitable with the
competitors in the industry but they are dissatisfied on the presence of helpful superiors. They feel that they cannot go to their superiors for work related problems. Moreover they are dissatisfied with the salary they receive because they feel that they are not being paid in compliance to their abilities. This highlights a controversial aspect of pay packages because males on the other hand feel that they are being paid according to their abilities and they also feel that they can go to their superiors for work related problems. This highlights the role of sexual discrimination in the insurance sector.

Results of Crosstabs for relationship between Job satisfaction and referring a friend to work in the same company

\[ H_0: \text{Referring a friend to work in the company is dependent on Job satisfaction.} \]
\[ H_1: \text{Referring a friend to work in the company is independent of the Job satisfaction.} \]

In order to test whether employee referral is dependent on job satisfaction of an employee or not regression analysis was done. For a good dependency value of R square should be more than .70 but it was observed that the value of R square is .197 (Refer Appendix- A; Table 1.9) which implies that employee referral depends upon job satisfaction with only 19.7% dependency. This low dependency suggests that employee referral is independent of job satisfaction. In order to test that model’s appropriateness for this test the significant value is seen which is .000 which is less than 0.05 and hence the model is fit for testing this hypothesis. (Refer Appendix- A; Table 1.10). From this test it can be concluded that even if a person is satisfied to work in an organization still he may or may not refer a friend to apply in his company because employee referral does not depends on job satisfaction of an employee.

Results of Crosstabs for relationship between age of a person and Job satisfaction

\[ H_0: \text{There is no significant difference between age of a person and job satisfaction.} \]
\[ H_1: \text{There is a significant difference between age of a person and job satisfaction.} \]

Several researchers reported that in industrial setting job satisfaction and job involvement increases with age and as a result occupational stress would decreases (Cherrington, 1979) therefore it was needed to study the impact of age on job satisfaction in insurance sector therefore cross-tabulation was done between age of a person and his job satisfaction. It was observed that job satisfaction increased with increase in age. It was observed that the Asymp. Sig. value was 0.002 which is less than 0.05 and hence the null hypothesis is rejected so there is a significant difference between age of a person and job satisfaction. ((Refer Table 1.12, 1.13, 1.14; Appendix A). As already mentioned job satisfaction increases with increase in age. From Table 1.14 it can be seen that maximum number of respondents who agree or strongly agree that they are satisfied with their job lie in the age group of above 40 years. The Table also suggests that a total of 78 % respondents with the age above 40 years were satisfied with their job which is highest.

The age and job satisfaction curve is U-shaped (Refer to Figure 1; Appendix- B). It is high (62%) at 22-26 years of age and declines sharply between 26+ -30 years, slightly rises between 30+ -35 years and then rises from there on till above 40 years. The respondents in the young adult group (26+ -35 years) must have put relatively short period in service. They may be getting adjusted to their jobs as well as to the demands and adjustments of young married life. Perhaps the reduced job satisfaction in young adults might have resulted from their occupying lower status positions in organization as a result of which they have minimal organizational
power and little control over work demands. Under such circumstances it may be expected that, compared to the middle aged who are more or less settled in their personal as well as work life’s, young adults found their jobs much more stressful. This is in corroboration with the previous studies (Oswald Andrew 2002) and hence it can be said that as age increases job satisfaction in turn increases which leads to decrease in stress level of an individual.

Results of Crosstabs for relationship between tenure of a person and Job satisfaction

\( H_0: \) There is no significant difference between tenure of a person and his job satisfaction.

\( H_1: \) There is a significant difference between tenure of a person and his job satisfaction.

In order to examine the impact of Job satisfaction in insurance sector on the tenure of a person chi-square was applied with the help of cross tabulation between tenure and job satisfaction. It was observed that the value of Asymp. Sig. was 0.008 which is less than 0.05 and hence the null hypothesis is rejected which implies that there is a significant difference between job satisfaction and tenure of a person. (Refer to Table 1.15, 1.16, 1.17; Appendix A). Table 1.17 shows that in terms of percentages maximum job satisfaction occur in the tenure range of 3+ years to 6 years. It can also been seen in Figure 2 (Appendix B) which shows that job satisfaction increases till the tenure of 3+ years to 6 years but then dips for people with tenure of 6+ years to 10 years but then again sharply rises for employees with tenure of more than 10 years. One of the main reasons for this peculiar behavior may be that job satisfaction increases when a person sticks with the company for longer duration and company implements retention techniques but after the tenure of 6 years, employees might be looking for newer avenues with better opportunities so their satisfaction level dips. But if the company is able to retain its talent force for more than 10 years then employees become stable and contended with their work and hence the sharp rise in satisfaction level.

Conclusion

After various analyses it can fairly be concluded that job satisfaction in the insurance sector is dependent on the demographic profile of an employee. Females came out to be more satisfied with their jobs as compared to their male counterparts but there were factors like salary, helpful superiors and fringe benefits which brought about the difference in satisfaction level of males and females. It was also seen that tenure and age of an employee play a vital role in determining the satisfaction of an employee. It was also observed that referring a friend to work for an organization and job satisfaction are two different aspects and both are independent of each other. In short it can said that employee psychology is an area which must be understood well by the mangers in order to ensure the satisfaction of their employees and understanding the demographic profiles can be of major help to managers while developing strategies for employees.

References


Murray, Richard A. (1999). Job satisfaction of professional and paraprofessional library staff at the University of North Carolina at Chapel Hill. A Master’s paper for the M.S. in Library Science degree, University of North Carolina, Chapel Hill.


Appendix-A

Mann-Whitney Test

Table 1.1

<table>
<thead>
<tr>
<th>Gender</th>
<th>N</th>
<th>Mean Rank</th>
<th>Sum of Ranks</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am satisfied to work for this company</td>
<td>75</td>
<td>89.95</td>
<td>6746.50</td>
</tr>
<tr>
<td>&quot;female&quot;</td>
<td>75</td>
<td>61.05</td>
<td>4578.50</td>
</tr>
<tr>
<td>Total</td>
<td>150</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 1.2

<table>
<thead>
<tr>
<th>Test Statistics</th>
<th>I am satisfied to work for this company</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mann-Whitney U</td>
<td>1728.50</td>
</tr>
<tr>
<td>Wilcoxon W</td>
<td>4578.50</td>
</tr>
<tr>
<td>Z</td>
<td>-4.256</td>
</tr>
<tr>
<td>Asymp. Sig. (2-tailed)</td>
<td>.000</td>
</tr>
</tbody>
</table>

a. Grouping Variable: Gender
Table 1.3

Ranks

<table>
<thead>
<tr>
<th></th>
<th>Gender</th>
<th>N</th>
<th>Mean Rank</th>
<th>Sum of Ranks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Know what is expected from me</td>
<td>female</td>
<td>75</td>
<td>73.15</td>
<td>5486.00</td>
</tr>
<tr>
<td></td>
<td>male</td>
<td>75</td>
<td>77.85</td>
<td>5839.00</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>150</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clear understanding of goals and strategies</td>
<td>female</td>
<td>75</td>
<td>74.71</td>
<td>5603.00</td>
</tr>
<tr>
<td></td>
<td>male</td>
<td>75</td>
<td>76.29</td>
<td>5722.00</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>150</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Targets are realistic</td>
<td>female</td>
<td>75</td>
<td>78.67</td>
<td>5900.50</td>
</tr>
<tr>
<td></td>
<td>male</td>
<td>75</td>
<td>72.33</td>
<td>5424.50</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>150</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Get opportunities to undertake interesting/challenging projects</td>
<td>female</td>
<td>75</td>
<td>73.28</td>
<td>5496.00</td>
</tr>
<tr>
<td></td>
<td>male</td>
<td>75</td>
<td>77.72</td>
<td>5829.00</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>150</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Get opportunities to learn and grow</td>
<td>female</td>
<td>75</td>
<td>75.28</td>
<td>5646.00</td>
</tr>
<tr>
<td></td>
<td>male</td>
<td>75</td>
<td>75.72</td>
<td>5679.00</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>150</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Receive frequent training for skill enhancement</td>
<td>&quot;female&quot;</td>
<td>75</td>
<td>71.92</td>
<td>5394.00</td>
</tr>
<tr>
<td></td>
<td>&quot;male&quot;</td>
<td>75</td>
<td>79.08</td>
<td>5931.00</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>150</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Get adequate freedom to do my job efficiently</td>
<td>&quot;female&quot;</td>
<td>75</td>
<td>76.08</td>
<td>5706.00</td>
</tr>
<tr>
<td></td>
<td>&quot;male&quot;</td>
<td>75</td>
<td>74.92</td>
<td>5619.00</td>
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<tr>
<td></td>
<td>Total</td>
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<td></td>
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<tr>
<td>Salary is in compliance with my ability and competence</td>
<td>&quot;female&quot;</td>
<td>75</td>
<td>65.40</td>
<td>4905.00</td>
</tr>
<tr>
<td></td>
<td>&quot;male&quot;</td>
<td>75</td>
<td>85.60</td>
<td>6420.00</td>
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<td></td>
<td>Total</td>
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<td></td>
</tr>
<tr>
<td>Salary is equitable with competitors in the industry</td>
<td>&quot;female&quot;</td>
<td>75</td>
<td>84.13</td>
<td>6310.00</td>
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<tr>
<td></td>
<td>&quot;male&quot;</td>
<td>75</td>
<td>66.87</td>
<td>5015.00</td>
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<td></td>
<td>Total</td>
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<tr>
<td>Receive fringe benefits from the company</td>
<td>&quot;female&quot;</td>
<td>75</td>
<td>84.37</td>
<td>6327.50</td>
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<tr>
<td></td>
<td>&quot;male&quot;</td>
<td>75</td>
<td>66.63</td>
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<tr>
<td></td>
<td>Total</td>
<td>150</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work atmosphere is open and friendly</td>
<td>female</td>
<td>75</td>
<td>80.83</td>
<td>6062.00</td>
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<tr>
<td></td>
<td>male</td>
<td>75</td>
<td>70.17</td>
<td>5263.00</td>
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<td>Gender</td>
<td></td>
<td></td>
<td>Count</td>
</tr>
<tr>
<td>------</td>
<td>--------</td>
<td>---</td>
<td>---</td>
<td>------</td>
</tr>
<tr>
<td>Treated with respect by the management and peers</td>
<td></td>
<td></td>
<td></td>
<td>75</td>
</tr>
<tr>
<td></td>
<td>female</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>male</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Good working relationship with peers</td>
<td></td>
<td></td>
<td></td>
<td>75</td>
</tr>
<tr>
<td></td>
<td>female</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>male</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Team spirit exists among my co-workers</td>
<td></td>
<td></td>
<td></td>
<td>75</td>
</tr>
<tr>
<td></td>
<td>female</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>male</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Performance is fairly appraised by my superiors</td>
<td></td>
<td></td>
<td></td>
<td>75</td>
</tr>
<tr>
<td></td>
<td>female</td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>male</td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>Total</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work is periodically reviewed and feedbacks are given for improvement</td>
<td></td>
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<td></td>
<td>75</td>
</tr>
<tr>
<td></td>
<td>female</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Receive recognition and incentives for personal accomplishments/initiatives</td>
<td></td>
<td></td>
<td></td>
<td>75</td>
</tr>
<tr>
<td></td>
<td>female</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>male</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manager is a competent person</td>
<td></td>
<td></td>
<td></td>
<td>75</td>
</tr>
<tr>
<td></td>
<td>female</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>male</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Superiors communicate freely and frequently</td>
<td></td>
<td></td>
<td></td>
<td>75</td>
</tr>
<tr>
<td></td>
<td>female</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>male</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supervisor invites ideas/inputs for decision making</td>
<td></td>
<td></td>
<td></td>
<td>75</td>
</tr>
<tr>
<td></td>
<td>female</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>male</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Superior encourages my career development</td>
<td></td>
<td></td>
<td></td>
<td>75</td>
</tr>
<tr>
<td></td>
<td>female</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>male</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manager does not seems to care about me</td>
<td></td>
<td></td>
<td></td>
<td>75</td>
</tr>
<tr>
<td></td>
<td>female</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>male</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Can go to my supervisor for help on having work related problems</td>
<td></td>
<td></td>
<td></td>
<td>75</td>
</tr>
<tr>
<td></td>
<td>female</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>male</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Good internal co-ordination between various departments</td>
<td></td>
<td></td>
<td></td>
<td>75</td>
</tr>
<tr>
<td></td>
<td>female</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>male</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


Table 1.4

<table>
<thead>
<tr>
<th>Know what is expected from me</th>
<th>Clear understanding of goals and strategies</th>
<th>Targets are realistic</th>
<th>Test Statistics</th>
<th>Get opportunities to learn and grow</th>
<th>Receive frequent training for skill enhancement</th>
<th>Get adequate freedom to do my job efficiently</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mann-Whitney U</td>
<td>2636.000</td>
<td>2753.000</td>
<td>2574.500</td>
<td>2646.000</td>
<td>2796.000</td>
<td>2544.000</td>
</tr>
<tr>
<td>Wilcoxon W</td>
<td>5486.000</td>
<td>5603.000</td>
<td>5424.500</td>
<td>5496.000</td>
<td>5646.000</td>
<td>5394.000</td>
</tr>
<tr>
<td>Z</td>
<td>-.872</td>
<td>-.269</td>
<td>-.934</td>
<td>-.696</td>
<td>-.071</td>
<td>-1.049</td>
</tr>
<tr>
<td>Asymp. Sig. (2-tailed)</td>
<td>.383</td>
<td>.788</td>
<td>.350</td>
<td>.487</td>
<td>.944</td>
<td>.294</td>
</tr>
</tbody>
</table>

a Grouping Variable: Gender
Table 1.5

Test Statistics

<table>
<thead>
<tr>
<th></th>
<th>Salary is in compliance with my ability and competence</th>
<th>Salary is equitable with competitor in the industry</th>
<th>Receive fringe benefits from the company</th>
<th>Work atmosphere is open and friendly</th>
<th>Treated with respect by the management and peers</th>
<th>Good working relationship with peers</th>
<th>Team spirit exists among my coworkers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mann-Whitney U</td>
<td>2055.000</td>
<td>2165.000</td>
<td>2147.500</td>
<td>2413.000</td>
<td>2376.500</td>
<td>2502.500</td>
<td>2352.000</td>
</tr>
<tr>
<td>Wilcoxon W</td>
<td>4905.000</td>
<td>5015.000</td>
<td>4997.500</td>
<td>5263.000</td>
<td>5226.500</td>
<td>5352.500</td>
<td>5202.000</td>
</tr>
<tr>
<td>Z</td>
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<td>-2.517</td>
<td>-2.589</td>
<td>-1.569</td>
<td>-1.710</td>
<td>-1.220</td>
<td>-1.799</td>
</tr>
<tr>
<td>Asymp. Sig. (2-tailed)</td>
<td>.003</td>
<td>.012</td>
<td>.010</td>
<td>.117</td>
<td>.087</td>
<td>.223</td>
<td>.072</td>
</tr>
</tbody>
</table>

a Grouping Variable: Gender

Table 1.6

Test Statistics (a)

<table>
<thead>
<tr>
<th></th>
<th>Performance is fairly appraised by my superiors</th>
<th>Work is periodically reviewed and feedbacks are given for improvement</th>
<th>Receive recognition and incentives for personal accomplishments/initiatives</th>
<th>Manager is a competent person</th>
<th>Superiors communicate freely and frequently</th>
<th>Supervisor invites ideas/input for decision making</th>
<th>Superior encourages my career development</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mann-Whitney U</td>
<td>2791.000</td>
<td>2649.500</td>
<td>2533.000</td>
<td>2593.000</td>
<td>2614.500</td>
<td>2803.500</td>
<td>2505.500</td>
</tr>
<tr>
<td>Wilcoxon W</td>
<td>5641.000</td>
<td>5499.500</td>
<td>5383.000</td>
<td>5443.000</td>
<td>5464.500</td>
<td>5653.500</td>
<td>5355.500</td>
</tr>
<tr>
<td>Z</td>
<td>-.087</td>
<td>-.642</td>
<td>-1.103</td>
<td>-1.853</td>
<td>-.766</td>
<td>-.038</td>
<td>-1.187</td>
</tr>
<tr>
<td>Asymp. Sig. (2-tailed)</td>
<td>.931</td>
<td>.521</td>
<td>.270</td>
<td>.394</td>
<td>.444</td>
<td>.970</td>
<td>.235</td>
</tr>
</tbody>
</table>

a Grouping Variable: Gender
Table 1.7

<table>
<thead>
<tr>
<th></th>
<th>Manager does not seem to care about me</th>
<th>Can go to my supervisor for help on having work related problems</th>
<th>Good internal coordination between various departments</th>
<th>Job security does not exist within the company</th>
<th>Company does not provide work flexibility with respect to family responsibilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mann-Whitney U</td>
<td>2750.500</td>
<td>2195.000</td>
<td>2616.500</td>
<td>2796.000</td>
<td>2713.500</td>
</tr>
<tr>
<td>Wilcoxon W</td>
<td>5600.500</td>
<td>5045.000</td>
<td>5466.500</td>
<td>5646.000</td>
<td>5563.500</td>
</tr>
<tr>
<td>Z</td>
<td>-.240</td>
<td>-.2395</td>
<td>-.761</td>
<td>-.064</td>
<td>-.389</td>
</tr>
<tr>
<td>Asymp. Sig. (2-tailed)</td>
<td>.811</td>
<td>.017</td>
<td>.446</td>
<td>.949</td>
<td>.697</td>
</tr>
</tbody>
</table>

a. Grouping Variable: Gender

Regression

Table 1.8

<table>
<thead>
<tr>
<th>Model</th>
<th>Variables Entered/Removed</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I am satisfied to work for this company</td>
<td>Enter</td>
</tr>
</tbody>
</table>

a. All requested variables entered.

b. Dependent Variable: I would refer a job seeking friend to apply for a job in this company
Table 1.9

Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.444a</td>
<td>.197</td>
<td>.192</td>
<td>1.00159</td>
</tr>
</tbody>
</table>

*a. Predictors: (Constant), I am satisfied to work for this company

Table 1.10

ANOVA

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>1</td>
<td>36.523</td>
<td>36.407</td>
<td>.000a</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>148</td>
<td>148.470</td>
<td>1.003</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>149</td>
<td>184.993</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*a. Predictors: (Constant), I am satisfied to work for this company

b. Dependent Variable: I would refer a job seeking friend to apply for a job in this company

Table 1.11

Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>1.593</td>
<td>.197</td>
<td>8.090</td>
</tr>
<tr>
<td></td>
<td>I am satisfied to work for this company</td>
<td>.432</td>
<td>.072</td>
<td>.444</td>
</tr>
</tbody>
</table>

*a. Dependent Variable: I would refer a job seeking friend to apply for a job in this company
## Table 1.12
### I am satisfied to work for this company * Age Crosstabulation

<table>
<thead>
<tr>
<th>Age</th>
<th>22-26 years</th>
<th>26+ -30 years</th>
<th>30+ -35 years</th>
<th>35+ -40 years</th>
<th>Above 40 years</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am satisfied to work for this company</td>
<td>strongly agree</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>8</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>agree</td>
<td>11</td>
<td>12</td>
<td>14</td>
<td>12</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>neutral</td>
<td>4</td>
<td>8</td>
<td>5</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>disagree</td>
<td>4</td>
<td>17</td>
<td>5</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>strongly disagree</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>21</td>
<td>41</td>
<td>28</td>
<td>28</td>
<td>32</td>
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</tbody>
</table>

## Table 1.13
### Chi-Square Tests

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>36.864(a)</td>
<td>16</td>
<td>.002</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>35.591</td>
<td>16</td>
<td>.003</td>
</tr>
<tr>
<td>Linear-by-Linear Association</td>
<td>11.305</td>
<td>1</td>
<td>.001</td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>150</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## Table 1.14
### Percentage of satisfied employees according to age group

<table>
<thead>
<tr>
<th>Age</th>
<th>22-26 years</th>
<th>26+ -30 years</th>
<th>30+ -35 years</th>
<th>35+ -40 years</th>
<th>Above 40 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am satisfied to work for this company</td>
<td>strongly agree</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>agree</td>
<td>11</td>
<td>12</td>
<td>14</td>
<td>12</td>
<td>10</td>
</tr>
<tr>
<td>Total respondents</td>
<td>21</td>
<td>41</td>
<td>28</td>
<td>28</td>
<td>32</td>
</tr>
<tr>
<td>% of satisfied employees</td>
<td>62%</td>
<td>37%</td>
<td>57%</td>
<td>71%</td>
<td>78%</td>
</tr>
</tbody>
</table>

95
Table 1.15
Chi-Square Tests

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>38.574(a)</td>
<td>20</td>
<td>.008</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>38.035</td>
<td>20</td>
<td>.009</td>
</tr>
<tr>
<td>Linear-by-Linear</td>
<td>5.056</td>
<td>1</td>
<td>.025</td>
</tr>
<tr>
<td>Association</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>150</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 1.16
I am satisfied to work for this company * Tenure Cross-tabulation

<table>
<thead>
<tr>
<th>I am satisfied to work for this company</th>
<th>Less than 6 months</th>
<th>6+ months - 12 months</th>
<th>1+ year - 3 year</th>
<th>3+ year - 6 year</th>
<th>6+years - 10 year</th>
<th>More than 10 years</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>strongly agree</td>
<td>1</td>
<td>7</td>
<td>2</td>
<td>4</td>
<td>2</td>
<td>14</td>
<td>30</td>
</tr>
<tr>
<td>agree</td>
<td>8</td>
<td>17</td>
<td>14</td>
<td>8</td>
<td>8</td>
<td>4</td>
<td>59</td>
</tr>
<tr>
<td>neutral</td>
<td>3</td>
<td>9</td>
<td>4</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>22</td>
</tr>
<tr>
<td>disagree</td>
<td>9</td>
<td>7</td>
<td>7</td>
<td>4</td>
<td>3</td>
<td>4</td>
<td>34</td>
</tr>
<tr>
<td>strongly disagree</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td>21</td>
<td>42</td>
<td>27</td>
<td>17</td>
<td>17</td>
<td>26</td>
<td>150</td>
</tr>
</tbody>
</table>
Table 1.17
Percentage of Satisfied employees according to their tenure

<table>
<thead>
<tr>
<th>Tenure</th>
<th>Less than 6 months</th>
<th>6+ months-12 months</th>
<th>1+ year - 3 year</th>
<th>3+ year - 6 year</th>
<th>6+years-10 year</th>
<th>More than 10 years</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am satisfied strongly agree</td>
<td>1</td>
<td>7</td>
<td>2</td>
<td>4</td>
<td>2</td>
<td>14</td>
<td>30</td>
</tr>
<tr>
<td>I am satisfied agree</td>
<td>8</td>
<td>17</td>
<td>14</td>
<td>8</td>
<td>8</td>
<td>4</td>
<td>59</td>
</tr>
<tr>
<td>Total no. of respondents % of satisfied respondents</td>
<td>21</td>
<td>42</td>
<td>27</td>
<td>17</td>
<td>17</td>
<td>26</td>
<td>150</td>
</tr>
<tr>
<td>% of satisfied respondents</td>
<td>42.9%</td>
<td>57%</td>
<td>59%</td>
<td>70.6%</td>
<td>58.8%</td>
<td>69.2%</td>
<td></td>
</tr>
</tbody>
</table>
Appendix-B

Figure 1
Line graph showing relationship between Job satisfaction and age of employees

![Line graph showing relationship between Job satisfaction and age of employees](image1.png)

Figure 2
Line graph showing relationship between Job satisfaction and Tenure of employees

![Line graph showing relationship between Job satisfaction and Tenure of employees](image2.png)