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Mathew J. Manimala

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Adjacent to School of Management Studies
University of Hyderabad Campus
Central University Post Office
Hyderabad - 500 046, India
Tel : 91-40-64543774/5226
E-mail : amdisa@amdisa.org
Website : www.amdisa.org

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Motivation, Performance and Satisfaction Among University Teachers: Comparing Public and Private Sectors in Pakistan and Malaysia

Seema Munaf *

The research aims to determine the difference in performance, achievement motivation and job satisfaction of teaching faculties of selected private and public sector higher educational institutions of Pakistan and Malaysia, which are countries representing South/South-East Asia in cross-cultural perspective. The sample consisted of 120 Heads of the departments and teaching faculties of Pakistan (N = 60) and Malaysia (N = 60). With the consent of the Vice Chancellors/ Registrars/Deans of the faculties, the Heads of the Department (HODs) were requested to rate the performance of their teaching faculty on University Teacher's Evaluation Rating Questionnaire (UTERQ). Then two senior and regular teachers from each teaching faculty of the department completed Personal Information Form following Costello Achievement Motivation Scale (CAMS, adapted English version by Misra and Srivastava, 1990) and Job Satisfaction Scale (Singh and Sharma, 1999). Scoring was made according to the standard procedures as mentioned in the manuals. In order to treat the scores in statistical terminology, t-test was applied. The results indicate that when comparison was made separately between private and public higher educational institutions of Pakistan and Malaysia, the achievement motivation of teaching faculties of Malaysian private and public sector is higher than that of Pakistan. Similarly, the performance of public sector Malaysian teaching faculties seems to be better than public sector Pakistani faculties, although their evaluation mean score fall in the good range. However, the performance of private sector teachers of Pakistan and Malaysia do not differ. Furthermore, Pakistani public sector faculties seems to be more satisfied with their teaching jobs than Pakistani private sector teachers, although their performance and achievement motivation are alike. Whereas Malaysian public sector faculties not only seem to perform better than private sector Malaysian teachers but they are also more satisfied with their teaching profession than the latter group, regardless of similarity in their achievement motivation.

INTRODUCTION

In higher educational institutions, teachers play an important role in devel-

opment of motivation in students to strive for higher grades. Their guidance, suggestions and involvement in administrative

* Professor, Institute of Clinical Psychology, University of Karachi, Pakistan. E-mail: drseemamunaf@hotmail.com

activities help management of educational institutions to reach their goals of accomplishment and having good national and international standing.

Teachers or any other employee's attitude towards their work can be best measured through their work performance, achievement, motivation and job satisfaction. As there are two main types of higher educational institutions, public university and private university, the main focus, especially in educational research, is on the grades of students in order to formulate ranking of particular private or public sector universities. Whether it is educational institution or any other organization, the factors responsible for better accomplishment of employees are somewhat similar. Different theories came forward to give answer to reasons behind high and low functioning of the personnel.

What are the factors responsible for better performance, job satisfaction and enhancement of achievement motivation are some of the questions, for which different theorists came forward to give answers. Starting from the intrinsic or extrinsic motives for better performance, gradually they moved towards content theories of work motivation—Maslow's Hierarchy of Needs, Herzberg's Two-Factor Theory of Motivation, Aldefer's ERG Theory, Vroom's Expectancy Theory of Work Motivation, The Porter-Lawler Multi-variable Model, Adams Equity Theory of Work Motivation, Organization Justice Theory, Control Theory and Agency Theory emphasized on causes of work environment motivation, job satisfaction and performance in one way or the other.

Then innumerable theories came forward emphasizing leadership style as the core issue for the development of high level of employee's performance, accomplishment, achievement and job satisfaction. They stressed on manager/supervisor's need to demonstrate particular management style which is directly and positively related to employee's satisfaction on the job. Mukherjee (2004) stated that, "there are certain positive and negative leader attributes which are found to be universally true across cultures." Unfortunately, less attention is given to make cross-cultural comparison of various dependent variables resulting from management in educational system particularly in the private and public sector universities of South/South-East Asia. Hence, there is a need to conduct cross-cultural research comparing performance, achievement motivation and job satisfaction of teaching faculties of private and public sectors. This would help us to plan future research of finding causes of the difference as there is already dearth of research in this particular area in the Asian region.

Due to scarce of researches related to performance, achievement motivation and job satisfaction of teaching faculty of two sectors of higher education, this section focuses on teacher's performance, achievement motivation and job satisfaction with special attention to cross-cultural perspective and private and public higher education in Pakistan and Malaysia. Then, aims and objectives have been identified and the hypotheses of the research have been discussed.

TEACHERS' PERFORMANCE,
ACHIEVEMENT MOTIVATION
AND JOB SATISFACTION WITH
SPECIAL REFERENCE TO CROSS-
CULTURAL PERSPECTIVE AND
PRIVATE AND PUBLIC HIGHER
EDUCATION IN PAKISTAN AND
MALAYSIA

In education, need for achievement can be seen in teaching faculty through their interest in taking class in time, taking extra efforts to complete course, bring new and innovative ideas to class in order to motivate students towards studies and support management through their active participation in administrative work. In higher education, such a faculty or individual teacher involved in research brings satisfaction to them due to its accomplishment. If they are promoted to the position of the HOD, they appreciate new ideas, trust their subordinates, set higher but attainable goals with efforts and also expect from their teaching faculty to be achievement-oriented. Whether it is faculty of private or public sector, if they have higher achievement motivation and come with novel attainable ideas then the chairperson should accept it. The proper management of both the sectors should have positive implications on performance, achievement motivation and job satisfaction of its faculties. Depending on difference of management in two sectors, there can be difference in its impact. For example, Solomon (1986) found private sector managers to be more satisfied than managers from public organizations. Establishment of private sectors and privatization policy indicates that it does have positive consequences. The

Bangladesh government has also strengthened its privatization program (Siddiqui, 1994). However, Kumar and Acharnamba (1993) found administrative staffs of public sector are more satisfied than private sectors. On the other hand, Scheider and Vaught (1993a) found that there is no significant difference in job satisfaction between the employees of two sectors.

Concerning implication in view of Koh *et al.* (1995), combination of leadership style facilitates to predict organizational commitment, organizational citizenship behavior, and teacher satisfaction. Contrary to it, the work of Rao and Sridhar (2003) indicate that there is no major effect of management on the condition of job satisfaction of teachers. However, not specific to any educational sector, Lackritz (2004) exploring burnout among university faculty found that it is significantly correlated with numbers of students taught, time spend in various activities and numerical student evaluations.

With reference to teaching sectors, Kingdon (1996) study supports the already existing evidence of efficiency of private sector educational system over public sector. The work on private and public educational sectors of India by Kingdon and Teal (2007) indicate that academic results are related to pay in private sectors but not in government sectors. Hence, it appears that there is difference in functioning of two sectors resulting in disparity of consequences either positive or negative. This difference may be common to more or less all cultures or

there may be variation in it. The cross cultural differences and similarities in performance, achievement motivation and job satisfaction of personnel can be seen in various studies.

Important contribution emphasizing cross-cultural difference can be seen in the work related to application of theories of motivation in the US and China (Nevis, 1983) and difference in need for achievement in the US, Canada, Great Britain, Chile and Portugal (Hofstede, 1980). In the US, the need for achievement, growth and self actualization is extremely important, but it is not so in every culture. On the other hand, Kim *et al.* (1990) reported that there does not seem to be any difference in the motivational feeling process based on feeling of equity in the US and Asian countries. In Asia, the variation may be observable in Malaysia due to multicultural society.

Similarly, cultural difference in Pakistani private and public sector educational institutions may be noted which can have its effects on teachers' functioning. Hyder and Reilly (2005a) found that the public sector in Pakistan has both a more compressed wage distribution and a smaller gender pay gap than that prevailing in the private sector.

Various other similarities and differences in private and public higher educational system of Pakistan and Malaysia are worth mentioning.

The Malaysian education system demonstrate the notion of democratization of education with giving impor-

tance to access, equity, quality in education together with the efficiency and effectiveness of educational management (Baginda and Schier, 2005). In a bid to make foreigners to invest in Malaysia and contribute to a great extent towards the country's foreign exchange earnings, Malaysia has embarked on the mission to promote the establishment of more private education institutions (cited in *The China Post*, 2006). There are 20 public universities and university colleges in Malaysia, whereas 22 private universities and university colleges with 4 foreign branch campuses. There are 532 private colleges; 22 and 34 polytechnics and community colleges, respectively (Fahim, 2006). "Public Higher Education Institutions (HEIs) consist of universities and university colleges; Private HEIs consist of universities, university colleges, colleges, oversees branch campuses, open universities, virtual/e-universities, and IT academies. Polytechnics offer certificate and diploma as a source of semi professional workforce. Community colleges offer full time academic programs and short courses, based on the request of the local community" (cited in *Global Education Digest*, 2006).

To ensure quality assurance, the Lembaga Akreditasi Negara (LAN) was established in 1996 and is responsible for public HEIs; whereas the Quality Assurance Division (QAD) was established in 2001, which is accountable for private HEIs (*Global Education Digest*, 2006). Wilkinson and Yussof (2005) compared public and private provision of higher education in Malaysia in terms of

registrations, expenses, services and quality of provision. It was concluded that public universities appear to be more competent in fulfilling public demand in terms of quality of provision.

Whereas in order to enhance education, the Pakistan government has made it quite easy for the private sector to set up colleges and universities. According to Higher Education Commission (HEC) report (2006), there are 114 Chartered Universities/Degree Awarding Institutes of Pakistan in Public (59) and Private Sector (55). As reported by Hamid (2005), private sector in Pakistan is more suitable regarding organization of tasks in the university. It is more efficient regarding the provision of directions to the staff and students, coordination, collection of reports for every activity of the organization and revision of curricula according to emerging global needs. It is also more favorable regarding the availability of quality assurance system. From 2001 to 2004, there is an increase in enrollment for Bachelor and Ph.D. degrees due to increased interest in obtaining higher education. In private sector universities also, there is an increase in the enrollment of higher education in spite of heavy tuition fees. As a result, Pakistan is able to produce professionals, scholars, leaders and highly educated people to run the nation (Xhaferri and Iqbal, 2007). Moreover, quality assurance cell of HEC Pakistan keeps a check on the functioning of public sector universities. It has established 20 more Quality Enhancement Cells (QEC), additionally to existing

10, which look after the implementation of regular training workshops, meetings and quality conferences. Recently, it has been given the task to restrain the practice of plagiarism (HEC Pakistan, 2007). HEC prescribes the guidelines under which all institutions of higher education may open and operate. It monitors all degree-granting higher education programs for quality assessment and is responsible for chartering both public and private institutions of higher education (Sedgwick, 2005).

To increase the performance of teachers, to enhance achievement motivation and to increase their job satisfaction in public sectors universities, for regular permanent teachers, there is an increase in salary each year. In order to motivate them towards research, various other facilities are also provided. This is helping them to improve their performance and to update their knowledge also. As cited in news report by Ghumman (2007), "The government has given a further 70% increase in the salaries of university teachers who have been hired under a new service structure mainly to lure back expatriate Pakistanis serving in foreign universities."

Salary structure of Pakistani and Malaysian teachers appears to be quite different. As per official records at the end of the financial year 2008, the basic salary of Pakistani teacher of higher education ranged from Rs. 19,455 to Rs. 37,095 per month for Professors, while salary for Lecturer/Research Officer ranged from Rs. 8,210 to Rs. 20,610 per month.

While salary of Malaysian teacher in education ranged from 1,600 RM to 2,700 RM per month for a senior executive, the salary for fresh/entry level ranged from 700 RM to 1,600.00 RM per month (Job Street.com Malaysia).

Tony (2005) states that “The Ministry of Education needs to seriously relook at the entire remuneration and career advancement package of teachers in Malaysia.” According to *Global Education Digest* (2006), the government has the authority to appoint professors and researchers, allocate students to HEIs, and fix the salary scale of teachers.

Whether it is Malaysian private or public sector, in a multicultural society, it appears difficult not only to manage students of different nations with difference of views, but also to manage the faculty who are also managing these students, and in which some of the faculty members are again from different culture. It is the management style to effectively motivate people across race with different attitudes and style of living. The HODs should know the art to motivate the students and teaching faculty. Here, in educational field, research culture is developing in faster rate. Numbers of educational institutes have also been established to build cross-cultural understanding on issues of mutual concern on education and to maintain a regional, common system of on-going education and support for teachers.

While in Pakistan in order to support research culture and to fill the gap in education, the HEC Pakistan is

facilitating its teachers; unfortunately, there is lack of research in the areas related to performance of teachers of higher educational system. Hence, there is a need to conduct research related to teacher’s performance, achievement motivation and job satisfactions of private and public sectors of higher educational institutions cross culturally, first with the Asian countries, than the work may be extended towards other continents.

Owing to prevailing multicultural society of Malaysia, it appears that effectiveness of private and public educational management of Pakistan and Malaysia as measured through teachers’ performance, achievement motivation and job satisfaction would differ.

Hence, to enhance teachers’ performance, satisfaction and achievement motivation of different sectors and for quality assurance, there is a need to find out the difference on the above three variables of private and public sector university teachers of both the countries. This would help us to fill in the gap due to lack of cross cultural researches relevant to the present issue. Difference and similarities on factors under study would help in finding out causes of these similarity and difference in future studies and in forming guidelines for future implication of policies regarding private and public sector educational system pertaining to two countries under the study.

OBJECTIVES

The purpose of the present cross-cultural research is to determine the effectiveness of teachers of selected private and public educational institutions of Pakistan and

Malaysia, which are countries representing South/South-East Asia through examining their difference in performance, achievement motivation and job satisfaction. This study investigates the effectiveness of selected private and public sector universities of Pakistan and Malaysia which are countries representing South/South-East Asia in cross-cultural perspective.

Therefore, the present research will help to fill the gap in our knowledge through having the results in scientific way of the effectiveness of private and public sector educational institutions of Pakistan and Malaysia seen through performance, achievement motivation and job satisfaction of teaching faculty. Hence, on the basis of the results, recommendations will be given for public and private sectors educational institutions of South/South-East Asian countries in general and Pakistani and Malaysian educational institutions in particular. The results will serve as guidelines in policy making in the field of higher education and provide us with idea of recommendations and avenue for future research.

In the present work, private and public universities of Pakistan and Malaysia are independent variables and performance, achievement motivation and job satisfaction of their teaching faculty are dependent variables.

HYPOTHESES

H₁: There would be a difference in the performance; achievement motivation and job satisfaction of private sector teaching faculties of

Pakistani and Malaysian selected higher educational institutions.

H₂: There would be a difference in the performance; achievement motivation and job satisfaction of public sector teaching faculties of Pakistani and Malaysian selected higher educational institutions.

H₃: There would be a difference in the performance; achievement motivation and job satisfaction of private and public sector teaching faculties of Pakistani selected higher educational institutions.

H₄: There would be a difference in the performance; achievement motivation and job satisfaction of private and public sector teaching faculties of Malaysian selected higher educational institutions.

METHODOLOGY

SAMPLE

The first sample comprises 120 Chairpersons/heads, 60 working in Pakistan and 60 in Malaysia, in different departments of private and public sector universities.

The second sample consists of 120 teaching faculties of Pakistan ($N = 60$) and Malaysia ($N = 60$), which include senior and regular teachers working for minimum period of two years in the same department. A sample of two teachers have been taken from each department from where the first sample of heads has been taken.

In Pakistan, the sample was taken from 30 departments of private and 30 departments of public sector universities

of provinces of Sindh and Punjab. Whereas in Malaysia, the sample was taken from 20 private sector and 40 public sector departments of universities of Kuala Lumpur and Kedah.

Pakistani sample included male teachers only from 34 departments, female teachers only from 12 departments and both male and female teachers combined from 14 departments who participated in the study. In 37 departments, all teachers were married, in 5, all were unmarried and 18 departments comprised both married and unmarried teachers who volunteered as participants. The mean life age of teachers was 37.69 years.

Malaysian sample included male teachers only from 21 departments, female teachers only from 14 departments and both male and female teachers combined from 25 departments who participated in the study. In 39 departments, all teachers were married; in 3 all were unmarried and 17 departments comprised both married and unmarried participants. Only 1 department has one married and one divorced teacher who served as a sample for the present study. The mean life age of teachers was 35.71 years.

It may be noted as mentioned earlier that in present study one faculty/department included two regular senior teachers who participated in the study representing faculty.

DESCRIPTIONS OF SCALES AND ITS SCORING SYSTEM¹

The following two forms were prepared:

Introduction to Participants and Informed Consent Form

Introduction to Participants and Informed Consent Forms were similar for the HODs and teaching faculties working under them. However, in forms of heads the Chairman/Director/HOD or Institutions of public/private sector university of Pakistan/Malaysia were requested to fill University Teacher's Evaluation Rating Questionnaire (UTERQ). Whereas their teaching faculty were requested to complete Personal Information Form, Costello Achievement Motivation Scale and Job Satisfaction Scale.

Personal Information Form

Personal information form collected demographic information of the teaching department and teaching faculty.

UTERQ

The Proforma of Annual Confidential Report of the academic staff of University of Karachi, Pakistan was utilized for the present research in order to evaluate performance of regular teaching faculty of the department concerned. Instructions requested the HODs to rate the last two years performance of their regular teaching faculty on ten-point rating scale (0-10) from 'unsatisfactory' to 'outstanding', with additional not applicable category on variables of 'Professional Performance', 'Co-Professional Performance', 'Administrative Performance' and 'Personality and Behavior'. Sum of weight cent score gives overall evaluation score of performance.

¹ For detail descriptions of Forms, Questionnaires and Scales with Scoring System refer to Munaf (2008). Effectiveness of Transformational and Transactional management in educational institutions of South/South-East Asia: A cross cultural study of Malaysia and Pakistan. Post Doctoral Fellowship Research, published by AMDISA.

The reliability and validity of the questionnaire can be seen from its applicability for evaluation of yearly overall performance of the teaching faculties of University of Karachi since more than a decade.

Costello Achievement Motivation Scale (CAMS, Adapted English Version by Misra and Srivastava, 1990)

Costello Achievement Motivation Scale (CAMS) is a standard inventory which measures achievement motivation of a person. It can be administered very easily individually or in a group. It contains 24 items and its answer can be given in 'Yes' or 'No' category. People usually complete it within 15 to 20 minutes.

The test is directly scored from test booklet. Question Nos. 2, 3, 5, 7, 9, 11, 13, 17, 19, 20, 22, and 24 are given one mark if answered positively by the subject. These items are assigned zero if answered in negative manner. Item No. 1, 4, 6, 8, 10, 12, 14, 15, 16, 18, 21, and 23 are awarded one mark if answered in negative manner. These items are assigned zero if answered in positive manner. Maximum score is 24 (Misra and Srivastava, 1990, p. 12).

Reliability and Validity

The reliability of above mentioned adapted version of CAMS, for industrial employees was established through its administration on the public and private sector organizations of Kanpur. The test-retest reliability was 0.77 and split half reliability was 0.80.

The validity of the scale was set up by showing that recognized achiever scored high on this measure. For this purpose,

achievement motivation scores of 20 university professors and 25 executives holding top positions were compared to university students. The results indicated that both professors and executives scored higher than the students.

Job Satisfaction Scale (Singh and Sharma, 1999)

It consists of 30 statements inclusive of both positive and negative statements related to job satisfaction. The positive statements carry a weightage of 4, 3, 2, 1 and 0 and the negative ones a weightage of 0, 1, 2, 3, and 4. The total score indicates job satisfaction/dissatisfaction of a worker.

Reliability and Validity

The test-retest reliability of above mentioned job satisfaction scale with sample of 52 and after break of 25 days is 0.978. It is positively related with Muthayya's job satisfaction questionnaire and its validity coefficient is 0.743.

PROCEDURE

Consent for data collection was taken from the Vice-chancellor/Registrar/Dean of particular university and faculty. Then the HODs were approached as sample one. The entire purpose of the research was explained to them and they were requested to cooperate in data collection by acting as first sample by completing Introduction to Participants and Informed Consent Form, followed by the UTERQ. They were further requested to nominate two regular teachers of their department to be sample two. Teachers were then approached; they were requested to complete Introduction to Participants and Informed

Consent Form and Personal Information form. In addition, they completed CAMS (adapted version) and Job Satisfaction Scale. In order to keep confidentiality of their answers respondents were asked to place the filled sets in an envelope given to them and sealed it properly.

When any heads, did not prefer that the main research or her assistants should meet their teachers, then all three envelopes (1 for head and 2 for two regular teachers) were given to HODs, to be filled by the self concerned and two regular teachers. Researchers also clarified to the heads the main difference between two types of envelopes. Under certain conditions when any one or both the respondents were too busy, then they were asked to fill the forms at suitable time of their convenience and handed over the sealed envelopes to their Secretaries. Research Assistant then collected remaining envelopes with questionnaires from the secretary at mutually agreed time and date. Scoring of protocols was made according to the standard procedures of scoring of scales and questionnaires. In

addition, in order to arrive at the scores of achievement motivation and job satisfaction of the teaching faculty, the total score of two teachers on achievement motivation and job satisfaction were added up and divided by two to provide composite average score of achievement motivation and job satisfaction of a teaching faculty.

STATISTICAL ANALYSES

In order to compare the means of two samples, *t*-test was applied for statistical analyses of the scores. In the present work, it shows the difference in the mean scores of performance, achievement motivation and job satisfaction of teaching faculty of educational institutions functioning under the management of Pakistan and Malaysia.

DATA ANALYSIS

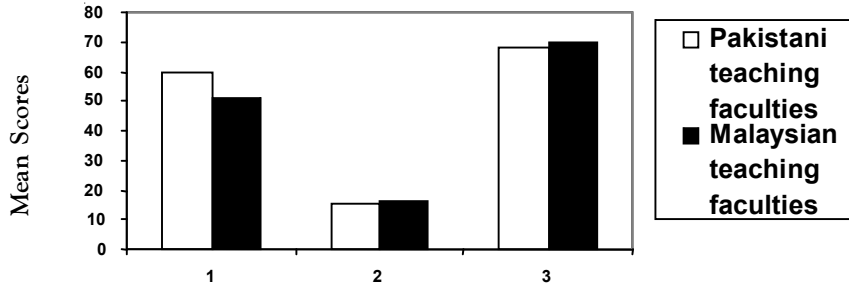
In this section, the results and data were analyzed. Table 1 and Figure 1 show the difference in the mean scores of performance, achievement motivation and job satisfaction of teaching faculties of selected Pakistani and Malaysian educational institutions

Table 1: *t*-Test Showing Difference in the Mean Scores of Performance, Achievement Motivation and Job Satisfaction of Teaching Faculties of Selected Pakistani and Malaysian Educational Institutions Functioning Under Management of Private Sectors

Variables	Teaching Faculties	N	Mean	S.D.	<i>t</i>	df	Sig. (2-Tailed)
Performance	Pakistani	30	59.99	17.15	1.912	48	0.062
	Malaysian	20	50.95	15.12			
Achievement Motivation	Pakistani	30	14.98	1.88	-2.119	48	0.039
	Malaysian	20	16.20	2.14			
Job Satisfaction	Pakistani	30	68.40	10.49	-0.514	48	0.610
	Malaysian	20	69.85	8.52			

MOTIVATION, PERFORMANCE AND SATISFACTION AMONG UNIVERSITY TEACHERS:
COMPARING PUBLIC AND PRIVATE SECTORS IN PAKISTAN AND MALAYSIA

Figure 1: Mean Scores of Performance, Achievement Motivation and Job Satisfaction of Private Sector Teaching Faculties of Pakistan and Malaysia



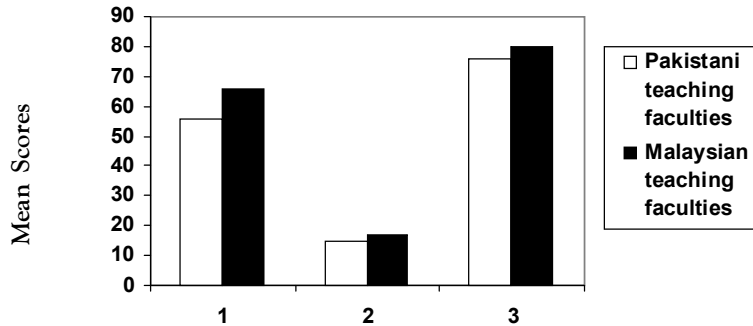
Note: 1 = Performance 2 = Achievement; Motivation 3 = Job Satisfaction

functioning under management of private sectors. Table 2 and Figure 2 indicate the difference in the mean scores of performance, achievement motivation and job satisfaction of teaching faculty of selected Pakistani and Malaysian educational

Table 2: t-Test Showing Difference in the Mean Scores of Performance, Achievement Motivation and Job Satisfaction of Teaching Faculties of Selected Pakistani and Malaysian Educational Institutions Functioning Under Management of Public Sectors

Variables	Teaching Faculties	N	Mean	S.D.	t	df	Sig. (2-Tailed)
Performance	Pakistani	30	55.58	17.03	-3.066	68	0.003
	Malaysian	40	66.10	11.69			
Achievement Motivation	Pakistani	30	14.65	3.03	-3.461	68	0.001
	Malaysian	40	16.90	2.41			
Job Satisfaction	Pakistani	30	76.16	11.74	-1.614	68	0.111
	Malaysian	40	79.77	6.83			

Figure 2: Mean Scores of Performance, Achievement Motivation and Job Satisfaction of Public Sector Teaching Faculties of Pakistan and Malaysia



Note: 1 = Performance 2 = Achievement; Motivation 3 = Job Satisfaction

institutions functioning under management of public sectors. Table 3 and Figure 3 are related to difference in the mean scores of performance, achievement motivation and job satisfaction of teaching faculty of Pakistani educational institutions functioning under management of private

and public sectors and Table 4 and Figure 4 show the difference in the mean scores of performance, achievement motivation and job satisfaction of teaching faculties of Malaysian educational institutions functioning under management of private and public sector.

Table 3: t-Test Showing Difference in the Mean Scores of Performance, Achievement Motivation and Job Satisfaction of Teaching Faculties of Selected Pakistani Educational Institutions Functioning Under Management of Private and Public Sectors

Variables	Teaching Faculties	N	Mean	SD	t	df	Sig. (2-tailed)
Performance	Pakistani Private	30	59.99	17.15	1.001	58	0.321
	Pakistani Public	30	55.58	17.03			
Achievement Motivation	Pakistani Private	30	14.98	1.88	0.512	58	0.611
	Pakistani Public	30	14.65	3.03			
Job Satisfaction	Pakistani Private	30	68.40	10.49	-2.699	58	0.009
	Pakistani Public	30	76.16	11.74			

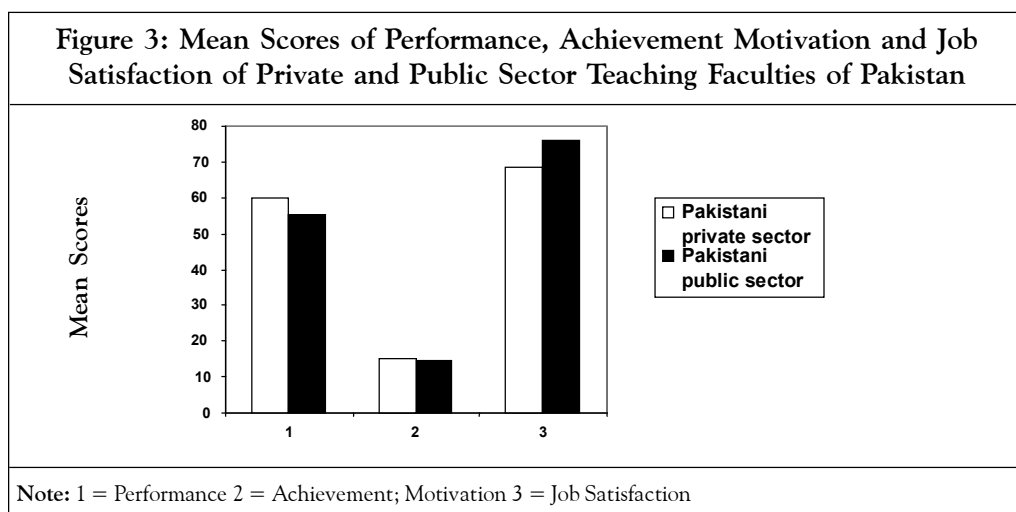
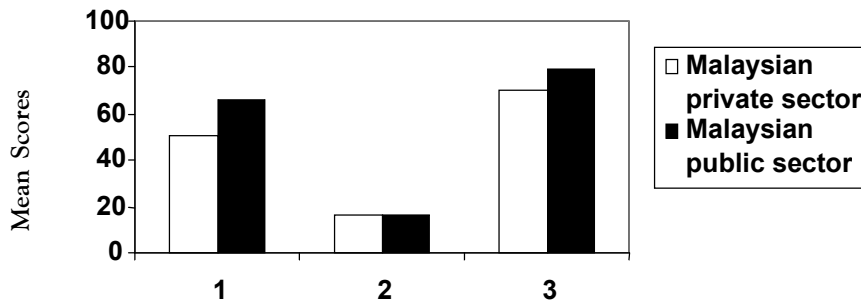


Table 4: t-Test Showing Difference in the Mean Scores of Performance, Achievement Motivation and Job Satisfaction of Teaching Faculties of Selected Malaysian Educational Institutions Functioning Under Management of Private and Public Sectors

Variables	Teaching Faculties	N	Mean	SD	t	df	Sig. (2-Tailed)
Performance	Malaysian Private	20	50.95	15.12	-4.28	58	0.000
	Malaysian Public	40	66.10	11.69			
Achievement Motivation	Malaysian Private	20	16.20	2.14	-1.10	58	0.275
	Malaysian Public	40	16.90	2.41			
Job Satisfaction	Malaysian Private	20	69.85	8.52	-4.87	58	0.000
	Malaysian Public	40	79.77	6.83			

Figure 4: Mean Scores of Performance, Achievement Motivation and Job Satisfaction of Private and Public Sector Teaching Faculties of Malaysia



Note: 1 = Performance 2 = Achievement; Motivation 3 = Job Satisfaction

- There is a significant difference in achievement motivation ($t = -2.119$, $df = 48$, $p = 0.039$) between teaching faculty working under management of private sector universities of Pakistan ($X = 14.98$) and private sector universities of Malaysia ($X = 16.20$). Achievement motivation of teaching faculties of Malaysian private sectors seems to be more than teaching faculty of Pakistani private sectors.
- Insignificant difference was found on the variable of performance ($t = 1.912$, $df = 48$, $p > 0.05$) and job satisfaction ($t = -0.514$, $df = 48$, $p > 0.05$) between teaching faculties of private

sector universities of Pakistan and Malaysia indicating that the performance and job satisfaction of private sector university teachers of Pakistan and Malaysia do not differ.

- There is a significant difference in performance ($t = -3.066$, $df = 68$, $p = 0.003$) and achievement motivation ($t = -3.461$, $df = 68$, $p = 0.001$) between teaching faculties working under management of public sector universities of Pakistan ($X = 55.58$ and $X = 14.65$ respectively) and Malaysia ($X = 66.10$ and $X = 16.90$). This difference indicates that job performance and achievement motivation of teaching faculty of public sector universities of Malaysia is significantly more than public sector teaching faculties of Pakistan.
- Insignificant difference was found on the variable of job satisfaction ($t = -1.614$, $df = 68$, $p > 0.05$) between both the groups, indicating that job satisfaction of both the group is alike.
- There is a significant difference of job satisfaction ($t = -2.699$, $df = 58$, $p = 0.009$) between teaching faculties working under management of private ($X = 68.40$) and public sector ($X = 76.16$) universities of Pakistan. Teaching faculty of public sectors seems to be more satisfied with their jobs than private sector university teachers.
- Insignificant difference was found on the variable of performance ($t = 1.001$, $df = 58$, $p > 0.05$) and achievement motivation ($t = 0.512$, $df = 58$, $p > 0.05$) between teaching faculties working under private and public sector universities of Pakistan, indicating that the performance as well as Achievement motivation of private and public sector university teachers of Pakistan does not differ.
- There is a significant difference in performance ($t = -4.283$, $df = 58$, $p = 0.000$) and job satisfaction ($t = -4.875$, $df = 58$, $p = 0.000$) between teaching faculty working under management of private ($X = 50.95$ and $X = 69.85$ respectively) and public sector universities of Malaysia ($X = 66.10$ and $X = 79.77$ respectively), indicating that public sector teaching faculties seems to perform better and are also more satisfied with their jobs than faculties of private sector universities of Malaysia.
- Insignificant difference was found on the variable of achievement motivation ($t = -1.102$, $df = 58$, $p > 0.05$), indicating that achievement motivation of both the group seems to be alike.

DISCUSSION

In this section, discussion of hypotheses are made with special reference to related researches, followed by conclusion, implications, recommendations and finally limitation of study and avenues for future research.

Analyses of Tables 1-4 give us some interesting interpretations of the impact of selected private and public sectors higher educational institutions of Pakistan and Malaysia upon teacher's performance, achievement motivation and job satisfaction.

When analyses were made (Tables 1 and 2) for private and public sector universities of both the countries, it is obvious that mean score of achievement motivation is more in the teaching faculties of Malaysian private and public sector than in the teaching faculties of Pakistan. But the performances and job satisfaction of university teaching faculties of private sector of Pakistan and Malaysia do not differ. Similarly, Mean scores of Job satisfaction of public sector Pakistani and Malaysian teachers do not differ, however the performance of public sector faculties of Malaysia is surprisingly much better than public sector faculties of Pakistan although rating of latter fall in the 'good' range. Hence, the first two hypotheses were partially proved. The difference in achievement motivation between two cultures may be due to Malaysian multicultural society, as Rowley and Bhopal (2005) consider it as an old colonially produced type of multicultural society. Here, as written earlier, teaching faculties are from variety of cultures, hence, it is not easy to adjust in working environment where students are also from different ethnic background, yet they may be motivated to work hard in order to achieve the desired goal. Therefore, their achievement motivation is comparatively more than teaching faculties of Pakistan. The present achievement motivation results are in contradiction with the work of Shaari *et al.* (2002) on Malaysian teachers. They found no significant difference between overall job motivation and different job performance as well as achievement motivation with different job performance.

One of the important things to note is that inspite of good Pakistani public sector teacher's performance, the Malaysian public sector teachers' performance is significantly better. Even though in Pakistan there is an increase in educational budget and innumerable facilities are provided to teachers to update their knowledge since 2006 by HEC Pakistan, unfortunately performance of Pakistani public sector teachers is not equivalent to Malaysian public sector teachers. One of the possible reasons can be that in Pakistan before 1984-85, public expenditure on education was less than 2% of GNP (Mushtaq, 2002) an increase of 2.5% can be seen in recent years (Hussain *et al.*, 2006). Therefore, the benefits and facilities provided to public sector teachers in 2006 may have taken time to show its positive effect on performance. Moreover, rating of teacher's performance by their heads was of last two year and was not of few days only, while their job satisfaction measured their present condition which was teachers own perception, that how much they are satisfied with their jobs, while their rated performance was given by their HODs.

Significant observation which needs a mention here is that more Malaysian private sector university teaching faculty avoided to fill complete demographic information form compared to Pakistan. However, there appeared to be less resistance in teaching faculties of public sector universities of both the countries. This observation of Pakistani and Malaysian public sector teachers is in contradiction with the observation of

Barrows and Wesson (2001). They found that response rate of private sector was higher than that of the public sector.

Further analysis of Table 3 and 4 make it obvious that Pakistani faculty of public sectors seems to be more satisfied with their jobs than private sector university faculties. However, their performance and achievement motivation are similar to private sector faculties. Therefore, only part of the third hypothesis with reference to job satisfaction is proved. Research on Pakistani sample by Halepota (2008) also indicate that due to difference in public sector employees from private sector, due to work environment and work context, the job satisfaction of employees may also vary. Hyder and Reilly (2005b) believes that public sector workers in Pakistan are comparatively more educated and have higher average pay than private sector workers. It is indicated in *Pakistan Education Statistics Handbook* (n.d) that public teachers are better salaried than non-state teachers. Correspondingly work of Rahman *et al.* (1995) specifies that public sector employees had higher job satisfaction than private sector employees.

Higher Job satisfaction of public over private sector university teachers as mentioned previously is due to advanced facilities provided to public teachers by HEC Pakistan in recent years. In order to increase performance of the teachers, to enhance achievement motivation and to increase job satisfaction in public sector universities; they have been provided with innumerable facilities which are sufficient for public sector teachers to make them

satisfied with their jobs. Contrary to the findings reported by Iqbal and Hussain (2003), the Pakistani non-government bank executive are more satisfied than government executives. This difference in findings may be due to difference in jobs and status of employees.

In Table 4, we can also see performance as well as job satisfaction of Malaysian public sector university faculties is more than the private sector faculties. The results are contrary to Scheider and Vaught (1993b) work who found no significant difference in public and private sector employees on variable of job satisfaction levels. It appears that there is high correlation of performance with job satisfaction scores of both private and public sectors. Likewise Manaf and Marzuki (2005) found significant relationship between performance and job satisfaction of workers of Malaysian public organization.

Further, it is also clear from Table 3 and 4 that achievement motivation of teachers of both private and public sector of Pakistan do not differ. Similar is the case with Malaysian teachers. There is no difference of achievement motivation of both the cultures and both the sectors go along with the belief of McClelland as cited in Accel Team (2007), "the need for achievement is a distinct human motive that can be distinguished from other needs".

CONCLUSION

It is clear from the discussion that private and public sector management are playing significant role in managing teaching

faculty of educational institutions of Pakistan and Malaysia. There does not seem cross-cultural difference between Pakistan and Malaysia when performance and job satisfaction of teaching faculty of private sectors is concerned, however, both private and public sectors educational management of Malaysia seems to be doing vital job in developing more achievement motivation in their teaching faculty than Pakistani management. Moreover, performance of public sector Malaysians teachers appears to be more than Pakistan public sector teachers, although it is not in the low range. Nevertheless, public sectors teachers of Pakistan are more satisfied with their jobs than private sector Pakistani teachers. Hence, it would be injustice to consider any one sector of Pakistan and Malaysia in particular and South/South East Asia in General playing key position in enhancing performance, achievement motivation and job satisfaction of teaching faculties.

IMPLICATIONS

The results of the present study are highly significant as they highlight the need to develop high level achievement motivation in teaching faculty of Pakistan. The same would help to strengthen already existing performance and to develop more job satisfaction in them.

The results draw attention that in future focus group research may be conducted to find the major causes of difference in achievement motivation of teachers of both the countries. This would help to make policies which may facilitate in strengthening the performance.

To enhance quality performance, achievement motivation and job satisfaction of teaching faculties of private and public sector higher educational institutions, workshops, seminars and conferences needs to be arranged with practical implications. It would be more imperative that proper educational management training program be implemented for both the sectors. This would help the management to adopt the style with the teaching faculty which would help to increase their performance, achievement motivation and job satisfaction.

RECOMMENDATIONS

It is suggested that Ministry of Higher Education of Pakistan and Malaysia may set committee to develop strategies for further enhancement of performance, job satisfaction and achievement motivation in their teaching faculty. This will help to raise the standard of both private and public sector teaching institutions.

For the welfare of teachers and better functioning of educational institutions teachers need to be included in decision-making. Communication with them will help to find out their needs and preferences in educational department.

LIMITATIONS OF STUDY AND AVENUES FOR FUTURE RESEARCH

- The data have been collected from selected private and public sectors higher educational institutions of few cities of Pakistan and Malaysia. It would have been more appropriate if the data may have been collected from all the provinces of both the countries

as well as other countries of South/South East Asia in order to generalize the results with high degree of reliability.

- Respondents in the research were voluntary and do not represent the entire teaching faculty of Pakistan and Malaysia. Although care was taken to collect data in ideal way by taking equal number of participants from both the sectors of two countries, practically it was not possible.
- Future comparison of performance, job satisfaction and achievement motivation of private and public sector teaching faculties of university, college, high school and schools would provide us with wider perspective.
- Suggestions given by various HODs and teachers of both the countries were to take response online. It would save time of both the researcher and

the sample. Hence, future cross-culture researcher may instead of visiting different countries for data collection, get the work done online. This would save time, energy and finance, but it would limit the observation and networking, which are very much important for cross-cultural researcher.

- In Future research, statistical analysis may also be taken into consideration the gender difference, income level, experience and marital status. This would make it a cross-sectional study also.

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Changing Paradigms of Luxury Consumption in India: A Conceptual Model

Krishna Das Gupta*

This paper tries to explore the evolution of luxury consumption or prestige seeking consumption behavior. While it upholds the luxury consumption in the Indian context, citing the statistical growth of the 'the rich class' it rationalizes the origin of such indulgence. It also tries to project the significant change sweeping the Indian society that has turned conspicuously consumerist unlike the past when display of wealth was shunned at. The paper unearths the origin of luxury consumption through sociology and anthropology and tries to explain the cultural factors underlying luxury consumption.

INTRODUCTION

As a result of the spectacular growth of luxury markets over the past 10 years, the marketing literature has recently seen substantial interest in the study of prestige brands. Yet very little is known about how to best market prestige brands. Research conducted by Powderly and Mac Nulty (1990) anticipated important social changes as the year 2000 neared. Their research identified that people's needs for appearances and materialism were increasing. That is they recognized an increasing demand for conspicuous and status products. Evidences of launch of MBA programs specialized in luxury marketing (e.g., ESSEC, Paris) are a few. A review and attempt to reconcile the accounts from the literature of economics, marketing and psychology, show a general

lack of consensus relating to the definition of luxury. The concept of 'luxury' in different discipline may have specific definition(s). Marketing textbooks suggest the concept of luxury when an organization is planning to position a product as high quality or exclusive; "prestige pricing is setting a rather high price to suggest high quality or high status" (McCarthy and Perreault, 1987, p. 506). Finally, social psychologists have long been using the concept of luxury to study the effect of group forces on the formation and change of opinions and attitudes (e.g., Lorge, 1936; and Asch, 1948). Early research on the topic of luxury started in the last century from the work of Rae (1834), Veblen (1899) and Keasbey (1903). Wong and Ahuvia (1998) conceptualized Asia's rising significance as the market for luxury and

* Assistant Professor, Marketing Area, Management Development Institute (MDI), Sukhrali, Gurgaon 122007, India. E-mail: krishnagupta@mdi.ac.in

prestige brands compared to the West. Their articles examined the cultural factors that lie behind the 'luxury' phenomenon based on distinctions between Southeast Asian and Western cultures.

UNDERSTANDING THE INDIAN LUXURY MARKET

India's luxury market is still small, an estimation of \$100 mn at best as on 2007 (Chadha and Husband, 2007). In a near virgin market, the rewards are almost instant—research conducted by the Foreign Investors' Chamber of Commerce and Industry (FICCI) found that Louis Vuitton was the most prestigious accessory brand, while Armani topped the charts in apparel category. As signs of the times, the World Luxury Council has opened an Indian operation. In terms of the spread of Luxury Model, India is at the threshold, the emerging middle class is aspiring for quality of life, while a small elite segment indulges in luxury brands. This segment has been acquiring luxury goods internationally, and hence, they are the first customers of luxury brands in India. While India may be the next China in terms of market size, the forces shaping its development are quite different.

If China's starting point was a slate wiped clean by Mao, India's chalk board is covered by myriad of traditions, religious beliefs and colorful festivals.

India's multi-tiered consuming classes are mostly poor but income levels are improving. In time, the poor are becoming poorer. The rich are getting richer, as well as increasing in number, but they will continue to remain in minority. The myth of the Great India Middle Class—that large mass of homogenous consumers with growing incomes, who are supposed to form the mainstay of consumer India—has been exploded. The texture of India's population of approximately 1.17 billion people (as on July, 2009), in many shades and grades of affluence and price-value orientation. The five consuming classes defined by National Council of Applied Economic Research (NCAER) in Table 1 (benefit maximizers, cost-benefit optimizers, cash constrained benefit seekers, new entrants and non consumers) form the generic model of the Indian market.

Since 1989-90, the distribution of low income class has been declining sharply

Table 1: Mapping India's Income Classes

The Classes	1994-95	1999-2000	2005-06
Rich (Rs. 215,000 +) Benefit Maximizers Owns Cars, PCs	1	3	6
Consuming (Rs. 45,000-215,000)	29	55	75
Climbers (Rs. 22,000-45,000) Cash Constrained Benefit Seekers	48	66	78
Aspirants (Rs. 16,000-22,000) New Entrants	48	32	33
Destitutes (Less than Rs. 16,000)	35	24	17

Source: NCAER's MISH Report, as reported in 2003-04 BW Marketing White Book

CHANGING PARADIGMS OF LUXURY CONSUMPTION IN INDIA:
A CONCEPTUAL MODEL

while the distribution of middle income class has more than doubled. Table 2 goes on to confirm the above fact by projecting 50 times growth for the 'The Very Rich' by 2006-07.

The growth rate for Super rich as evident in Tables 3 and 4 has far outnumbered the rate of growth for other categories.

INDIA'S MONEYED ELITE

The number of families with an annual income of between Rs. 50 lakh and Rs. 1 cr was just 11,000 in 1995-96 rose to 40,000 in 2001-02 and is projected to rise to 255,000 by the end of the decade. As a result, India's income demographics are going to be unrecognizable by the end of

Table 2: Distribution of Income Classes Among Urban Households (%)

Income	1989-90	1992-93	1994-95	1999-2000
Low	37.1	38.4	33.6	15.9
Middle	59.1	56.7	60.4	69.1
High	3.8	4.9	6.0	15.0

Source: NCAER's MISH Report, As Reported in 2003-04 BW Marketing White Book

Table 3: Urban India's Income Classes by Size

Income Classes	1995-96	2001-2002	2006-2007
The Very Rich	0.8	1.9	4.0
The Consuming Class	16.6	26.5	40.8
The Climbers	16.8	17.4	13.7
The Aspirants	7.1	9.9	0.7
The Destitute	5.3	2.7	0.9

Note: Households (population). All figures in million.

Source: NCAER's MISH Report, As Reported in 2003-04 BW Marketing White Book

Table 4: Urban India's Classification Based on Income Class and Number of Families

Consumer Classification	Income Class (in Rs. '000')	Number of Families (in '000')	Growth Rate (in %)
Strivers	500 – 1,000	3,212	17.50
Near Rich	1,000 – 2,000	1,122	19.40
Clear Rich	2,000 – 5,000	454	21.30
Sheer Rich	5,000 – 10,000	103	23.40
Super Rich	10,000 +	53	25.90

Note: Income figures per annum at 2001-2002 prices.

Source: National Council for Applied Economic Research, India

the decade. These translate into an enormous buying power for luxury consumption, and hence justify the title of the paper. This further warrants academic researchers to delve deep inside the buying psychology for luxury products while presenting a sizable opportunity for the world's most prestigious luxury brands to establish their footprint in the Indian market, almost discovering the new world.

The dazzling array of luxury goods available today is clearly catering to the growing number of Indians who are enjoying unprecedented levels of affluence. The consumer insights division of Technopak, The Knowledge Company (TKC) has attempted to understand the deeper meanings of the affluent phenomenon. At incomes above Rs. 45 lakhs (US\$ 100,000) per annum, TKC's research indicates that the proportion of disposable income for spends on luxury products increases substantially (*BW Marketing Whitebook*, 2007-2008, p. 283). Possible explanation to this phenomenon provided by economists have shown that decisions on how much to save and spend depend on expectations of lifetime income (and not as is commonly assumed, annual income). This is here wealth comes in. Consumers who have substantial wealth on financial assets, real estate, etc., are more confident to keep spending despite temporary ups and down in their annual income.

WHAT IS LUXURY?

In the past, prestige was due to real financial distance. Luxury was consumed by aristocratic elite. These were very few in number. So the prestige associated with luxury consumption was based on real

financial distance. The masses simply could not afford luxury. They were just too financially distant from the paintings, jewellery, clothes, homes and so on (*BW Marketing White Book*, 2007-2008, p. 301). The English word 'luxury' is derived from the latin term *luxus* and is defined as 'the state of great comfort and extravagant living and an inessential but desirable item'. According to Boston Consulting Group, society is experiencing one of the greatest shifts in consumer buying habits and tastes since the 1950s, and thus necessitating a redefinition of the concept of luxury is required, provided by consumer's luxury experiences (Dubois and Czellar, 2002). Marketing textbooks suggest the concept of prestige, when an organization is planning to position a product as high quality or exclusive; "prestige pricing is setting a rather high price to suggest high quality or high status" (McCarthy and Perreault, 1987, p. 506). Finally, social psychologists have long been using the concept of prestige to study the effect of group forces on the formation and change of opinions and attitudes (e.g., Lorge, 1936; and Asch, 1948). Vigneron and Johnson (1999) established "three types of brands which were categorized as prestigious: up market brands, premium brands and luxury brands, respectively in an increasing order of prestige."

EVOLUTION OF LUXURY CONSUMPTION

Galbraith (1958) termed contemporary America as the 'Affluent Society' in which the single-minded pursuit of wealth led to massive exploitation of resources and materials through the years.

Contemporary India reflects the western ethos while aggressively channelising the natural resources of the country side to meet the needs of the urban industrial sector. From this biased resource-use, arise the grave inequalities of consumption within the nation. The 'Affluent Society' anatomized the social consequences of mass consumption age. He highlighted the 'pre-occupation with productivity and production' in post-war America and Western Europe. The population in these societies has for the most part been adequately housed, clothed and fed, now they expressed a desire for "more elegant cars, more exotic food and more erotic clothing, more elaborate entertainment". When Galbraith termed America of the 1950s as the 'Affluent Society', he not only meant that this was a society most of whose members were hugely prosperous when reckoned against other societies and other times, but also this was a society so dedicated to affluence that the possession and consumption of, material goods became the exclusive standard of individual and collective achievement. He quoted the Anthropologist, Geoffrey Gorer, who remarked that this was a culture in which any device or regulation which interfered or can be conceived as interfering with the supply of more and better things is resisted with unreasonable horror as the religious resist blasphemy, or the warlike pacifism' (Galbraith, 1958).

CONSUMPTION: THE UNASKED QUESTION

The Conservationist Approach: In the article, "How much should a country consume?", Galbraith had noted the disjunction between 'private affluence' and

'public squalor' of how this single-minded pursuit of wealth had diverted attention and resources from the nurturing of true democracy which he defined as the provision of public infrastructure, the creation of decent schools, parks and hospital. While often 'prestige' and 'luxury' are used synonymously, economists have used luxury instead of prestige in comparisons between luxuries and necessities (e.g., Besley, 1989). The concept of prestige has intensively been investigated in Sociology, referring to the social position conferred to an individual by other members of a group (Shils, 1968; and Wegener, 1992). There seems to be three empirical consensus that (1) prestige is a cornerstone of social stratification; (2) it is a product of both subjective and objective social reality; and (3) there is considerable heterogeneity in the subjective perception of prestige across members of a society (Wegener, 1992). According to Dubois and Laurent (1994), in Asia, more and more consumers were interested in luxury goods, which led to find out the motivation behind consumption of luxury goods. They found that consumers who choose brands with high awareness are attracted by the conspicuous value and more often they are social-oriented. On the other hand, consumers who choose low brand awareness are attracted by the hedonism and more often they are personal-oriented.

CONSPICUOUS CONSUMPTION

In the early 1980s, several researchers conducted studies based on the original work of Bourne (1957), which focused on the influence of the reference groups on

the consumption of prestige brands (Mason, 1981 and 1992; and Bearden and Etzel, 1982). The authors found that the conspicuousness of a product was positively related to its susceptibility to reference group influence. For instance, Bearden and Etzel (1982) concluded that publicly consumed luxury products were more likely to be conspicuous products than privately consumed luxury products. Conspicuous consumption claims a relatively larger portion of the income of the urban than of the rural population, and the claim is also more imperative. The result is that in order to keep up decent appearance, the former habitually live hand to mouth to greater extent than the latter. The requirement of conformity to higher conventional status becomes mandatory. Throughout the entire evolution of conspicuous expenditure, whether goods or services, or human life, runs the obvious implication that in order to effectively explain the consumer's good fame, it must be an expenditure of superfluities. In order to be reputable, it must be wasteful. Merit would not accrue from the consumption of bare necessities of life. If these articles of consumption are costly, they are felt to be noble and honorific. Conspicuous consumption still plays a significant part in shaping preferences for many products which are purchased or consumed in public contexts (Braun and Wicklund, 1989; Hong and Zinkhan, 1995; Bagwell and Bernheim, 1996; and Corneo and Jeanne, 1997). Veblen (1899) many years ago suggested that conspicuous consumption was used by people to signal wealth and, by infer-

ence power and status. Thus the utility of prestige products may be to display wealth and power and one could consider that highly visible prestige brands would dominate the conspicuous segment of the consumers.

DEFINING PRESTIGE

The distinction between prestige and non-prestige brands has been operationally defined in this paper as the distinction between brands, exhibiting five perceived values, contingent on a particular socioeconomic framework.

- Consumption of prestige brands is viewed as a signal of status and wealth and whose price expensive by normal standards enhances the value of such a signal (perceived conspicuous value).
- If virtually everyone owns a particular brand, it is by definition not prestigious (perceived unique value).
- Prestige is derived partly from the technical superiority and the extreme care that takes place during the production process (perceived quality value).

This interpretation recognizes that prestige may vary from different people, depending on their socioeconomic background. Translated into marketing terms, consumers develop prestige meanings for brands based upon interaction with (e.g., Aspired and/or peer reference group), object properties (e.g., best quality), and hedonic value (e.g., sensory beauty). Such interactions occur at personal and societal levels. Thus, a brand's prestige is created from a multitude of

interactions between consumer and elements within the environment. In sum, five values of prestige combined with five relevant motivation as follows (Table 5).

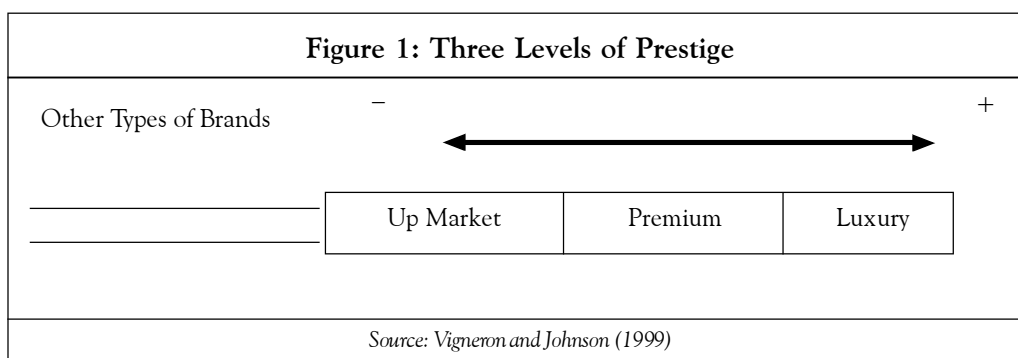
Table 5: Five Values of Prestige Combined with Five Relevant Motivations	
Values	Motivation
Conspicuous	Veblenian
Unique	Snob
Social	Bandwagon
Emotional	Hedonist
Quality	Perfectionist

LITERATURE REVIEW ON PRESTIGE PURCHASES

Early research on this topic mainly started last century from the work of Rae (1834), Veblen (1899) and recently Keasby (1903). Recently the marketing literature has focused its study of luxury brand specifically in terms of brand extensions (Roux, 1995), conflict management between mass marketing and luxury principles (Bechtold, 1991; and Roux, 1994), and measures of attitude towards the luxury concept (Dubois and Duquesne, 1993a, b). Currently, the luxury market is taking a new direction with unprecedented demand coming from Asian countries, and this research has focused on the cross-cultural comparison of attitudes towards the luxury concept (Dubois and Laurent, 1994; and Dubois and Paternault, 1997) and the comparison of motivation between Asian and western societies (Wong and Ahuvia, 1998). However, these studies have focused on only some aspects of prestige seeking

consumer behavior. Although researchers agree that the study of prestige is interesting and important, there is currently little agreement about how best to define, and hence, understand the psychology of prestige related consumer behavior. 'Strategies for status brands are intuitively recognized by marketing professionals and practitioners. Prestige brands are an example of extreme high involvement decision making. Prestige products are infrequently purchased, require high level of interest and knowledge and strongly related to the person's self concept. For instance, Rossiter *et al.* (1991) stated that the distinction between high and low involvement was dichotomous rather than continuous. Their framework states that prestige products are high involvement products, and that transformational brand choices (i.e., sensory gratification, intellectual stimulation, and particularly social approval) are the primary factors in selecting a prestige product. Although the involvement model is used to distinguish prestige products from normal products, it does not significantly differentiate the level of prestige among prestige brands (Horiuchi, 1984). In this research three types of brands are categorized as prestigious, up market brands and premium brands and luxury brands, respectively in an increasing order of prestige.

Hence, prestige brands represent the category while 'luxury' is used when relating to the extreme-end of the prestige-brand category (Figure 1). Table 6 compiles a set of prestige values into a single framework using wide range of sources. Self

**Table 6: Examples of Research Used to Define the Values of Prestige**

Authors	Conspicuousness	Uniqueness	Quality	Extended Self	Hedonism	Others
Veblen (1899)	Conspicuous Consumption Pecuniary Emulation	Invidious Consumption	Fashion	Bourgeois Upper Class	Leisure Class	
Leibenstein (1950)	Veblen Effect	Snob Effect		Bandwagon Effect		
Mason (1981)	Conspicuous Consumption, Status Seeking	Scarcity Value	Aesthetic Quality	Distinction Conformity Achievement		
Bearden and Etzel (1982)	Conspicuous	Exclusivity		Publicly Consumed	Privately Consumed	
Horiuchi (1984)	Most Expensive of their Category	Limited Production Infrequent Purchase	Best Functional or Stylist Values, Often Hand Made	Show who you are	Provide Intrinsic Enjoyment and Satisfaction	Unnecessary to Life and Health
Rossiter and Percy (1987)	High Involvement Conspicuous Brand			Social approval Search Audience, Personal Recognition	Sensory Gratification	
Richins (1994)	Conspicuous Socially Visible expensive Status Concerned			Success Achievement, Expression of the Self Stereotypes	Happiness Hedonic Potential Pleasure	
Dubois and Laurent	Very Expensive Elitism	Few People Distinguish	Better Quality	Imitate Rich Reveal who	Hedonic Motives	To be Offered

Table 6 (Cont.)

Authors	Conspicuousness	Uniqueness	Quality	Extended Self	Hedonism	Others
(1994)		Snob	not mass Produced	you are Refined People		as a Guilt
Pantzalis (1995)	Selling High Prices Status Symbol	Exclusivity Uniqueness Selectively Accessible		Aspirational Groups Imitation		
Dubois Paternault (1997)	Expensiveness	Exclusive Clientele Scarcity	Extreme Quality Craftmanship		Hedonic Experience Aesthetic Appeal	Rituals Usefulness
Wong and Ahuvia (1998)	Conspicuous Wealth and Social Class Expensive and Ostentatious Materialism	Conformity versus Distinction	Brand manufacture Country of Origin	Public Appearances, Self Concept Family Reputation	Hedonic Value Pleasure Experience	Gift Giving

consciousness is defined as the consistent tendency of person to direct attention inward or outward (Fenigstein *et al.*, 1975). Public self conscious persons are more concerned about how they appear to others, and privately self conscious persons are more preoccupied on their inner thoughts and feelings. Much of existing research has emphasized the role that status plays in communicating, informing about their possessions and about social relationships (Hyman, 1942; Barkow, 1975; Douglas and Isherwood, 1979; and Ditmar, 1994).

A DISCUSSION ON FIVE VALUES OF PRESTIGE

In the early 1980s, several researchers conducted studies based on original work of Bourne (1957), which focused on the influence of reference groups on the consumption of prestige brands (Mason, 1981 and 1992). These authors found that the conspicuousness of a product was

positively related to its susceptibility to reference group influence. For example, Bearden and Etzel (1982) concluded that publicly consumed luxury products were more likely to be more conspicuous products than privately consumed luxury products. Thus, the utility of prestige products may be to display wealth and power and one could consider that highly visible prestige brands would dominate the conspicuousness segment of the consumers. Several authors have demonstrated that the price of product may have positive role in determining the perception of quality (Erickson and Johnsson, 1985; Lichtenstein *et al.*, 1988; and Tellis and Gaeth, 1990). These studies indicate most often consumers use price cue as an evidence for judging quality when choosing between different brands. Snob effect was proposed by Leibenstein (1950). Snob effect clearly takes into consideration the personal and emotional desire

when purchasing or consuming brands. Snob effect may occur during two circumstances: (1) when new prestige product is launched, the snob will adopt the product first to take advantage of the limited number of consumers at that moment; and (2) snob effect is in evidence when status sensitive consumers come to reject a particular product as and when it is seen to be consumed by the general mass of people (Mason, 1981). Unique perception of a brand is also related to its cost. 'Brand exclusivity' is the positioning of a brand such that it can command a high price relative to similar products. Leibenstein (1950) called the effect which influence the "lower-end brand extension", the bandwagon effect. People's desire to possess prestige brands may serve as symbolic to the group membership. Bandwagon effect induces an individual to conform with prestige groups and/or to be distinguished from non-prestige groups reference groups (French and Raven, 1959; Sirgy, 1982; Midgley, 1983; Solomon, 1983; Mick, 1986; McCracken, 1986; Belk, 1988; and Dittmar, 1994). The literature on materialism provides a framework which helps to understand the meaning that consumers attach to worldly possessions (Belk, 1985). The link between materialism and prestige has received recent attention (Richins, 1994b; and Wong and Ahuvia, 1998). The consumption of prestige brands represents one type of materialistic consumer behavior. Certain goods and services have known to possess emotional value in excess of their functional utility (Hirschman and Holbrook, 1982; and

Sheth *et al.*, 1991). Recent studies in luxury consumption have identified that luxury products are likely to provide subjective intangible benefits. For example, Dubois and Laurent (1994) recognized that the emotional value was an essential characteristic of the perceived utility acquired from luxury products. Hedonic motive implies that one buys luxury goods primary for one's pleasure. Responses associated with the consumption such as sensory pleasure, aesthetic beauty or excitement (Allérès, 1990; Benarrosh, 1991; Fauchois and Krieg, 1991; and Roux and Floch, 1996). The hedonic effect is felt when consumers value the perceived utility acquired from a prestige brand to arouse feelings and affective states.

CONCLUSION AND SCOPE FOR FUTURE RESEARCH

Implications of this research are of significance for marketers in India. It offers a wide range of understanding about the concept of prestige and luxury and how customers perception reflect in their purchasing habit. This reinforces the commitment of global players with luxury brands to widen their reach in the Indian market. Customers in India aspire for luxury brands and believe in purchasing from abroad or in their foreign trips. Redding (1990) concluded in his study of Chinese economic behavior that any attempts to explain social behavior from a western model would be incomplete without due consideration of cultural factors. The western rationality inherent in most consumer theories needs to be reinterpreted through the eyes of Indian

reality. That is, the premise that consistency exists between private and public selves in independent cultures needs to be reexamined in an Eastern framework, where such consistency is not as crucial. Research is necessitated to explore the Indian emphasis of self-concept construct behind luxury consumption behavior. When one sees Southeast Asians consuming luxury goods, it is tempting to come to the same conclusion one would draw were one to see westerners behaving in the same way. However, this behavior needs to be understood in light of the specific cultural context in which it takes place. Because

Asian culture is based on an interpersonal construal of self. Asians value group norms or group goals more highly (Miller, 1984; Markus and Kitayama, 1991; and Abe *et al.*, 1996). The Indian context research may examine which of the perceived values discriminate most significantly among three level of prestige brands (i.e., luxury and premium and up market brands). With luxury market in India poised for growth, marketing literature needs to be enriched through borrowing and integrating fundamental concepts of 'luxury consumption behavior' as an extended and evolving paradigm of consumer behavior.

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CHANGING PARADIGMS OF LUXURY CONSUMPTION IN INDIA:
A CONCEPTUAL MODEL

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Antecedents of Households' Investment Decision-Making Process: A Study of the Indian Households

Yesh Pal Davar* and Suveera Gill**

Current Investment Decision Making (IDM) models present numerous variables that influence investment choice, and thereby, providing a theory base for how investment decisions are made by investors. The study reported here investigated the underlying dimensions in the selection of different investment avenues for the households. An examination of a sample of 500 investor respondents led to unraveling the difference in the household' IDM process both present and future with regard to varied investment alternatives. The results of factor analysis revealed emphasis on familiarity, satisfaction, opinion and demographic dimensions for all investment avenues. Univariate analyses of mean and proportion showed a significant difference amongst households with respect to their decision to invest vis-à-vis abstain in a particular investment avenue on the satisfaction dimension with regard to present investment and the opinion dimension with regard to future investments. The analyses are relevant since they reiterate the fact that the holistic development of capital market can take place only if a concerted effort is made to educate the household investors. The paper also provides direction for future research by identifying a number of issues and areas that have remained totally unexplored in the context of household investment participation and diversification in India.

INTRODUCTION

India is one of the high saving economies of the world (Athukorala and Sen, 2002). The Gross Domestic Savings (GDS) as a proportion of Gross Domestic Product (GDP) at current prices increased to 34.8% in 2006-07 from 23% in 1990-91 (RBI, 2008). A large part of the overall improvement in domestic savings emanate from higher household savings. Indian

households constitute nearly 80% of the economy's aggregate savings (RBI, 2008).

A vibrant capital market is characterized by the active participation of retail investors. However, the robust economic expansion and the resulting increase in per capita GDP have not translated in an increased household investor base. According to the report of the working group on savings in the 11th Five-Year

* Retired Professor, University Business School, Punjab University, Sector 14, Chandigarh 160014, India.
E-mail: ypdavar@yahoo.com

** Reader, University Business School, Punjab University, Sector 14, Chandigarh 160014, India.
E-mail: gillsuveera@yahoo.com

Plan, the estimates of financial savings of the households have shown a decline over recent years, whereas physical savings have increased (Patnaik and Narayan, 2007). Over the past five years, households had a mere 5% of their savings invested in the capital markets on an average. According to the estimates provided by SEBI-NCAER (2003), there are only 13 million households out of the total 177 million surveyed with investments in the capital markets. This is equivalent to a mere 7% of total Indian households. Such a low participation of households in the capital markets does not augur well for investment and economic growth of the country.

In the realm of households, one of the biggest trends that have arisen in the past few years is disintermediation of financial services. Household investors are being called upon to make complex and important decisions that they did not have to make in the past (Merton, 2003). The fast socioeconomic changes in India are increasingly forcing people to provide for their own retirement during their working life (Engardio and Matlack, 2005). Furthermore, the householders confront lots of opportunities and choices among financial products. Although having choices is nice, it is a quite daunting task to select amongst them.

The Indian household investors' saving and investment preferences have also been changing overtime. There is a clear shift in the preference pattern as there has been a rise in the rate of contractual

savings and decline in the rate of net deposits. As per the related literature, the quantum of the household savings and investments tracks a host of theoretically well-established determinants, the prime among them being the growth in per capita income, financial liberalization, greater opportunities for diversification across financial assets and market related returns.¹ At the international level, there have been substantial theoretical as well as applied evidence or dis-evidence about the explanatory facets of investor's perception and Investment Decision Making (IDM). At the national level, a number of such studies have picked up during the preceding decade at best. Set in this frame, the present paper is an attempt to shed light on various aspects of households' IDM.

LITERATURE REVIEW AND HYPOTHESES

Current IDM models present numerous variables that influence investment choice, and thereby providing a theory base for how investment decisions are made by investors. There is a general agreement among scholars concerning the individual variables that influence investment decisions. The positive IDM models and their theoretical underpinnings identify key constructs that assist in understanding the factors that have the greatest effect on an individual's IDM. Criticisms of normative models of investment, which often assume absolute truths about appropriate decision making, led to the development of positive

¹ A succinct discussion can be found in Report of the High Level Committee on Estimation of Savings (RBI, 2009); Report of the Working Group on Savings for the 11th Five Year Plan (RBI, 2007); Athukorala and Sen (2001); and EPWRF-NCAER Study (2003).

perspectives and models. Unlike normative models that specify decision rules for how to make an optimum or correct decision, positive models are more readily evaluated, using different modes of inquiry (Blume and Friend, 1978; Schlarbaum *et al.*, 1978; Juster and Smith, 1997; Kennickell, 1998; Grinblatt and Keloharju, 2000; Kopczuk and Saez, 2004; Calvet *et al.*, 2006; Campbell, 2006; and Massa and Simonov, 2006).

In the past three decades, many respected finance theorists and behavioral scientists have studied how people should and actually do make investment decisions. Theorists have produced optimization models that capture important features of reality, such as changing investment opportunities (Merton, 1973; Breeden, 1979; Campbell and Viceira, 2001; and Wachter, 2003), unpredictable labor income (Bodie *et al.*, 1992; Heaton and Lucas, 2000; Viceira, 2001; Gourinchas and Parker, 2002; Lynch and Tan, 2004; Cocco *et al.*, 2005; and Massa and Simonov, 2006), habit formation (Sundaresan, 1989; Abel, 1990; Constantinides, 1990; Ferson and Constantinides, 1991; Boldrin *et al.*, 1995; Heaton, 1995; and Campbell and Cochrane, 1999) and transaction costs (Davis and Norman, 1990; Haliassos and Bertant, 1995; Alexander *et al.*, 1998; Bernheim, 1998; and Vissing-Jorgensen, 2003). At the same time, scientific studies of actual financial behavior have revealed that people consistently make certain mistakes because of lack of knowledge (Lichtens-tein *et al.*, 1982; Yates, 1990; Griffin and Tversky, 1992; Haliassos and Bertant, 1995; Shleifer and Vishny, 1997;

Campbell and Cochrane, 1999; Hirshleifer, 2001; Vissing-Jorgensen, 2003; Graham *et al.*, 2005; Calvet *et al.*, 2006; Campbell, 2006; and Lusardi and Mitchell, 2006), faulty logic (Shefrin and Statman, 1985; Kroll *et al.*, 1988; Shiller, 1989; Ippolito, 1992; De Bondt, 1993; Odean, 1998; and Bange, 2000), cognitive dissonance (Lewellen *et al.*, 1977; Huberman and Regev, 2001; Zhu, 2002; and Mitchell and Utkus, 2003), and biased statistics (Mankiw and Zeldes, 1991; Kennickell, 1998; Vissing-Jorgensen, 2003; Banks *et al.*, 2005; and Graham *et al.*, 2005). Insights into the strength of positive models of IDM come from empirical studies that have assessed these relationships. There have been over time continuous refinements, additions and changes in these theories.

A number of research studies/surveys have been undertaken in India to identify the preferential structure of retail investors/households amongst general and specific avenues of investment. The summary of these studies is presented in Table 1. A perusal of literature shows that bulk of the research work on IDM has been carried out during the preceding decade at best. With regard to location, some surveys have covered selected cities, states and union territories whilst others are on an all-India basis. The favored sampling method has been convenience/ judgmental although random and stratified sampling techniques have also been used. Various statistical tools varying from the computation of basic statistical measures to rigorous statistical framework have been used for the analyses.

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Table 1: A Comparative Profile of Research on IDM			
Authors	Location	Sample	Statistical Tools
Gupta and Jain* (2008)	21 States/UT	n = 1,463 households Stratified random sampling	Frequency Distribution, and Percentages
Shollapur and Kuchanur (2008)	Bijapur	n = 300 household investors Judgment and convenience sampling	Mean, and Coefficient of Variation
Verma (2008)	Jaipur	n = 500 retail investors Judgment and convenience sampling	Frequency Distribution, Mann-Whitney U-Test, Kruskal-Wallis Test, and MANOVA
Mittal and Vyas (2007 and 2008)	Indore	n = 428 retail investors Judgment and Convenience sampling	Cluster Analysis, Kruskal-Wallis Test, and Correspondence Analysis
Mittal and Dhade (2007)	Indore	n = 167 investors Convenience sampling	Mann-Whitney U-Test, Sum test, and Chi-square
Srivastava (2007)	Delhi NCR	n = 500 households Judgment and random sampling	Frequency Distribution, and Percentages
Ranganathan (2006)	Mumbai	n = 100 retail investors Random and judgment sampling	Principal Component Analysis, and Multinomial Logistic Regression
Gupta* (2005)	24 States/UT	n = 5,908 households Stratified random sampling	Frequency Distribution, and Percentages
Gupta <i>et al.</i> * (2004b)	20 States/UT	n = 531 households Stratified random sampling	Frequency Distribution, and Percentages
Gupta <i>et al.</i> * (2004a)	20 States/UT	n = 542 households Stratified random sampling	Frequency Distribution, and Percentages
Khanna (2004)	Delhi, Chandigarh, Ludhiana, Bangalore, Chennai, Hyderabad, Mumbai, Ahmedabad and Kolkata	n = 792 retail investors Judgment and snow ball sampling	Frequency Distribution, and Cluster Analysis
MARCH Marketing Consultancy and Research (2004)	Delhi, Mumbai, Hyderabad, Bangalore, Chennai, Kolkata and Ahmedabad	n = 200 retail investors per city (total 1,400) Convenience sampling	Frequency Distribution, and Percentages
Singh (2003)	Punjab, Delhi and Mumbai	n = 260 retail investors Convenience and purposive sampling	Weighted Average Scores, and Factor Analysis

Table 1 (Cont.)

Authors	Location	Sample	Statistical Tools
Swarup (2003)	Kolkata, Bangalore, Pune, New Delhi, Jaipur, Vadodara, Mumbai, Surat and Ahmedabad	n = 367 retail investors Convenience sampling	Factor analysis
Panda and Tripathy (2002)	Orissa	n = 100 retail investors Convenience sampling	Spearman's Rank Correlation, and Multi-dimensional Scaling Techniques
Ranjith (2002)	Ahmedabad	n = 50 retail investors Convenience sampling	Mean, and Probability Approach
Singh and Vanita (2002)	Delhi	n = 150 retail investors Convenience sampling	Frequency Distribution, and Percentages
Dutta (2001)	16 cities	n = 600 investors Random sampling	Principal Factor Analysis
Gupta <i>et al.</i> * (2001)	21 states/UT and 130 cities/towns	n = 2819 households Stratified random sampling	Frequency Distribution, and Percentages
Gupta and Choudhury* (2001)	23 states/UT and 107 cities/towns	n = 312 households Stratified random sampling	Frequency Distribution, and Percentages
Raju (2001)	West Godavari district	n = 810 retail investors Stratified random sampling	Frequency Distribution, and Percentages
Rajaraman (2000)	Chennai	n = 405 investors Judgment sampling	Cluster Analysis, and Kruskal Wallis Test
Rajeshwari and Moorthy (2000)	Delhi, Madras, Bombay, Calcutta, Bangalore, Hyderabad, Coimbatore, Jamshedpur, Trichy and Anantapur	n = 350 retail investors Judgment sampling	Frequency Distribution, Percentages, and Factor Analysis
SEBI-NCAER (2000)	All-India	n = 25,000 households Judgment sampling	Frequency Distribution, and Percentages
Shanmugham (2000)	Coimbatore	n = 201 retail investors Judgment sampling	Multiple Discriminant Analysis, ANOVA, and Factor Analysis.
Rajaraman (1998)	Chennai	n = 405 retail investors Judgment sampling	Frequency Distribution, and Percentages

Table 1 (Cont.)

Authors	Location	Sample	Statistical Tools
Gupta* (1993)	19 states/UT and 76 cities/towns	n = 1,755 households Stratified random sampling	Frequency Distribution, and Percentages
Gupta* (1991)	23 states/UT and 100 cities/towns	n = 5,822 households Stratified random sampling	Frequency Distribution, and Percentages
Prasad and Subhas (1991)	Hubli and Dharwar	n = 142 retail investors Judgment sampling	Frequency Distribution, and Percentages

Note: * Survey conducted by the Society for Capital Market Research and Development (SCMRD), Delhi.

A number of studies highlight a relationship between investors' awareness and investment behavior. Investors, in general, have good knowledge about simple forms of investments, like fixed deposits and government savings schemes (Prasad and Subhas, 1991; Khanna, 2004; Gupta, 2005; and Shollapur and Kuchanur, 2008). The awareness conversely was the lowest for public and private sector bonds (Khanna, 2004; and Gupta *et al.*, 2004). It was observed that households hardly differed in their perception about equity shares and debentures as distinguishable 'risk classes' in earlier studies (Gupta, 1991; and SEBI-NCAER, 2000). However, later the findings revealed that household investors have become more sophisticated and discerning (Khanna, 2004; Gupta, 2005; and Srivastava, 2007). The capital market's development depends on the willingness of the investing public to invest in capital market instruments. Such willingness of investors, in turn, depends on their satisfactory past investment experience. There was relatively a high level of satisfaction with respect to investment in equity shares (SEBI-NCAER, 2000; Gupta *et al.*, 2004; and

Gupta, 2005). The satisfaction level was low with regards to investment in mutual funds (SEBI-NCAER, 2000; Panda and Tripathy, 2002; Singh and Vanita, 2002; Singh, 2003; Gupta *et al.*, 2004; and Gupta, 2005). The highest proportion of unsatisfactory investment experience was reported for private-sector bonds (Gupta *et al.*, 2004; and Gupta, 2005). Generally, the household investors' selection of investments is guided by their judgment about the overall suitability of each investment avenue. A comparison of responses of just about all the studies shows a similar pattern; the safety considerations dominated the overall suitability criterion (Gupta, 1991; SEBI-NCAER, 2000; Gupta and Choudhury, 2001; Gupta *et al.*, 2001; Singh, 2003; and Gupta, 2005). Accordingly, it is arguable that familiarity, past investment experience and opinion about an investment avenue influences the IDM process of a household. Therefore, we predict the following:

H₁: A significant difference exists between households' present IDM apropos an investment avenue with respect to:

(a) Familiarity in terms of knowledge and awareness about investments; (b) Satisfaction in terms of overall experience; and (c) Opinion about safety, return, and overall suitability.

Pertinent insights about household investors' IDM have also been put forth by investigations on the impact of demographic factors, such as, age, education, occupation, and income. Generally, as age increases, the tendency to take risk declines (Ranjith, 2002; Gupta and Jain, 2008; and Verma, 2008). According to Gupta *et al.* (2001) bonds were regarded as an investment for the retired people and did not have much appeal for young people except in the case of Development Financial Institution (DFI) bonds. The market penetration achieved by mutual funds was found to be much lower than equity shares for all age-classes (Gupta *et al.*, 2001; Singh, 2003; Gupta *et al.*, 2004; Gupta, 2005; and Gupta and Jain, 2008). Higher the education, higher was the level of understanding of investment complexities. Graduates and above in qualification preferred to invest in equity shares as well as mutual funds (MARCH MC and R, 2004; Mittal and Vyas, 2007 and 2008; and Verma, 2008). Further, the investment performance experience of share owners was related to their educational level (Gupta, 1991; SEBI-NCAER, 2000; Ranjith, 2002; and Singh, 2003). The incidence of investing in equity shares has been the highest amongst the service class (Gupta, 1991; SEBI-NCAER, 2000; Ranjith, 2002; and Mittal and Vyas, 2007 and 2008). The business class showed inclination to invest

in real estate and bullion (Mittal and Vyas, 2007 and 2008). Verma (2008) showed that mutual funds were popular amongst professionals, students and the self employed. Retirees displayed their risk aversion by not investing in mutual funds and/or in equity shares (Gupta, 2001; and Verma, 2008). There was a marked preference for fixed-interest type of investments amongst all income groups while mutual funds have found favor only with middle and high income groups (Gupta *et al.*, 2001; Panda and Tripathy, 2002; Gupta *et al.*, 2004; and Gupta and Jain, 2008). Equity shares uniformly have been found to have a high degree of acceptability across all income classes; particularly the level of penetration was very high for the middle class investors (Gupta, 1991; Ranjith, 2002; Khanna, 2004; Gupta, 2005; and Gupta and Jain, 2008). Appropriately, it is predicted that demographic factors certainly influence households' decision to invest in a particular investment avenue. Therefore, we predict the following:

H_2 : A significant difference exists between households' present IDM apropos an investment avenue with respect to: (a) age; (b) education; (c) occupation; and (d) income.

The cynosure of likely future investment to a large extent conforms to the risk perception (safety criterion) of households about different investment avenues. A comparison of responses with regard to likely future investment avenue showed diverse but much higher preference for less risky, fixed-interest type

investment avenues (Gupta, 1991; Gupta, 1993; SEBI-NCAER, 2000; Gupta *et al.*, 2001; Singh and Vanita, 2002; Gupta *et al.*, 2004; and Gupta, 2005). Further, a good number of educated investors in the age group of 45-55 years developed well planned out investment structures in terms of their future investment plans suggesting that such investors prefer to take moderate risk (Rajarajan, 2000; Ranjith, 2002; and Singh, 2003). Gupta and Jain (2005 and 2008) revealed that the past experience of an investor in a particular investment avenue to a very large extent influenced the future IDM. Correspondingly, it is predicted that demographic factors certainly influence households' decision to invest in a particular investment avenue. Therefore, we predict the following:

H₃: A significant difference exists between households' future IDM apropos an investment avenue with respect to: (a) opinion about safety, return, and overall suitability; (b) satisfaction in terms of overall experience; and (c) demographic factors.

Most of the surveys/studies on the Indian household/retail investors have looked into the investment preferences and the effect of demographic and psychographic factors on the IDM. However, there is dearth of evidence on the epistemological underpinnings to the selection of different investment avenues for investors especially in the Indian context. In general, discerning differences in the IDM of households and the way investors intend to invest in the future is

of paramount importance. The results presented in this paper have addressed this gap in literature.

OBJECTIVES

Extensive review of the extant literature, as well as the current IDM models has resulted in the formulation of two objectives:

1. To discern the underlying dimensions in the selection of different investment avenues for households; and
2. To determine differences in the households' present and future IDM process.

RESEARCH DESIGN

A BRIEF PROFILE OF THE RESPONDENTS

As the focus of the study has been on the identification of the IDM process of the households, the data has been collected from the respondents on the income and investments of the households as a whole. In the present paper, the term 'household' implies the investor/respondents' family and the same has been taken as a sampling unit.

In terms of geographical location, the scope of the study has been restricted to Chandigarh as well as to some extent the satellite towns of Mohali and Panchkula. Chandigarh is fast coming up as the center for trading in financial markets in North India (SEBI-NCAER, 2003). It has more than thrice the number of total investors (household investing in equity or bond or both) as compared to average number of total investors in India. The city ranks sixth

in terms of volume of transactions in the stock markets in India (Gera, 2005).

It is fairly well-known from the available facets of the residents of Chandigarh and its satellite towns that only certain segments of the population are of direct interest for the present study. As such the focus for collection of data has been on the subjectively but relevant segments of the population.² The 'targeted relevant population segment' comprises of those respondent investors who:

- Possess reasonable level of income, are educated and well employed or engaged in economic activities such as professionals, entrepreneurs, etc.
- Are well aware of their social/economic needs and of the investment scenario; and
- Have availability of investible funds and are presently engaged in investment activity.

The subjectively decided sample size of 500 investors/respondents has been taken from the 'targeted relevant population segment' based on the combined judgment and random sampling covering different age, education, occupation and income groups. For the purpose of comparisons, a reasonably large number of avenues have been covered: equity shares, various mutual fund schemes, and 'others' (government bonds, company debentures, bank-fixed deposits, gold/bullion, and real estate).

A brief demographic profile of the respondents can be seen from Table 2. With regard to equity shares as an investment alternative, it can be observed that the households did not differ significantly on any demographic factor, viz., age, education, occupation and income. For mutual funds, however, there were significant differences between households that invested vis-à-vis those abstained on the basis of level of education ($\chi^2 = 14.521$; $p < 0.001$), occupation composition ($\chi^2 = 18.781$; $p < 0.001$), and income class ($\chi^2 = 7.768$; $p < 0.05$). Investors in mutual funds, essentially, comprised that segment of the households who were highly educated, belonged to service class, and were affluent. In the case of 'others', there was a significant difference only on one factor namely, age ($\chi^2 = 16.396$; $p < 0.001$). In general, investment in 'others' was the lowest for respondents over the age group of 55 years.

PREPARATION AND ADMINISTRATION OF THE SURVEY INSTRUMENT

A detailed and exhaustive questionnaire was prepared to carry on an in depth exploratory and empirical level research (Annexure 1). The questionnaire was prepared keeping in view the targeted class of investors in terms of desirable characteristics of good sampling research design. The survey instrument used in the present study has been adapted and developed from the previous published research work.³

² Several studies like Rajarajan (1998); Rajeshwari and Moorthy (2000); Gupta *et al.* (2001); Singh and Chander (2004), etc., have used similar kind of methodology.

³ For example, Gupta and Choudhary (2000); SEBI-NCEAR Investor Survey (2000); Gupta *et al.* (2001); Gupta *et al.* (2001); Singh and Vanita (2002); Singh and Chander (2004); Swarup (2003); and MARCH MC and R (2004).

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Table 2: Demographic Profile of the Respondents											
	Total Number N = 500	Equity Shares			Mutual Funds			Others			
		Invest n = 309	Abstain n = 191	Test Statistic	Invest n = 332	Abstain n = 168	Test Statistic	Invest n = 252	Abstain n = 248	Test Statistic	
Age	Less than 30 years	55 (18%)	42 (22%)	$\chi^2=2.097$	74 (22%)	23 (14%)	$\chi^2=6.787$	55 (22%)	42 (17%)	$\chi^2=16.396^{***}$	
	30-45 years	99 (32%)	53 (28%)		100 (30%)	52 (31%)		88 (35%)	64 (26%)		
	45-55 years	93 (30%)	61 (32%)		93 (28%)	61 (36%)		57 (23%)	97 (39%)		
	Over 55 years	62 (20%)	35 (18%)		65 (20%)	32 (19%)		52 (20%)	45 (18%)		
Education	Graduate	127 (41%)	79 (41%)	$\chi^2=0.306$	117 (35%)	89 (53%)	$\chi^2=14.521^{***}$	93 (37%)	113 (45%)	$\chi^2=5.024$	
	Postgraduate	157 (51%)	94 (49%)		183 (55%)	68 (40%)		139 (55%)	112 (45%)		
	Ph.D.	25 (8%)	18 (9%)		32 (10%)	11 (7%)		20 (8%)	23 (9%)		
Occupation	Government Service	137 (44%)	75 (39%)	$\chi^2=2.886$	123 (37%)	89 (53%)	$\chi^2=18.781^{***}$	98 (39%)	114 (46%)	$\chi^2=3.455$	
	Professional Practice	35 (11%)	22 (12%)		44 (13%)	13 (8%)		33 (13%)	24 (10%)		
	Own Business	27 (9%)	15 (8%)		24 (7%)	18 (11%)		21 (8%)	21 (8%)		

Table 2 (Cont.)

	Total Number N = 500	Equity Shares			Mutual Funds			Others		
		Invest n = 309	Abstain n = 191	Test Statistic	Invest n = 332	Abstain n = 168	Test Statistic	Invest n = 252	Abstain n = 248	Test Statistic
Retired	48 (10%)	25 (8%)	23 (12%)		32 (10%)	16 (9%)		24 (10%)	24 (10%)	
	141 (28%)	85 (28%)	56 (29%)		109 (33%)	32 (19%)		76 (30%)	65 (26%)	
Income (per month)	133 (27%)	74 (24%)	59 (31%)		80 (24%)	53 (32%)		67 (26%)	66 (27%)	
	133 (26%)	78 (25%)	55 (29%)		82 (25%)	51 (30%)		65 (26%)	68 (27%)	
	234 (47%)	157 (51%)	77 (40%)		170 (51%)	64 (38%)		120 (48%)	114 (46%)	

Note: * significant at the 0.05 level; *** significant at the 0.001 level.

Subsequent to observing a series of individual observations, i.e., 61 variables, 11 clustered variables were identified on which statistical analysis has been carried out. In order to understand the nature of the distributions, the variables were given a figural representation(s); and in most of the cases the variables involved have been observed to be 'more or less' normally distributed. The variables are defined in Table 3.

The variables reflected four IDM dimensions keeping in view the scope of the present research work. The IDM dimensions were familiarity, satisfaction, opinion, and demographics as shown in Table 4. The multidimensional nature of IDM necessitated this variety so as to obtain more reliable measures of general tendencies and to distinguish them from more situational ones.

Several steps were taken to ensure the validity of the survey instrument representing the four IDM dimensions. First, they were verified using a panel of two experts. Second, the questionnaires were pretested for general readability and design. The face validity of the survey instrument was established subsequent to the modifications which were

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Table 3: Variable Definitions	
Variable	Definition
KFR	Knowledge of financial ratios comprises four ratios: (a) <i>P/E</i> ratio; (b) Dividend Yield; (c) Yield to maturity; and (d) NAV.
KCFC	Knowledge of complex financial concepts as a measure of understanding complex concepts and investment avenues available comprises eight concepts: (a) Gilt funds; (b) Index funds; (c) Stock futures; (d) Index futures; (e) Index options; (f) Book building method of share issue; (g) Dematerialization; and (h) Fund-to-Funds.
LAWR	Investors level of awareness about the capital market investment vagaries has been measured in terms of six prominent Indian securities scams: (a) The Securities Scam: 1992; (b) MS Shoes Scam: 1994; (c) CRB Scam: 1997; (d) Vanishing Companies Scam: 1998; (e) Plantation Scam: 1999; and (f) Ketan Parekh Scam: 2001.
LSATIS	Level of satisfaction has been measured in terms of overall experience of investors of investing with regards to equity shares, mutual funds and 'others'.
OAS	Opinion about safety has been measured in terms of viewpoint of investors on safety with regards to equity shares, mutual funds and 'others'.
OAR	Opinion about return has been measured in terms of viewpoint of investors on return with regards to equity shares, mutual funds and 'others'.
OAO	Opinion about overall suitability has been measured in terms of viewpoint of overall suitability with regards to equity shares, mutual funds and 'others'.
AGE	Respondents' age is a continuous variable and has been measured in years as follows: (a) Less than 30 years; (b) 30-45; (c) 45-55; and (d) Above 55 years.
EDU	Education is a demographic variable and has been measured as follows: (a) Graduate; (b) Postgraduate; and (c) Ph.D.
OCCU	Respondents' occupation is a demographic variable and has been measured as follows: (a) Government service; (b) Professional practice; (c) Own business; (d) Retired; and (e) Other Service.
LINC	Level of income refers to respondents' total household monthly income and has been measured in rupees as follows: (a) Less than Rs. 20,000; (b) Rs. 20,000-25,000; (c) Above Rs. 25,000.
PINVST	Present Investment has been measured in terms of respondents' (including household members) presently invested funds in equity shares, mutual funds and 'others'.
FINVST	Future Investment has been measured in terms of respondents' intention of investing funds within the next one year in equity shares, mutual funds and/or 'others' depending upon the availability of funds (1= Below Rs. 25,000; 2 = Rs. 25,001-50,000; 3 = Rs. 50,001-1,00,000; and 4= Above Rs. 1,00,000). The field of study was transformed into three dummy variables: (a) Low; (b) Medium; and (c) High.

Familiarity (3 Items)	Satisfaction (1 Item)	Opinion (3 Items)	Demographics (4 Items)
KFR	LSATIS	OAS	AGE
KCFC	–	OAR	EDU
LAWR	–	OAO	OCCU
–	–	–	LINC

made on the basis of the responses received.

The reliability of the instrument was examined using Cronbach's alpha to assess its internal consistency. Table 5 shows the coefficient alpha estimates of internal consistency reliability ranged from 0.63 to 0.74 across the four IDM dimensions. The scale showed high reliability coefficients in all the four IDM dimensions.⁴ It was concluded that the survey instrument could be used to assess household perceptions on investments.

A total of 700 questionnaires were personally administered, out of which 526 could be obtained as complete for usage. At the screening stage, 26 questionnaires had to be rejected due to inconsistent or incongruous responses. Thus, the final sample size in the present study has been that of 500 investor respondents, providing a 71.42% response rate which is considered to be reasonably satisfactory.

DATA ANALYSIS AND METHODOLOGY

To determine the underlying dimensions in the selection of different investment avenues for households, the principal component approach to factor analysis has been used. The criterion of minimum salient loading of variables on components has been considered (Guilford, 1956; Cliff and Hamburger, 1967; Horn, 1967; Pennell, 1968; Humphrey's *et al.*, 1969; Lawley and Maxwell, 1973; Nunnally, 1979, etc.). Accordingly, the minimum absolute magnitude of 0.50 for component's loadings is taken for the rotated factors (components) respectively. The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy has been used to gauge the appropriateness of the factor analysis approach. The decision for the extraction and retention of significant components has been taken by keeping in view the recommendations about the

	Familiarity (3 Items)	Satisfaction (1 Item)	Opinion (3 Items)	Demographics (4 Items)
Mean (SD)	2.44 (1.40)	1.33 (0.89)	2.21 (0.43)	2.27 (0.56)
Alpha (α)	0.7438	0.6274	0.6667	0.6656

⁴ According to Nunnally (1979) a scale having a reliability coefficient of 0.50 and above should be included in the study.

same by Guttman's (1940), Kaiser's (1958), and Bentler's (1968) mathematical/psychometric/statistical criterion of latent roots greater than or equal to unity. Further, the Bartlett's (1950 and 1951) multivariate test of sphericity revealed that the correlation matrix R obtained was positively definite.⁵

To investigate differences in the IDM process of households for different investment avenues, the data was subjected to univariate analysis by invoking one-way analysis of variance (ANOVA) using the general linear model. An ANOVA was performed for each of the 11 IDM variables.

LIMITATIONS

The present study is subject to the following limitations:

- A statistical inquiry pertaining to personal incomes and investment involves considerable difficulty due to confidential and sensitive nature of such information. Such information can be collected only from those willing to cooperate in filling up the questionnaires.
- Those falling below the poverty line, having little voluntary savings for financial investments and/or no ability/knowledge/awareness at all to understand investments in financial instruments of various kinds have been excluded from the scope of the present study. Further, quite higher and top-end social classes have also been excluded.

RESULTS AND DISCUSSION

UNDERLYING DIMENSION IN THE SELECTION OF INVESTMENTS

The factor analysis (varimax rotation) yielded a four-five factor solution with eigen values greater than one explaining within the range of 64.919% to 56.147% of the common variance as reported in Table 6.

The first factor is loaded heavily and positively by the familiarity dimension irrespective of the fact whether households have invested or abstained in the case of all investment avenues. This class of households is knowledgeable and appreciates the fact that without the right information, the financial world can be a labyrinth where one can easily lose a lot of money. However, for households who have abstained to invest in equity shares, this factor is indexed on the satisfaction dimension as well. The second factor, which seems to index the opinion dimension, was composed of the three variables OAS, OAR and OAO for all investment avenues. Such predominant loading on opinion implies that the investing policy of householders hinges on safety of capital, adequacy of return and overall suitability. For households who have invested in equity shares this factor is indexed on OAS and OAO. The third factor is positively loaded by the demographics for households in the case of equity shares as well as 'others'. In the case of mutual funds, this dimension is indexed both on the demographics as well as satisfaction dimension. For equity shares as an investment avenue, this factor

⁵ All the 11 eigen values are positive, i.e., the correlation matrix is of full rank. Further, the explanatory variables under investigation do not suffer from serious degree of multicollinearity.

Table 6: Summary of Rotated Factor Loadings on IDM Variables by Principal Component Analysis (N = 500)

Variables	Dimension	Invest Factors					Abstain Factors					
		1	2	3	4	5	1	2	3	4	5	
Panel A: Equity Shares												
KFR	Familiarity	0.762					0.586					
KCFC	Familiarity	0.812					0.665					
LAWR	Familiarity	0.645					0.770					
LSATIS	Satisfaction				0.740		0.553					
OAS	Opinion		0.854					0.793				
OAR	Opinion				0.532			0.576				
OAO	Opinion		0.765					0.872				
AGE	Demographics						-0.733			-0.713		
EDU	Demographics			0.753							0.717	
OCCU	Demographics						0.743			0.703		
LINC	Demographics			0.758							0.687	
Eigenvalues			1.836	1.474	1.251	1.184	1.111	1.825	1.788	1.523	1.401	
Percentage of Variance		16.687	13.397	11.375	10.759	10.095	16.588	16.250	13.841	12.739		

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Table 6 (Cont.)

Variables	Dimension	Invest Factors					Abstain Factors					
		1	2	3	4	5	1	2	3	4	5	
Panel B: Mutual Funds												
KFR	Familiarity	0.772					0.827					
KFCF	Familiarity	0.824					0.828					
LAWR	Familiarity	0.756					0.726					
LSATIS	Satisfaction			0.512					0.769			
OAS	Opinion		0.638					0.664				
OAR	Opinion		0.770					0.754				
OAO	Opinion		0.783					0.774				
AGE	Demographics			-0.685								0.888
EDU	Demographics				0.814					0.854		
OCCU	Demographics			0.714					0.739			
LINC	Demographics				0.706					0.546		
Eigenvalues		1.982	1.661	1.293	1.240	1.928	1.740	1.218	1.136	1.120		
Percentage of Variance		18.019	15.099	11.756	11.272	17.530	15.815	11.071	10.326	10.178		

Table 6 (Cont.)

Variables	Dimension	Invest Factors					Abstain Factors						
		1	2	3	4	5	1	2	3	4	5		
Panel C: Others													
KFR	Familiarity	0.801					0.772						
KCFC	Familiarity	0.826					0.815						
LAWR	Familiarity	0.737					0.776						
LSATS	Satisfaction					0.937							0.933
OAS	Opinion		0.662					0.643					
OAR	Opinion		0.666					0.721					
OAO	Opinion		0.725					0.661					
AGE	Demographics					0.779							-0.648
EDU	Demographics			0.806						0.784			
OCCU	Demographics					-0.705						0.811	
LINC	Demographics			0.690						0.615			
Eigenvalues		1.933	1.462	1.256	1.175	1.059	1.925	1.389	1.332	1.152	1.102		
Percentage of Variance		17.569	13.290	11.422	10.678	9.625	17.592	12.630	12.106	10.470	10.019		
Note: Loadings < 0.50 omitted.													

is positively loaded on *EDU* and *LINC* for investors, while bipolar with loadings of 0.703 on *OCCU* and -0.713 on *AGE* for non-investors. For this class of households, with growing age the tendency to invest and take risks declines. For mutual funds, this factor is positively loaded on *LSATIS* and *OCCU* for investors, while is bipolar for non-investors with loadings of 0.512 and 0.714 respectively on *LSATIS* and *OCCU* as well as -0.685 on *AGE*. Generally, the level of satisfaction as well as the occupation class of the householder determines the decision with regard to investment in mutual funds. However, with age the propensity to invest in mutual funds declines. For 'others', this factor is positively loaded on *EDU* and *LINC* for all households. The fourth factor is loaded by demographics in the case of mutual funds and 'others' for all households. For investors in equity shares, this factor is indexed both on the satisfaction and demographic dimension. While those who refrained from investing in equity shares, this factor was loaded on *EDU* and *LINC*. Similar factors were also observed for all households that invested in mutual funds. For 'others', this factor is bipolar with loadings of 0.779 on *AGE* along with -0.705 on *OCCU* for investors; and 0.811 on *OCCU* along with -0.648 on *AGE* for non-investors. This class of investors in 'others', undoubtedly with growing age develops maturity and experience for making decisions about the usage of their surplus and/or available funds in the light of overall economic needs of their family life. It seems that the rational investors' occupation irrespective of their age does

not play a significant role in the overall IDM process beyond a certain level. The fifth factor is bipolar factor with loadings of 0.743 on *OCCU* along with -0.733 on *AGE* for investors in equity shares; positively loaded on *AGE* for non-investors in mutual funds; and heavily and positively on *LSATIS* for all households in the case of investment in 'others'.

The underlying dimension in selection of investments by households reveals emphasis on all the four IDM dimensions, viz., familiarity, satisfaction, opinion and demographic for all investment avenues. Such kind of empirical results indicate inter-domain factors underlying the selection of investments and are quite realistic and rational.

DIFFERENCES IN THE HOUSEHOLDS' IDM

The ANOVA procedure for present investment (PINVST) is shown in Table 7. Panel A shows that there were significant differences between households that have currently invested vis-à-vis abstained on the familiarity (*KFR*, *KCFC*, and *LAWR*), satisfaction (*LSATIS*), and opinion (*OAS*, *OAR*, and *OAO*) dimension. Only one demographic variable, namely *LINC* was found to be significant at the 0.05 level. Further analyses of the 'means' revealed a higher level of familiarity, satisfaction, opinion on safety, risk and return as well as income for those who have presently invested in shares. A plausible explanation to a relatively high percentage of satisfaction level of high income households with respect to investment in equity shares can be that

Table 7: One-Way Analysis of Variance for Present Investment (PINVST)

Investment Avenues	Variables	Invest	Abstain	F-Statistics
Equity Shares	KFR	2.1472	1.5041	28.044***
	KCFC	2.9126	2.1099	48.847***
	LAWR	3.2427	2.1047	25.958***
	LSATIS	2.8511	0.8325	256.527***
	OAS	1.0485	0.3613	32.731***
	OAR	3.7961	2.7906	33.395**
	OA0	2.1327	0.8534	66.832***
	AGE	2.5243	2.5243	0.390
	EDU	1.6699	1.6806	0.035
	OCCU	2.6311	2.8063	1.230
	LINC	2.2686	2.0942	5.210*
Mutual Funds	KFR	2.8102	2.2024	25.336***
	KCFC	3.1446	2.1429	18.746***
	LAWR	2.0808	1.5471	17.906***
	LSATIS	1.0807	0.2831	98.976***
	OAS	1.9351	1.4349	22.737***
	OAR	2.6233	2.1363	20.951***
	OA0	2.3025	1.8431	14.622***
	AGE	2.4488	2.6071	2.730
	EDU	1.7440	1.5357	12.614***
	OCCU	2.8795	2.3393	11.268***
	LINC	2.2711	2.0655	0.009**
Others	KFR	2.6468	2.5445	0.496
	KCFC	2.8175	2.7984	0.007
	LAWR	2.0649	1.7355	7.486
	LSATIS	1.7263	0.4396	213.577***
	OAS	3.2540	3.2200	0.118**
	OAR	2.0133	1.8151	2.435
	OA0	2.4758	2.4918	0.018
	AGE	2.4206	2.5847	3.287
	EDU	1.7103	1.6371	1.710
	OCCU	2.7897	2.6048	1.450
	LINC	2.2103	2.1935	0.051

Note: *significant at the 0.05 level; **significant at the 0.01 level; and ***significant at the 0.001 level.

factors such as risk-tolerance capacity, the extent of diversification achievable, awareness level and accessibility to consultants, etc., enhances with the level of household income. Panel B reveals statistical differences between households with regard to their decision to put in or withhold investment in mutual funds on the familiarity (*KFR*, *KCFC*, and *LAWR*), satisfaction (*LSATIS*), opinion (*OAS*, *OAR*, and *OAO*) and demographic (*EDU*, *OCCU*, *LINC*) dimensions. An examination of 'means' revealed a higher level of familiarity and opinion for households currently invested in mutual funds. Further, higher 'means' were observed for investors on education, occupation and the level of income. Investors in mutual funds are not only more discerning but belong to that section of households who are better educated, affluent and belong to the service class. Panel C highlights significant difference between investors and non-investors regarding investments in 'others' on only two variables, namely *LSATIS* and *OAS*. Investors in 'others' perceive their investment to be safer than other avenues.

Overall, the results show that satisfactory past experience in a particular investment avenue seem to be of paramount importance to investing households. Further, familiarity is significant and higher for knowledge investment products like equity shares and mutual funds. A significant difference thus exists between households' present IDM apropos an investment avenue with respect to familiarity, satisfaction, opinion as well as

demographic factors. Hence, the hypotheses H_1 and H_2 stands accepted.

The ANOVA procedure for future investment (*FINVST*) taking into consideration the availability of funds with households is shown in Table 8. Panel A shows that there were significant differences between intention to invest vis-à-vis abstain in equity shares on the dimension of familiarity (*KFR*, *KCFC*, and *LAWR*), and opinion (*OAS*, *OAR*, and *OAO*) irrespective of the availability of funds. Added, the demographic variable *LINC* was also found to be significant for all households irrespective of funds availability. The variable *AGE* was found to be significant provided households had access to high funds in the future. Further analyses of the 'means' revealed a higher level of familiarity, opinion as well as income for those who intend to invest in shares. The relatively aged householders even with high availability of funds do not intend to invest in equity shares. Panel B reveals statistical differences between households with regard to their decision to invest or not in mutual funds in future on the opinion (*OAR* and *OAO*) and demographic (*OCCU*) dimensions regardless of the availability of funds. An examination of 'means' revealed a higher level of opinion about return and overall suitability for householders who intend to invest. Further, higher 'means' was observed on the *OCCU* variable. Households belonging to the service class have shown market preference for investment in mutual funds. Statistical differences were also found with regard to future investment in mutual funds on

Investment Avenues	Variables	Low			Medium			High		
		Invest	Abstain	F-Statistics	Invest	Abstain	F-Statistics	Invest	Abstain	F-Statistics
Equity Shares	KFR	2.7513	2.5116	4.045*	3.0568	2.2252	55.848***	3.0261	2.4207	23.853***
	KCFC	3.1269	2.6007	5.394*	3.4934	2.2288	34.242***	3.3595	2.5648	11.062***
	LAWR	2.1454	1.7429	10.748***	2.2528	2.6046	30.081***	2.3249	1.7148	22.467***
	LSATIS	2.5635	1.7657	28.262***	2.5677	1.6679	38.076***	2.1902	1.8991	13.409***
	OAS	1.0711	0.6007	14.989***	1.0917	0.5277	22.743***	1.0196	0.6830	6.716**
	OAR	3.8629	3.1188	17.960***	3.9563	2.9520	35.144***	3.9216	3.1873	15.478***
	OAO	2.1675	1.3036	28.745***	2.3275	1.0664	68.491***	2.3399	1.3372	34.842***
	AGE	2.0255	2.5017	0	2.4061	2.5830	3.8000	2.3529	2.5677	4.801*
	EDU	1.6751	1.6733	0.001	1.7031	1.6484	0.909	1.7386	1.6455	2.348
	OCCU	2.7513	2.6634	0.321	2.8210	2.5941	2.171	2.8824	2.6167	2.549
Mutual Funds	LINC	2.2995	2.1386	4.479*	2.3057	2.1144	6.612***	2.3725	2.1268	9.387**
	KFR	2.6259	2.5826	0.136	2.7073	2.4128	5.792*	2.7784	2.4967	5.569*
	KCFC	2.7926	2.8261	0.022	2.7927	2.8375	0.036	2.9175	2.7386	0.614
	LAWR	1.8640	1.9456	0.451	1.9194	1.8674	0.166	1.9937	1.8431	1.470
	LSATIS	0.8704	0.7450	2.285	0.8758	0.6926	4.446	0.9464	0.7280	6.677**
	OAS	1.8160	1.7095	1.100	1.8841	1.5437	10.402***	1.8599	1.7081	2.141
	OAR	2.6386	2.2495	14.709***	2.6033	2.1856	15.427***	2.6593	2.3330	9.792**

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Table 8 (Cont.)

Investment Avenues	Variables	Low			Medium			High		
		Invest	Abstain	F-Statistics	Invest	Abstain	F-Statistics	Invest	Abstain	F-Statistics
	OAO	2.3110	1.9570	9.575**	2.2442	1.9650	5.364*	2.3973	1.9925	11.799***
	AGE	2.3185	2.7174	19.951***	2.4421	2.6163	3.346	2.2990	2.6307	13.016***
	EDU	1.7185	1.6217	2.975	1.7165	1.5930	4.410*	1.6907	1.6634	0.225
	OCCU	2.8704	2.4957	5.973*	2.8262	2.4535	5.363*	2.9381	2.5458	6.265*
	LINC	2.2148	2.1870	0.139	2.2287	2.1512	0.976	2.2577	2.1667	1.419
Others	KFR	2.5350	2.7427	2.856	2.4975	3.0400	14.164***	2.5721	2.8413	2.345
	KCFC	2.7234	2.9708	1.114	2.5700	3.7600	18.981***	2.7208	3.4127	4.291*
	LAWR	1.8564	1.9882	1.066	1.8521	2.0993	2.674	1.8544	2.2281	4.217*
	LSATIS	1.1230	1.0210	0.847	1.069	1.0131	0.509	1.1054	0.9679	0.753
	OAS	3.2600	3.1930	0.413	3.2910	3.0216	4.787*	3.2816	2.9286	5.668*
	OAR	2.0358	1.6826	7.024**	1.9896	1.6165	5.559*	1.9678	1.5487	4.820*
	OAO	2.6450	2.1735	14.782***	2.5957	2.0358	14.819***	2.5384	2.1044	6.022*
	AGE	2.5137	2.4795	0.127	2.5200	2.4300	0.630	2.5515	2.1587	8.384**
	EDU	1.6261	1.7661	5.666*	1.6425	1.8000	5.097*	1.6568	1.7937	2.638
	OCCU	2.6778	2.7368	0.133	2.6175	3.0200	4.426*	2.6156	3.2698	8.108**
	LINC	2.1672	2.2690	1.682	2.1875	2.2600	0.605	2.2037	2.1905	0.014

Note: *significant at the 0.05 level; **significant at the 0.01 level; and ***significant at the 0.001 level.

variable *AGE* (low availability of funds); *KFR*, *OAS*, and *EDU* (medium availability of funds); as well as *KFR*, *LASTIS* and *AGE* (high availability of funds). While the results are mixed with regard to availability of funds, it is imminent that investment in mutual funds would be determined to a large extent by opinion about returns and overall suitability. Further, relatively younger householders preferred this investment avenue for both low and high funds availability. Panel C highlights difference between the intention to opt or restrain investment in 'others' by the households on the opinion (*OAR* and *OAO*) dimension. An examination of 'means' revealed a higher level of opinion about returns and overall suitability amongst householders who intend to invest regardless of the availability of funds. Statistical differences were also found with regards to future investment in 'others' on variable *EDU* (low availability of funds); *KFR*, *KFCF*, *OAS*, *EDU*, *OCCU* (medium availability of funds); as well as *KFCF*, *AWR*, *OAS*, *AGE* and *OCCU* (high availability of funds). What is very forthcoming is that households with lower familiarity and low level of education consider 'others' to be a promising investment even when the availability of funds is medium to high. Added, for the same availability of funds, the opinion about safety is of paramount importance to investors.

Overall, the results suggest that opinion about returns and overall suitability in the case of all investment avenues seem to be a key determinant with respect to future investments. A

significant difference thus exists between households' future IDM apropos an investment avenue with respect to familiarity, satisfaction, opinion as well as demographic factors. Hence, the hypothesis H_3 stands accepted.

CONCLUSION AND IMPLICATIONS

The study of household finance is challenging because household investors' behavior is difficult to measure, and households face constraints not captured by textbook models (Campbell, 2006). This paper chronicles research on households that has tested the major IDM constructs. The studies reviewed were related explicitly to the constructs and relationships set forth in positive theories, which is one of the first steps to assess our overall level of understanding of IDM. Understanding why and how Indian households make investment decision could lead to initiatives resulting in active participation of investors, underpinned by their long-term investment goals, with adjustments made in response to their short-term liquidity needs. The present paper is motivated by such a viewpoint, as it endeavors to unravel the difference in the IDM of households with regard to varied investment alternatives.

The empirical results put forth by the study make the IDM process of investors very forthcoming. The underlying dimension in selection of investments reveals emphasis on familiarity, satisfaction, opinion and demographic dimensions for investment avenues in the way various IDM variables were grouped by factor analysis. Univariate (item-by-

item) analyses of mean and proportion show statistically significant differences between the households for both present and future IDM regarding the choice of an investment avenue with respect to familiarity, satisfaction, opinion as well as demographic dimensions. There exists a significant difference amongst households with respect to their decision to invest or abstain in a particular investment avenue on the satisfaction dimension with regard to present investment and the opinion dimension with regard to future investments. The investors' preferences are supposedly related to the actual performance of the various investment avenues over a certain investment time horizon. Seemingly, investors consciously or unconsciously take into account their previous experiences while forming an opinion about making investment decisions for the future. The findings also suggest that demographic factors like age, education, occupation and income have a significant influence on IDM process. Generally, the most affluent, educated and younger investors have favored to invest in equity shares and mutual funds. With regard to future investments, irrespective of funds availability the affluent preferred equity shares as an investment avenue, while the service class preferred mutual funds. Investors intending to invest in 'others' belong to that class of households that has low knowledge and awareness about capital market investments and value safety of investments over returns. This class of households can be targeted as

potential investors through systematic investment education programs. The setting up of the Investor Education and Protection Fund (IEPF) by the Ministry of Company Affairs is a commendable attempt in this direction. However, the content and the delivery mechanism for investor education on a countrywide basis need to be reworked.

Inevitably, the extant literature on households' IDM brings to fore a number of issues and areas that have remained totally unexplored in the context of household investment participation and diversification in India. A few possible theoretical and empirical directions are suggested herewith.

- Portfolio theory suggests that everyone should participate in all security markets. Nonparticipation may derive from salience bias, or from mere exposure effects.⁶ Although, the latter has been explored in the Indian context, it would be appealing to explore the former.
- An interesting research question is whether stock market investors are more risk tolerant than non-investors. The effect of poor health or owning significant private business assets on asset allocation can be looked into.
- There is a need to further empirical literature on how households construct their portfolios within each asset class. It has been established, for example, that employees invest heavily in their own firm's stock and perceived it to be low on risk.⁷

⁶ See, for example, Hong *et al.* (2004), Puri and Robinson (2005), and Gusio *et al.* (2008).

⁷ See, for example, Benartzi (2001), and Mitchell and Utkus (2003).

- There is an active debate about performance of concentrated portfolios. For instance, among wealthier households, concentrated portfolios have higher average returns than diversified portfolios although they also have higher risk and low Sharpe ratio.⁸
 - A small recent literature finds strong evidence for inertia in asset allocation. It has been observed that participants in retirement savings plans rarely alter the allocation of their contributions or rebalance their portfolios, and default options have long-lasting effects on their portfolios.⁹ These issues need further exploration in the Indian context.
 - An additional priority of future research is to determine the underlying dimensions in the selection of different investment avenues for female and male investors.
 - There is a lack of significant data on quantified fees charged by each mutual fund available to investors and the effect of these fees on household IDM and portfolio performance.
 - Another important aspect of household finance is the existence of borrowing costs. It has been seen that consumption responds to predictable changes in income and age in a manner that suggests the relevance of borrowing constraints for many households.¹⁰
 - An appealing direction for future research is to gauge benefits out of the emergence of markets for new financial instruments, such as options, swaps, etc., which offer interesting new opportunities for people to achieve financial security.
 - A different empirical direction is to analyze how behavioral investment psychology drives IDM. A vast psychological literature shows that emotional state can significantly affect decision making.¹¹
- The literature on household IDM is a rapidly expanding area of study that has matured considerably, both theoretically and empirically. Despite the growing popularity of this research stream, the review indicates that much needs to be done in the Indian context. Research on suggested areas can provide a lot of interesting and reliable information enabling better understanding of Indian households' IDM process. It may be then feasible for the field to contribute ideas to improve the confidence and welfare of household investors at large.

⁸ See, for example, Ivkovic *et al.* (2004).

⁹ See, for example, Madrian and Shea (2001), Choi *et al.* (2002), Agnew *et al.* (2003), and Ameriks and Zeldes (2004).

¹⁰ See, for example, Gourinchas and Parker (2002), Cocco (2005), Zinman (2005), Davis *et al.* (2006), Johnson *et al.* (2006).

¹¹ See, for example, Kahneman and Tversky (1979), Damasio (1994), Elster (1998), Charlton (2000), Hermalin and Isen (2000), and Shiller (2000).

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ANNEXURE 1 (CONT.)

3. Do you endorse the view that pension and provident funds in India should invest part of their funds in equities? Yes/No/Can't say

4. Are you aware of any of the following event(s): (Please tick ✓)

Events	Fully	Reasonably Well	Quite Reasonably	Moderately Well	Somewhat	Not At All/ Can't Say
The Securities Scam: 1992	1	2	3	4	5	6
MS Shoes Scam: 1994	1	2	3	4	5	6
CRB Scam: 1997	1	2	3	4	5	6
Vanishing Companies Scam: 1998	1	2	3	4	5	6
Plantation Scam: 1999	1	2	3	4	5	6
Ketan Parekh Scam: 2001	1	2	3	4	5	6

5. Do you believe that equity shares shall give higher returns than fixed-income investments over:

a. The short-term Yes/No/Can't say

b. The medium-term Yes/No/Can't say

c. The long-term Yes/No/Can't say

6. Have you and/or any member(s) of your family invested in shares: (Please tick ✓)

a. Only through Mutual Fund (MF) Schemes

b. Directly in equity shares-IPO's

c. Directly in equity shares-Secondary

7. Do you and/or any member(s) of your family presently own: (Please tick ✓)

Shares	<input type="checkbox"/>
Mutual Fund Growth Schemes	<input type="checkbox"/>
Mutual Fund Income Schemes	<input type="checkbox"/>
Mutual Fund Balanced Schemes	<input type="checkbox"/>
Money Market/Liquid Mutual Fund	<input type="checkbox"/>
GILT-Edged	<input type="checkbox"/>

ANTECEDENTS OF HOUSEHOLDS' INVESTMENT DECISION-MAKING PROCESS:
A STUDY OF INDIAN HOUSEHOLDS

ANNEXURE 1 (CONT.)

ELSS	
Tax Saving Mutual Fund Schemes	
Industry specific Mutual Fund Schemes	
Mutual Fund Index Schemes	
Mutual Fund Sectoral Schemes	
Government Bond	
Company Debentures	

8. If you and/or any member(s) of your family have invested in Mutual Funds, in how many schemes (number) of the following categories have you preferred to make investment(s) in:

	Categories	Number of Schemes
A	Bank Sponsored	
	Joint Ventures-Predominately Indian (e.g. SBI Funds Management Ltd.)	
	Others (e.g., UTI Asset Management Co. Pvt. Ltd.)	
B	Institutions (e.g., GIC Asset Management Co. Ltd.)	
C	Private Sector	
	Indian (e.g., Kotak Mahindra Asset Management Co. Ltd.)	
	Joint ventures-Predominately Indian (e.g., HDFC Asset Management Co. Ltd.)	
	Joint Ventures-Predominately Foreign (e.g., Morgan Stanley Investment Management Pvt. Ltd.)	

9. How much satisfactory, in over all terms, is your experience of investing in the following:
(Please tick ✓)

Investment Types	Extremely Satisfactory	Reasonably Satisfactory	Moderately Satisfactory	Unsatisfactory	Extremely Unsatisfactory	Can't Say/ Not Applicable
Shares	1	2	3	4	5	6
Mutual Fund Growth Schemes	1	2	3	4	5	6
Mutual Fund Income Schemes	1	2	3	4	5	6
Mutual Fund Balanced Schemes	1	2	3	4	5	6

ANNEXURE 1 (CONT.)

Investment Types	Extremely Satisfactory	Reasonably Satisfactory	Moderately Satisfactory	Unsatisfactory	Extremely Unsatisfactory	Can't Say/ Not Applicable
Money Market / Liquid Mutual Fund	1	2	3	4	5	6
GILT-Edged	1	2	3	4	5	6
ELSS	1	2	3	4	5	6
Tax Saving Mutual Fund Schemes	1	2	3	4	5	6
Industry Specific Mutual Fund Schemes	1	2	3	4	5	6
Mutual Fund Index Schemes	1	2	3	4	5	6
Mutual Fund Sectoral Schemes	1	2	3	4	5	6
Government Bond	1	2	3	4	5	6
Company Debentures	1	2	3	4	5	6

10. According to you, which SIX of the following investment types are the best from the viewpoint of safety? Give ranks against the selected five in the column under safety (Rank 1= topmost, Rank 2 = Next best..... Up to 6). Similarly, please select the best SIX from the 'Return' and 'Overall Suitability' level by assigning ranks in each case:

Investment Types	I	II	III
	Security Point	Returns Point	Overall Suitability Point
Shares			
Mutual Fund Growth Schemes			
Mutual Fund Income Schemes			
Mutual Fund Balanced Schemes			
Money Market Mutual Fund			

ANTECEDENTS OF HOUSEHOLDS' INVESTMENT DECISION-MAKING PROCESS:
A STUDY OF INDIAN HOUSEHOLDS

ANNEXURE 1 (CONT.)

Investment Types	I	II	III
	Security Point	Returns Point	Overall Suitability Point
GILT-Edged			
ELSS			
Tax Saving Mutual Fund Schemes			
Industry Specific Mutual Fund Schemes			
Mutual Fund Index Schemes			
Mutual Fund Sectoral Schemes			
Government Bond			
Company Debentures			
Bank-Fixed Deposits			
Gold/Bullion			

11. Where would you like to invest within the next one year if you had funds with the following ranges? Please choose NOT MORE THAN SIX investment types. (Please tick ✓)

Investment Types	Below Rs. 25,000	Rs. 25,001 to 50,000	Rs. 50,001 to 1,00,000	Above Rs. 1,00,000
Shares				
Mutual Fund Growth Schemes				
Mutual Fund Income Schemes				
Mutual Fund Balanced Schemes				
Money Market Mutual Fund				
GILT-Edged				
ELSS				
Money Market Mutual Fund				
Tax Saving Mutual Fund Schemes				
Industry Specific Mutual Fund Schemes				
Mutual Fund Index Schemes				
Mutual Fund Sectoral Schemes				
Government Bond				

ANNEXURE 1 (CONT.)

Investment Types	Below Rs. 25,000	Rs. 25,001 to 50,000	Rs. 50,001 to 1,00,000	Above Rs. 1,00,000
Company Debentures				
Bank Fixed Deposits				
Gold/Bullion				
Real Estate				

12. Which of the following is your usual investment sale/purchase policy regarding shares? (Please tick ✓)

- Sell within 1 year
- Hold the shares for a period 1-2 years
- Hold the shares for a period more than 2 years
- Sell/buy as per availability/need of funds

13. How important are the following factors in your choice of a Mutual Fund organization? (Please tick ✓)

Factors in Choice of a Mutual Fund Organization	Extremely Important	Very Important	Important	Not Much Important	Not Important at All	Can't Say
Strong Possibility of Capital Appreciation	1	2	3	4	5	6
Better Annual Dividend Income	1	2	3	4	5	6
Your Previous Satisfactory Experience as its Client	1	2	3	4	5	6
Friends Suggestion	1	2	3	4	5	6
Agent's Recommendations	1	2	3	4	5	6
Advertising	1	2	3	4	5	6

ANTECEDENTS OF HOUSEHOLDS' INVESTMENT DECISION-MAKING PROCESS:
A STUDY OF INDIAN HOUSEHOLDS

ANNEXURE 1 (CONT.)

Factors in Choice of a Mutual Fund Organization	Extremely Important	Very Important	Important	Not Much Important	Not Important at All	Can't Say
General Reputation and Popularity	1	2	3	4	5	6
'Early Bird' Incentive Offered	1	2	3	4	5	6
Schemes Suiting your Needs	1	2	3	4	5	6
Other Factors (Please Specify)						
.....	1	2	3	4	5	6

14. Particulars of Household:

a. Age _____ years

b. Education: Graduate Post-graduate Ph.D.

c. Occupation:

Government service Professional practice

Own business Retired Other service

d. Total household monthly income in rupees (Please tick ✓)

Less than Rs. 20,000 Rs. 20,000 - Rs. 25,000 Above Rs. 25,000

e. How many member(s) are there in your family? _____

f. How many member(s) of your family are earning? _____

g. Name _____

h. Residential Address _____

i. Telephone Number (Residence/Mobile) _____

Thanks for Sparing your Valuable Time

Child Labor in India: From Welfarist to Economic Perspective

Mridul Maheshwari* and Manjari Singh**

Child labor in India is a critical socioeconomic issue which generates interest among the international and national bodies to initiate appropriate policies to control it. The policy makers have mostly focused on the welfare aspects without looking into the important economic aspects. Both welfare and economic aspects are especially important in the context of a developing nation like India. In order to have effective policies to deal with the problem of child labor, one needs to understand the factors influencing it. This paper studies the macro level indicators of the major factors influencing child labor incidence for the following four categories: male children in rural areas, female children in rural areas, male children in urban areas, and female children in urban areas. The effect of these factors differs across the four categories in this cross-sectional study covering 28 states and 7 union territories of the Indian federation. The results show that besides welfare aspects like educational and developmental factors, economic aspects like work force participation rate, poverty factors, and family factors show significant effect on child labor.

INTRODUCTION

High percentage of child labor is one of the critical problems of most of the developing nations and dealing with it has emerged as a big challenge (Basu, 1999; and Ranjan, 2001). Many authors (for example, Bhukuth and Ballet, 2006) have pointed out that laws and policies banning child labor are inefficient and insufficient to deal with this malaise. In India, this is a critical social and economic problem as more than 5% of the children in the age group of 5-14 years are trapped under it (according to Census of India, 2001

data).¹ This problem increases because children are denied equal opportunities and rights. As a result, it has a negative effect on the growth of these children and is a critical problem for the nation as a whole.

Developed nations have continuously made demands and pressurized the developing nations to introduce strict mechanisms to control child labor (Diamond and Fayed, 1998; and Ranjan, 2001). This has led to the merging of trade issues with the child labor clauses

* Doctoral Student, Personnel and Industrial Relations Area, Indian Institute of Management, Vastrapur, Ahmedabad 380015, Gujarat, India. E-mail: mridul@iimahd.ernet.in

** Faculty, Personnel and Industrial Relations Area, Indian Institute of Management, Vastrapur, Ahmedabad 380015, Gujarat, India. E-mail: manjari@iimahd.ernet.in

¹ Source: http://www.censusindia.gov.in/Census_Data_2001/Census_Data_Online/Economic_Data.html

(Nardinelli, 1992). Recent changes in the General Agreement on Tariffs and Trade (GATT) dispute settlement procedures now provides powers to the WTO to enforce the provisions its members choose to adopt (Castle *et al.*, 1997; and Basu, 1999). However, before planning the mechanisms to eradicate this problem of child labor from India and other developing nations, there is a need to analyze critically the forces that actually influence it.

This paper focuses on the child labor incidence and the factors affecting it. It is a cross-sectional study of all the Indian states and Union Territories (UT) using macro indicators to measure various factors. Earlier study (Maheshwari and Singh, 2008) found varying effect of the influencing factors across rural and urban population and also across male and female population. Chaudhri (1997a) found that various factors affect male and female child labor differently. This led us to study the factors influencing child labor in more specific categories: male and female in rural areas and male and female in urban areas. This study is based on the premise that by understanding factors in specific categories, better policies can be formulated. Also on the basis of gender there are various factors that affect child labor incidence differently (Chaudhri, 1997a and 1997b).

CONCEPTUAL BACKGROUND

There has always been lots of confusions related to the concept of 'child labor'. In Asian countries like India where cultural patterns are different from those in the developed nations, the problem is more

complex (Castle *et al.*, 1997; and Duraisamy, 1997). Partially, it is due to lack of clarity in the definition that the results of various studies on child labor do not completely concur with each other (Gayathri and Chaudhri, 2002). For Example, it is also said that if child labor in India is measured according to concepts used by developed nations then this figure will be over 100 millions. The problems faced by developing nations increase when the international trade relations and International Labor Organization (ILO) clauses related to 'child labor' are clubbed together (Lieten, 2002). So it becomes essential to understand the reference in which the term 'child labor' is used in a study (Singh, 1997). In the presence of so many differences among the terminologies used, definition of child labor has not yet reached any consensus. But, the basic concept that is to an extent accepted worldwide is based on the ILO's produced statistics on child labor on a uniform definition, i.e., economically active population under the age of 15 years (Grootaert and Kanbur, 1995).

Though child labor is a disease that needs to be eradicated from any society, it cannot be viewed just from the simple perspective of welfare without considering the economic aspects attached to it.

WELFARIST PERSPECTIVE

Welfarist perspective looks into the health hazards and other negative effects of child labor. The group of international bodies and governments of various nations have always focused on the aspect of welfare, which they have stated to be an essential

requirement to control child labor. The welfarist perspective is based on implementing policies that keep children away from hazardous work environment. Education forms a major element of welfare perspective (Castle, 2002). Most of the nations have been focusing on the development of educational resources (Bhukuth and Ballet, 2006). This aspect is essential as without adequate educational facilities, children cannot be made to shift from work to education. Besides this, investment on infrastructure and medical facilities is also an essential part of welfare aspect.

Policy decisions regarding child labor are mostly guided by welfarist perspective and fail to incorporate the economic perspective. This is one of the key reasons for the inefficient implementation of these policy decisions. This fact has emerged as the most important factor that actually reduces the effectiveness of policy interventions taken to control child labor. These have always focused more on the welfare of poor sections of the society whose children are involved in workforce. However, this literature also emphasizes the fact that along with welfare there are crucial economic aspects attached to child labor.

ECONOMIC PERSPECTIVE

Economic perspective deals with economic reasons for child labor like augmenting family income, etc., and many times justify the prevalence of child labor (Grootaert and Kanbur, 1995; Basu and Van, 1998; and Dessy, 2000). The economic perspective is based on the

'luxury axiom' by Basu and Van (1998). This posits that a household sends its children to work only if the household's income is inadequate to meet the family needs, implying that the use of children is responsive to the income earning status of a family. In the literature on child labor, this aspect is stated as 'subsistence hypothesis'. The literature has emphasized that the economic aspects plays a critical role in supply of child labor. In Basu and Van (1998), it has been clearly expressed that unfavorable labor markets actually leads to fall in the wages of adults below a basic minimum required point, which pushes the children to workplace. The authors have very strongly expressed their views that by simply incorporating welfare measures and banning child labor will not work, as need to survive and sustain will ultimately lead to new problems (Grootaert and Kanbur, 1995; Basu and Van, 1998; and Dessy, 2000). There is a need to introduce policies that helps to raise the income of adults, which is a critical instrument to reduce child labor.

There are other aspects that emphasize the economic perspective on child labor. The high fertility rate has been associated with the increase in supply of child labor (Guilmoto and Rajan, 2002). However, welfare measures by themselves may not be enough to have significant influence in reducing the fertility rate. Hence, there is a need to increase the income of adults of the house, instead of just looking for measures to control fertility rate. This difference in the focus motivated us to

study the differences in welfare and economic interventions required for all the categories.

CHILD LABOR IN INDIA

According to The Child Labor (Prohibition and Regulation) Act, 1986 of India, the law prohibits the employment of children below the age of 14 years in the factories, mines and in other forms of hazardous employment, and regulates the working conditions of children in other employment.² According to this clause of the act, 'child' means a person who has not completed his 14th year of age. Child labor includes the children in the age-group of 5-14 years, working as paid workers, bonded laborers and unpaid workers employed in family's business by compromising their education. According to the census of India, even in the complete population survey done every 10 years the dimensions of child labor have changed. Till 1991, the census included only the main workers, but in 2001 it has changed to include marginal workers. In 2006, the Government of India added the domestic help and hospitality sector to the 13 occupations banned from employing children below 14 years. However, the effectiveness of this law has been questioned, mainly because causes of child labor and its remedies have been overlooked in it (Gayathri and Chaudhri, 2002). This empirical study endeavors to determine the factors that affect child labor. We have taken the following definition of child labor based on the definition of the Census of India, 2001:

Child labor incidence is basically the population in the age-group of 5-14 years, both male and female, involved in the workforce of the country. This includes both the main as well as the marginal workers.

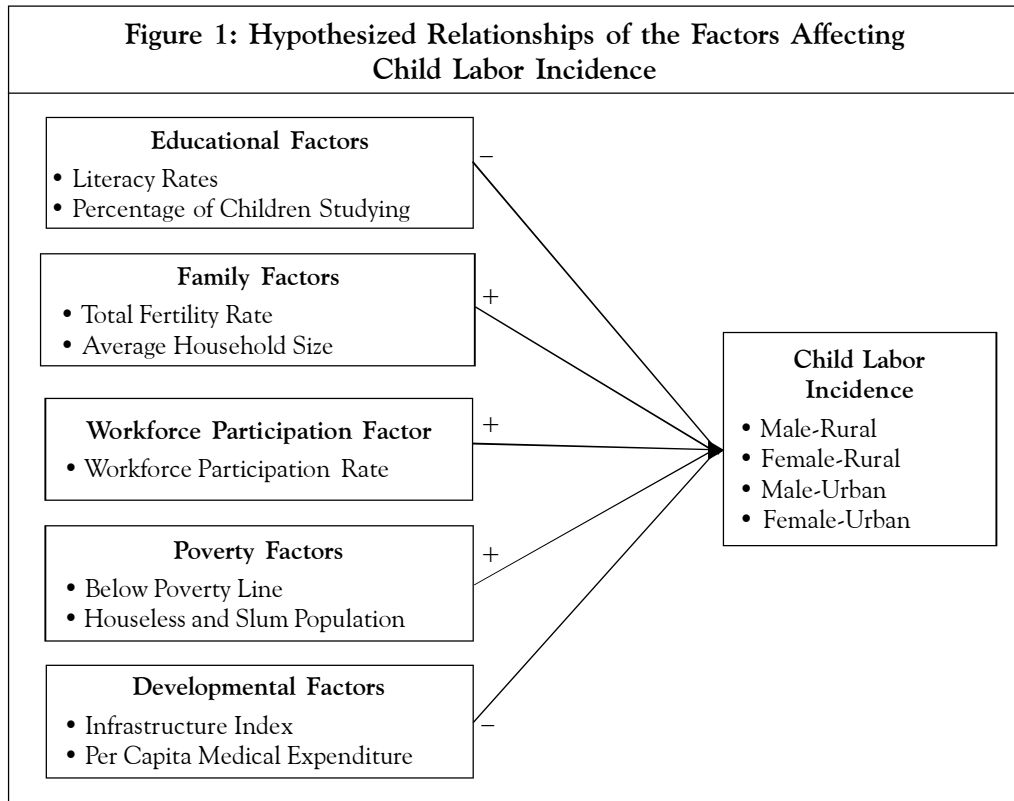
FACTORS AFFECTING CHILD LABOR IN INDIA AND THE HYPOTHESES

Literature has emphasized that there is major influence of community factors in both the individual and household decisions that affect the instances like child labor (Singh, 2001). These factors have both positive and negative enforcements: positively known as virtuous spiral and negatively as vicious spiral. The major factors that have emerged as the result of previous studies and analysis are educational, family, workforce participation, developmental and poverty factors. The study by Rosenzweig and Evenson (1977) has emphasized the significance of educational and fertility factors for rural India. Figure 1 shows the hypothesized relationships of the child labor incidence with the five factors studied here.

Educational Factors

Education has emerged as the most significant factor reducing child labor incidence. It is not only the education level of children but also the education status of their parents which determine the future status of children (Sharma and Sharma, 1997). Chadhuri (1997b) has found significant correlation of child labor with literacy rate and the percentage of

² Source: <http://labour.nic.in/cwl/ChildLabour.htm>



school-going children (5-14 years) at rural and urban level. Percentage of children going for school actually influences their involvement in workforce as choice between education and employment takes place (Buragohain, 1997; and Lieten, 2002). Lack of adequate education facilities has always been a major factor leading to child labor. It is due to this that many countries have developed the universal uni-modal systems of elementary education, which has led to reduction in child labor practices. In this context, the policy of compulsory education has been a major component (Weiner, 1996). But still this cannot be taken as a perfect mechanism to fight against child labor as is the case in India. For example, with similar policies wide variation in literacy

rates can be seen between the two Indian states of Bihar and Kerala, with Kerala achieving 100% literacy (Duraisamy, 1997).

Education factors here are taken predominantly from welfarist perspective, though economic perspective is also embedded in it. Any decision between investment in child's education and her/his employment is primarily based on economic considerations in many households; education is the best option for children from welfare perspective. It keeps them away from the hazardous work environment and improves their future prospects. Also, these children realize the value of education and in future would be keener towards education of their own children.

Effect of education on child labor has also got influenced by the structural changes in the industrialization policy of the Asian countries. Most of these countries moved from import substituting to export oriented units, which were initially based on the textile and garments industry (Kuruville and Venkataratnam, 1996). This led to vast employment of young girls and elder females. This took young girls away from education to enter into workforce. Except Japan that has compulsory education policies focused on girls, the above phenomenon can be seen in most of these recently industrializing countries and is a major pull factor that led to child labor (Kuruville and Venkataratnam, 1996). So it can be said that the rise in literacy rate of people and also the increase in the percentage of children going for formal education will actually reduce child labor. This effect was studied at the aggregate level of total state population by Diamond and Fayed (1998). Our study looks at these factors for the following four categories: male children in rural areas, female children in rural areas, male children in urban areas, and female children in urban areas. We hypothesize that for each of these categories:

H₁: Educational factors have negative impact on child labor incidence.

Family Factors

Industrialization led to population explosion due to rise in birth rate and decline in child mortality and death rates. This created imbalance in the demographic profile of the population and

survival in poor families depended on more of their members joining workforce, which in turn, increased child labor at the rural and urban level (Cadwell, 1990 in Chadhuri, 1997b, and Castle, 2002). The situation has further got degraded due to high fertility rate in certain areas, especially in rural India. The fertility rate also has a supply effect where more children (particularly male) means more family members working in field and augmenting family earnings (Singh, 1997; and Chaudhuri, 1997a). This has been a crucial factor affecting child labor, mainly in rural areas, where people want to have more children to increase their family income (Singh, 2001; and Guilmo and Rajan, 2002).

The other family factor affecting child labor is the average size of households. Naturally, the basic requirements in larger households having are more. Similar to high fertility rate, larger household size also influences family's tradeoff in favor of child employment rather than education. This is based on intra-house resource allocation model, which is one of the main theoretical frameworks in economic perspective of child labor. Grootaert and Kanbur (1995) looked at various studies on choices that households make regarding child's education versus employment and inferred that in developing countries, there is higher possibility of child labor in larger households. The family factors, i.e., fertility rate and average household size, are expected to increase child labor, particularly of male children in rural areas. Hence, for each of the four categories—male-rural, female-rural,

male-urban and female-urban, we infer the following hypothesis.

H₂: Child labor incidence is positively affected by the family factors.

Workforce Participation Factor

This factor emphasizes on the workforce participation rate of the people in the age category of 15-60 years. This factor has been examined earlier by Lieten (2002) and has also emerged as a significant factor affecting child labor in a study by Maheshwari and Singh (2008). It is stated that for certain segments of labor markets, particularly lower segments, entire families (including children) are pulled into the workforce when there is high demand for labor (Lieten, 2002). At times when wages do not increase, male workers move to other areas and then more children are pulled to join workforce (Lieten, 2002). So in the areas where workforce participation of population is high, child labor also increases. Another part of economic perspective is the substitution theory, where firms are keen to substitute adult labor with child labor in order to reduce their wage burden. Diamond and Fayed (1998) looked into the substitution of adults by children at work place and found that lower wage rates of children lead to their higher demand. Considering the pull factor and substitution theory, workforce participation has emerged as a significant factor affecting child labor and we can say the following for all the four categories in our study.

H₃: Higher workforce participation factor increases child labor incidence.

Poverty Factors

Poverty is one of the crucial economic reasons that push children into workforce in order to take care of their family's basic needs. The result of earlier studies also shows the influence of poverty on child labor. Poverty is easily visible in the form of houseless people taking staying on streets and slums. It is also estimated through factors like sufficient availability of nutritious food. In households where basic needs of food and shelter are not being met, involvement of children in workforce is very high (Duraisamy, 1997; Chaudhuri, 1997b; and Lieten, 2002). A qualitative study by Myers (1989) on urban child labor in four countries of South America also underlines the need for focusing on the economic aspects of child labor along with welfare aspects. Myers (1989) found that due to high rate of poverty in the slum areas of urban regions and inadequacy of the earnings of adults, children are pushed into workforce. So poverty factors are directly related to increase in child labor in case of each of the four categories studied here and we can state the following:

H₄: Child labor incidence is positively affected by the poverty factors.

Developmental Factors

These factors are related to the developmental role of the state. Development of infrastructure in terms of power, communication, and transport opens new avenues for overall improvements in the living conditions of people (Duraisamy, 1997; and Chaudhuri, 1997b). Also, support from the government in providing better medical facilities and its focus on

health of children should lead to welfare of children and help to fight against the social evils like child labor. With the increase in the developmental factors, child labor is expected to reduce for each of the four categories. Hence, we hypothesize that:

H_5 : *Child labor incidence is negatively influenced by the developmental factors.*

Developmental role of any state government is influenced by the economic development of the state. So even though we are primarily looking at developmental factors from welfare aspects, economics aspects are also embedded in this.

METHOD

SAMPLE

The study is cross-sectional in nature with 35 sample points including 28 states and 7 union territories of Indian federation. The data is collected primarily from the reports of the Census of India, 2001. In addition, we have also gathered information from the IndiaStat website (a data source on Indian statistics) and Centre for Monitoring Indian Economy (CMIE) database. The data has been collected for the Indian states and UTs for rural male and female and urban male and female population. The study is based on the data collected in the most recent census conducted in 2001. The Census of India data is the most reliable data source which is collected in every 10 years.

MEASURES

Dependent Variable – Child Labor Incidence (CLI)

In this paper, CLI is measured as the proportion of children in the age-group

of 5-14 years working both as main and marginal workers to the total children in this age-group (Castle *et al.*, 1997; and Duraisamy, 1997). Children in the following four categories are covered here: male-rural, female-rural, male-urban, and female-urban. For illustration: CLI for male-rural is the proportion of male child labor (5-14 years) in rural areas to the total male child population in the rural areas (5-14 years) of the state.

$CLI_{MR} = \text{Total male child labor in rural areas (5-14 years) / Total male child population in rural areas (5-14 years)}$

$CLI_{FR} = \text{Total female child labor in rural areas (5-14 years) / Total female child population in rural areas (5-14 years)}$

$CLI_{MU} = \text{Total male child labor in urban areas (5-14 years) / Total male child population in urban areas (5-14 years)}$

$CLI_{FU} = \text{Total female child labor in urban areas (5-14 years) / Total female child population in urban areas (5-14 years)}$

The data is taken from Census of India, 2001, which gives total as well as rural, urban, male, and female workers in broad age-groups.

CONTROL VARIABLES

Population Density (PD)

It is the number of population living per square kilometer in a state and is calculated by dividing total population of the state by the area of the state. This reflects the concentration of people in a state and

is also based on population data collected by Census of India, 2001. The data is also available for rural and urban areas separately and has been taken as PD_R and PD_U in our analysis. There is a wide variation between PD_R and PD_U in Indian states and UTs.

Per Capita State Domestic Product (PSDP)

It is the per head share of individuals of the total domestic product of the state. The State Domestic Product (SDP) consists of the states' consumption expenditure, government expenditure, investments, and net exports in a year. The data is for 2001-02 and has been calculated at the constant base year of 1993-1994. This data is based on the reports of Economic Survey of India, 2001 and has been taken from the IndiaStat data source. The same state level data has been taken for all the four categories.

INDEPENDENT VARIABLES

Educational Factors

Two measures have been taken to represent the educational factors: literacy rate and percentage children studying. Literacy rate has been taken to capture the overall educational status in the respective category, whereas percentage children studying capture the education level of children in the age-group 5-14 years.

Literacy Rate (LR)

Literacy rate of the population is defined by Census of India, 2001 as the percentage of literates to the total population in the age-group of 7 years and above for the

state. It has been calculated separately for male-rural, female-rural, male-urban and female-urban population. For illustration: male-rural literacy rate is the proportion of total male-rural literates of a state to the total male-rural population (7 years and above) of the state.

$$LR_{MR} = \text{Total male literates in rural areas (7 years and above)} / \text{Total male population in rural areas (7 years and above)}$$

Percentage of Children Studying (PCS)

It is calculated as the proportion of children (in the age-group of 5-14 years) attending educational institution to the total population in this age-group. It has also been calculated separately for male-rural, female-rural, male-urban and female-urban population. For illustration: the percentage of female children studying in the female-urban category is the proportion of female children in the age-group 5-14 years in urban area attending education institution to the female-urban population in this age-group only.

$$PCS_{FU} = \text{Total female children going for education in urban areas (5-14 years)} / \text{Total female child population in urban areas (5-14 years)}$$

Family Factors

This factor focuses on the specific family related issues which affects child labor. To study this influence, total fertility rate and average household size have been taken. Total fertility rate reflects the increase or decrease in the number of children, whereas average household size shows the

total number of members in a family. This is based on the economic perspective of supply effect and intra-house resource allocation model discussed earlier.

Total Fertility Rate (TFR)

Fertility rate is, basically, the number of children that an average woman have in the age-group of 15-49 years. It has been taken from Guilmoto and Rajan (2002), who have calculated total fertility rate based on Census of India, 2001 data. Same data for total fertility rate has been taken for all the four categories: male-rural, female-rural, male-urban and female-urban population.

Average Household Size (AHS)

It has been taken from the data of Census of India, 2001. It has been measured by dividing the total population of a state by the total number of households in it. It depicts the average number of members in a family in each state. This data is available for rural and urban areas separately and has been taken as AHS_R and AHS_U .

WORKFORCE PARTICIPATION FACTOR

This factor is measured through workforce participation rate.

Workforce Participation Rate (WPR)

It is defined as the percentage of total workers (main and marginal) to total population. It has been calculated for the age group of 15 years and above on Census of India, 2001 data. It also has been calculated separately for male-rural, female-rural, male-urban and female-

urban population. For illustration: male-urban workforce participation rate of a state is the total male workforce (main + marginal) in the urban areas in the age group of 15 years and above to the total male-urban population of the state in this age group.

$$WPR_{MU} = \frac{\text{Total male working population in urban areas (15 years and above)}}{\text{Total male population in urban areas (15 years and above)}}$$

Poverty Factors

Poverty has been measured with the help of BPL and slum and houseless population ratio. These have been used to indicate to specific aspects of poverty. BPL is for the minimum intake of calories to survive and slum and houseless depicts the lack of shelter.

Below Poverty Line (BPL)

This variable represents the poverty related factor that pushes children into labor force. The Planning Commission of India has been estimating the incidence of poverty at National and State level (both in rural and urban areas) since the Sixth Five Year Plan on the basis of the recommendations of the Task Force (1997) on projections of minimum needs and effective consumption demand (Joshi, 2002). This data has been taken from IndiaStat for the year 2001-02. It is available separately for rural and urban areas of each state/UT: BPL_R and BPL_U .

Homeless and Slum Population Ratio (HS)

It is calculated as the proportion of the population of states who are either homeless

or are living in slums.³ The data for homeless population for rural and urban areas and slum population of male and female population in urban areas has been taken from the Census of India, 2001. In 2001, the data for slum population was collected for the first time by Census of India.

$HS_R = \text{Homeless population in rural areas} / \text{Total population in rural areas}$

$HS_{MU} = \text{Homeless population in urban areas} / \text{Total population in urban areas} + \text{Male population in slums} / \text{Total male population in urban areas}$

$HS_{FU} = \text{Homeless population in urban areas} / \text{Total population in urban areas} + \text{Female population in slums} / \text{Total female population in urban areas}$

Developmental Factors

The developmental role of the state has been measured by two factors in this study. Infrastructural index represents the overall development of a state, and per-capita medical expenditure indicates the medical support provided to the people of a state. These two measures show the focus of the state on the development of the people.

Infrastructure Index (II)

This is a composite measure of power, communication, and transport infrastructure index of the states. This index was initially developed by the 10th Finance

Commission of India and then 11th and 12th Finance Commissions used the same construct for developing this index for subsequent years. Index used in this study was developed for 12th Finance Commission and is based on the CMIE data for the year 2001. In this study, the same state level data has been taken for all the four categories. This data is available for the 28 states only and not for the seven UTs.

Per Capita Medical Expenditure (PME)

It is basically the ratio of expenditure on medical benefits by a state to its total population. The data for total medical expenditure by each state/UT for the year 2001-02 is taken from IndiaStat website. This data is also same for all the four categories.

$PME = \text{Total medical expenditure on people} / \text{Total population of the state}$

ANALYSES

The analysis has been carried out for all the four categories of child labor as focused in the paper. The analysis has been done separately for four categories of population—male-rural, female-rural, male-urban, and female-urban—to study the specific factors that are influencing child labor in each of these categories. For regression analysis, natural log of the dependent variable child labor incidence has been taken to correct the heteroskedasticity problem.

³ According to the Census of India, 2001, slum areas broadly constitute of:

(1) All specified areas in a town or city notified as slum by State/Local Government and UT Administration under any Act including a 'Slum Act'. (2) All areas recognized as slum by State/Local Government and UT Administration, Housing and slum Boards, which may have not been formally notified as slum under any act; (3) A compact area of at least 300 population or about 60-70 households of poorly built congested tenements, in unhygienic environment usually with inadequate infrastructure and lacking in proper sanitary and drinking water facilities.

Considering significant correlations among measures of the five factors studied here, the analysis has been done taking each group of factors separately. This will help us to see the affect of each of these five factors on child labor incidence separately. Altogether in our paper, we have analyzed seven models for each of the category. An illustrative example of the equations in these models is given for the case of male-rural population.

Model 1: Control Variables – $CLI_{MR} = \alpha + \beta_1 PD_R + \beta_2 PSDP + \epsilon$

Model 2: Educational Factors – $CLI_{MR} = \alpha + \beta_1 LR_{MR} + \beta_2 PCS_{MR} + \epsilon$

Model 3: Family Factors – $CLI_{MR} = \alpha + \beta_1 TFR + \beta_2 AHS_R + \epsilon$

Model 4: Workforce Participation Factor – $CLI_{MR} = \alpha + \beta_1 WFP_{MR} + \epsilon$

Model 5: Poverty Factors – $CLI_{MR} = \alpha + \beta_1 BPL_R + \beta_2 HS_R + \epsilon$

Model 6: Developmental Factors – $CLI_{MR} = \alpha + \beta_1 II + \beta_2 PME + \epsilon$

Model 7: It is taken as an overall model for all the factors.

However, significantly correlated variables have not been included in the overall model to avoid multi-collinearity.

Similar equations have been used for the other three categories: female-rural, male-urban, and female-urban population.

Also, in our analysis, only population density has been taken as control variable. Per-capita SDP has not been included because of its high correlation with other independent variables.

RESULTS

MALE-RURAL POPULATION

Table 1 shows the means, standard deviations, and correlations of the dependent and independent variables. Mean value of child labor incidence in male-rural category is 5.9%, which is higher than the average figure for the total population, almost similar to rural population but less than male population statistics given in Maheshwari and Singh (2008). The signs of all the significantly correlated influencing factors are in the expected direction, except for per-capita medical expenditure. Both the educational factors are negatively correlated and total fertility rate and BPL are positively correlated. In case of developmental factors, infrastructure index is negatively correlated as expected but per-capita medical expenditure is positively correlated.

The results show that there is high correlation among explanatory variables. The two control variables, population density and per-capita SDP, are correlated at $p \leq 0.001$ significance level (0.577). There is negative correlation between per-capita SDP and total fertility rate and BPL at $p \leq 0.001$ level (–0.582 and –0.639 respectively). Literacy rate is significantly correlated at $p \leq 0.001$ level with percentage children studying (0.566) and total fertility rate (–0.668). Percentage children studying is significantly correlated with total fertility rate (–0.596) and infrastructural index (0.625) at $p \leq 0.001$ level. Total fertility rate is negatively correlated with average household size (0.617) at $p \leq 0.001$ level.

Table 1: Means, Standard Deviations and Correlations for Male-Rural Population

S.No.	Variable	N	Mean	S.D.	1	2	3	4	5	6	7	8	9	10	11	
1.	CLL _{MR}	35	0.059	0.032												
2.	PD _R	35	432.130	566.939	-0.492**											
3.	PSDP	35	12069.057	6066.597	-0.413*	0.577***										
4.	LR _{MR}	35	0.748	0.097	-0.448**	0.351*	0.524**									
5.	PCS _{MR}	35	0.739	0.197	-0.405*	0.257	0.528**	0.566***								
6.	TFR	35	2.968	0.801	0.454**	-0.240	-0.582***	-0.668***	-0.596***							
7.	AHS _R	35	5.223	0.641	0.207	-0.234	-0.481**	-0.438**	-0.448**	0.617***						
8.	WPR _{MR}	35	0.517	0.057	0.064	0.221	0.409*	0.224	0.250	-0.447**	-0.750***					
9.	BPL _R	35	0.239	0.154	0.409*	-0.417*	-0.639***	-0.460**	-0.352*	0.544**	0.186	-0.362*				
10.	FS _R	35	0.002	0.002	-0.026	-0.082	0.183	0.039	0.010	-0.044	-0.161	0.488**	-0.370*			
11.	II	28	91.893	53.847	-0.549***	0.031	0.525**	0.508**	0.625***	-0.602**	-0.307	0.327	-0.652***	0.527**		
12.	PMIE	35	5.256	12.567	0.443**	-0.051	-0.058	0.251	0.024	0.062	0.051	-0.020	0.150	-0.193	-0.233	

Note: *** $p \leq 0.001$; ** $p \leq 0.01$; * $p \leq 0.05$; Two-tailed tests. Pair-wise deletion.

Same is the case between average household size and workforce participation rate (-0.750) and also between BPL and infrastructural index (-0.652). Due to high correlation between various explanatory variables, seven models have been used to study them in the regression analysis.

Table 2 shows the results of regression analysis. Control variables are taken in Model 1 and are found to have significant negative effect on child labor incidence. Model 2a, where both the educational factors are considered along with control variable, has adjusted R^2 of 0.483 and ΔR^2 of 0.247 having F -statistic of 8.125 at $p \leq 0.01$ level. Considering the fact that both the educational factors are significantly correlated to each other, only percentage children studying is taken in Model 2b. In case of Model 2b, adjusted R^2 is 0.400 and $\beta = -0.405$. Model 3 and Model 4 include family factors and workforce participation factor respectively along with control variable. They have adjusted R^2 of 0.393 and 0.328 respectively. ΔR^2 for these two models are 0.165 and 0.086 having F -statistic of 4.611 and 4.333 at $p \leq 0.05$ level. Model 5a includes poverty factors, which are insignificant when taken along with control variable. However, in Model 5b when control variable is excluded, BPL

Independent Variables	Dependent Variable: Ln(CLL_{MR})									
	Model 1	Model 2		Model 3	Model 4	Model 5		Model 6	Model 7	
		a	b			a	b			
Control Variable: PD_R	-0.531**	-0.342*	-0.427**	-0.465**	-0.597***	-0.377*		-0.243	-0.292	
Educational Factors: LR_{MR} PCS_{MR}		-0.385* -0.209	-0.405**						-0.450**	
Family Factors: TFR AHS_R				0.515** -0.248						
Workforce Participation Factor: WPR_{MR}				0.300*					0.408*	
Poverty Factors: BPL_R HS_R						0.330 0.196	0.526** 0.299		0.237	
Developmental Factors: II PME								-0.587** 0.182	-0.595** 0.271	
ΔR^2 ++		0.247**	0.153**	0.165*	0.086*	0.076				
Overall Adjusted R^2	0.260	0.483	0.400	0.393	0.328	0.295	0.202	0.448	0.680	
Overall Model F	12.945**	11.595***	12.317***	8.334***	9.293**	5.748**	5.314*	8.301**	10.552***	

Note: *** $p \leq 0.001$; ** $p \leq 0.01$; * $p \leq 0.05$; Two-tailed tests; $N = 35$ for Models 1 to 5 and $N = 28$ with list-wise deletion for Models 6 and 7; Standardized regression coefficients for each model when all variables of that model are entered into the equation are shown; + ΔR^2 in Models 2(a), 2(b), 3, 4, and 5(a) are each in comparison to Model 1; ++ + Significantly correlated variables causing multi-collinearity are not included.

emerged as significant factor with β value of 0.526 at $p \leq 0.001$ level. Model 6 shows the influence of development factors (along with control variable) on child labor incidence. Adjusted R^2 is 0.448 and infrastructural index is significant with $\beta = -0.587$ at $p \leq 0.001$ level. Thus in the case of male-rural population, all five hypotheses are supported. Models having higher explanatory powers are those of educational and developmental factors. Variance inflation factors for any variable never exceeded two in Models 1 to 6 and never exceeded 2.5 in Model 7.

Finally, we have Model 7, which has all the factors together (excluding highly correlated factors causing multicollinearity) with adjusted R^2 of 0.680 and F -value of 10.552 at $p \leq 0.001$ level. In this model, child labor incidence is affected by literacy rate ($\beta = -0.450$) at $p \leq 0.01$ level, workforce participation ($\beta = 0.408$) at $p \leq 0.05$ level and infrastructural index ($\beta = -0.595$) at $p \leq 0.001$ level.

FEMALE-RURAL POPULATION

Means, standard deviations, and correlations of the dependent and independent variables are shown in Table 3. Mean value of child labor incidence in female-rural category is 6.11%, which is higher than the average figure for the total population, female population and also the rural population as studied in Maheshwari and Singh (2008). This reflects the severity of the problem of child labor for this category. The correlation results are similar to male-urban category, except for workforce participation rate been significantly positive and BPL not been significant in this case.

The results show high correlation among explanatory variables. Other than the common variables mentioned for male-rural population, population density is significantly correlated with workforce participation rate at $p \leq 0.001$ level with coefficient of -0.706 . There is positive correlation of per-capita SDP with percentage children studying (0.589). Literacy rate is significant at $p \leq 0.001$ level with percentage children studying (0.607) and total fertility rate (-0.668). Percentage children studying is significantly correlated with total fertility rate (-0.639).

The results of regression analysis are given in Table 4. Here also, control variable shows significant effect on child labor incidence in Model 1. Both the models of educational factors show significant change in R^2 (respective F -statistics are 6.553 and 6.115 at $p \leq 0.01$ level and $p \leq 0.05$ level) when compared with Model 1, thus supporting H_1 for this category. Though Model 3 also has significant change in R^2 (with total fertility rate been the significant variable), major difference is seen in Model 4. For this category, workforce participation rate shows positive effect on child labor at $p \leq 0.001$ level. Poverty factors are insignificant when taken along with control variable but both factors are positively significant when control variable is excluded. Model 6 has adjusted R^2 of 0.514 where infrastructural index is significant with $\beta = -0.496$ at $p \leq 0.01$ level. Thus all five hypotheses are supported in the case of female-rural population also. Other than poverty

Table 3: Means, Standard Deviations and Correlations for Female-Rural Population

S.No.	Variable	N	Mean	S.D.	1	2	3	4	5	6	7	8	9	10	11
1.	CL_{FR}	35	0.0611	0.041											
2.	PD_R	35	432.130	566.939	-0.567***										
3.	$PSDP$	35	12069.057	6066.597	-0.392*	0.577***									
4.	LR_{FR}	35	0.340	0.142	-0.358*	0.304	0.522**								
5.	PCS_{FR}	35	0.692	0.214	-0.375*	0.297	0.589***	0.607***							
6.	TFR	35	2.968	0.801	0.432**	-0.240	-0.582***	-0.668***	-0.639***						
7.	AHS_R	35	5.223	0.641	0.169	-0.234	-0.481**	-0.406*	-0.507**	0.617***					
8.	WPR_{FR}	35	0.298	0.114	0.820***	-0.706***	-0.315	-0.283	-0.170	0.212	-0.010				
9.	BPI_{FR}	35	0.239	0.154	0.324	-0.417*	-0.639***	-0.335*	-0.328	0.544**	0.186	0.309			
10.	HS_R	35	3	0.002	0.140	-0.082	0.183	-0.207	-0.048	-0.044	-0.161	0.256	-0.370*		
11.	II	28	91.8929	53.847	-0.468*	0.031	0.525**	0.424*	0.594**	-0.602**	-0.307	-0.137	-0.652***	0.527**	
12.	$PMIE$	35	5.256	12.567	0.426*	-0.051	-0.058	0.362*	0.054	0.062	0.051	0.236	0.150	-0.193	-0.233

Note: *** $p \leq 0.001$; ** $p \leq 0.01$; * $p \leq 0.05$; Two-tailed tests; Pair-wise deletion.

factors, all other factors have higher explanatory powers. Variance inflation factors for any variable never exceeded two in Models 1 to 6 and never exceeded three in Model 7.

Model 7 has adjusted R^2 of 0.812 and F -value of 20.392 at the significance level of $p \leq 0.001$. In case of female-rural population, child labor incidence is affected by literacy rate ($\beta = -0.370$) at $p \leq 0.01$ level, workforce participation ($\beta = 0.607$) at $p \leq 0.001$ level and infrastructural index ($\beta = -0.314$) at $p \leq 0.05$ level of significance.

MALE-URBAN POPULATION

Table 5 shows the means, standard deviations, and correlations of the dependent and independent variables. Here the mean value of child labor incidence is 2.6%, almost similar to urban population average given in Maheshwari and Singh (2008). This shows that the incidence of child labor is higher in the case of male in rural areas compared to those in urban areas. No explanatory variable showed significance correlation with the dependent variable in the expected direction. Only per-capita medical expenditure is significantly correlated and that too positively.

Other than common variables mentioned in earlier cases, correlation is significant at $p \leq 0.001$ level between percentage children studying and literacy rate, total

Table 4: Results of Regression Analysis for Female-Rural Population

Independent Variables	Dependent Variable: Ln(CLL_{FR})									
	Model 1	Model 2		Model 3	Model 4	Model 5		Model 6	Model 7+++	
		a	b			a	b			
Control Variable: PD_R	-0.669***	-0.529***	-0.576***	-0.626***	-0.209	-0.530***		-0.479**	-0.010	
Educational Factors: LR_{FR} PCS_{FR}		-0.351* -0.113	-0.312*						-0.370**	
Family Factors: TF_R AHS_R				0.466** -0.296						
Workforce Participation Factor: WPR_{FR}				0.651***					0.607***	
Poverty Factors: BPL_R HS_R						0.280 0.262	0.556** 0.407*		0.093	
Developmental Factors: II PME								-0.496** 0.148	-0.314* 0.172	
ΔR^{2++}		0.164**	0.089*	0.133*	0.213***	0.074				
Overall Adjusted R^2	0.431	0.574	0.507	0.540	0.639	0.295	0.264	0.514	0.812	
Overall Model F	26.709***	16.268***	18.482***	14.280***	31.068***	11.234***	7.087**	10.517***	20.392***	

Note: *** $p \leq 0.001$; ** $p \leq 0.01$; * $p \leq 0.05$; Two-tailed tests; $N = 35$ for Models 1 to 5 and $N = 28$ with list-wise deletion for Models 6 and 7; Standardized regression coefficients for each model when all variables of that model are entered into the equation are shown; + ΔR^2 in Models 2(a), 2(b), 3, 4, and 5(a) are each in comparison to model 1; +++ Significantly correlated variables causing multi-collinearity are not included.

Table 5: Means, Standard Deviations and Correlations for Male-Urban Population

S.No.	Variable	N	Mean	S.D.	1	2	3	4	5	6	7	8	9	10	11
1.	CLL _{MU}	35	0.026	0.014											
2.	PD _U	35	3625.316	2602.966	-0.179										
3.	PSDP	35	12069.057	6066.597	-0.159	0.517**									
4.	LR _{MU}	35	0.880	0.042	-0.165	-0.209	0.226								
5.	PCS _{MU}	35	0.799	0.100	-0.062	-0.007	0.365*	0.624***							
6.	TFR	35	2.968	0.801	0.156	-0.185	-0.582***	-0.419*	-0.745***						
7.	AHS _U	35	5.003	0.609	-0.010	0.023	-0.463**	0.528**	0.562***	0.576***					
8.	WPR _{MU}	35	0.502	0.049	0.099	0.070	0.469**	0.346*	0.565***	-0.527**	-0.750***				
9.	BPL _U	35	0.174	0.115	-0.206	-0.047	-0.372*	-0.164	-0.249	0.262	0.301	-0.354*			
10.	HS _{MU}	35	0.094	0.081	-0.094	0.455**	0.133	-0.335*	-0.098	0.014	0.078	-0.074	-0.339*		
11.	II	28	91.893	53.847	-0.284	0.062	0.525**	0.145	0.339	-0.602***	-0.230	0.416*	0.047	0.256	
12.	PME	35	5.256	12.567	0.494**	-0.249	-0.058	0.427*	0.182	0.062	0.040	0.050	-0.221	-0.342*	-0.233

Note: *** $p \leq 0.001$; ** $p \leq 0.01$; * $p \leq 0.05$; Two-tailed tests; Pair-wise deletion.

fertility rate, average household size, and workforce participation (0.624, -0.745, 0.562, 0.565, respectively). Total fertility rate is significantly negatively correlated with average household size (0.576). Average household size is significantly negatively correlated with work-force participation (-0.750).

Table 6 shows the results of regression analysis. Control variable was insignificant in all the models. In this category, only the H_1 finds support. Model 2 has adjusted R^2 of 0.107 and literacy rate emerges significant at $p \leq 0.05$ level with $\beta = -0.455$. This shows that for male-urban population welfarist perspective plays a major role. Literacy rate has emerged as the significant factor in Model 2 and percentage children studying was not significant even when literacy rate was not included in it. Model 7 has adjusted R^2 of 0.429 and F -value of 3.903 at the significance level of $p \leq 0.01$. This model shows that the female-rural child labor incidence is affected by literacy rate ($\beta = -0.619$) at $p \leq 0.01$ level and per-capita medical expenditure ($\beta = -0.549$) at $p \leq 0.01$ level of significance. Variance inflation factors for any variable never exceeded two in all models.

FEMALE-URBAN POPULATION

Means, standard deviations, and correlations of the dependent and

Independent Variables	Dependent Variable: $\ln(CLL_{MU})$						
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7 ⁺⁺⁺
Control Variable: PD_U	-0.048	-0.143	0.033	-0.055	-0.185	0.041	-0.170
Educational Factors: LR_{MU} PCS_{MU}		-0.455* 0.026					-0.619**
Family Factors: TFR AHS_U			0.402 -0.286				
Workforce Participation Factor: WPR_{MU}				0.106			0.386
Poverty Factors: BPL_U HSM_U					-0.273 0.274		-0.029 0.152
Developmental Factors: II PME						-0.266 0.377	-0.321 0.549**
ΔR^{2++}		0.184*	0.104	0.011	0.080		
Overall Adjusted R^2	-0.028	0.107	0.020	-0.048	-0.006	0.158	0.429
Overall Model F	0.076	2.364	1.232	0.219	0.927	2.687	3.903**

Note: *** $p \leq 0.001$; ** $p \leq 0.01$; * $p \leq 0.05$; Two-tailed tests; $N = 35$ for Models 1 to 5 and $N = 28$ with list-wise deletion for Models 6 and 7; Standardized regression coefficients for each model when all variables of that model are entered into the equation are shown; ++ ΔR^2 in Models 2, 3, 4, and 5 are each in comparison to model 1; +++ Significantly correlated variables causing multi-collinearity are not included.

Table 7: Means, Standard Deviations and Correlations for Female-Urban Population

S.No.	Variable	N	Mean	S.D.	1	2	3	4	5	6	7	8	9	10	11
1.	CL _{RU}	35	0.019	0.016											
2.	PD _U	35	3625.316	2602.966	-0.387*										
3.	PSDP	35	12069.057	6066.597	-0.199	0.517**									
4.	LR _{RU}	35	0.756	0.076	0.291	-0.131	0.282								
5.	PCS _{RU}	35	0.754	0.130	0.054	0.052	0.459**	0.725***							
6.	TFR	35	2.968	0.801	0.150	-0.185	-0.582***	-0.429*	-0.749***						
7.	AHS _U	35	5.003	0.609	-0.166	0.023	-0.463**	-0.527**	-0.561***	0.576***					
8.	WPR _{RU}	35	0.137	0.066	0.689***	-0.311	0.073	0.472**	0.282	-0.166	-0.291				
9.	BPL _U	35	0.174	0.115	-0.375*	-0.047	-0.372*	-0.338*	-0.289	0.262	0.301	-0.403*			
10.	HS _{RU}	35	0.093	0.080	-0.327	0.425*	0.105	-0.296	-0.075	0.029	0.091	-0.330	0.357*		
11.	II	28	91.893	53.847	-0.425*	0.062	0.525**	0.171	0.400*	-0.602***	-0.230	-0.151	0.047	0.247	
12.	PME	35	5.256	12.567	0.557**	-0.249	-0.058	0.502**	0.193	0.062	0.040	0.672***	-0.221	-0.342*	-0.233

Note: *** $p \leq 0.001$; ** $p \leq 0.01$; * $p \leq 0.05$; Two-tailed tests; Pair-wise deletion.

independent variables are shown in Table 7. Mean value of child labor incidence in female-urban category is lowest at 1.9%: slightly less than urban population average but far less than the total population and female population average (Maheshwari and Singh, 2008). Explanatory variables showing significant correlations in expected directions are workforce participation rate and infrastructure index. BPL and per-capita medical expenditure are significant with opposite signs. This shows that the incidence of child labor is more in the case of females in rural areas than those in urban areas. Other than common variables, variables correlated at $p \leq 0.001$ level are: literacy rate and percentage children studying (0.725); percentage children studying and total fertility rate (-0.749); percentage children studying and average household size (-0.561); and workforce participation rate and per-capita medical expenditure (0.672).

The results of regression analysis are shown in Table 8. Similar to male-urban population, population density is not significant in any model. Unexpected results are seen in Model 2 where both the educational factors turned out to be insignificant. Mixed results are seen in Model 3 (adjusted R^2 of 0.170) where total fertility rate is positively related with child labor ($\beta = 0.445$) but average household

Independent Variables	Dependent Variable: $\ln(CLI_{FU})$							
	Model 1	Model 2		Model 3	Model 4	Model 5	Model 6	Model 7 ⁺⁺⁺
		a	b					
Control Variable: PD_U	-0.240	-0.198	-0.230	-0.146	-0.091	-0.351	-0.215	-0.238
Educational Factors: LR_{FU} PCS_{FU}		0.189 -0.348	-0.210					
Family Factors: TF_R AHS_U				0.445* -0.505*				
Workforce Participation Factor: WPR_{FU}					0.481**			0.397*
Poverty Factors: BPL_U HS_{FU}						-0.397* 0.217		-0.277 0.169
Developmental Factors: Π PME							-0.416* 0.325	-0.459**
ΔR^{2++}		0.060	0.044	0.185*	0.209**	0.131		
Overall Adjusted R^2	0.029	0.032	0.046	0.170	0.221	0.110	0.368	0.535
Overall Model F	2.024	1.378	1.812	3.316*	5.822**	2.406	6.247**	7.215***

Note: *** $p \leq 0.001$; ** $p \leq 0.01$; * $p \leq 0.05$; Two-tailed tests; $N = 35$ for models 1 to 5 and $N = 28$ with list-wise deletion for models 6 and 7; Standardized regression coefficients for each model when all variables of that model are entered into the equation are shown; + + ΔR^2 in Models 2, 3, 4, and 5 are each in comparison to model 1; + + + Significantly correlated variables causing multi-collinearity are not included.

size is negatively related ($\beta = -0.505$) at $p \leq 0.05$ level of significance. In case of Model 4 (adjusted R^2 of 0.221), workforce participation rate has significant positive effect on child labor incidence with $\beta = 0.481$ at $p \leq 0.01$ level. In Model 5, BPL emerged as significant factor but not with hypothesized sign ($\beta = -0.397$ at $p \leq 0.05$ level). Model 6 has adjusted R^2 of 0.368 with infrastructure index ($\beta = -0.416$) been significantly related with child labor with at $p \leq 0.05$ level. H_2 and H_3 find weak support and H_5 has strong support. H_1 and H_4 found no support.

Adjusted R^2 is 0.535 for Model 7 and F -value is 7.215 at $p \leq 0.001$ of significance. In this model, child labor incidence is significantly affected by workforce participation rate ($\beta = 0.397$) and infrastructural index ($\beta = -0.459$). This analysis shows that for female-urban population, workforce participation rate and infrastructural index have strongest influence. Variance inflation factors for any variable never exceeded two in Models 2 to 6 and never exceeded 2.5 in Models 1 and 7.

DISCUSSION

The results show that affect of educational, family, workforce participation, poverty, and developmental factors varied across the four categories. In case of male population living in rural areas, all five hypotheses found support with educational and developmental factors having strong effect. Chaudhri (1997a) had also found schooling and infrastructure index to be significant in case of male children in rural areas. Among the four categories studied here, the effects of the

five factors were strongest in case of female-rural population. All five hypotheses were supported in this category also. This analysis showed that the factors affecting male and female children in rural areas were similar but their significance differs. In addition to educational and developmental factors, family and workforce participation factors also have strong influence. Workforce participation rate was found to be significant at $p \leq 0.001$ level for rural population and female population and only at $p \leq 0.05$ level for male population in the study by Maheshwari and Singh (2008). In this study, workforce participation rate had strong effect in case of female-rural category but weak impact in case of male-rural population. Tilak (1994) also found that workforce participation of women and literacy affect child labor in rural areas. Rosenzweig and Evenson (1977) studied the influence of fertility rate, schooling and the economic contribution of both male and female children in rural India and found that push of male and female children to workplace is influenced by the high fertility rate in rural India. This finding was supported in our paper where fertility rate was significant at $p \leq 0.01$ level in Model 3 for both male and female population in rural areas.

Workforce participation factor was expected to have a major influence on male-rural population (Diamond and Fayed, 1998; and Lieten, 2002). However, it turned out to be weakly significant for this category. It was insignificant in case of males in urban areas. The pull factor and substitution theory was found to be

having a major impact on female-rural population and lesser but significant influence on female-urban population. This shows that according to data collected in 2001, female children are getting more affected by the pull factor and any policy measure to counter this affect has to target female children rather than male children.

Explanatory powers of models are the least for male-urban children. In the literature where causes and reasons for child labor has been discussed from rural/urban and males/females dimensions, the focus is more on rural areas and on female children. One of the reasons for this bias may be that these groups are considered to have social and economic disadvantages. More research is needed to identify other factors having major influence on child labor in case of male urban children. Even push effect of poverty discussed by Myers (1989) found no support in this study for male children in urban areas.

Our study found that overall literacy was having stronger impact than percentage children studying. This showed that intra-house resource allocation gets highly influenced by the education of parents. Interestingly educational factors have no influence on child labor incidence on female-urban population. Literacy rate in case of female population in urban areas was much higher compared to that in rural areas. Introducing measures to improve education will not make much difference for female child labor in urban areas. On

the other hand, our findings showed that other factors like workforce participation of adult females and basic infrastructure were playing more important role.

Push effect of poverty was more significant in rural areas compared to urban areas. However, in our findings poverty factors did not emerge as critical. Infrastructure index played a more significant role in reducing child labor for male-rural, female-rural, and female-urban population. Our findings showed that larger family size was not leading to increased child labor incidence. These findings were not aligned with the arguments of subsistence hypothesis given by Basu and Van (1998). The supply effect of fertility rate found support in the case of male-rural, female-rural, and female-urban population.

CONCLUSION

Though there is a lot of discussions globally, related to the eradication of child labor, the crucial issue in this context is to understand the differences that exist in the conceptualization of child labor in different nations. The findings of this paper clearly support the key premise on which this paper focuses. In order to control the critical issue of child labor, the policy makers have to understand the basic forces that are highly prevalent in a particular situation. This will help to target the issue specifically and will create more impact. The results show that to control child labor in rural areas, focus on different factors need to vary for males and females. Educational factor is more

crucial for male children and so more thrust is needed on various education related policies. On the other hand, though it cannot be denied that female children are getting affected by the lack of educational support, pull and substitution effect of workforce participation factor also plays a critical role in their case. By considering the case of male and female children in urban areas, it becomes clear that infrastructure support plays an important role.

Our recommendations in the case of female-rural children will be to implement policies that would dilute the effect of pull factor of workforce participation. Individual families focusing on short-term monetary gains may pull their daughters to work with them at a very early age. This is done at the cost of their long term overall development. Many times work is either too strenuous for a girl child or work conditions are hazardous and their physical well being gets adversely affected. They get trapped for life to be low skilled workers and same scenario gets repeated even with the future generations. Hence, in addition to properly enforcing laws regarding child labor, strong actions are to be taken by the government organizations as well as NGOs so that a girl child is not pulled into the workforce. Instead, every opportunity should be provided to develop more rewarding skills that facilitates their ability to be financially independent and to lead a more satisfying life. The actions needed in such scenario would involve clearly establishing the age of the child through proper documentation processes

like birth certificate and Unique Identification Number. As our study clearly establishes the focus on the economic perspective than just the welfaristic perspective, economic incentives and financial instruments are needed to ensure that the pull effect is controlled. Chakrabarty and Grote (2009) suggested micro credit as one of the instruments to bring families out of debt cycle without sacrificing children's future. For example, children's schooling is acceptable collateral for the micro credit in the Grameen Bank model implemented in Bangladesh. The results also show that literacy rate and better infrastructure index would also help in reducing child labor incidences for rural girls.

In order to reduce child labor among male-rural population, more emphasis needs to be given on developing the infrastructure and the literacy level of the state. Such policies would help male population to gain better education and the opportunities to get higher skilled work thus reducing their dependence on the unskilled poorly paid jobs. This would reduce the incidences of parents' compromising their children's future by pulling them into workforce.

We are not saying that policy-makers should only cater to the factors that have emerged significant in statistical tests. But special focus on these important factors will definitely help in making their policies more effective. Primarily policy makers need to focus on the development of the education systems for higher literacy rate and more enrollment of children in

schools. Along with this, economic reasons for the high drop-out rates in schools should also be taken care of. Secondly, policy makers should focus on specific factors like infrastructure, poverty, etc., in order to create better impact. These measures will concentrate on developing the infrastructure, reducing the fertility rate, eradicating poverty, etc. In addition, the concept of child labor should be looked at from the context of welfarist and economic perspectives in India. Simply following the successful practices of other nations, particularly welfarist ones, may not create much difference.

One of the major limitations of this study is that it was constrained by the number of states and the union territories in the Federation of India; therefore our sample size limited to only 35. In some cases, the independent variables were highly correlated with each other, so taking all independent variables together in a single model was not feasible. This study was entirely based on the secondary sources of data, so we have made best possible efforts to identify reliable sources to verify our model. However, some degree of caution should be exercised while interpreting the results as it was not possible to validate the data, due to the extensive nature of the data involved in the study.

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Influence of Socio-Demographic Factors on Entrepreneurial Attributes and Success

Chivukula Venkata Ramana*, Raman K J** and Ramachandra Aryasri A***

Entrepreneurial success is one of the areas in entrepreneurship that have not been adequately explored by researchers. The present study attempts to find the influence of demographic factors on entrepreneurial attributes and success. For the purpose of the study, 200 start-ups in the Small and Medium Enterprises categories (SME) have been selected across five states in India. Personal interviews were carried out with the founders/entrepreneurs of these enterprises. The entrepreneurial attributes like Industry Knowledge (IK), Street Smarts (SS), Tolerance for Ambiguity (TFA), Impact of Personal Selling on Start-up Success (IPSS) and Entrepreneurial Success (ES) have been compared with respect to socio-demographic factors. The interesting highlights of the study are high level of education does not guarantee entrepreneurial success and senior citizens do not achieve a higher level of entrepreneurial success. It is worthwhile to mention that those who were unemployed in their previous occupation turned out to be the most successful entrepreneurs.

INTRODUCTION

During the past two decades there has been a serious disagreement among entrepreneurship researchers on the dispositional (trait) and demographic approach to explore entrepreneurial success. The dispositional (trait) and demographic approach to explore Entrepreneurial Success (ES) was widely debated after the publication of Gartner's (1988) famous article, "Who is an entre-

preneur? Is the wrong question". Following David McClelland's pioneering research, several studies have adopted the trait and demographic approach to explore the personality and success of entrepreneurs. One of the phenomenal studies using the trait approach was conducted by John A Hornaday. Hornaday's (1982) study lists 42 attributes of entrepreneurs. Among these 42 attributes, only five attributes have been widely explored in

* Associate Professor, Sreenidhi Institute of Science and Technology, Hyderabad 501301, India. E-mail: cvr1977@hotmail.com

** Associate Professor, Graduate School of Business, Universiti Sains Malaysia (USM), Penang 11800, Malaysia. E-mail: dr_kjraman@usm.my

*** Professor, School of Management Studies, Jawaharlal Nehru Technological University (JNTU), and Chairman, Board of Studies, Management Science Department, Hyderabad 500085, India. E-mail: aryasri@yahoo.com

many studies. These attributes include need for Achievement (nAch), Tolerance for Ambiguity (TFA), risk taking propensity, internal locus of control and type A behavior. Norman Smith's 1967 study distinguished between 'Craftsman Entrepreneur' and 'Opportunistic Entrepreneur'. Craftsman Entrepreneur had more limited cultural backgrounds and social involvement and lower inclination for long-term planning and the likelihood of heading adaptive firms (Smith, 1967).

Some studies have examined the influence of demographic diversity on building an effective entrepreneurial team. Diversity in terms of gender, age, and functional background does not contribute to the team level cognitive comprehensiveness and team commitment (Chowdhury, 2005). Entrepreneur's achievement motivation is significantly and positively related to entrepreneurial performance regardless of the munificence level in the environment (Jingtong and Zhi, 2007).

A majority of ES factors are directly related to not only skills, expertise and traits but also to the support systems available. The failure in explaining ES can be mostly attributed to measurement problems. The complexity in developing instruments to measure the factors influencing ES have also been an impediment to entrepreneurship researchers. The failure in explaining ES has also been attributed to the disagreement on what encompasses success in business.

The early studies in entrepreneurship focused on the industry characteristics and personal traits of entrepreneurs. The

earliest work in the field of entrepreneurship also focused on personal characteristics that distinguished entrepreneurs from non-entrepreneurs (Brockhaus, 1982). Entrepreneurship research is exceedingly difficult to do well because of the complex nature of the field (Gartner, 1989). Brockhaus (1982) has focused on personal characteristics that distinguish between entrepreneurs from non-entrepreneurs Johnson (1990) and Gartner (1985) have studied consistent relationships between individual factors, viz., 'achievement', 'locus of control', 'motivation' and 'entrepreneurship'. Miner *et al.* (1989) provided additional insights into the motivation-entrepreneurship association. Their research concluded that positive relationships exist between managerial motivation, firm expansion, and firm growth. A strong combination of four components, viz., great team, right market, focused execution, and market leadership are critical to start-up success (Occhipinti, 2001). Start-up success is one of the areas of entrepreneurship that has not been considered seriously by researchers. Researchers have neglected the study of start-ups for various reasons such as 'complexity in gathering reliable data', 'absence of a well-defined theory' and 'inadequate financial rewards'. Over the past two decades, there has been a meteoric rise in the number of start-ups, especially in the US, UK and India.

ES appears to derive from two key sources; personal profile and managerial competence of the entrepreneur (Panda, 2005). In the context of start-ups, some of the important tasks that entrepreneurs will embark upon are (1) Working

intensely despite uncertainty and lack of capital and other resources; (2) Fending off retaliatory activities from rivals in the market place; (3) Dealing with informed investors (like venture capitalists, angel investors, etc.); (4) Transforming technological discoveries into marketable items; and (5) Identifying hospitable niches and strengthening their presence in the market place. Miner (1990) conducted a research study on entrepreneurs with an aim to identify personality types among entrepreneurs and explore entrepreneurial success. Ambition is more important than 'strategic knowledge' and 'sales savvy' for entrepreneurial achievement (Champy, 2001).

A growing area of interest in entrepreneurship concerns differences in the demographics and attributes of entrepreneurs and non-entrepreneurs. Research gaps are evident in the literature. First, a conceptual framework is lacking to integrate the available literature on entrepreneurial attributes and ES with socio-demographic factors. Second, there has not been any focus on the influence of demographic factors and entrepreneurial attributes on entrepreneurial success. Third, the majority of studies on ES are conceptual in nature and did not conduct an empirical investigation on entrepreneurial success. Fourth, instruments to measure Industry Knowledge (IK), Street Smarts (SS) and IPSS have not been developed. The present study seeks to address this deficiency through an exploration of influence of demographic factors on

entrepreneurial attributes, which contribute to ES.

RESEARCH METHODOLOGY

The study was mainly based on primary data collected through personal interviews and a structured questionnaire has been used for collection of responses from the enterprise and the entrepreneur which covered the following aspects; socioeconomic profile of the entrepreneur, entrepreneurial performance and growth of the firm, entrepreneurial attributes and their impact on business. The following are the criteria of the firms chosen for the research study:

- The firms must be start-ups. In other words, the founders of the firms must be first generation entrepreneurs and should have not have bought an already existing business. Holding companies and regulated banks and utilities are not eligible.
- The age of the firm should be between 5-20 years.
- The firm must have been privately held as on May 1, 2005 and was never listed on the stock exchange.
- The firm had to have annual revenues of at least INR 50 lakh but not more than INR 100 crore in the past five years.
- The firms must have registered a sales increase between 2001 and 2004.
- The firms must not have been grown through joint ventures or alliances with either overseas or domestic companies.

The interviews were held in five states, viz., Delhi, Andhra Pradesh, Tamil Nadu, Gujarat, and Maharashtra in India. Firms operating in the manufacturing, service, distribution and trading sectors were chosen for the study. The interviews took place from May 2005 to March 2006 at the entrepreneur's place of business. The questionnaire used for collection of responses from entrepreneurs covers the following aspects and its measurements are given in Appendix 1.

ENTREPRENEURIAL SUCCESS

In this study, financial and non-financial parameters are used to measure ES. The financial parameters used in this study are 'growth in total sales', and 'growth in employment'. The non-financial parameters are 'support received by the entrepreneur', 'work experience of the entrepreneur', and 'involvement of the entrepreneur'. The reasons for including non-financial parameters in the measurement of ES are (1) The success of an enterprise cannot be evaluated by just the total sales generated by the entrepreneur and his team; (2) It is a greater achievement to operate an enterprise without adequate resources than to operate with adequate resources; and (3) Research shows that in many situations, the support received by entrepreneurs plays an important role in the success of an enterprise.

INDUSTRY KNOWLEDGE

Current literature on entrepreneurship does not have an instrument for measuring IK. Hence, a special instrument was developed for measuring IK. A pilot study was carried out to ensure the

validity and reliability of the instrument. The instrument used to measure IK comprised four major aspects, viz., 'education pertaining to the specific business', 'work experience in the industry', 'awareness about changes in the industry', and 'knowledge gained through involvement in industry aspects'. The 10 items in this instrument encompassed all the above-mentioned aspects.

STREET SMARTS

There is no appropriate instrument from earlier studies on entrepreneurship to measure SS. A special instrument for measuring SS was designed after consultations with entrepreneurs, academicians and researchers. Further more, a pilot study was carried out. All these were made to ensure the validity and reliability of the instrument. The instrument used to measure SS contained eight items covering four aspects, viz., 'gut reactions', 'dealing with people to get things done', 'experience and observation', and 'decision making'.

TOLERANCE FOR AMBIGUITY

The instrument for TFA captured information on five aspects, viz., 'experimentation', 'reaction to uncertainty', 'attitude towards ambiguity', 'tastes and preferences', and 'inclination to seek information', and contained 10 items.

IMPACT OF PERSONAL SELLING ON START-UP SUCCESS (IPSS)

The instrument used to measure the IPSS was aimed at capturing information on three aspects, viz., 'contribution of personal selling to start-up success',

'involvement of the entrepreneur in personal selling' and 'effectiveness of personal selling verses advertising', and contained six items.

THEORITICAL FRAMEWORK AND HYPOTHESES

The existing literature on ES does not have a strong theoretical framework encompassing all the relevant factors contributing to the success of entrepreneurs. The framework for the study is shown in Figure 1.

Based on the review of the existing literature and the framework developed for the study, the following hypotheses have been framed:

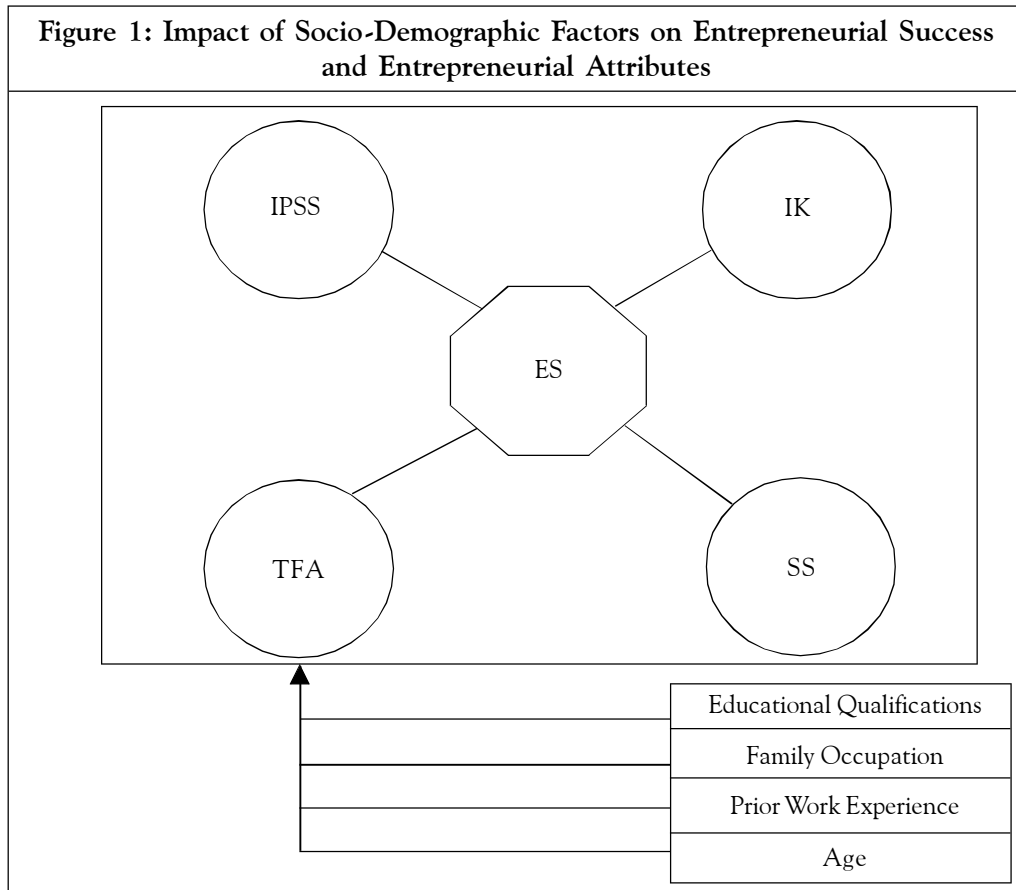
H₁: A high level of education is critical to start-up success.

H₂: Higher aged individuals achieve a higher level of ES.

H₃: Prior work experience enhances the level of ES.

DISCUSSION AND ANALYSIS OF DATA

Out of 200 entrepreneurs considered for the study, 198(99%) were males, and only 2(1%) were females. These females were unemployed before taking up entrepreneurship. There are certain restrictions for the inclusion criteria, like minimum of five years track record in business, no



joint venture, only first generation entrepreneurs, and firms only in the Small and Medium Enterprises categories (SME). Because of these reasons, there is very low representation of female entrepreneurs. Again, 191(95.5%) respondents were married, and the remaining 9(4.5%) were unmarried. Most of the respondents started entrepreneurship after the age of 30 years and so majority of them belong to married group. The mean \pm standard deviation of age in years for the study sample is 45.85 ± 10.17 with minimum age is 29, and the maximum age is 70 years. About 136(68%) respondents were below 50 years of age and it indicates that 30-50 years of age is well suited for entrepreneurship. The educational status is a crucial factor for not only taking up a career in entrepreneurship but also in becoming successful.

Table 1 reveals that only 12(6%) out of 200 respondents have education below graduation and 106(53%) have had

postgraduation. Out of the 200 respondents, 78(39%) had a family occupation of agriculture, 102(51%) had a family occupation of business and 20(10%) had public or private service as their family occupation. The family occupation includes the occupation of the parents or the respondents themselves. With regard to the previous employment of the respondents, 84(42%) have engaged in white-collar jobs, 57(28.5%) in professional jobs, 41(20.5%) in skilled worker jobs and 18(9%) have been unemployed.

The educational qualification of the respondents and their family occupation are compared for possible association. The chi-square test for independence of attributes given in Table 2 indicates that the educational qualification and family occupation are highly statistically associated ($\chi^2 = 30.04$, $p = 0.00$). It highlights that the proportion of respondents whose family occupation is

Table 1: Education, Family Occupation and Previous Employment of the Respondents

Socio-Demographic Factors	Particulars	Number of Respondents (N = 200)	%
Educational Qualification	MBA	34	17
	Postgraduation	72	36
	Graduation	82	41
	Below Graduate	12	6
Family Occupation	Agriculture	78	39
	Service	20	10
	Business	102	51
Previous Employment	Unemployed	18	9
	Skilled Worker	41	20.5
	White Collar Job	84	42
	Professional	57	28.5

INFLUENCE OF SOCIO-DEMOGRAPHIC FACTORS ON ENTREPRENEURIAL ATTRIBUTES AND SUCCESS

Table 2: Educational Qualification Versus Family Occupation*

Socio-Demographic Factors		Family Occupation			
		Agriculture	Business	Service	Total
Educational Qualification	Below Graduate	5	5	2	12
	Graduate	25	47	10	82
	Postgraduate	44	23	5	72
	MBA	4	27	3	34
Total		78	102	20	200

Note: * $\chi^2 = 30.04, p = 0.00$.

business invariably insisted that their wards should go for MBA education. Also, these respondents had in mind to start their own business using their academic knowledge gained through the MBA program.

From Table 3, we infer that family occupation and previous employment of the entrepreneurs are associated. Those respondents whose family occupation is business ventured into white-collar job or professional service, prior to becoming entrepreneurs. These proportions are found to be statistically significant ($\chi^2 = 21.642, p = 0.001$).

Table 4 gives the descriptive statistics for 200 entrepreneurs with respect to five

attributes: IK, SS, TFA, IPSS, and ES. It may be noted that the mean score is maximum for SS followed by ES. The entrepreneurs on the whole scored less in IK. It could be due to the fact that they started the business on their own without much work experience in the industries.

Whenever we are interested in comparing the equality of more than two population medians, we use Kruskal-Wallis test. In Tables 5 and 6, the scores of the above said five attributes are compared with respect to education. The scoring pattern is same for all levels of education with respect to all attributes except for ES and is found to be statistically significant ($\chi^2 = 31.661, p = 0.00$).

Table 3: Family Occupation Versus Previous Employment*

Family Occupation	Previous Employment				Total
	Unemployed	Skilled Worker	White Collar Job	Professional	
Agriculture	3	21	25	29	78
Business	10	14	53	25	102
Service	5	6	6	3	20
Total	18	41	84	57	200

Note: * $\chi^2 = 21.642, p = 0.001$.

Table 4: Descriptive Statistics of Entrepreneurial Attributes

Descriptive Statistics					
Attributes	N	Mean	Std. Deviation	Minimum	Maximum
IK	200	2.4120	0.95390	1.00	5.00
SS	200	4.2283	0.77903	1.13	5.00
TFA	200	2.8560	0.90360	1.00	5.00
IPSS	200	2.8479	1.48468	1.00	5.00
ES	200	2.9680	0.63320	1.80	5.00

Table 5: Comparison of Scores of Attributes with Respect to Education

Attributes	Educational Qualification	N	Mean Rank
IK	Below Graduate	12	71.04
	Graduate	82	95.21
	Postgraduate	72	112.08
	MBA	34	99.12
	Total	200	
SS	Below Graduate	12	66.96
	Graduate	82	103.95
	Postgraduate	72	101.76
	MBA	34	101.37
	Total	200	
TFA	Below Graduate	12	92.33
	Graduate	82	95.71
	Postgraduate	72	103.80
	MBA	34	107.95
	Total	200	
IPSS	Below Graduate	12	116.50
	Graduate	82	95.66
	Postgraduate	72	103.95
	MBA	34	100.47
	Total	200	
ES	Below Graduate	12	118.92
	Graduate	82	124.69
	Postgraduate	72	74.13
	MBA	34	91.50
	Total	200	

INFLUENCE OF SOCIO-DEMOGRAPHIC FACTORS ON ENTREPRENEURIAL ATTRIBUTES AND SUCCESS

Table 6^{a, b}: Test Statistics Related to Comparison of Scores of Attributes with Respect to Education

Statistics	IK	SS	TFA	IPSS	ES
Chi-Square	6.930	4.496	1.632	1.715	31.661*
df	3	3	3	3	3
Asymp. Sig.	0.074	0.213	0.652	0.634	0

Note: a. Kruskal-Wallis Test; b. Grouping Variable: Educational Qualification; * Significant at 0.01 level (2-sided).

It shows that graduate has the highest mean rank of 124.69 followed by under graduate with 118.92 whereas postgraduate and MBA have got less mean ranks. It signifies that very high level of education is not really essential for ES as it demands more of technical and managerial

strategies rather than academic and theoretical knowledge and excellence.

The comparison of scores of attributes with respect to family occupation for sample is given in Table 7 and 8. Out of the five attributes, ES is the only attribute that is statistically significant

Table 7: Comparison of Scores of Attributes with Respect to Family Occupation

Ranks			
Attributes	Family Occupation	N	Mean Rank
IK	Agriculture	78	104.15
	Business	102	101.45
	Service	20	81.43
	Total	200	
SS	Agriculture	78	100.01
	Business	102	103.55
	Service	20	86.83
	Total	200	
TFA	Agriculture	78	101.85
	Business	102	98.54
	Service	20	105.20
	Total	200	
IPSS	Agriculture	78	101.12
	Business	102	100.07
	Service	20	100.28
	Total	200	
ES	Agriculture	78	85.02
	Business	102	104.26
	Service	20	141.68
	Total	200	

Table 8^{a, b}: Test Statistics Pertaining to Comparison of Scores of Five Attributes with Respect to Family Occupation					
Descriptive Statistics					
Statistics	IK	SS	TFA	IPSS	ES
Chi-Square	2.597	1.449	0.297	0.015	16.318*
df	2	2	2	2	2
Asymp. Sig.	0.273	0.485	0.862	0.992	0.000

Note: a. Kruskal-Wallis Test; b. Grouping Variable: Educational Qualification; * Significant at 0.01 level (2-tailed test).

Table 9: Comparison of Scores of Five Attributes with Respect to Previous Employment			
Domain	Previous Qualification	N	Mean Rank
IK	Unemployed	18	40.53
	Skilled Worker	41	109.54
	White Collar Job	84	102.64
	Professional	57	109.79
	Total	200	
SS	Unemployed	18	99.47
	Skilled Worker	41	74.41
	White Collar Job	84	97.61
	Professional	57	109.46
	Total	200	
TFA	Unemployed	18	109.61
	Skilled Worker	41	104.13
	White Collar Job	84	97.05
	Professional	57	100.08
	Total	200	
IPSS	Unemployed	18	90.92
	Skilled Worker	41	104.78
	White Collar Job	84	101.03
	Professional	57	99.67
	Total	200	
ES	Unemployed	18	164.28
	Skilled Worker	41	94.34
	White Collar Job	84	99.23
	Professional	57	89.82
	Total	200	

Table 10^{a, b}: Test Statistics Pertaining to Comparison of Five Attributes with Respect to Previous Employment

Statistics	IK	SS	TFA	IPSS	ES
Chi-Square	22.673*	2.099	0.926	0.759	18.190*
df	3	3	3	3	3
Asymp. Sig.	0.000	0.552	0.819	0.859	0.000

Note: a. Kruskal-Wallis Test; b. Grouping Variable: Previous Employment; * IK and ES Significant at 0.01 level (2-tailed test).

($\chi^2 = 16.318, p = 0.00$). ES score is less among agriculturist, maximum among service and moderate among business people.

In Tables 9 and 10, the scores of five attributes with respect to previous employment are compared. The previous employment has four categories, viz., ‘unemployed’, ‘skilled worker’, ‘white collar job’, and ‘professional’. As far as IK is concerned, employed workers have favored strongly than unemployed respondents ($\chi^2 = 22.673, p = 0.01$) while it is other way round for ES ($\chi^2 = 18.190, p = 0.01$). It is worthwhile to mention that those who were unemployed in their previous occupation turned out to be most successful entrepreneurs.

IMPLICATIONS FOR THEORY AND PRACTICE

The study has some interesting findings. The study provides strong support to Bhide’s theory that high level of education is not critical to ES. The study contradicts McCormack’s proposition that prior work experience enhances the chances of success in business. The study is in conformity with Bhide’s proposition that younger age individuals are more likely to achieve start-up success.

The findings of the study are not in conformity with the theoretical framework and hypotheses. There are at least three reasons for the deviance from the theoretical framework and hypotheses. First, academic knowledge may not always lead to managerial abilities. Entrepreneurs in the sample of the present study who had high qualifications may not have handled day to day operations of the business effectively, which resulted in a low level of ES. Second, entrepreneurs need to work very hard irrespective of their line of business. It is possible that entrepreneurs who belong to the higher age group were not able to work very hard, which is essential for achieving a high level of success in their businesses. Third, the entrepreneurs in the sample of the present study had work experience in a different field other than that in which they started their own businesses. Very few entrepreneurs had work experience in the same field in which they started their own businesses. Because of lack of prior experience in the same field, many entrepreneurs may not have achieved a high level of entrepreneurial success.

The findings of the study have implications for various segments of

practitioners, especially for venture capitalists, angel investors, entrepreneurship training institutes and policy makers. Venture capitalists can enhance the effectiveness of new venture survival assessment using the instruments, especially IK and SS. The study helps policy makers to provide more customized entrepreneurial support systems. Angel investors can make more meaningful decisions while evaluating the profiles of prospective entrepreneurs. Using the present study, entrepreneurship training institutes can incorporate changes in training and educational programs based on the individual profile of the candidates undergoing training.

RECOMMENDATIONS

Venture capitalist should not give too much of importance to educational qualifications of prospective entrepreneurs who are seeking funding. If venture capitalists give more importance to higher age individuals with high educational qualifications, their assessment of new venture survival will not be effective because they will be missing potential business opportunities presented by younger individuals with low educational qualifications. Policy makers should not focus only on higher aged, experienced and highly educated individuals while developing entrepreneurial support systems. This will lead to a very limited range of programs and incentives aimed at a particular segment in the society.

LIMITATIONS AND SCOPE FOR FURTHER RESEARCH

The present study explores ES and provides a useful insight into the concept

of success in SMEs. Although the study covers five states in India, a wider geographical coverage is likely to dig deeper into various aspects of SMEs. Hence, a research study covering a cross section of states and more extensive coverage of diversified categories of entrepreneurs would provide a greater understanding of the entrepreneurial attributes and demographic aspects. The present study has included very few firms operated by female entrepreneurs. As a result of this, many characteristics of women entrepreneurs could not be captured in this study.

CONCLUSION

The present study indicates that 30-50 years of age is well suited for entrepreneurship. It is found that moderate level of education is enough to attain high level of success in entrepreneurship. In fact, very high level of education is not really essential for ES as ES demands more of technical and managerial strategies than academic excellence.

In relation to family occupation, ES is the only attribute that is found to be significant. It is high among respondents in service, moderate among business persons and less among agriculturists. Respondents with business background and those with previous employment as a white collar job have attained higher level of ES. In relation to previous employment, out of five attributes, only IK and ES are found to be significant. Understandably, IK is acquired through previous employment, which has in turn led to high

level of ES. It is worthwhile to mention that those who were unemployed in their previous occupation turned out to be most successful entrepreneurs.

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APPENDIX 1

Measurement of Entrepreneurial Success
<p>I. Turnover/Total Sales of the company</p> <p>Above 10 crore 5; 5 crore to 10 crore 4; Above 3 crore and below 5 crore 3; 1.5 crore to 3 crore 2; Below 1.5 crore 1.</p>
<p>II. Employment Size</p> <p>101 employees and above 5; 51-100 employees 4; 11-50 employees 3; 6-10 employees 2; 1-5 employees 1.</p>
<p>III. Support Received</p> <p>No Financial and Moral Support during any stage of the company 5; Moral Support only during start-up stage 4; Financial Support only during start-up stage 3; Financial and Moral Support only during start-up stage 2; Financial and Moral Support during all the stages of the company 1.</p>
<p>IV. Involvement</p> <p>One individual without access to consultancy services 5; One individual with access to consultancy services 4; 2-5 individuals without access to consultancy services 3; 2-5 individuals with access to consultancy services 2; More than 5 individuals who worked previously for the same industry in which the company is operating 1.</p>
<p>V. Work Experience</p> <p>No work experience 5; 1-5 years in the same industry 4; 1-5 years in a different industry 3; More than 5 years in a different industry 2; More than 5 years in the same industry 1.</p>

APPENDIX 2

Measurement of Attributes (on Likert Scale)

I. Measurement of Industry Knowledge

On a scale of 5 to 1; Deep involvement 5, Medium involvement 4, Little involvement 3, Very little involvement 2, No involvement 1.

1. Involvement with the same field through education.
2. Involvement with the same field by virtue of work experience in the same industry.
3. Involvement with the same field by virtue of training.
4. Involvement with the same field through organizing and participating Industry related seminars and Industry related trade shows.
5. Involvement through various functions and ranks in professional societies.
6. Involvement through contribution of articles and papers to Industry magazines and trade publications.
7. Involvement through submission of reports and memoranda to government and private agencies.
8. Involvement in the form of any voluntary activities related to the industry.
9. Involvement by serving on an advisory committee or consulting team for an entity.
10. Involvement through reading Industry magazines and Trade publications.

II. Measurement of Street Smarts

On a scale of 5 to 1; Reference Period: Recent one year.

More than 20 times 5, 15-20 times 4, 10-15 times 3, 10 times 2, once or twice 1.

1. Number of times the entrepreneur had applied gut reactions to business situations.
2. Number of times entrepreneur had got slightly more in return (extra service, developed relationships or grabbed special attention) for what he had paid for a product or service.
3. Number of times the entrepreneur had won solely by applying his or her people sense.
4. Number of times the entrepreneur had tackled business situations by presence of mind or commonsense.
5. Number of times the entrepreneur had used experience and observation to solve a business problem.
6. Number of times the entrepreneur handled critical situations by taking quick decisions.
7. Number of times the entrepreneur had spotted an opportunity and acted upon it.
8. Number of times the entrepreneur had gathered useful and relevant information by applying his skills and relationships.

APPENDIX 2 (CONT.)

Measurement of Attributes (on Likert Scale)

III. Measurement of Tolerance for Ambiguity

On a scale of 5 to 1; Strongly Agree 5, Agree 4, neither Agree nor Disagree 3, Disagree 2, Strongly Disagree 1.

1. Puts to test him (her) self by experimenting in different situations.
2. Enjoys unexpected situations and surprises.
3. Prefers situations with no strict rules and no prescribed ways of doing things.
4. Inclined towards non-traditional profession.
5. Willing to participate in new endeavors and to take risk.
6. Puts to test his (her) abilities with complex tasks, even if he apprehends might not succeed.
7. He (she) is rather original and non-traditional in his (her) tastes and preferences.
He (she) has a willingness to act in an uncertain situation.
8. In some situations he (she) needs very little or even no information to take a decision.
9. He (she) is rather original and non-traditional in his (her) tastes and preferences.
10. Views uncertainty and ambiguity as an adventure.

IV. Measurement of 'Impact of Personal Selling on Start-Up Success'

On a scale of 5 to 1; Highly significant 5, Significant 4, Neither significant nor insignificant 3, Insignificant 2, Highly insignificant 1.

1. Total sales made through personal selling.
2. Number of repeat orders got as a result of earlier sales made through personal selling.
3. Amount of feedback in terms of suggestions from customers met through personal selling.
4. Number of new customers obtained through reference from old customers whom the entrepreneur had met through personal selling.
5. Reduction in 'cost per call' as well as in 'overall sales cost' by using personal selling rather than advertising.
6. Contribution of personal selling to the overall growth of the start-up.

A Conceptual Framework for Creating Customer Value in E-Retailing in India

Sita Mishra*

Over the last few years, the retail sector has become an increasingly competitive and dynamic business environment worldwide. As net revolution is gaining momentum, most of the companies are becoming online through their corporate websites. The growth of the Internet has enabled the new retail format and forced the existing retailers to consider e-retailing model of retailing as well. The arrival of e-retailing model is also shaking up India's retail sector because it has enormous competitive advantages over other channels. Despite the Internet offers tremendous potential in today's cluttered online world, it is becoming difficult for customers to search for goods/services of their choice. Organizations are focusing on incorporating the use of digital technologies in the firm's marketing mix, yet there is a need for organizations to better understand how to leverage this technology for enhancing customer value. Value-enhancing services may be offered to augment customer value. The focus of this paper is on developing a conceptual framework for creating and enhancing customer value in the e-retailing.

INTRODUCTION

With rapid growth of the Internet and globalization of market, the retail sector has become an increasingly competitive and dynamic business environment. The growth of the Internet has enabled the new retail format and forced the existing retailers to consider e-retailing model as well. E-retailing refers to the selling of retail goods electronically over the Internet. It usually refers to the Business-to-Consumer (B2C) transactions and is the largest marketing activity in the rapidly growing field of electronic commerce. Hart *et al.* (2000) defined the first stage of web retailing as the communication platform, where information on store

location, product information, etc., is made available. In addition, interactive features are offered which may prompt the user to take some form of action, such as catalogue ordering or joining a mailing list (Scott *et al.*, 2003). The second stage is defined as the electronic shop where retailers present their off-line shop online. The third and final stage is that of a trading community where retailers move beyond the e-shop model and develop or participate in portals, creating a shopping mall online.

Most experts agree that the advent of the Internet retailing has transformed the marketplace. E-retailing involves major changes in the traditional retailing

* Associate Professor (Marketing), Institute of Management Technology, Raj Nagar, Ghaziabad, India.
E-mail: smishra@imt.edu

business system and philosophy; therefore retailers need to be careful before embarking on an online retailing strategy. E-retailing offers the consumers huge amounts of information in the form of websites with useful links to similar sites that allows consumers to compare products by looking at individual items. The Internet shopping fulfils several consumer needs more effectively and efficiently than conventional shopping (Grewal *et al.*, 2002). One of the most dramatic changes e-retailing is creating is a shift in power between retailers and consumers (Dunne and Lusch, 2005). From the perspective of consumers, the Internet has changed their relationship with sellers because of the unprecedented increase in the number of choices and levels of control over the message (Sheth and Sisodia, 1999). It has also changed the decision making environment by the amount, type and format of information available to consumers (Alba *et al.*, 1997), because it provides tools for information storage, for information search and for decision analysis. The e-retailing business model is not bound by operational timings, geographical boundaries and can cater to country wide markets at a comparative miniscule cost. Due to all these factors, the Internet retailing has firmly established itself as a viable alternative to store-based shopping in a relatively short span of time.

The arrival of e-retailing model is also impinging on India's retail sector because it has enormous competitive advantages over other channels. However, as Porter (2001) has suggested, any business

transformation system is not without its tradeoffs. Accordingly, in exchange for saving money and time, consumers have to accommodate with other problems, as evident with the recent concern for spam protection and cyber security issues. Despite benefits proposed by the web-based commercial environment, few e-retailers have succeeded in encouraging consumers to amend their current shopping habits, in favor of the Internet shopping. The failures of a number of the Internet retailers suggest that some caution needs to be exercised regarding the potential of electronic shopping.

THE POTENTIAL OF THE INTERNET AS A MARKETING CHANNEL

The number of consumers buying online and the amount being spent by online buyers has been on the rise. According to Forrester Research report (Mulpuru *et al.*, 2008) in 2007, non-travel-related e-commerce sales in the US reached \$175 bn, a 21% increase over the previous year and is expected to grow to \$334.7 bn in 2012. European e-commerce is also growing rapidly. According to e-marketer, Europe's e-commerce market is currently growing at an approximate rate of 37%. The real drivers of online retailing in Europe are the UK, Germany and France, which currently account for 63% of the market. The report of e-marketer project's total e-commerce sales in Europe to be \$140.7 bn in 2007, and is expected to reach \$235 bn in 2010 (Dellner, 2007).

The increasing internet penetration has made e-business a huge potential in developing countries like India. With e-retailing channels making its presence felt in India, companies are using either their own web portal or are tying up with horizontal players like Rediff.com and Indiatimes.com to offer their products on the web. According to a study by IMRB International and the Internet and Mobile Association of India (IAMAI), active internet users in India reached 4.53 crore on September 2008 (*EE Times Report*, 2009). According to Abhichandani, Insight Director, IMRB, "Previous research had estimated the market size for e-commerce industry in 2007 at Rs. 7,080 cr. With the continued anticipation of growth, the industry was expected to grow to Rs. 9,210 cr last year. However due to recent global downturn, the industry might have fallen short of this estimated figure" (*The Financial Express Report*, 2009). At present, it stands at Rs. 1,180 cr. The growth in e-tailing market in India is driven by—increase in the number of buyers and sellers, change in the customer's attitude, convenience, and better Bargains. All the indications are pointing out that this pace of development is likely to continue and will have a significant impact on the store-based retailing. The reasons that limit the growth of this online segment in India comprise lack of trust, especially for unknown brands, lack of 'touch-feel-try' experience, higher chances for discrepancy in the product delivered, low margins, etc. With so many hurdles around

for e-tailing, it would be long time before e-tailing really catches up.

The Internet-based retail channels generally offer the consumer a convenient way to explore a broader range of products and product attributes and to compare features and prices. Shopping online helps customers and ensures the health of a growing economy by ensuring that businesses can offer a wider variety of certain items, allow less likelihood of impulse buying, offer convenience for those who do not have time to drive to the mall or outlet stores, and offer product reviews (Smith and Rupp, 2003). Understanding how the Internet is different has been widely researched in order to help establish how retailers can unlock its potential, either as an alternative or as a complementary retail channel (Rowley, 1996; Morganosky, 1997; Hart *et al.*, 2000; and Levenburg, 2005).

Unfortunately, the Internet in its current technological form is a poor service delivery medium because it lacks the capacity for direct personal interaction enjoyed by the most non-internet-based services. Regardless of the Internet's growth and enormous use for marketing purposes, various researchers have reported poor perception of e-service (Kolesar and Galbraith, 2000; Darian *et al.*, 2001; Burke, 2002; and Zeithaml, 2002), and many blunders seem to occur because e-companies fail to deliver real added value services to the customers and to meet their expectations (Zott *et al.*, 2000).

THE CONCEPT OF CUSTOMER VALUE

The term customer value has many meanings (Woodall, 2003), but two most prominent used within the marketing literature are—what is derived by the customer from the supplier (customer perceived value or customer received value), and what is derived by the supplier from the customer (value of the customer, now more commonly referred to as customer lifetime value). In this paper, the focus is on the former perspective, i.e., customer value is what they ‘get’ (benefits) relative to what they have to ‘give up’ (costs or sacrifices) (Zeithaml, 1988).

The creation of customer value has long been recognized as an essential concept in marketing (Woodruff, 1997) and the fundamental basis for all marketing activity (Holbrook, 1994). A business has been viewed as “the processes composed of value-adding activities”, and the output of firms’ activities are considered ‘value to the customer’. The value created by a firm can be measured by the amount that customers are willing to pay for it. A business is profitable if the value it creates exceeds the cost of performing the value activities (Porter, 1985, p. 38). Value can be created by differentiation along every step of the value chain, through activities resulting in products and services that lower buyers’ costs or raise buyers’ performance. An organization is competitive in the eyes of its customers if it is able to deliver a better value when compared with its competitors (Feurer and Chaharbaghi, 1994). Customer value can

therefore be considered as the benefit perceived by the customer in relation to the demanded price.

CONSTITUENTS OF CUSTOMER VALUE

Just as there is no commonly accepted definition of customer value, there is no definitive conceptualization of customer value. Few researchers explained the customer value by considering its components and improvement directions. In an early conceptualization, Williamson (1975) identified transaction efficiency as a major source of value, as enhanced efficiency reduces costs. He suggested that value creation can derive from the attenuation of uncertainty, complexity, information asymmetry, and small-numbers bargaining conditions. Park *et al.* (1986) described three basic consumer needs that reflect value dimensions—functional needs, symbolic needs, and experiential needs. Sheth *et al.* (1991) described five types of value that drive consumer choice, viz., functional value, social value, emotional value, epistemic value, and conditional value. However, both these frameworks do not capture the cost/sacrifice aspect of customer value. Holbrook (1994) suggested two aspects on which types of customer value differ. Customer value may be intrinsic to the product or extrinsic, and it may be self-oriented or other-oriented.

Jarvenpaa and Todd (1997) described that customer values are composed of product, service, shopping experience, and consumer risk, and can be improved both by increasing quality, variety,

playfulness, service quality and reducing price, inconvenience, and risk. Davis (1989) hypothesized the two constructs, perceived usefulness and perceived ease of use, to be fundamental determinants of user acceptance of information technology. Keeney (1999) mentioned a list of fundamental objectives affecting customer service which can be considered as core benefit, viz., product quality, cost and complimentary benefits, viz., time to receive product, convenience, and time spent, shopping enjoyment, privacy, and safety. Ulaga (2003) proposed a comprehensive framework in which he identified eight categories of value in business relationships, viz., product quality, delivery, time to market, direct product costs (price), process costs, personal interaction, supplier know-how, and service support.

CUSTOMER VALUE FRAMEWORK FOR E-RETAILING

Creating value on a continuing basis is essential for sustaining profitable opportunities (Kalanidhi, 2001). Customer value can be used in designing marketing strategy, recognizing new product opportunities, and enhancing product concept (Smith and Colgate, 2007). Value creation opportunities in virtual markets may result from new combinations of information, physical products and services, innovative configurations of transactions, and the reconfiguration and integration of resources, capabilities, roles and relationships among suppliers, partners and customers (Zott and Amit, 2001). The impact of the Internet at the

firm level has been analyzed using the value chain framework in a number of papers (Rayport and Sviokla, 1995; Porter, 2001; and Koh and Nam, 2005). Zott *et al.* (2001) studied the value creation on the Internet (e-business) and identified four main drivers: efficiency, complementarities, lock-in and novelty.

According to Zeng and Reinartz (2003), the Internet has a much differentiated impact along the different stages of the consumer decision-making process and the true value added of the Internet to consumers materializes at very specific points in the purchase process. Lumpkin and Dess (2004) described a model with a description of the Internet activities that add value from the perspective of customer, thorough the enhancing and facilitating the purchasing processes. These activities are: search, evaluation, problem-solving and transaction. Chen and Dubinsky (2003) developed a model of perceived customer value in an e-commerce context and emphasized that consumer value perceptions and purchase intentions are determined by the valence of experience (described as relevancy of information, ease of use and customer service, perceived risk, product price, and product quality.

Sweeney *et al.* (1999) examined the role of perceived risk in the quality-value relationship for durable goods and concluded that consumers do not only consider the immediate benefits and sacrifices, but also contemplate about the longer-term implications of the product's ownership. Perceived risk is considered as

a sacrifice, or cost, which negatively influences perceived value.

Zeithaml *et al.* (2000) stressed that additional dimensions will be needed in order to fully explain consumer evaluations of e-services. They developed e-SERVQUAL for measuring the e-service quality and discussed four dimensions—efficiency, reliability, fulfillment, and privacy—that form the core service scale. In addition, three other significant dimensions including responsiveness, compensation and contact are also stated when online customers have questions or run into problems.

Forsythe and Shi (2003) indicated that four types of risk, viz., Financial, product performance, time/convenience, and psychological (privacy) risk impact on online patronage behavior. The security and privacy provided by online channels have frequently been questioned by consumers (Rowley, 1996; Hoffman *et al.*, 1999; and Ranganathan and Ganapathy, 2002).

Menon and Kahn (2002) discussed consumers' perceptions of functional and utilitarian dimensions related to e-retailing or their perceptions of emotional and hedonic dimensions. In addition to these dimensions, some other factors relevant to e-retailing are 'consumer traits' (Burke, 2002), 'product characteristics' (Elliot and Fowell, 2000), "previous online shopping experiences" (Eastlick and Lotz, 1999) and 'trust in online shopping' (Lee and Turban, 2001; and Yoon, 2002). Thus, adoption and usage of e-retailing may be driven by more than the usual transactional and

functional attributes of value. A more holistic approach would consider that consumers may demand convenience in particular situations. In other situations and/or at other times, consumers may be looking for other non-convenience related attributes (for example, fun and entertainment attributes). More specifically, there are occasions and situations where consumers are goal oriented, at other times they are non-goal oriented (Kervenoael *et al.*, 2006).

CONCEPTUAL FRAMEWORK FOR CREATING CUSTOMER VALUE IN E-RETAILING DURING DIFFERENT STAGES OF PURCHASE DECISION MAKING

Regardless of increasing number of online users and products that are being offered on the web, there is no prior study that focuses on creating and enhancing customer value in e-retailing in India. To understand value creation in this business environment, a theoretical foundation building on several perspectives is called for. Research contributions and theories in the areas of consumer behavior, e-business-related value creation, business models and value drivers, provide us with the basis for suggesting the following research framework based on which the author explored value creation in e-business during different stages of product purchase decision making.

The classic purchase decision model identified stages through which

consumers proceed in making buying decisions (Perreault and McCarthy, 2002). It has been suggested that while a majority of retailers use the Internet to enhance company image, greater pay-offs come from offering more online services, particularly those that may be used by customers in the acquisition process and for post-purchase support (Levenburg, 2005). Recent work has applied the model including pre-purchase, acquisition, and post-purchase phases, to understand consumers' buying considerations within the context of e-retailing (Kiff, 2000; Kolesar and Galbraith, 2000; Burke, 2002; and Chen and Dubinsky, 2003). Each stage involves customer-supplier interaction, and thus offers the supplier an opportunity to add value for the consumer (Woodruff, 1997).

Value has been defined as the customer-perceived trade-off between costs and benefits (Brady *et al.*, 2005) and is generally considered a relativistic (i.e., personal and situational) concept (Holbrook, 1999). This conceptualization emphasizes the importance of incorporating context-specific costs and benefits as predictors of overall value judgments. Mathwick *et al.* (2002) highlighted the importance that is attributed to the value components may vary between customers or across different purchase situations. Some other researchers (for example, Gale, 1994; and Heard, 1993-94) defined customer value as being what customers get (benefits, quality, worth, utility) from the purchase and use of a product versus what they pay (price, costs, sacrifices), resulting in an

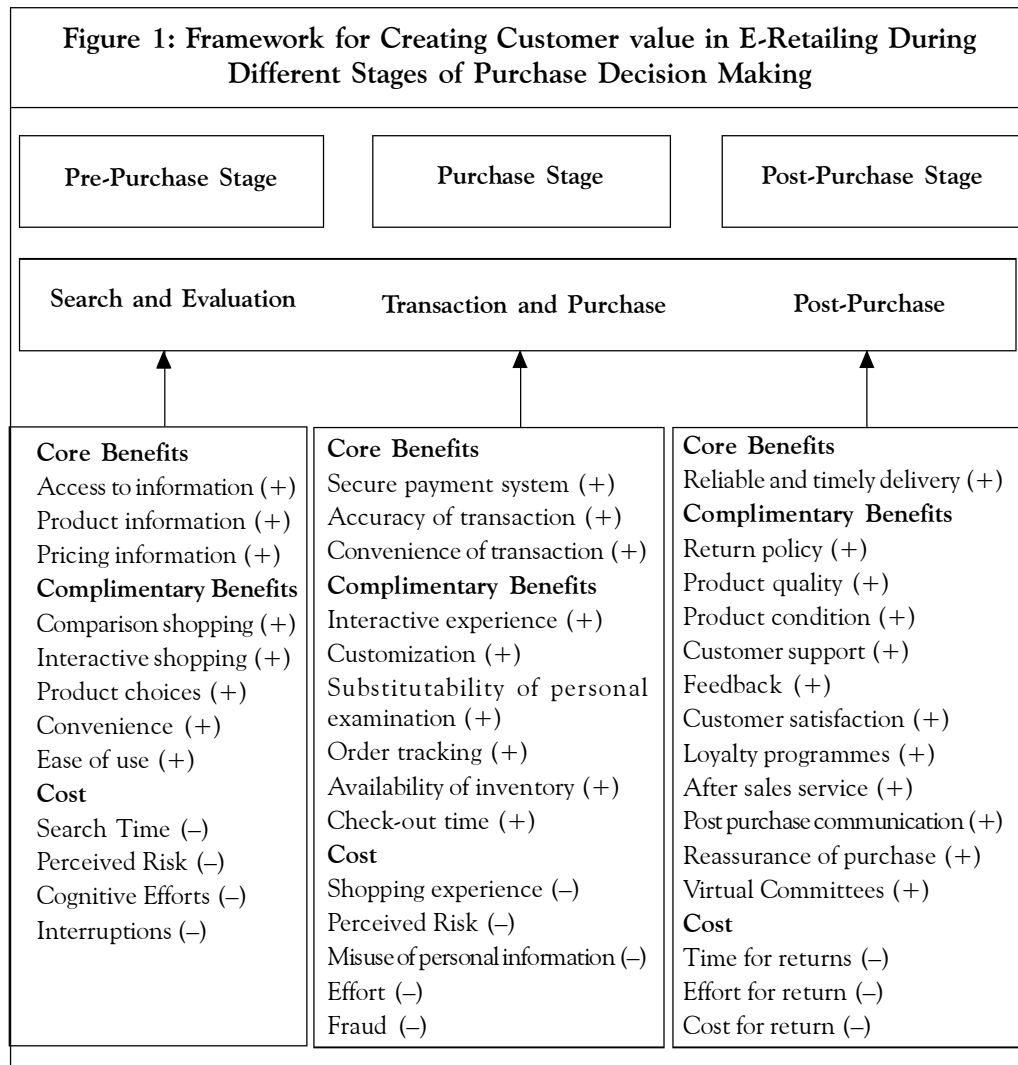
attitude toward, or an emotional bond with (Butz and Goodstein, 1996) the product. Perceived value reflects consumers' net gain obtained from their consumption behavior; thus it is likely to be used as an indicator of purchase intention in the offline channels, as well as the online channel (Chen and Dubinsky, 2003).

Literature review of customer value broadly describes trade-off between costs and benefits. Thus, this paper focuses on creating customer value with 3Cs (coined by author in context of customer value creation) approach, which comprise of two basic constructs, i.e., 'perceived benefits' and 'cost' during purchase decision making. In this paper, customer value in context of e-retailing is explained on the basis of 3Cs and is defined as "Customer's perception of advantage evolving over time from transactions made through e-retailing and which can occur in terms of the core, complimentary benefits achieved; reduction in costs; the resultant or aggregation of any weighed combination of any or all of these 3Cs."

Core benefits refer to the generic benefits with which the customer is endowed with either in the form of offer itself or by some other aspects of the offer. Offers can be products, services, or information that is provided e-retailers. The complimentary benefits are those that are delivered additional to the delivery of the core benefits. While these benefits may not be key reasons leading customers to purchase (i.e., not core benefits), for some the inclusion of these benefits strengthens the purchase decision while for others failure to include these may

cause the customer not to buy. The complimentary benefits can be added by differentiating the ways of transaction. The cost refers to all the sacrifices required to gain the offering, which includes time, inconvenience, efforts as well as money. While the cost related to core benefits manifest directly to the customers, the complimentary benefits related cost exists implicitly and becomes an obstacle to the success of the Internet business.

Figure 1 shows this framework for creating and enhancing customer value in e-retailing during different stages of purchase decision making. Since customer requirements differ in each stage, tapping into the determinants of value in each stage is important in achieving superior market performance. E-retailers that focus and develop strategies around the drivers of customer value in each stage can enhance the online shopping experience and boost their performance.



Sweeney *et al.* (1999) mentioned that value for the customer is delivered more effectively by reducing sacrifice than by increasing benefits. Based on the above discussed theories and models, customer value can be enhanced either by increasing core or complimentary benefits (indicated as +) or by reducing cost (indicated as -) required for obtaining the benefits. This framework can be used to create and improve the value for customers completely and effectively by considering its constituents/ drivers. Thus, firms can create value by providing the core benefit or by offering complimentary benefits in a more valuable way.

PRE-PURCHASE STAGE

In the consumer decision making process, information search begins when consumers recognize a purchase problem. To solve this problem, consumers have the choice of searching for information from two channels. They can search for information exclusively online or off-line, or in combination (Peterson *et al.*, 1997). Consumers in the pre-purchase stage engage in a search-and-evaluation process to gather information, both product-related (Kolesar and Galbraith, 2000; Betts, 2001; Burke, 2002; and Chen and Dubinsky, 2003) and retailer-related (Devlin, 2001), and evaluate collected information according to their purchasing criteria. At this stage, it is critically important to provide sufficient product and pricing information (Burke, 2002) and make it easy to locate.

In pre-purchase phase, there are considerable differences between traditional shopping and the Internet

shopping. Firstly, in e-retailing, there is limited physical interaction possible with the product (visual and textual information only). Additional information on products is limited to other channels such as online 'chat' sessions, telephone conversations and e-mail. Secondly, it is difficult to find common comparative criteria from different retailers for similar products. Various characteristics of the Internet such as, the convenience of 24/7 trading hours and multitude of websites may reduce the time and effort involved in accessing stores and searching for products (Seiders *et al.*, 2000). This source is particularly advantageous when searching for unique or unusual products and when seeking to compare a range of products or prices (Zeithaml *et al.*, 2000; and Wolfinbarger and Gilly, 2001).

Along with this, comparing products can be much easier on the Internet, since physical movements between shops or between shelves in a shop are not necessary (Grunett and Ramus, 2005). While in a traditional store, energy exerted to find information can be quite high, though there is lot of potential for environmental influences (e.g., store atmosphere, POS information, sales personnel, etc.) and immediate feedback on appropriateness of product (e.g., tactile qualities, fit, color, drop, quality). Another important point on the Internet is that quick and effortless searches and comparisons are possible. The comparative data is, however, limited to the information given by the e-retailer. In order to provide a clearer understanding

of online information search behavior, one needs to recognize that the Internet is not an isolated channel. It coexists, complements and competes with other conventional channels used by consumers to search for information and make decisions (Peterson *et al.*, 1997). Because the Internet shopping is a new mode of shopping involving various and seemingly novel types of perceived risks (Eastlick, 1996), the consumer is likely to place added importance on searching for information when using this channel. Due to the potential importance of search in online behavior, Klein (1998) argued that search processes be made part of interactive consumer models as critical predictors of the Internet consumer behavior. Klein's (1998) Interaction Model of pre-purchase consumer information search explained a goods classification model in which consumers analyzed the relative costs and benefits of an additional search.

Liang and Huang (1998) indicated that consumers are likely to conduct transactions in a manner that minimizes transaction costs. Since consumers rarely visit multiple physical stores before purchasing (Newman and Staelin, 1972), interactive shopping can lower the costs of acquiring pre-purchase product information. In conjunction with this, it increases search benefits by providing a broader array of product alternatives at a small incremental cost (Bakos, 1991). The benefits can increase especially when the consumer is under time pressure (Beatty and Smith, 1987). Haubl and Trifts (2000) explained interactive

decision aids designed to assist consumers in the initial screening of available products and to facilitate in-depth comparisons among selected alternatives may have highly desirable properties in terms of consumer decision making. Such tools allow shoppers to more easily detect products that are overpriced or otherwise dominated by competing alternatives, thus increasing market efficiency.

Many online retailers employ features such as banner ads and pop-up windows to generate additional revenues and promote sales. These features also increase interruption of the search process, distracting and disorienting consumers in this highly visual and perceptual environment. By understanding the effects of interruption, online retailers could prevent consumers from getting lost in this information space and guide them to the information destinations of interest (Chiang *et al.*, 2005).

Dowling (1986) said that perceived risk pertains primarily to pre-decision consumer choice and information search. As risk perceptions are higher, consumers are willing to spend more time and effort to on their decision; thus higher risk will automatically lead to more cognitive effort. Several other researchers (Sweeney *et al.* 1999; and Agarwal and Teas, 2001) showed that perceived risk negatively impacts perceived value. In case of e-retailing, although physical efforts (e.g., going to stores) have been reduced to mouse clicks, the cognitive challenges of interacting with computers and online information remain that limit consumer information search within and between

sites (Chiang *et al.*, 2005). E-retailers should consider that evaluating the vast selection of products may become tedious or time-consuming (Alba *et al.*, 1997).

Building on the above mentioned logics, following hypotheses in pre-purchase stage of e-retailing have been proposed:

- H₁: Information (access and ease of use) is the core benefit which increases customer value in e-retailing.*
- H₂: Effortless search (without physical movement) is the additional feature which strengthens customer value in e-retailing.*
- H₃: Comparison of products is the added aspect which reinforces customer value in e-retailing.*
- H₄: Interactive shopping is the supplementary feature in e-retailing which can enhance customer value.*
- H₅: Perceived risk during pre-purchase (interruptions, increase in search time, cognitive efforts, etc.) negatively impacts customer value.*

TRANSACTION AND PURCHASE STAGE

In the acquisition stage, shoppers are ready to buy and expect to be able to complete their transactions with a limited amount of effort (Ellis and Marino, 1992). The purchase stage in e-retailing differs from traditional retailing both in the physical activity involved and in terms of payment. The latter is an important aspect given consumers' involvement with payment security when buying via the Internet (Gritzalis and Gritzalis, 2001;

Kolsaker and Payne, 2002; and Liebermann and Stashevsky, 2002). Along with this, there is availability of limited payment methods in e-retailing. The Internet provides freedom from sales staff and allows consumers to readily abandon shopping carts or delay a purchase commitment (Wolfenbarger and Gilly, 2001). In traditional stores, factors such as sales persons, product displays, electronic media and point-of-purchase advertising influence decisions. In case of traditional retailing, service encounter, viz., short queues, helpful sales-personnel, methods of payment, stock availability, relaxing POS environment can have an impact on decision to continue with the purchase while on the Internet the quality of service encounter is governed by the interactive experience of the user with the website (ease of navigation, information availability, data security, graphics, returns policy, delivery terms, and cost).

Electronic market places, electronically connecting buyers and sellers through a central database, reduce transaction costs for both buyers and sellers. Several studies indicated that online customers desire to know the availability of inventory, and want fast and convenient check-out, secure ordering, and the ability to track purchases (Betts, 2001; and Burke, 2002). Peterson (1997) mentioned that from a customer perspective, the cost and benefits of buying online will depend on the price/quality trade-off, the relative speed and costs of shipping and other transaction-related risks. Because online purchases may be perceived as riskier endeavors than

in-store transactions, online tracking of customer orders is particularly important in reducing customers' perception of risk and enhancing perceptions of value vis-à-vis assurance (Kolesar and Galbraith, 2000).

According to Kiang *et al.* (1999), the Internet can act as a transaction channel during the purchase stage. By doing so, the company can reach a larger customer base, improve its revenues and streamline its transactions process as well as customize promotion. Once a customer arrives at the website, a superior shopping experience supported by value-added services can induce purchase. Such value added services enhance the value customers derive from the purchase and also strengthen customer loyalty (Reichheld and Scheffer, 2000). Shopping experiences can directly enhance value perceptions and store purchasing intentions (Kerin *et al.*, 1992).

Among the benefits of traditional physical store retailing is the ability to personally experience a product on a multi sensory basis (Alba *et al.*, 1997). It is expected that those individuals, who do not value or at least utilize these sensory components of the traditional retail channels, will see the new media as an acceptable substitute for directly examining a product in-person. Childers *et al.* (2001) mentioned that as the substitutability of personal examination of product information obtained via interactive media increases, perception of usefulness and the enjoyment of using the media will also increase.

Buying from the Internet retailer poses some distinctive challenges, viz., problems with privacy of personal information and mistrust regarding payment system. Further, a consumer's lack of trust or perception of security and privacy risks may be a prohibitive factor for online purchasing (Cheung and Lee, 2001). Consequently, many shoppers perceive more risk when they shop on the Internet compared to shopping in traditional stores (Hoffman *et al.*, 1999). Zeithaml (1988) addressed that the time and effort invested are mediated by the perceptions of product value for money. Apart from time and effort, consumers can bear psychological or emotional costs in order to receive their products.

This new media may become a deterrent in a few cases: firstly, if assistance from sales staff or the opportunity to interact with friends and family is desired (Dholakia, 1999) and secondly, for sensory deficiency. Websites that enable interaction with other consumers, such as subscriber chat sites or online forums for product users, may offer social value and a sense of community (Mohammed *et al.*, 2002). Not being able to see, feel or experience a product prior to purchase may be a deterrent (Zeithaml *et al.*, 2000).

As such in purchase stage, it is hypothesized that:

- H_6 : *Convenient and secure payment system is the prime benefit which can increase customer value in e-retailing.*
- H_7 : *Interactive experience during purchase is the added aspect which*

can enhance customer value in e-retailing.

H₈: Tracking information (inventory, order, check-out time etc.) is the additional facet which strengthens customer value in e-retailing.

H₉: Perceived risk during purchasing negatively impacts customer value.

H₁₀: Different shopping experience during purchasing (not getting assistance from sales staff, sensory deficiency, etc.) negatively impacts customer value.

POST-PURCHASE STAGE

Following the purchase decision, customers engage in a post-purchase and evaluation process. The post-purchase phase differs in that with traditional retailing, consumers take their products home, whereas when shopping via the Internet they will have to wait for delivery. For this reason, questions of product returns and retailers' return policies may have more importance. At this stage, consumers compare their actual experiences with expectations and promises provided by the retailer, including the timeliness and reliability of product delivery (Kolesar and Galbraith, 2000; and Burke, 2002). They may want to know what to do with unsatisfactory items (Burke, 2002), suggesting the need for retailers to facilitate communications to resolve customer service issues. Also, the physical dispatch of goods may delay completion of acquisition tasks or discourage impulse shopping (Wolfenbarger and Gilly, 2001)

Berry *et al.* (2002) addressed that the transaction convenience, which they entitle as post-purchase convenience, refers to the consumer's perceived time and effort expenditures needed to reinitiate contact with the (service) provider to resolve problems and to arrange follow-ups.

Wang and Huarng (2002) identified nine factors in the customer text comments. The satisfied customers showed their primary concern was to receive products as ordered on time with a competitive price without any hidden charge, then customer support. Whereas the primary concern of unsatisfied customers was customer service via phone or e-mail, availability of merchandise in stock and delivery of merchandise as ordered on time (Wang and Huarng, 2002).

Hagel and Armstrong (1997) discussed that creating virtual communities (where people connect through the website and communicate in real time with other users with similar interests) has benefits for both consumers and vendors. Consumers are able to share their experiences, access competing vendors and ideas, and shape the content they receive. Vendors can better target their product offerings to specific audiences that have segmented themselves. Since users arrange themselves according to interests, communities can also be a means of leveraging the reach of the Internet to improve communication flow.

Promotion has an important role in reassuring the customers of the appropriateness of their decisions and in

providing information on use and care of the product (Murray and O'Driscoll, 1996). Milliman and Decker (1990) in their study demonstrated the use and potentially positive effects of post-purchase communication on order refund requests and reorder rates. Based on the findings of previous research, it seems plausible that dissonance was effectively reduced through post-purchase communication. Absence of offline retail outlets may increase the time, effort and cost involved in returning or exchanging products (Seiders *et al.*, 2000).

Thus, following hypotheses in post-purchase stage in e-retailing have been proposed:

- H_{11} : *Delivery (reliable and timely) of the product is the core benefit which increases customer value.*
- H_{12} : *Relationship measures (customer services, loyalty programs, satisfaction, etc.) are the additional benefits which enhance customer value.*
- H_{13} : *Reassurance measures (promotions, virtual communities, etc.) are the extra benefits which strengthen customer value.*
- H_{14} : *Return policy (more time and effort taking, cost, etc.) negatively impacts customer value.*

CONCLUSION

The growth of the Internet is changing the environment in which businesses operate today. There is no doubt that the Internet has radically changed and facili-

tated the decision making process and choice due to its unique characteristics as communication medium and effective channel for conducting marketing. The arrival of e-retailing model is also shaking up India's retail sector because it has enormous competitive advantages over other channels. A large number of consumers in India are using this channel for shopping purposes but it is not clear how to leverage this technology for enhancing customer value. This paper proposes that the body of theoretical and empirical research on customer value drivers can be applied to e-retailing. The framework discussed in this paper is based on 3Cs (core and complimentary benefits and costs) presented in this paper provides some assistance in this task of customer value creation. This paper also proposes a number of propositions which needs to be examined and verified. Although, there is ample theoretical justification for these propositions, however, there is little empirical evidence available to test these hypotheses in the Indian context. Thus, the paper provides directions for future empirical research on customer value.

The framework can provide practitioners with a way to create and improve customer value during product purchase decision making in e-retailing. The transaction through the Internet is different from traditional channel and has quite different impacts on different stages of the consumer decision-making process. Further, there can be differences in customer value drivers in different product categories. Much may be learned by analyzing the drivers of customer value

in various e-retail products and services. The proposed framework can be used by e-retail managers to select various factors related to benefits and costs or even to set goals for their organizations to enhancing customer value. Hence, e-retailers should think from the perspectives of consumers as well as products and develop strategies which not only support core customer needs but also add real value to very specific online consumer needs. Further, as e-retail evolves, new benefits will likely to appear, therefore in future, these items related to core and complimentary benefits and costs

can be revised. In any case, future researchers should validate the framework discussed in this paper. Future researchers could also seek other factors that may influence the benefits and costs. Technological changes are also providing many new opportunities which were previously not available. Therefore, it is important to continually reassess customer value drivers, particularly in online environments. Being inventive about creating customer value can enable marketers to be more successful in exploring numerous opportunities.

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Research Note

Measuring the Construct of Workplace Forgiveness: A Confirmatory Assessment Using SAS Proc Calis Procedure

Malay Biswas*

Forgiveness is a robust construct, featured widely in western academic journals. However, academic discourse on workplace forgiveness is relatively rare. This paper attempts to contribute by filling up this gap and attempts to evaluate the integrity of the forgiveness construct in the Indian workplace scenario. Workplace violence signifies relative absence of footprint of forgiveness inside the organizational settings in India. The author used SAS Proc Calis procedure to evaluate the robustness of the construct. Utilization of structural equation modelling is a very recent phenomenon and is preferred for its rigor. In line with the recent advancement, the author has utilized factor analysis, and subsequently structural equation modelling technique for the present work. The findings of the research corroborate that the construct is appeared to be robust and could be utilized for other derivative studies. The present research relies upon limited sample. Hence, the results are required to be taken with requisite reservation and careful consideration.

When you seek revenge, dig two graves.

–Chinese Proverbs

INTRODUCTION

Recently, India witnessed a few outburst of severe workplace violence. On September 23, 2008, the *Times of India* reported gruesome murder of Chief Executive Officer of a multinational company by sacked the Indian workers. Unreported workplace violence is not rare. In the early part of industrialization in India over the last few decades, workplace violence was the result of tussle between various trade

union factions and industrial houses for political, economic and social benefits (Bhattacharjee and Ackers, 2008). As India enters into high growth economy, this tussle is being replaced by new types of violence, mostly triggered apparently due to unjust experiences. The author believes that one of the ways to evaluate the problem is to link workplace violence with forgiveness.

* Associate Professor, Institute of Hotel Management, Department of Management Studies, Aurangabad, Maharashtra, India. E-mail: malay.biswas@gmail.com

Forgivingness has been defined by Roberts (1995) as “the disposition to abort one’s anger (or altogether to miss getting angry) at persons one takes to have wronged one culpably, by seeing them in the benevolent terms provided by reasons characteristic of forgiving” (p. 290). Another way to define it is as “...a willingness to abandon one’s right to resentment, negative judgment, and indifferent behavior toward one who unjustly injured us, while fostering the undeserved qualities of compassion, generosity and even love toward him or her.” (Enright *et al.*, 1998, pp. 46-47). Prime derivatives from these definitions are: (1) Dilution of anger towards a person, who committed wrong; and (2) Positive outlook towards the person who committed wrong. In other words, it signifies absence of revenge intention and presence of positive frame of mind towards the person, who committed wrong.

ROLE OF FORGIVENESS IN WORKPLACE CONTEXT

As India makes strides towards developed economy, employees working in the Indian service sector are exposed to different set of challenges, which are unlike the experience of manufacturing sector. Employee requires to be emotionally literate to handle emotional dissonance, which may arise as a product of exposure to service production environment. Unjust experience in organizational context is inevitable. Source of unjust experience may be due to inequitable procedure, unfair distribution of scarce organizational resources, rude behavior of customers, etc.

In some cases, unpleasant experience arises out of unsuccessful interactions with employees and colleagues. Some of other sources of unjust experience could be sexual harassment, workplace bullying, etc. Besides, aesthetic preference over merit may also cause substantial unjust experience in the minds and hearts of employees, working in the service sector. Fairness heuristic theory supports the claim that in an organizational environment, one requires to submit themselves to others in a deep network of relationship. Often, submission to other reduces the freedom, flexibility and control. This provides an opportunity for exploitation. Relations with authority always have potential to get sour. Inevitably, this will lead to layers of unjust experience (Lind *et al.*, 1980; Lind and Lissak, 1985; and Van den Bos *et al.*, 2001). Irrate customers’ irrational demands are another potential source of unjust experience. Delinquent customers behave ruthlessly with employees and potentially may create unjust experience. Human Resource professionals could attempt to reduce the exposure to this kind toxic workspace; however, thorough elimination is not likely possible. Hence, forgiveness construct has true potential to explain various workplace issues and problems. Unjust experience may originate from procedure and people involved. Thus, it is mostly centered around individuals, such as office superiors, supervisors, colleagues, customers. These are the people, who influence and play significant role on employees’ life. They allocate resources, develop procedures and create an

environment for sustainable work milieu. They represent company and often their role is embodied the true character of workplace and corporate brand. Hence, forgiveness construct, in our present research, directed to these individuals.

Forgiveness potentially has rich explanatory power in organizational context. Stone (2002) observed that "When we demonstrate forgiveness at the level of team, people feel safe to express themselves fully, leading to greater creativity, innovation and risk-taking. People will work harder and have crucial 'courageous conversations' because they feel recognized and appreciated. They are willing to play full out because they feel safe to voice their concerns as well as their dreams and aspirations. Forgiveness leads to an empowered and fully functioning work team" (p. 285). Forgiveness is a virtue and plays significant role in controlling, moderating, driving employee's behavior. "Forgiveness is a restorative virtue. If practiced often enough that forgiving becomes incorporated as part of a manager's repertoire of management techniques, a habit, forgiveness can enable the manager locked into a malignant pattern of behavior or cycle of conflict fueled by past resentment and anger, to move beyond her negative feelings for the good of the working relationship and the organization" (Kurzynski, 1998).

Literature review suggests that forgiveness provides rich framework of reference and holds wide range of explanatory power, such as satisfaction in

life and forgiveness (Sastre *et al.*, 2003), forgiveness and personality (Koutsos *et al.*, 2008; and Maltby *et al.*, 2008). For example, Sastre *et al.* (2003) explored the relationship between forgivingness and satisfaction with life. They reported that three components of forgivingness (enduring resentment, sensitivity to circumstances, and overall willingness to forgive) and satisfaction with life was 'weak' and 'most of the time non-significant'. Their research supports the arguments that forgiving an offence to an offender do not result in a strong increase in overall satisfaction in life.

CROSS CULTURAL EVALUATION

Due to unique peculiarity embedded in country's cultural orientation, evaluation of psychological instruments are required an evaluation before utilizing it for further derivative studies. Interpersonal forgiveness will "vary according to one's culture" (Temoshok and Chandra, 2000). In cross cultural environment, only a few studies on forgiveness are available for scrutiny. In non-western environment, numbers of studies become rather rare (Sandage and Williamson, 2005). A few academic studies on forgiveness in cross cultural environment are available for scrutiny. For example, Ohbuchi and Sato (1994) studied the effect of apologies on Japanese adult's response to harm. Azar and Mullet (2001) compared and contrasted willingness to forgive in several communities in Lebanon, (Azar *et al.*, 1999; and Azar and Mullet 2001). Other few studies are Korean adolescent's reasoning about forgiveness

(Park and Enright, 1987), forgiveness in Nepal (Watkins and Regmi, 2004), forgiveness dynamics in Chinese mainland (Fu *et al.*, 2004).

Suwartono *et al.* (2007) explored the nature of the factor structure of forgiveness in Indonesian Muslim dominated country and evaluated against French sample. They found that three-factor structure (lasting resentment, sensitivity to circumstances and willingness to forgive) is evidently present in the Indonesian sample. Sensitivity to circumstances and willingness to forgive scores were higher, and lasting resentment score was lower, among Indonesian students compared to French students. Fu *et al.* (2004) found that in Peoples Republic of China, willingness to forgiveness is influenced by social solidarity need than individualistic personality variables or religiosity as reported in western research.

It is important to note that paucity of research in workplace context is discernibly visible (Exline *et al.*, 2003). Most of the academic discussions, available for scrutiny, are predominantly linked with paramedical, therapeutic and religious context. Stone (2002) presented some qualitative arguments on workplace forgiveness, which requires further validations. Hence, the present discussion is timely, appropriate and relevant to the present Indian work context. Not to mention that during the last decade, economic growth in India made a lot of structural changes in the Indian workplace and this makes forgiveness studies an urgent necessity of our times.

IMPORTANCE OF THE PRESENT STUDY

The present research makes two distinct contributions: Firstly, forgiveness research in workplace context has been almost negligible. Present research initiative will have potential to generate wide range of discussions, linking various organizational outcomes. Needless to mention, though descriptive discourse is available on workplace forgiveness (Kurzynski, 1998; and Stone 2002), empirical evidence to support their claims is relatively scarce and negligible. Present research attempt to provide empirical evidence by evaluating the statistical robustness of the instrument. This research will indeed pave the way for wide range of research work. Secondly, usage of SAS Proc Calis procedure is rarely reported in the Indian academic journals. The present research fulfils these gaps. The author believes that this procedure provides relatively more helpful guidelines through various modification indexes, when refining models.

RESEARCH METHOD

The author carried out Principal Component Analysis to extract the factor structures. Subsequently, confirmatory assessment of the scale has been done with the help of these factor structures.

PRINCIPAL COMPONENT ANALYSIS

It is one of the effective data reduction techniques, often considered for exploratory data analysis. This is used to identify the underlying factors, which explain relatively large number of variables in an integrated

manner. Variables commonly share an underlying concept. "In summarizing the data, factor analysis derives underlying dimensions that, when interpreted and understood, describe the data in a much smaller number of concepts than the original individual variables" (Hair *et al.*, 1998).

STRUCTURAL EQUATION MODELLING

Structural equation modelling, one of the widely used frameworks, is used in the present study to evaluate the fit of the model structure. Structural equation modelling technique estimates relationship among manifest and latent variables along with their measurement error simultaneously. Other first generation multivariate techniques estimate relationship among variables once at a time. Structural equation modelling provides robust framework of equations to calculate relationship among manifest and latent variables simultaneously. Accommodating measurement error in estimation of relationship is a great advantage. The method provides ample opportunity to improve competing models by generating various indicators such as modification index, standardized residuals, etc. "In structural equation modelling, a model fit is said to fit the observed data to the extent that the model-implied covariance matrix is equivalent to the empirical co-variance matrix" (Schermelleh-Engel and Moosbrugger, 2003). Swell Wright is often cited as prime contributor on path analysis work, while Thurstone's factor analysis work and econometrician's simultaneous equation-modelling work

generated a unique platform. Subsequently, Joreskog (1973) bridged it through structural equation modelling work.

Structural equation modelling has been widely accepted method for data analysis in most of the leading journals. Dedicated reviews are available on the application of structural equation in communication research (Holbert and Stephenson, 2002), psychology (Hershberger, 2003), marketing (Baumgartner and Homburg, 1996), management information system (Chin and Todd, 1995; and Gefan *et al.*, 2000), logistics (Graver and Mentzer, 1999), operational research (Shah and Goldstein, 2006), organizational research (Medsker *et al.*, 1994), strategic management (Shook *et al.*, 2004), tourism studies (Golob, 2003; and Biswas, 2008), recreational tourism (Reisinger and Turner, 1999), etc.

ESTIMATION METHOD

A number of estimation methods such as Maximum Likelihood (ML), Unweighted Least Square, Scale Free Least Squares, Asymptotically Distribution Free (ADF), Generalized Least Square (GLS) are available. Each estimation method has its advantage and disadvantages. For example, ML assumes univariate and multivariate normality and input data matrix is positively definite but provides quire robust results under moderate violation. For the present research work, ML estimation method has been deployed. ADF has a few distributional assumptions; however requires very large sample size, in the region of 5,000 for accurate results. Multivariate normality is essential for ML

estimation (Curran *et al.*, 1996). Monte Carlo simulation study suggests that small sample does not affect the estimation process if the data set is normal.

MODEL VALIDITY

No agreement is seen among SEM experts of what constitutes a perfect fit. Hu and Bentler (1999) observed that "Despite the availability of various measures of model fit, applied researchers often have difficulty in determining the adequacy of a structural equation model because different aspects of the results point of conflicting conclusions about the extent to which the model actually matches the observed data."

MODEL EVALUATION

The author evaluates the integrity of the model through structural equation. Traditional regression has limitations and structural equation is comparatively better framework for model evaluation. Authors such as, Hoyle and Panter (1995) and Boomsma (2000), suggested that diagrams of hypothesized and final models should be presented in the article. The author follows the guidelines and present diagrammatic presentation for independent judgment and evaluation.

LIKELIHOOD-RATIO CHI-SQUARE STATISTICS

This is widely used in SEM journals. Low chi-square value signifies that actual and predicted matrices are not statistically different. However, this is very much sensitive to sample size. It is important that researcher must complement this chi-square measure with other goodness-

of-fit measures. This is one of the highly debatable areas among competent SEM experts.

GOODNESS OF FIT INDEX (GFI)

It is one of leading indices often used to substantiate the overall fit (Baumgartner and Homburg, 1996; and Holbert and Stephenson 2002). It is a non-statistical measure ranging in value from 0 (poor fit) to 1.0 (perfect fit). Though there is no agreement for threshold limit for accepting a model, 0.90 and above is considered to be fit with the data.

ROOT MEAN SQUARE ERROR OF APPROXIMATION (RMSEA)

It is one of leading indices often cited for substantiating model fit. (Holbert and Stephenson, 2002). It is the discrepancy per degree of freedom. It is sensitive to sample size. Values less than 0.05 is a good fit, values ranging from 0.06 to 0.08 mediocre fit, below 0.08 is a poor fit.

ADJUSTED GOODNESS OF FIT INDEX (AGFI)

It is one of the extensions of GFI. Recommended level of value is often a value greater than or equal to 0.90.

COMPARATIVE FIT INDEX (CFI)

It is an incremental fit index, ranging value from 0 (no fit) to 1.0 (perfect fit). It compares data between researcher's model (Chi-square value minus degree of freedom) and full model (Chi-square minus degree of freedom). This equation is range bound and remain within 0 to 1.0, preferably model above 0.90 is considered to be adequate fit.

RESEARCH PROCESS**MODEL EVALUATION CRITERIA**

Hatcher (1995) provided useful guidance on how to evaluate model while using SAS Proc Calis procedure:

- Review the Chi-Square Test: Chi-square value signifies the difference between theoretical model and model produced by the data. If this chi-square figure is high, then it suggests that there are substantial difference between the model and data. It is sensitive to sample size, and hence require to be interpreted with due care. Hatcher (1995) suggested ratio of Chi-square value to Degree of Freedom (DF) should not be greater than two. However, some authors recommended this ratio stretch between 1-3 (Carmines and McIver, 1981).
- Review the Non-Normed Fit Index (NNFI) and Comparative Fit Index (CFI): Both of these indices are required to be above 0.90.
- Review the Significance Test for Factor Loading and Path Coefficients: All the *t*-values should be greater than 1.96.
- Review the Residual Matrix and Normalized Residual Matrix: Standardized residual should not exceed 2.58.
- Review the R^2 Value: R^2 value should be relatively large.

SOFTWARES

For Structural Equation Modelling purpose, various softwares are available such as EQS, MPLUS, SAS, SPSS

AMOS, LISREL. The author used the SAS 9.1.3 for the present research work.

OBJECTIVES

The objective of the research is to provide a confirmatory assessment of the forgiveness scale and to check its integrity using structural equation modelling.

INSTRUMENT

Several instruments are available to measure forgiveness (Enright *et al.*, 1998; McCullough *et al.*, 1998; Azar *et al.*, 1999; and Azar and Mullet, 2001). The author used Transgression-Related Interpersonal Motivations (TRIMS), developed by McCullough *et al.* (1998). They reported high reliability (ranging from 0.86 to 0.90) and it has only 12 items, supported by two factors. Though the scale has been developed to measure forgiveness construct in close relationship context, it has potential to explain forgiveness domain in organizational setting, especially relationship with supervisors. In the service sector, considerable amount of work is performed under direct and indirect supervisory control. Hence, assessing potential of forgiveness in supervisory set up provides unique opportunity. TRIMS has two factors: revenge intention (Indicator RE1 to RE5) and avoidance intention (Indicator AV1 to AV7). As the factor name implies, all the question items are required to be reverse coded to represent forgiveness in any given context. However, in line with McCullough *et al.* (1998) studies, the author did not reverse the score for the present study as it is not linked with

other organizational outcome variables. Respondents got the following direction while filling up the questionnaire. "Please indicate your current thoughts and feelings about the person who recently hurt you in your workplace. Use the following scale to indicate your agreement with each of the questions". Range indicated in the scale was 1-5, 1 being the lowest (Strongly Disagree) to 5 being the highest (Strongly Agree).

SAMPLE

The questionnaire has been administered to the employees of three of the five star hotels (located in Delhi and Mumbai), two retailing companies (known as a leading player in Indian market)—one budget hotel, and the other Insurance Company, India. Participation was totally on the voluntary basis. To maintain the anonymity, participants were requested not to mention their name. This has been done to reduce social desirability effect. The author did not use any scale to measure social desirability effect. Average age of the participants was 24.4 years. 91% of the sample were male out of the sample size of 243. Approximately, 91% of the employees claimed to practice Hinduism, 5% Christianity and rest profess Muslim and Sikh religion.

DATA ANALYSIS

To analyze the data, the author undertook following steps for the present study:

Reliability Alpha: It is important to find how reliable the instrument is. Reliability alpha value is required to be above 0.707. However, the reliability alpha for Avoidance Intention and Revenge Intention were 0.901 and 0.757 respectively. These values are higher than the threshold value.

Factor Analysis and Sample Adequacy: Kaiser Meyer Olkin Measure of Sample Adequacy value was 0.848. This is much higher than the minimum threshold value (Table 1). Hence, the data is ready for factor analysis.

The author carried out principal component analysis with varimax rotation. These produced three factors, which cannot be explained with the help of existing theories. Number of factors kept limited by two as it is theoretically supported (Table 2). RE3 and RE4 indicators, which as per the theory postulated, should have aligned with Revenge Factor, failed to converge and clearly explain the Revenge Intention factor; hence the author has eliminated these two items from further statistical processes. Post elimination of cross loading

Table 1: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.848
Bartlett's Test of Sphericity	Approx. Chi-Square	1446.078
	df	66
	Sig.	0.000

(value lower than +0.40), the following factor structure emerged from the data (Table 2).

Structural Equation Modelling: SAS Proc Calis procedure allows implementing structural equation modelling. Structural equation could be written in several formats, such as using LINEQS, RAM, COSAN or MATRIX format. The author has used LINEQS format, which facilitate the execution of covariance analysis. After invoking correlation data using datalines command, Proc Calis procedure is activated and requested for residual and modification indices.

MODEL FIT

There is no universal agreement of what constitutes a good fit. Most frequently, authors have used Chi square value, GFI,

AGFI, CFI, NNFI and RMSEA to indicate a good fit. Chi Square value should be lower and statistically nonsignificant. GFI, AGFI, CFI, NNFI should have a cut off value above 0.90. Root Mean Square Approximation (RMSEA) should have value lower than 0.08. (Table 3). Besides *t*-statistics for each path coefficient should exceed 1.96 in absolute terms. All these criteria are to be met and accepted the model Model E (Table 3). Over-fitting of the data is one of the problems is required to be remembered while utilizing modification indices for modification of the models. The author utilized the guidance provided by Modification Index and Standardised Residual Value to reach the final model.

Table 3 provides details about model refinement process. Number of observation

Table 2: Principal Component Analysis Rotated Component Matrix

	Component	
	1	2
AV4: I find it difficult to act warmly towards him/her.	0.870	
AV5: I avoid him/her.	0.817	
AV7: I withdraw from him/her	0.780	
AV6: I cut off the relationship with him/her.	0.774	
AV1: I keep as much distance between us as possible.	0.763	
AV2: I live as if he/she doesn't exist, isn't around.	0.745	
AV3: I don't trust him/her.	0.671	
RE2: I wish that something bad would happen to him/her.		0.864
RE5: I want to see him/her hurt and miserable.		0.803
RE1: I will make him/her pay.		0.711
Eigenvalue	4.297	2.326
Variance Explained	36%	19%
Reliability	0.901	0.757

MEASURING THE CONSTRUCT OF WORKPLACE FORGIVENESS: A CONFIRMATORY ASSESSMENT USING SAS PROC CALIS PROCEDURE

Table 3: Model Summary

Model	Model Description	Chi-Square	DF	GFI	AGFI	CFI	NNFI	RMSEA	t-Statistics	Remarks
Model A	Full Model	227.1482	36	0.8141	0.7159	0.8126	0.7668	0.1659	All significant	Poor Fit
Model B	RE1 removed	136.3980	28	0.8545	0.7661	0.8832	0.8499	0.1416	All significant	Poor Fit
Model C	AV5 removed	97.4030	21	0.8861	0.8047	0.8873	0.8497	0.1373	All significant	Poor Fit
Model D	AV6 removed	58.6197	15	0.9295	0.8517	0.9138	0.8793	0.1227	All significant	Poor Fit
Model E	AV1 removed	20.2396	9	0.9696	0.9290	0.9709	0.9514	0.0804	All significant	Good Fit

is 243. Full model produced a poor fit. Chi-Square value is 227.1482 with 36 degree of freedom (DF), GFI (0.8141), AGFI (0.7159), NNFI (0.7668), Bentler's CFI (0.8126), and RMSEA (0.1659). Modification index and standardized residual suggested removal of RE1, AV5, AV6, AV1, which resulted in better model fit than full model. With the help of residual value and modification index, Model E was accepted.

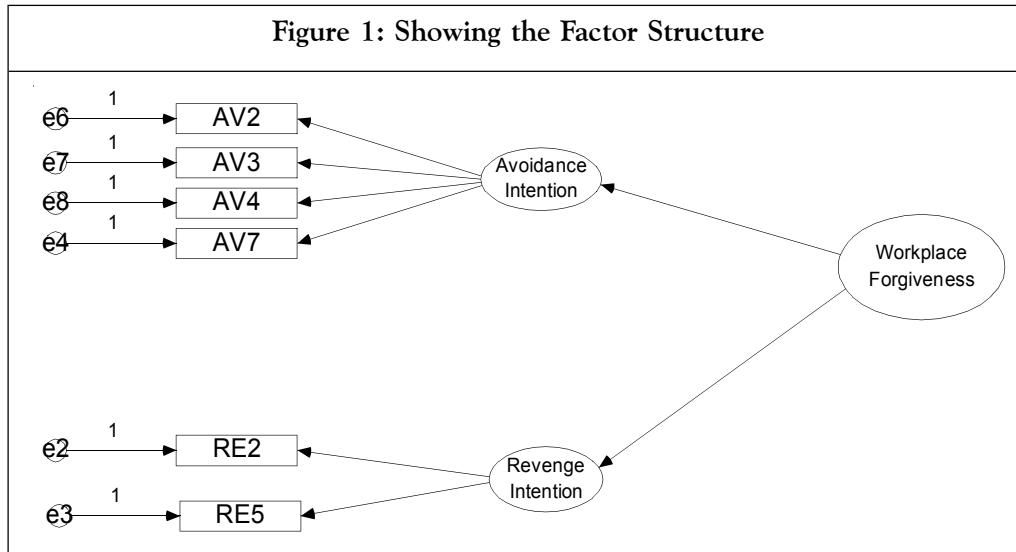
Model E provides Chi-Square value 20.2396 with 9 DF, GFI (0.9696), AGFI (0.9290), NNFI (0.9514), Bentler's CFI (0.9709), RMSEA (0.0804). All R^2 values were relatively large. Besides, t -statistics for each path coefficient exceeded 1.96 in absolute terms (Hatcher, 1999). All these indicate an acceptable fit (Table 3). The author considered Model E as acceptable model (Figure 1). This solution adhered to the guidelines provided by Hatcher (2002).

DISCUSSION

CONSTRUCT RELATED

The above discussion highlights statistical and conceptual integrity of forgiveness scale (i.e., TRIMS). The author identified factor structures, revenge intention and avoidance intention as envisaged by McCullough *et al.* (1998), using Exploratory Factor Analysis (EFA). However, while conducting Confirmatory Factor (CFA), some of the indicators were eliminated to improve overall model fit. This framework can be utilized with other organizational outcomes to evaluate to what extent forgiveness, influences employees' perceptions, motives and motivations. In the recent discourse of

Figure 1: Showing the Factor Structure



positive psychology (Luthan *et al.*, 2006), the role of forgiveness construct can explain good number of positive outcome in an organizational context.

PROC CALIS PROCEDURE

- Proc Calis provides unique opportunity to conduct confirmatory factor analysis.
- Proc Calis procedure provides useful and relatively wide range of modification indices and residual analysis, which equips researchers to pin point the sources of problems and allows researchers to take more informed choice while modifying the models.
- Though SAS Proc Calis procedure does not provide graphical interface, it is relatively user friendly procedure.
- Recently, SAS introduced SAS Proc Tcalis procedure (SAS 9.2), which provides more flexible frameworks to carry out relatively complex studies. Future work in this area should utilize Proc Calis procedure (SAS 9.2: eventually 'T' will be removed from 'Tcalis'). The

author have utilized SAS 9.1.3, which found to be adequate for the present research purpose.

A summary could be presented as a derivative of the above research work:

- From the above analysis, it is evidently clear that forgiveness construct as proposed by McCullough *et al.* (1998), reflected in the behavior of the Indian managers.
- The present research work provides solid bedrock to explain the behavior of Indian managers with a wide ranging effect. This framework can be utilized with other organizational outcomes to evaluate as to what extent forgiveness, located in every individuals, influences employees' perceptions, motives and motivations. This framework is more holistic and has potential to explain the behavior of Indian managers more profoundly (Stone, 2002).
- The present research confirms and revalidates the TRIMS scale,

applicable for the Indian context. Utilization of structural equation modelling is relatively less visible in Indian journals. The present work provides exemplary platform for those, who are interested to execute confirmatory factor analysis and other related studies.

CONCLUSION

Transgression-Related Interpersonal Motivations (TRIM) Inventory, as proposed by McCullough *et al.* (1998), is a robust framework, for evaluation of interpersonal forgiving. The present research successfully assesses its robustness. Hence, this framework could be deployed for further investigation in the Indian workplace scenario. For example, investment in managing relationship with supervisors/colleagues and other societal arrangements in organizational setting could be explained by forgiveness construct very well.

Mostly, influence of supervisors or other immediate human agencies influence employees for various decisions and behaviors such as intention to quit,

absenteeism, delinquent behaviors or other important organizational outcomes. Indeed, forgiveness in organizational context appears to have tremendous potential to explain various dimensions of organizational behaviors. As argued earlier, with increased accountability for deliverables and its uninterrupted pressures across time zone on each employees deployed in service sector require each employee to interact to its immediate world, where service is co-produced in constant interactions with juniors, colleagues, supervisors, suppliers, customers, etc. Potentially, some of the interactions may create unjust experience in the heart and mind of employees. Hence, in absence of forgiveness footprint, employees may engage in various unproductive behaviors. The author believes that further investigation into this realm has potential to contribute, enrich and explain employee's behavior, especially in service setting. It is believed that present discussion will initiate a new range of investigations, which will ultimately help human resource professionals to devise suitable human infrastructure in organizational setting.

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Book Reviews

India Arriving: How This Economic Powerhouse Is Redefining Global Business

By Rafiq Dossani; Publisher: AMACOM (2007); Pages: 304; Price: \$18;

ISBN: 978-081-0814474242

Since long, India has posed and will continue to pose an enigmatic look to the world. In the authors' words, India is a land of oddities, puzzles, paradoxes and ethnic fractures with a democratic tradition. She is also a measure of isolation (within) and globalization (outside). In spite of such national puzzles in place, India is changing. The book is all about India changing and arriving in multiple senses to "look familiar to an outsider". India, a poor and ethnically fractured country with low development on both economic and social fronts, has evidenced to the world that a seminal tool like non-violence can free a nation from colonial oppressors and has marched towards institutional development like developed countries and economic growth like East Asia. India's federal character has positively contributed to the growth of the services sector to GDP, growth of private education and improved agricultural extension services which piloted the absence of food-grain crop failures. Federalism, not devoid of its drawbacks, has also led to substantial corruption.

India is generally believed to be an abode of religious tolerance and is renowned for its tranquility despite its multifariousness. But the Mumbai and Ahmedabad riots proved to be vice-versa and maimed the residents of these two cities. Riots, corruption and inefficiency have become a part of independent India's disposition. These seemed to stand out as hallmarks of Indian bureaucracy. Prolonged poverty, conflicting interests of the landless and landlords, the quota system and its related maladies were the enablers of these hallmarks. This led to the creation of a 2-tier economy consisting of both private and public sector companies which resulted in the absence of quality products, R&D for new products, introduction of new technologies, etc.

Amidst all these maladies, the laudable facet of India is its deep-rootedness with multi-linguality. Most of India's city inhabitants are well-versed in more than one language, thus contributing to the multi-linguality. Though India did not formally encourage and emphasize the role of English language, it found its way

into the Indian education system owing to the recruitment demand placed by majority of the services companies for English speaking professionals. Despite the seepage of English into the Indian education system, it still is a cause of concern for recruiters due to the shortage of talent and its interrelated high cost of wages. Apart from these, the other cost maladies faced by most of the Indian firms include, training, attrition and tradability costs of the top Indian talent. But currently, with a high-growth economy in place, the scenario seems to take a U-turn and is bringing the Indians back to their domiciles for even lower remunerations. The Indian education system is also faced with problems of content, lack of soft facilities and consultancy assignments for faculty, other quality problems and paucity of academia-industry partnerships. The woes of the Indian Educational system extend to the Indian IT industry as well. In comparison with other countries, Indian Infrastructure is a major off-putting factor for this industry. Body shopping, labor arbitrage and custom service image add to the existing misery.

The domestic despairs have extensively contributed to the Indian immigration. The Indian immigration to the US can be chronologically understood as contributed by medical doctors, students entering upper tier American universities, less educated and underprivileged lot in search of a decent living and finally followed by the trained engineers. The success of these immigrants overseas can be attributed to the knowledge of English, formation of professional associations' alongwith purpose-built community

centers, senior citizens' advocacy groups and charitable foundations. The success and rising influence of the "Overseas Indian" and his de-mainstreaming have caused a remarkable change in the attitudes back home. The off late discovery of their transnational identity has created a renewed self-serving interest in the Indian cricket, music, Bollywood and the Indian politics as well.

After captivating the readers with the success stories of the 'Overseas Indian', the readers were slapped in the face with reality of the Indian stock markets. The Indian stock markets which originated in the 1870s were subjected to global influences and were marked by intense corruption and insider trading. The key to success of any stock exchange is efficient regulation backed by technological smartness and an independent and capable regulatory body. So the attempts, to end insider trading and corruption and to enhance the stock market's efficiency, were FERA, liberalization of industrial quotas and the set-up of SEBI. SEBI, in an attempt to squash corruption, relied heavily on the foreign firms and their rules. The final stamping on corruption was done with the set-up of National Stock Exchange, a competing stock exchange of BSE, which gradually became a leader in transparent functioning and thus led to a positive change in the BSE.

Continuing on the road of realities, rural India is characterized by hunger and mass poverty backed by shortage of rainfall, famine and lack of tax relief. Post independence saw India's focus for economic growth via industrial growth,

patronization of the rural elite with secondary interests towards land reforms. Though the latter government favored national development via agricultural development through huge fertilizer, capital, power subsidies and nationalization of banks, it contributed to a financial collapse of the treasury. To avert such losses, a better initiative could be to invest in rural health and education which has the capacity to yield productive rural activity and rural industry.

The author then proceeds to project the face of an independent, highly populated and educated India where over 45,000 newspapers reside, of which 7,500 alone are in English. These statistics display the extensive reading habits of the Indians, who adore reading in trains and even an entire uneducated village can 'read' newspapers by banking on one literate. Over a period of time, the Indian media grew in terms of presence and freedom though it is still relatively low on investigative journalism.

The final episode of India's story looks at its three-stage growth which happened with the removal of constraints on the private sector, effective regulation and the initiative of the private enterprises. Specialized cities owing to their ability to support financial markets, sports, films and education and distinctive Indian democratic values were the idiosyncratic forces that contributed towards India's growth. But this growth seemed a minuscule when compared to China. Urban development, business friendly society, ethnic homogeneity and state control of the economy prompted Chinese development. Whilst the Chinese bank on extensive experimentation and learning by doing, the Indians look at adopting a single best approach through good thinking. With this approach, India has categorically made its presence felt by transforming itself from a poor country with the enterprise and energy of its people.

Madhuri Modekurti

Faculty (HR)

Manipal Universal Learning Pvt Ltd.

Hyderabad, AP, India

E-mail: madhuri.modekurti@gmail.com

Prageetha Raju G

Professor (HR)

IBS, Hyderabad

AP, India

E-mail: dr.prageetha@gmail.com

Microfinance in India

By K G Karmakar

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India is believably unique in comprising two major models of microfinance. One is the time-honored Bank-Self Help Group (SHG) model and the other being Grameen replicator model followed mostly by the MFIs. Microfinance movement in India derives its support from RBI and the Ministry of Finance. The SHG movement benefits from enormous political and non-government support. Studies have established that SHG model where it has been in existence for a long time (five years or more) has an impact on poverty. However, given the small size of loans in both the models, it is hard to envision a rapid decline in poverty as these kinds of loans are insufficient to cover even investment in livelihood assets that can generate a poverty extenuating income.

The microfinance sector in India, for the most part unregulated by annoying regulation and meddling is adolescent and dynamic. It is required to evolve into a full-grown industry. The pool of skilled microfinance professionals is pretty small. It is not unusual to find experienced and expert practitioners involved in more than one organization, serving on either the governing body or management team. Capital infusion is no longer a problem for MFIs in India, because of short-term bank

loans and off-balance sheet financing via the trendy partnership model. However, MFIs are wanting in some forms of capital. So far MFIs in India have not issued bonds. Bond issuance would allow MFIs to diversify their funding sources, which are dominated by a few large commercial banks and government-sponsored apex organizations like NABARD and SIDBI. Also, MFIs have been helpless in accessing long-term debt from banks. And, Large MFIs rarely receive equity investment. Growth strategies for MFIs in India can be seen in terms of Horizontal growth, vertical growth and franchisee model.

The advent of new millennium has witnessed vigorous growth and significant developments in the Indian microfinance industry. It is in this backdrop that the book under review is a timely outcome. The book has a very good collection of essays and articles that analyze the potential of the Indian microfinance industry and examine the approaches for microfinance development in India. This edited volume, *Microfinance in India*, by K G Karmakar is aimed at providing wholesome information about microfinance activity in India. The book can be broadly seen to have four parts. The editor has selected the following themes to capture the topic of microfinance

in India such as, overview of microfinance; promotion, regulation and sustainability of MFIs in India; SHG Bank Linkage program in India; successful bank models of microfinance; and innovations for growth.

In Part 1, *Microfinance: An Overview*, the most interesting essay is that of Priya Basu titled "A Financial System for the Poor". The author has lucidly highlighted the importance of the need for a financial system for the poor while analyzing the structure and performance of Indian banking towards achieving inclusive growth. It is rightly observed that by and large microfinance has increased the opportunity and the liability for the poor to escape ossified social structures. Analyzing the status of rural banking in India, the author observes rightly that the policies on interest rates for small loans the policies on interest rates for small have resulted into with unintended consequence of 'credit rationing'. The agenda for achieving inclusive financial system has been proposed by the author with important aspects such as introducing flexible products, need for composite financial services, simplification of procedures to open a bank account access credit; better staffing policies and doorstep banking, making priority sector lending obligations tradable and increasing the efficiency of rural finance markets with better regulation and supervision. K G Karmakar, in the paper, 'Microfinance revisited' underscores the need for microfinance in view of the large mismatch between the services provided by the formal rural finance sector and the loan require-

ments of the rural people, and hence, the need for parallel credit systems which are better enabled to meet the genuine credit needs of rural people. It is rightly pointed out that rural prosperity is very uneven due to the level of commercialization and diversification while in tribal areas the rural economy is largely non-monetized. However, the author's observation that the formal rural areas to urban areas as is evident from the low-credit deposit ratios is unsubstantiated. While making an emphatic point that there is a need for formal or informal credit markets which will retail rural money for developing rural areas, the same is not substantiated. Because, the rural financial institutions such as cooperatives and regional rural banks have been achieving this objective since quite a long time in the history of Indian banking. In this essay, the author enlists the major issues in microfinance such as up scaling of the program, capacity building, sustainability of SHGs, graduation from microfinance to microenterprises and other specific issues such as transparency, sustainability with outreach and self regulation. It is rightly summed up that the real assault on rural poverty can be possible only when microfinance enables the emergence of a large number of microentrepreneurship in rural areas, who have graduated from various SHGs.

The second section of the book is titled Part 2: *Microfinance Institutions (MFIs)*. In the paper, "MFIs in India: An Overview", the author, Murulidhara Rao, has cogently explained the aspects of MFI activity in

India such as microfinance service providers, emergence of private microfinance industry, MFIs and legal forms and about the regulation and supervision MFIs in India. Commenting on the regulation and supervision of MFIs in India, the author argues that a developmental mode rather than a regulatory mode needs to be adopted for encouraging MFIs to innovate and evolve in areas where financial exclusion for the poor is widespread. In the paper, "Regulatory Framework for MFIs", commenting on the limitations of microfinance sector in India, the author, Krishan Jindal, observes that MFIs except the top 10 are very small in size and lack appropriate systems. Further, advocating the need for regulatory framework for MFI sector, it is emphasized that NGO MFIs should also be made to report to any statutory body as they are not presently doing so. Even though 'section 25 companies' are not allowed to mobilize deposits, yet many of such MFIs are accepting deposits from the public violating the RBI norms. The essay pertinently points out that a regulatory framework could facilitate better access for savings and commercial loans for MFIs thereby upscaling their operations. Since the MFI sector is highly heterogeneous, it is divisible into two broad institutional categories, comprising institutions incorporated under diverse legislative framework and the other incorporated as NBFC and registered with RBI is a workable proposition. In the paper, "Promotion of Linkages Between Banks and MFIs", the author, P Satish, highlights the triad of the statement of the advisors

group to the UN International year of Microcredit 2005 (United Nations, 2005). This according to him, rightly, has brought us to the necessity of building up linkages between banks and MFIs which has been manifested in Indian microfinance despite the fact that MFIs cater only to a small segment of microfinance market in India. In the paper, "Sustainability of MFIs", Vijaya Mahajan has pointedly discussed the four dimensions of sustainability of microfinance in India such as; Sustainability of demand, Financial sustainability, Organizational sustainability and sustainability of the mission of MFIs.

Part 3 of the book, "SHG: Bank Linkage Program" is a collection of factual essays. H R Dave has forcefully highlighted the importance of 'SHGs in savings mobilization' and has identified the key issues relating to the savings mobilization by SHGs. While Pradeep Kashyap's paper throws enough light on the interesting topic of 'Livelihood promotion among SHGs', the aspect of 'Emerging SHG Federations and Challenges' has been well-articulated in a paper by C S Reddy. Sustainability of SHGs is an imperative factor for the success of MFIs activity in India and this topic has been dealt very interestingly by N Srinivasan. Swarnajayanthi Grama Swarojgar Yojana (SGSY) is an important rural development program of Government of India started in 1999 mainly encompassing the assistance to SHG activity in the country. Thanksy Francis

BOOK REVIEWS

Thekkekara in his article has brought out some interesting facts on this aspect.

Part 4 of the book, Successful MFI Models, consists of five essays on different successful MFI models in India. In Part 5, Successful Bank Models, successful experiences of two Regional Rural Banks and two District Central Cooperative Banks have been narrated in an impressive style and arouse the reader's interest. In Part 5, Innovations for Growth, there are

four essays that throw interesting ideas for the growth of microfinance in India.

This book is indeed quite useful for development professionals, evaluators, planners, managers, administrators, researchers and social sector students. The book is easy to read and comprehend. It is equipped with subject-author index and contains figures, boxes, tables, references and footnotes in the main text which are indicators of a reader affable book.

Vighneswara Swamy

Professor in Banking

IBS, Hyderabad

Survey No. 156/157

Dontapally Village

Shankarapally Mandal

Ranga Reddy District

Hyderabad 501203

E-mail: vighnesh_swamy@yahoo.com

Handbook of Product Placement in the Mass Media: New Strategies in Marketing Theory, Practice, Trends, and Ethics

By Galician M L,

Best Business Books, Binghamto, New York (2004), Pages: 360; Price: Rs. 410

ISBN: 978-0-789025-35-7 (PB)

This *Handbook of Product Placement in the Mass Media* is a compilation of research and commentary addressing the theory and practice of product placement in the mass media which is a promotion management subject. The book examines product placement, related media marketing strategies, and their impacts on consumers. Product placement or embedded marketing is a form of advertisement, where branded goods or services are placed in a context usually devoid of ads, such as movies, the story line of television shows, or news programs. The product placement is often not disclosed at the time that the good or service is featured. Product placement became common in the 1980s. In April 2006, Broadcasting and Cable reported, "Two thirds of advertisers employ 'branded entertainment'—product placement—with the vast majority of that (80%) in commercial TV programming." The story, based on a survey by the Association of National Advertisers, said, "Reasons for using in-show plugs varied from 'stronger emotional connection' to

better dovetailing with relevant content, to targeting a specific group."

The contributors are national experts in a variety of mass media specialties, who address product placement in terms of historical context, Hollywood, brand synergy and brand identity, and legal/ethical issues. One will also find fascinating case studies focusing on product placement in movie and television programs, in books, and as a marketing technique for medical products—plus examinations of the impact of adding an audible reference to a visually prominent brand placement and of the use of generic or fictitious products in otherwise 'realistic' films. This volume examines the phenomenon of product placement and related mass media marketing strategies. A sampling of topics includes the evolution of product placements in Hollywood cinema, the ethics of product placement in media entertainment, and the influence of presentation mode and familiarity. The papers were originally presented at the 2001 convention of the National Communication Association. The volume

has been simultaneously co-published as *Journal of Promotion Management*, Vol. 10, Nos. 1/2, 2004.

The collection is grouped into various sections namely, the practice of product placement and controls on product placement, case studies, commentaries, interviews and reviews. The first section, "The Practice of Product Placement", is a functional section that provides a general context of product placement. It starts with a sketch of the background of the early development of product placement in single sponsored programs in media like radio and television by media Historian Kathleen J Turner. The next document written by the author along with Peter G Bourdeau analyses the increasingly dominant role of product placements in the narratives of blockbuster movies since 1977. Cultural Critic, Susan B Kretchmer, explores the evolution in television and the Internet entertainment vehicles. The media scholars and practitioners Charles A Lubbers and William J Adams discuss two major elements, the under-examined multi-billion-dollar revenue producers in the current movie promotion mix-merchandising and promotional/partner tie-ups. This section concludes with an examination of normal distinctions between the cinematic world and the real world by Scott Robert Olson.

The second section, "Controls on Product Placement", provides a closer look at the legal and ethical issues surrounding the practice of this controversial industry which is very complex. The documents/arguments of

media scholar Paul Siegel is against locating product placement within the Supreme Court's commercial speech doctrine. A thorough analysis of the ethical challenges and controversies surrounding the practice is discussed by Lawrence A Wenner. Public Relations practitioners and mass media ethicists, Dean Kruckeberg and Kenneth Starck, offer a review of consumer communities that urges the adoption of a public relations approach rather than a marketing viewpoint.

Several intriguing case studies are presented in the third section. A study by Beng Soo Ong found that although three-fourth of the sample were aware of the practice in both movies and TV shows, there was less exposure to the embedded brands in TV than in films. In "Product Placement of Medical Products: Issues and Concerns," Christopher R Turner extends the legal-ethical discussion to pharmaceutical marketing and focuses on an episode of television's *Chicago Hope* touting the use of a medical device that had not earned FDA approval. Ted Friedman in his essay argues that Tom Hanks' film serves as a valuable case study because of the conflict between its relentless product placement and its dark vision of contemporary global capitalism. Ian Brennan and Laurie A Babin present an empirical study that demonstrated audio cues are a significant factor in the success of movie product placements. Richard Alan Nelson examines a new form of paid product placement in novels.

The final section of the book includes a variety of personal reflections. Personal interviews were granted to the author and the author has preserved the full flavor of the opinions by presenting them in a Q&A style.

Advertising is purported to have a powerful impact on the American psyche and culture (pp. 1-8). The twenty-two articles in this book address product placement, the business process that seamlessly inserts an advertiser's commercial message into entertainment and informational media content of movies, books, computer games, television programs, radio shows, newsletters and the Internet. The editor has sought to gather the balanced view of eighteen experts who present the results of their theoretical and practical research into this controversial form of advertising. The book could be useful to those seeking to better understand how to optimally apply the advertising technique (pp. 9-89). Equally, the text provides support for those who are concerned about the ethical issues arising from unsolicited advertising secretly-hidden within a movie we pay to view or the unwarranted effects of the manipulative advertising slotted into our children's television programs

(pp. 89-147). While the global nature of today's markets for movies and television is recognized in the five case studies (pp. 147-213), the book fails to adequately address the cultural impact of product placement on the values, beliefs and the laws of countries other than the US.

The book concludes with the transcript of a round-table with eleven of the authors who provide informative responses to five questions currently pertinent to product placement as an advertising practice in the 21st century (pp. 219-237). Those seeking deeper knowledge may find the included resource guide useful (pp. 259-269).

The *Handbook of Product Placement in the Mass Media: New Strategies in Marketing Theory, Practice, Trends, and Ethics* is the first serious book in English to examine the wider contexts and varied texts of product placement, related media marketing strategies and audience impacts. The contributors are national experts in a variety of mass media specialties—history, law and ethics (both media ethics and medical ethics); cultural and critical analysis: contents analysis and effects; visuality; marketing, advertising, public relations, and promotion; and digital technology and futures.

V Jayashree,
Senior Assistant Professor
Vignana Jyothi Institute of Management
Bachupally, Hyderabad
E-mail: v.jayashree@vjim.edu.in

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