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EMPLOYEE’S JOB SATISFACTION AND JOB PERFORMANCE IN JAFFNA ZONAL EDUCATION OFFICE.

Mr. T.L. Vannarajah*, Mr. T. Ramajeyam**

Introduction

Every organization tries to achieve their objectives. In this connection they must concentrate in many aspects. Human resource is considered as an important resource to every organization. Organizations wish to keep well trained and effective work force. Employees, who satisfy with their job, may exert high effort to the organization wish to satisfy their employees for getting effective more work done.

To make best use of people as a valuable resource of the organization attention must be given to the relationship between staff and the nature and content of their jobs. The work organization and the design of jobs can have a significant effect on staff. Attention needs to be given to understand how best to make work more satisfying for staff and to overcome obstacles to effective performance.

Now day by day competition is very high. Therefore every organization has to compete with other organization. In this connection in order to achieve competitive advantage the organization has to retain work force, organization expects that satisfying employees are more performing. Therefore there is a need for the organization to satisfy their employees to achieve their objectives.

Herzberg et al (1959) have examined the relationships between job satisfaction and performance and formulated a theory base on their results. They defined job satisfaction as an attempt by management to design tasks in such a way to build in the opportunity for personal achievement, recognition, challenge and individual growth. In similar way, many researchers and authors have described that job satisfaction has great impact on the work performance of the employees within an organization.

Research Problem

All the employees working in an organization experience in various levels of job satisfaction. This job satisfaction can be caused by several factors such as promotion, pay, working condition and the work itself etc. Job satisfaction has a great impact on the performance. In this research, main problem is that job satisfaction affect employee’s job performance. Hence performance is considering as a most important element in human resource management. The research can clearly understand this problem form the following research question.

Research Question

Based on the research problem and literature review the following research question is formulated.

- Is there any relationship between the employee job satisfaction and job performance?

Objectives of the study

Employees are important resource in any organization in order to achieve their objectives. Further organization needs to have well trained and effective work force, in this regard, the organization provides several benefits to them and also tries to satisfy their employees. In order to retain better employees, it is important feeling of employee’s satisfaction by themselves.

The study aims:

- To identify the factors that influence satisfaction and dissatisfaction of employees.
- To identify and evaluate how the job satisfaction influence the performance of the employees.
- To recommend alternative getting to enhance the job satisfaction of the employees.
Significance of the study

This study will attempt to identify whether job satisfaction of the employees affect their job performance. Findings of this study could enable managers to maintain high level of satisfaction of the employees. Through the findings of job satisfaction and the job performance management can take action to improve both organization and employees performance.

Job satisfaction as involving cognitive, affective and evaluative reactions or attitudes and states it is “a pleasurable or positive emotional state resulting from the appraisal of one’s job or job experience. Job satisfaction is a result of one’s perception how well their job provides those things that are viewed as important. It is generally recognized in the organizational behavior field that job satisfaction is the most important and frequently studies attitude. (Luthans, 2002)

Definition of job satisfaction is more of an attitude, an internal state. It could for example be associated with a personal feeling of achievement either quantitative. [Mullins, J.L (1999)]

Their study of determinant of employee’s relation climate in public sector undertaking with the 166 samples indicated that the factors like working conditions, the level of supervision, communications, worker participations, interpersonal relationship, induct the employer labor relations, climate can be achieved. Effective and frequent counseling for the employees and frequent meetings in all levels of the organization would also influence the climate, which would result in improved climate and productivity [ganesan et.al (2002)]

Performance is a measure of effectiveness and efficiency in carrying out a complex job. It questions how well a surgeon “does things right, and does the right things”. It refers to the global efficiency with which a complicated activity is completed. And has to be distinguished from “skills” And “abilities” [KBK Sohrfrcs (2007)]

Performance evaluation process being at the time of hire or the beginning of the evaluation cycle. The supervisor should meet with the employee to review the detailed position and job related expectation. The supervisor should discuss job responsibility, objective and working standards. The supervisor should seek employee input and encourage active participation. [Perfeval1990]

The study reported here used general ideas about employees’ on students’ achievement in mathematics using data. The analyses revealed that teacher’s knowledge of subject matter and expectancy motivation has direct effects on students’ achievement in mathematics and that the size of these effects on depends on the average level of ability of students in a school, from the longitudinal files of the National Education Longitudinal study 1988

Conceptualization

The conceptual model is a diagram that describes the variables to be analyzed by the researcher. In this research two variables have been considered by the researcher such as job satisfaction and job performance. The conceptual model can be developed as follows:

Conceptual model

![Conceptual Model Diagram]

Job satisfaction → Job performance

(Independent variable)  (Dependent variable)

Sampling Design

Sampling selection is very significant process in conducting a research because in any research it is very difficult to examine entire research area or whole population. At the same time, when select a sample research should take more care. Because the findings taken through analyzing the sample is common for whole population.

Data Collection Techniques

Usually two types of techniques are used by the researcher to collect the data from selected sample such as primary data collection and secondary data collection techniques in this research also both
techniques have been used by the researcher to collect relevant data from selected employees who are working in job satisfaction and employees’ performance in Jaffna zonal education office.

**Hypotheses of the research**

Possible hypotheses are to be developed based on the literature review and conceptualization of the research problem in order to conduct research finally these hypotheses are tested whether it is acceptable or not. In relation to this research the following hypotheses are formulated as follows:

H1: There is a positive relationship between job satisfaction and job performance

H2: There is a negative relationship between job satisfaction and job performance

H0: There is a no relationship between job satisfaction and job performance

**Statistical Tools**

The following tools are used for the present study.

Correlation- To find out the relationship between performance and satisfaction

Regression- To find out the signification between more than two variables.

**Findings of the Research**

In this research, the researcher finds out truth based on the data presentation and data analysis. To conducting these research four job satisfaction variables such as promotion, pay, reward and working conditions were considered. Then how these variables impact on their performance was analyzed by using statistical tools. This study brings some findings. Those are as follows.

In connection with pay 33% of the employees agreed that there is lower level of pay satisfaction in selected organization. 12% of the employees agreed that there is moderate level of pay satisfaction and 55% of employees also agreed that there is higher level of pay satisfaction in Jaffna Zonal Education Office the relationship between pay and job performance is positive. This can be proved through correlation. Pay is impact on their performance.

In relation with promotion, 83% of the employees agreed that there is high moderate level for promotion in that organization and 17% of the employees also agreed that there is low level of fair promotion therefore it was found that there is a fair promotion in selected organization. Further promotion with employees’ performance has high positive relationship. This can be proved through correlation between promotion and employees’ performance is positive. Hence, it can be said that the Jaffna zonal Education Office maintain fair promotion and it also has positive correlation impact on their performance.

Regarding with reward 57% of employees agreed there is high level of reward satisfaction, 26% of employees agreed moderate level of reward satisfaction and 17% of employees agreed low level of reward satisfaction. Here reward and job performance has positive relationship this can be proved through correlation between reward and job performance. Reward system impact on their performance.

In relation to working condition 24% of employees agreed that there is moderate level of good working condition in the selected organization. Also 55% of employees agreed that there is high level of good working conditions there. 21% of employees agreed low level of good working conditions. Further, the correlation between working conditions and job performance is positive. Working condition also impact on the performance.

Therefore totally it can be found that their pay system, fair promotion, reward system and good working conditions increase the job satisfaction of the employees and this also leads to considerable positive impact on their performance. The relationship between the job satisfaction and job performance is accepted.

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1. Introduction

Stress is a universal element and it has become a common phenomenon of our daily work life. It is a strong predictor of various personal and work-related outcomes. Stress results from a mismatch between demands and pressures on the person, on the one hand, and their knowledge and abilities on the other. Occupational stress is a harmful physical and emotional response that occurs when the requirements of the job do not match the capabilities, resources, or needs of the worker.

This study describes the occupational stress among the executives in the banking sector, particularly, in the Eastern part of Sri Lanka. During the past decade, the banking sector in Sri Lanka had undergone rapid and striking policy changes due to globalization and liberalization, increased competition due to the entrance of more private sector banks, introduction of new technologies, etc. Due to these changes, the employees in the banking sector are experiencing high level of stress. The implications of the above said transformation have affected the social, economical and psychological domains of the bank employees and their relations.

2. Review of Literature

Stress has become a common phenomenon of our daily life. It is a strong predictor of various personal and work-related outcomes. In the Encyclopedia of Stress, Flick (2000) defines stress as “real or an interpreted threat to physiological or psychological integrity of an individual that results in physiological and / or behavioral response”. It is a response to challenging events, as an event that places demand on the individual, an environmental characteristic which poses a threat to the individual, and a realization by the individual that he/she is unable to deal adequately with the demands placed upon him/her. Cooper and Marshall (1976) stated that the occupational stress includes the environmental factors or stressors such as work overload, role ambiguity, role conflict and poor working condition associated with the particular job.

Klarreich (1990) describes ‘work under-load’ as an occupational stressor, which means that means that insufficient tasks for the worker may lead to boredom or frustration. Role based stress concerns that roles that the worker has to perform in the work setting and includes role conflict and role ambiguity. Role conflict exists when the worker is torn between conflicting job demands, namely doing task that he/she dislike or does not consider his/her responsibility. Role ambiguity arises when the individual does not have clarity as to the work objectives of the job with the role conflicts, role ambiguity and inadequate coping resources being the major contributing factors regarding stress related disorders especially ‘burnout’ which is described as a progressive mental deterioration resulting in the individual becoming emotionally exhausted and depressed.

Pareek (1983) has discussed that ten type of stress negatively affect the organization namely; Inter role Distance, Role Stagnation, Role Erosion, Role Conflict, Role Overload, Role Ambiguity, Self-Role Distance, Role Isolation, Resource Inadequacy and personal inadequacy. Research has shown that role conflict and role ambiguity have been linked to negative outcomes in occupational settings, such as increases in perceived job tension, higher job dissatisfaction, greater propensity to leave the firm, and lower performance (Fisher and Gitelson 1983; Jackson and Schuler 1985; Van Sell et al.1981).

The existence of Group and Political Pressure will influence the job satisfaction. Political and Group Pressures plays a vital role to increase the stress among the employees as well as the job dissatisfaction among the employees (Hasnain, Iram and Bano, 2010; Deb, Chakraborty, Chetterjee, and Srivastava, 2005 a). An individual’s stress level can be increased by such
varied factors as his or her personality, role conflict, role overload, role ambiguity, role conflict, group or political pressure, responsibility under participation, status incongruence, no profitability are so many dimensions of occupational stress (Hasnain, Iram and Bano, 2010).

3. Objective of the Study

1. To identify the level of occupational stress among the executives of the state and private banks employees.

2. To recommend strategies to reduce the stress among the executives in their job

Hypothesis

H1 : The Occupational Stress among the Executives in the Private Banks is higher than the State Banks.

4. Methodology

This study attempt to investigate and compare the level of stress experienced by executives of the state and private banks in the Eastern part of Sri Lanka which includes three districts namely Batticaloa, Amparai and Trincomalee districts. The population selected for this study is two leading state banks namely Bank of Ceylon and peoples Bank and two private banks such as Seylan bank and Commercial Bank. The sampling population of this study is 200 executives and 100 from state banks and 100 from private banks and they were selected based on systematic random sampling method. A multi dimensional analysis of the job stress and the coping patterns of employees are the primary focus of this study. The variables selected for this study are : Role Conflict (RC), Role Overload (RO), Role Ambiguity (RA), Role Stagnation (RS), Role Erosion (RE), Feeling of inequality (FI), Lack of Supervisory Support (LSS), Job Difficulty (JD), Personal Inadequacy (PI) and Constraints of Changes, Rules and Regulations (CRR). The objective of this study is to analyze the level of occupational stress among the executives in the state and private banks and to identify to what extent the above mentioned factors were the causes for it. The hypothesis formulated for this study is ‘the occupational stress among the executives in the private sector banks is higher than the state banks’.

5. Analysis and Results

The following table explains the mean value and standard deviation and t-values of scores of respondents regarding the occupational stress in state and private banks.

<table>
<thead>
<tr>
<th>S.N.o</th>
<th>Variables</th>
<th>N</th>
<th>Private Banks</th>
<th>State Banks</th>
<th>t-value</th>
<th>DF</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>1</td>
<td>Total Stress</td>
<td>20</td>
<td>84.76</td>
<td>19.60</td>
<td>73.64</td>
<td>19.35</td>
</tr>
</tbody>
</table>

Table : 1

- Significance at 0.01 level

The table shows that there is a significant difference between the occupational stress level of the state and private banks in Sri Lanka. As mentioned in the above table, the mean value of the occupational stress among the executives in the private banks (84.76) is higher than the mean value of the stress levels of the state banks (73.64)

The table given below indicates the mean value and standard deviation of the occupational stress levels of the executives working in both state and private banks with respect to selected stress variables in their job.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Private Banks</th>
<th>State Banks</th>
<th>t-value</th>
<th>DF</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>RC</td>
<td>10.42</td>
<td>2.40</td>
<td>9.06</td>
<td>2.20</td>
</tr>
<tr>
<td>RO</td>
<td>16.45</td>
<td>3.12</td>
<td>12.04</td>
<td>3.02</td>
</tr>
<tr>
<td>RA</td>
<td>11.23</td>
<td>2.14</td>
<td>9.44</td>
<td>2.01</td>
</tr>
<tr>
<td>RS</td>
<td>9.63</td>
<td>2.01</td>
<td>7.12</td>
<td>1.92</td>
</tr>
<tr>
<td>RE</td>
<td>6.06</td>
<td>1.84</td>
<td>3.64</td>
<td>1.02</td>
</tr>
<tr>
<td>FI</td>
<td>8.62</td>
<td>2.01</td>
<td>9.43</td>
<td>2.12</td>
</tr>
<tr>
<td>LSS</td>
<td>5.64</td>
<td>1.12</td>
<td>5.02</td>
<td>1.03</td>
</tr>
<tr>
<td>JD</td>
<td>4.34</td>
<td>1.98</td>
<td>5.14</td>
<td>2.32</td>
</tr>
<tr>
<td>PI</td>
<td>5.69</td>
<td>1.11</td>
<td>5.12</td>
<td>1.09</td>
</tr>
<tr>
<td>CRR</td>
<td>6.68</td>
<td>1.87</td>
<td>7.43</td>
<td>2.62</td>
</tr>
<tr>
<td>TSC</td>
<td>84.76</td>
<td>19.60</td>
<td>73.64</td>
<td>19.35</td>
</tr>
</tbody>
</table>

Table 2
The table 2 explains the how the each variables taken for the study influences the stress of the executives in both private and state banks in their job. Accordingly, though the mean value of role authority is high in both state and private banks it is very much higher in private banks (16.45) than state banks (12.04). Similarly, the role ambiguity also was one of the main causes to the job stress of the staff in both banking sectors.

6. Findings of the Study

It has been revealed in the statistical analyzes that there is a significant difference between state and private sector bank employees in their level of stress. The study indicates that the executives who are working in private banks have high mean value (84.76) in relation to occupational stress compared to state banks employees (73.64). Further, the role overload has the highest mean score (16.45) followed by role ambiguity (11.23) in the private banks.

Therefore, the findings of this study are in line with the hypothesis stated above and it has been clearly revealed that the occupational stress among the private sector banks employees is higher compared to state sector banks employees. It is also found that the work load of the employees of the private sector banks is much more than the work load of the state sector bank employees. Most of the executives in the private banks feel that it is very difficult for them to achieve the monthly targets assigned to each and every employees, specially, in the present competitive context. Further, it was reported, that they are very much struggling in managing their daily routine works since they are assigned too many tasks. As a result, the employees in the banking sector face more psychological and behavioural problems like change of moods, reduced aspiration and self esteem, increased smoking and drinking habits, job dissatisfaction, etc.

7. Recommendations

Based on the findings of the study and the comments made by the respondents, it has been suggested, that the policy makers and the top management of banking sector, can organize the suitable stress management training programmes, in addition to the motivational packages provided to the bank employees of the state and private banks, to minimize the negative consequences of the job stress in the banking sector.

Strategies

1. The executives positions of the state and private banks both senior and junior categories have to be redesigned and specially the job descriptions of those positions must be designed carefully in order to match with the abilities and knowledge of the personnel’s.

2. Assess the work load of each branches and each divisions of the both private and state banks and assign the required number of employees to reduce the work load.

3. Extend the period of the pre-request training provided to the new recruits and includes stress management programmes as part of its curriculum.

4. The top management has to reduce the personal conflicts among the staff members in their job by promoting positive attitudes in their behavior.

5. Allow the employees to have the open communication with the management regarding the difficulties and the grievances which the employees including the managerial staff faces in their job.

6. Provide employee assistance programmes including professional counseling and try to get the feedback regarding the satisfaction in their job. Further, provide the counseling at employee family level including dependents and relatives.

7. Ensure use of grievance handling procedures to develop the trust and confidence among the employees and reduce anxiety and tension related to job related problems.

8. Allocate material, technical and human resources adequately to make employee feel more comfortable and safe in cash management.

9. Create an organizational climate with suitable career planning and career growth to attract and retain well qualifies and experience staff members in each branches of the banks.

10. Conduct the periodic research process particularly among junior executives who
continuously involve loan recovery activities and pawning works.

References


A NOVEL TECHNIQUE OF INFORMATION FLOW IN A MULTI-ECHELON SUPPLY CHAIN COMPRISING STRATEGIC PARTNERSHIPS FOR FACILITATING JUST-IN-TIME INVENTORY REPLENISHMENT THROUGH AUTOMATED ORDER PROCESSING

Kishor Pankan*, G. Pradeepnair*

Abstract

Inventory replenishment is a known SCM challenge area especially under uncertain demand and supply scenarios. Lack of synchronization of supply and demand information may lead to stock overflows or stock out scenarios leading to financial losses, and loss of customers and prospects. Strategic partnership and flow of timely, accurate, and complete information are recognized methods for dealing with demand and supply uncertainties. These methods help in dealing with extreme inventory replenishment problems during Forrester (Bullwhip) effect scenarios, as well. In absence of these methods, inventory managers allow asynchronous replenishment policies like beer game and rationing. Past research studies have proved that such asynchronous replenishment policies cause stock overruns and stock out situations, and amplify the demand fluctuation waveforms caused due to Forrester effect.

Strategic supplier and buyer partnership is the recognized solution to inventory replenishment problems. However, lack of synchronous information flow and human interventions in information access and order processing may make such partnerships ineffective. In this research, a novel technique of information flow and automated order processing is presented and is demonstrated using a replenishment model. The system comprises a framework of information packets collected from information systems of the suppliers and the manufacturer that is fed into a decision-making engine. The information packets comprise current (actual) stock information, current demand information (actual consumption), and current (actual) lead-time information captured from the information systems of the echelons. The packets are captured at the end of the day following a scheduler. The decision-making system will run an algorithm and will automatically release orders in the form of Kanban-like cards and allow them to flow upstream. The cards will be issued automatically in the ordering queue of the manufacturer and the suppliers, accessible through computer terminals/mobile phones. The entire system has been demonstrated in MATLAB using mocktesting data.

1. Introduction

A fully synchronised supply chain requires alignment of decision-making across all the echelons with common objectives (Sahin & Robinson, 2002). Minor oscillations and delays in flow of demand information result in amplification effects on the production and inventory levels (Forrester effect; also called Bullwhip effect) (Li, 2013). Unsynchronised decision-making in supply chains may result in batching (Potter & Disney, 2006), beer games (Geary, Disney, & Towill, 2003), rationing (Fransoo & Wouters, 2000), and shortage gaming (Fransoo & Wouters, 2000). As described by Potter & Disney (2006), Geary, Disney, & Towill (2003), and Fransoo & Wouters (2000), these decisions often cause dysfunctional consequences on supply chain operations due to amplification of Forrester waves resulting in inadequate demand fulfilment or excess inventory. The solution is to implement integrated information systems for timely sharing of upstream demand information across all echelons of the supply chain (Agrawal, Sengupta, & Shanker, 2009; Ahmed et al., 2005).

In this research, a framework of automated order processing and releasing is proposed in such a way that there is no need for manual interventions for processing demand information and releasing purchase orders. The framework can be implemented in an information system comprising a centralised decision-making engine. The engine continuously tracks consumption rates at all the echelons and calculates quantities and lead times at all the echelons based on past experiences. Based on the

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inputs, the engine creates purchase orders in the form of Kanban cards flowing upstream. The entire framework is proposed in the form of a system design and an algorithm. The next chapter presents a review of literatures for ensuring theoretical support to the proposed framework.

2. Review of literatures

Horizontal integration in supply chain among all its echelons is viewed as a key performance driver as the differences and factors and constructs among the echelons can be solved by achieving effective coordination and optimum process efficiency (Van Der Vaart & Van Donk, 2008). Integrated processes and information among the echelons help in synergising the attitudes, practices, and patterns such that the effects of misalignments and misinformation could be reduced (Van Der Vaart & Van Donk, 2008). The suppliers’ inventory policies and their planned service levels directly affect the delivery performance of a manufacturer (Fu & Piplani, 2004). Simatupang & Sridharan (2004) presented a conceptual framework for supply chain synchronisation, which is redrawn in Figure 1. As per this framework, the manufacturer should align its supply chain management processes, information processing systems, decision-making, and incentives with the suppliers for synchronising supplies with demands effectively (Simatupang & Sridharan, 2004). This level of alignment requires strategic relationships with suppliers based on joint business objectives and goals, and shared stakeholders for controlling their operations (Simatupang & Sridharan, 2004). The incentives, costs, and risks need to be shared between the manufacturer and its suppliers and there should appropriate mapping of supply chain processes and the information systems running their steps (Simatupang & Sridharan, 2004).

As discussed by Sarmah, Acharya, & Goyal (2005), the information about order interval times, demand information, and order-to-supply lead-times should be shared among all suppliers and the manufacturer. They argued that this has been one of the key limitations of supply chain synchronisation modelling because of multiple manual interventions required for operating the co-ordination procedures. In addition, they also argued that the information systems of suppliers and manufacturers have been different traditionally with limited integration enabled. The collaborative planning, forecasting, & replenishment (CPFR) strategies have been identified as the solution to this problem by many scholars (Bailey & Francis, 2008; Christopher, 2011; Attaran & Attaran, 2008; Holmstrom et al., 2002; Holmstrom et al., 2003; Christopher & Peck, 2004). The CPFR strategies have been formulated and proposed for meeting the objectives of efficient customer response (ECR) (Holmstrom et al., 2002; Holmstrom et al., 2003; Christopher & Peck, 2004; Christopher, 2011). CPFR requires mass collaboration between multiple manufacturers/retail stores and their common suppliers such that the demand information could flow upstream seamlessly and timely replenishments can be carried out at all the echelons of the supply chain (Holmstrom et al., 2002; Holmstrom et al., 2003; Christopher & Peck, 2004; Christopher, 2011). In this mode, the inventory may not pile up at any of the echelons because the replenishment process will be lean (that is, based on actual demand information only) (Christopher, 2011). In such a scenario, the demand forecasting accuracy at the last stage downstream is very critical for avoiding initiation of Forrester effect and its dysfunctional consequences (Agrawal, Sengupta, & Shanker 2009; Li, 2013). Li (2013, p. 1900) described that a switching mechanism may be established between the manufacturer/retailer and its suppliers. At time “t”, when the demand information is received by the suppliers, they can make decisions accordingly and when the demand information disappears at time “t + 1”, the decisions may continue as per the information received at time “t”. The inventory system stability (dampened Forrester waves) may be improved by setting the switching frequency at an estimated rate, which is less than the average demand fluctuations recorded in the past period “T”. Another research by Zhang (2005: p. 292-293) proved that Forrester waves formation can be controlled by delaying the demand information by a multiples of a small period, which is a constant determined by the demand forecaster.

In practical supply chains, the current state of multiple variables needs to be compared with the historical information for making replenishment decisions (Kaipia & Lakervi, 2006). The historical
information should not be very old and the forecasting should not be done for distant futures (Kaipia & Lakervi, 2006). The average and maximum values of the decision variables in the current state and few previous states can help in more accurate coordination of inventory replenishment (Gurbuz, Moinzadeh, & Zhou, 2007). If the replenishment needs to be done just-in-time, the information, goals, SCM processes, decisions, incentives, and resources need to be synchronised effectively (Cao et al., 2010). If advanced demand information is shared, and the production and inventory lead times are planned, the orders can be released through Kanbans maintaining a minimum base stock level (Liberopoulos & Koukoumialos, 2005). Kanbans can be used in supply chains of manufacturing organisations using tightly integrated strategic vendors connected over clearly visible supply chains (Liberopoulos & Koukoumialos, 2005).

In this research, a Kanban system is designed for placing automatic orders in a multi-echelon supply chain system of a manufacturer. The mathematical model and testing results of the proposed system are discussed in the next chapter.

3. The replenishment model

The scenario presented by Ouyang & Daganzo (2006) and Ouyang (2007) is replicated in this research. However, the supply chain is not modelled as decentralised as presented in their research studies. The supply chain modelled in this study is highly synchronised using a centralised information processing system and a decision-making system for automated order processing (that is, releasing the Kanban cards, as presented by Liberopoulos & Koukoumialos, 2005). It is assumed that this is a practical supply chain in which, the lead times and demands could vary. However, the system designed is considered as an assembly line as presented by Samaranayke (2005) suitable for manufacturers having strategic suppliers integrated tightly with all six parameters presented by Cao et al. (2010) (information, goals, SCM processes, decisions, incentives, and resources) synchronised effectively. Thus, the proposed system is a just-in-time inventory replenishment system with minimum safety inventory holding, as presented in the models by Liberopoulos & Koukoumialos (2005) and Kelepouris et al. (2008).

The supply chain scenario as per Ouyang & Daganzo (2006) and Ouyang (2007), modelled as an assembly line (Samaranayke, 2005), with all six parameters integrated effectively (Cao et al., 2010), and automated Kanban processing (Liberopoulos & Koukoumialos, 2005) is presented in Figure 2.

Figure 2: The multi-echelon supply chain modelled in this research

The scenario has “n” stages “E1” to “En”. En is the main manufacturer of the finished goods delivered to the end consumers. E2 is the manufacturer supplying to E1, E3 is the manufacturer supplying to E2, and so on. Finally, En is the manufacturer supplying to En-1. In this scenario, the work-in-progress inventory holding begins at En-1. Each manufacturer maintains its own work-in-progress inventory. It is assumed that the buffer capacity (capacity for holding work-in-progress inventory) is unlimited at each echelon. The variables shown in Figure 2 are described below:

- M1 = maximum value of the past three values of consumption of the input material at E1, which is supplied by E2
- M2 = maximum value of the past three values of maximum consumption of the input material at E2, which is supplied by E3
- M3 = maximum value of the past three values of maximum consumption of the input material at E3, which is supplied by E4
- Mn-1 = maximum value of the past three values of maximum consumption of the input material at En-1, which is supplied by En
- Tm1 = maximum value of the past three lead-times of supply of M1 by E2
Tm2 = maximum value of the past three lead-times of supply of M2 by E3

Tm3 = maximum value of the past three lead-times of supply of M3 by E4

Tm(n-1) = maximum value of the past three lead-times of supply of Mn-1 by En

The concept of maximum value of only the past three transactions has been introduced based on the presentations by Kaipia & Lakervi (2006), Gurbuz, Moinzadeh, & Zhou (2007), and Liberopoulos & Koundoumas (2005). These scholars insisted on taking recent historical values (like, average and maximum values recommended by Gurbuz, Moinzadeh, & Zhou, 2007) for next state decision-making. In this research, the maximum value of past three transactions is taken as the parameter for the next state because taking average values may cause production outages due to materials shortage if the demand increases.

The just-in-time inventory replenishment in this research is considered as replenishment of M1, M2, M3, M(n-1) in E1, E2, E3, En-1, respectively on the day when the inventories are getting exhausted. Hence, the order to E2 for M1 needs to be placed when M1(Tm1 - 1) inventory is available at E1. Similarly, the order to E3 for M2 needs to be placed when M2(Tm2 - 1) inventory is available at E2. At En-1, the order to En needs to be placed when Mn-1[Tm(n-1) - 1] inventory is available at En-1. Hence, the JIT inventory value at which, the order should be placed may be represented as the following.

JIT inventory at E1 = M1 (Tm1 - 1)
JIT inventory at E2 = M2 (Tm2 - 1)
JIT inventory at E3 = M3 (Tm3 - 1)
JIT inventory at En-1 = Mn-1[Tm(n-1) - 1]

Thus, the order to En on behalf of En-1 for Mn-1 is placed automatically by the system when an inventory of En-1 = Mn-1[Tm(n-1) - 1] or lesser is available on any day. In this manner, even in worst-case scenario when the safety stock is also exhausted, it is expected that the inventory will have at least the materials available for consumption on the next day. In mathematical notation, the order placed to the previous echelon (represented by “On”) can be calculated as the following:

If I <= Mn-1[Tm(n-1) - 1], then On = Mn-1 → Equation (1)
If I > Mn-1[Tm(n-1) – 1], then On = 0 → Equation (2)

For testing this decision, a mock dataset is generated in an Excel sheet, with values entered in seven sheets as presented in Appendix A. The mock data set comprises ten echelons between the last supplier and the manufacturer. The data set represents results of 25 days. The parameters named “actual consumption” and “actual lead-time” are inputs, parameters “M”, “Tm”, and “JIT inventory” are intermediate calculated variables, and “orders placed” and “inventory” are output calculated variables.

On the first day, M = actual consumption on day 1, and on the second day, M = higher value of the actual consumptions on the first and second days. From the third day, M = maximum value of past three values of actual daily consumption of materials at the respective echelons. The values in the sheet named “M” are shown as M1 through M10 representing the maximum value of actual consumption of past three days at E1 through E10, respectively. Similarly, on the first day, Tm = actual lead-time (T1), and on the second day, Tm = higher value of the actual lead-times on the first and second days (T1 versus T2). From the third day, Tm = maximum value of past three values of actual lead-times of materials at the respective echelons. The values in the sheet named “Tm” are shown as Tm1 through Tm10 representing the maximum value of actual lead times of delivery of materials M1 through M10, respectively.

The JIT inventory is calculated by the following formula in the sheet named “JIT_Inventory”:

JIT Inventory = M (Tm – 1)

For the ten echelons in the mock data set,

M = M1, M2, M3, · · · · · , M10
Tm = Tm1, Tm2, Tm3, · · · · · , Tm10

The actual inventory on the first day is the inventory in hand. On the second day and onwards, the actual
inventory is calculated by the following formula in the sheet named “Inventory”:

\[ I = \text{Inventory on the previous day before the day of order placement} - \text{actual consumption (C)} + \text{Order placed (O)} \]

For the ten echelons in the mock data set,

\[ C = C_1, C_2, C_3, \ldots, C_{10} \]
\[ O = O_1, O_2, O_3, \ldots, O_{10} \]

In MATLAB, the sheets with these values may be imported or only the input data sheets can be imported and the rest calculated in MATLAB itself by importing row-wise (data of each day) separately. The algorithms written in MATLAB are presented in Figures 3 and 4.

**Figure 3**: MATLAB algorithm with the 10th row of sheets Tm, inventory, and M imported and the rest of data calculated

In Figure 3, the 10th row of sheets Tm, inventory, and M are imported and the corresponding values of JIT inventory, and orders placed (Kanbans) are calculated by the algorithm. The output of this algorithm (named as “Order”) in MATLAB is presented in Appendix B.

**Figure 4**: MATLAB algorithm with the 10th row of sheets Tm, actual consumption, and M imported and the rest of data calculated

In Figure 4, the 10th row of sheets Tm, actual consumption, and M are imported and the corresponding values of JIT inventory, actual inventory, and orders placed (Kanbans) are calculated by the algorithm. The output of this algorithm (named as “Order1”) in MATLAB is presented in Appendix B. In both the algorithms, it is assumed that the initial inventory on day 1 is equal to the estimated JIT inventory on day 1. In this way, the variations of actual inventory with respect to the initial projected JIT inventory can be analysed from the output of the two algorithms (both algorithms generate the same output). The calculated values of “On” for each imported row of data (that is, for each of the 25 days) are entered in the sheet named “Orders_Placed”. The same algorithm can be configured in Excel as well by using the If, then commands as formulac. The overall schematic of the system tested using the mock data set is shown in Figure 5.

**Figure 5**: The overall schematic of the system tested using the mock data

The blue coloured arrows indicate inbound information to the decision engine about actual consumption and actual lead time, the red coloured arrows indicate the automatic orders (Kanbans) placed, and purple arrows indicate the orders placed against the Kanbans.

In the next chapter, the results of tests conducted in MATLAB are presented.

4. Results and discussions

The results presented in this chapter present the plots generated in MATLAB after the algorithms have been executed. The outcomes of algorithms presented in Figures 3 and 4 are presented in Appendix B (the final orders placed are identical showing that both algorithms have generated identical results).

The Figure 6 presents the staircase plot of automatic orders placed to all the ten echelons. It may be
observed that there are seven days when the decision-making engine did not place any order to four of the ten echelons. This is because the actual inventory was more than the estimated JIT inventory. On the remaining days, the system placed automatic orders equal to “M” to all the echelons preceding the final echelon.

Figure 6: Stairs plot of automatic orders placed

The Figure 7 presents the line plot of actual inventory of all the ten stages over the 25 days period. It may be observed that there were no stock-outs on the 25 days and the increase in inventory levels is smooth. In most of the echelons, the inventory level on the 25th day has not changed significantly when compared with the inventory on the first day. The only exception is I9 that changed considerably from the first day to the 25th day. A number of step downs are witnessed indicating that the system corrects the inventory levels automatically over a period of time. Hence, it could be expected that the continuously changing inventory levels will be corrected automatically if this system is allowed to continue for another 25 to 30 days.

Figure 7: Line plot of Actual Inventory

The waterfall plots in Figure 8 present a plotting of actual inventory, projected JIT inventory, and orders placed in all the ten echelons over the period of 25 days. If the plots are smoothened, they will appear as waves with crests and troughs. The actual inventory level varies in the form of a waveform that may be viewed as being controlled by another waveform of projected JIT inventory levels. There is no endless piling up of inventories at any of the echelons. Whenever the inventory levels peak, a hidden force takes them down automatically just like a control system. Also, in this test of 25 days of mock data the inventory level has never reached zero causing a stock-out.

Figure 8: Waterfall plots: Actual inventory vs Projected JIT inventory vs Orders placed

The order placement waves are steady except some abrupt drops (visible in the line plot but apparent in the waterfall plot in Figure 7) when the system decided not to place the Kanban orders. A progression of controlled ordering based on projected JIT inventories resulted in controlled inventory replenishment in such a way that even after 25 days the inventory level from day 1 to day 25 has changed only marginally in most of the echelons. This may be viewed as quite close to an ideal JIT scenario in which, the inventory never exhausts and the residual inventory is steady forming a straight line.

The standard deviations generated in MATLAB for actual consumption, actual lead-time and the actual inventory levels are presented below:

Standard deviation of Actual consumption

\[
\begin{array}{cccccccc}
4.45 & 4.23 & 5.27 & 3.22 & 3.12 & 3.07 & 3.71 \\
3.33 & 3.05 & 3.59 & & & & \\
\end{array}
\]

Standard deviation of Actual Lead-time

\[
\begin{array}{ccccccc}
0.71 & 0.71 & 0.71 & 1.04 & 0.73 & 0.91 & 0.86 \\
1.04 & 1.00 & 0.60 & & & & \\
\end{array}
\]
Standard deviation of actual inventory levels
16.75  17.77  17.49  10.84  16.36  15.56
17.18  13.21  19.05  11.37

It may be observed that the actual inventory levels have delinked from actual consumption (demand) and actual lead-time variations. This is against the usual theory that inventory levels are highly correlated with the demand variance and lead-time variance (Bailey & Francis, 2008; Christopher, 2011; Attaran & Attaran, 2008). From MATLAB, the correlation between the standard deviation of actual consumption (demand variance) and the standard deviation of actual inventory levels is 0.32, and the same between standard deviation of actual lead-times and the standard deviation of actual inventory levels is −0.15. These results may be viewed as the outcomes of the synchronisation effect.

The framework may be extended to a scenario in which, “N” number of materials are consumed at each of the echelons. In such a scenario, the decision-making engine needs to monitor the actual consumption and lead-times of all the materials in all the echelons. This scenario is presented in Figure 9.

![Figure 9: Modified scenario with multiple materials with their respective lead-times at each of the echelons](image)

In this scenario, the projected JIT inventories at all the echelons may be represented by the following equations.

JIT inventory at E1 = M11(Tm11 − 1) + M21(Tm21 − 1) + --- + MN1(TmN1 − 1)
JIT inventory at E2 = M12(Tm12 − 1) + M22(Tm22 − 1) + --- + MN2(TmN2 − 1)
JIT inventory at E3 = M13(Tm31 − 1) + M23(Tm23 − 1) + --- + MN3(TmN3 − 1)
JIT inventory at En−1 = M1(n−1)Tm1(n−2) + M2(n−1)Tm2(n−1) + --- + MN(n−1)TmN(n−1)

The total orders placed to the nth echelon could be calculated as the following:

If I ≤ M1(n−1)Tm1(n−2) + M2(n−1)Tm2(n−1) + --- + MN(n−1)TmN(n−1),
Then, On = M1(n−1), M2(n−1), ---, MN(n−1)
If I > M1(n−1)Tm1(n−2) + M2(n−1)Tm2(n−1) + --- + MN(n−1)TmN(n−1),
Then, On = 0

5. Conclusions

Supply chain synchronisation has been viewed as the enabler of performance of inventory replenishment and demand fulfilment. A closely synchronised supply chain requires synchronisation of seven parameters named information, goals, SCM processes, decisions, incentives, and resources. These parameters could be integrated to form a just-in-time inventory replenishment system maintaining a minimum safety stock. Such a system can be designed for avoiding stock overruns or stock-out situations in the real world supply chains without compromising on demand fulfilment performance. It is also recognised that the decision-making for the next state should be based on the information collected from the present state and a few previous states not going deep into the history of transactions. Moreover, the maximum values of past demands and lead-times will be more effective than the average value when there are fluctuations.

In this research, an inventory replenishment system is designed employing a decision-making criteria based on the actual demand and lead-time information collected from all the echelons of a supply chain. Based on the information, the centralised decision-making system shall estimate a projected JIT inventory and make a decision for releasing orders automatically in the form of Kanban cards. The Kanban cards shall flow upstream while the supplies shall flow downstream. Using a mock data set of ten echelons over 25 days, the actual change in inventory levels and the orders placed are calculated in MATLAB following the decision-making algorithm. The results of testing in MATLAB have reflected that change in inventory levels remained under control in spite of considerable variations in the actual consumption of materials (demand) and lead-
times of delivering materials at their respective echelons.

It is proposed that this system shall be useful for manufacturing settings with a tightly synchronised supply chain considering each supplier as the part of an assembly line. The automated flow of Kanbans based on comparisons of actual and projected JIT inventory levels shall ensure continuous inventory replenishment with no possibilities of inventory overflows or stock out scenarios.

References:


INTRODUCTION

At the time of independence, Indian economy was developing and therefore we required bureaucratic management skills. However after 50 years of independence the Indian economy has become more mature and now we require more entrepreneurial management learning. India is a land of entrepreneurs unlike the western countries where there is a lot of business houses/employers. Indian economy is growing at a rapid pace and since service sector constitutes 45% of India's GDP, there are ample career opportunities for Commerce and management graduates. Our curriculums in commerce and management taught in our colleges and universities have failed to meet this challenge. There is an urgent need to restructure the commerce and management education to meet new challenges of 21st Century. Courses should be need based and curriculums design for CME should be changed periodically keeping in mind the future scenarios. Management institutes must endeavor in developing global manager of proper knowledge, attitude, skill, insight and foresight to meet the challenges of future. This can only be achieved by building relationships between the University education provider and industries in our country so as to utilize the strength of each institution to impart relevant commerce and management education for the development of our country and to produce competent manpower relevant for the Indian business society.

BACKGROUND, OBJECTIVE AND ITS METHODOLOGY OF STUDY

There is greater demand for development of commerce and management education in Indian universities/colleges for the economic development of the country and to meet the growing needs of the corporate sector and society at large. The present system of commerce education does not equip the students either for taking up jobs requiring knowledge of general subjects or jobs that demand knowledge of a technical or specialized nature due to the lack of updated knowledge on the subject, lack of various management skills and value based CME1.

The objective of this paper/study is to design commerce and management curriculum for the future that will create a wholesome personality of human beings with a view to produce effective managers, researchers and teachers for the development of our country with the uses of rigorous multifaceted pedagogy with an effective interaction with the industry to translate the countries mission into action. Thus it has becomes essential to re-examine the entire structure, content, purpose and pattern of commerce and management education.

The study is based on the primary data collected through field visits. A closed ended questionnaire and rating scale were designed and administered along with a brief note on the profile of the study. 15 industries have been considered for this study. Among them 5 are Large and Medium sized Industries, 7 are Small Scale Industries and 3 are Service Sector Organizations. 10 colleges/university and present college students were also included for this study. Interviews and questioners were distributed to pass out students to know the various problems they faced during the job.

ISSUES AND CHALLENGES IN COMMERCE AND MANAGEMENT EDUCATION IN INDIA

1. Administration flow in colleges
2. Inadequacy of learning resources and educational infrastructure
3. Use of out-dated study-material and poor faculty development programs
4. Lack of value and skill based education

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Traditional learning and evaluation system
Improper teaching methodology leading to lack of performance
Poor coverage of Indian business and socio-economic environment with less global perspective
Lack of research base and specialization
No interactive way of class room learning
No access to digital/information technology
Less industry-institute linkage in syllabus formulation
Information and interest gap in the light of globalization
Increase in government role and less autonomy for colleges
Decline in quality of higher education
Limited collaboration with foreign universities

CURRICULUM DESIGN FOR COMMERCE AND MANAGEMENT EDUCATION IN THE FUTURE

Indian Corporate Sector has been rapidly changing due to the transformation from regulation to liberalization, from protection to globalization, from planned economy to market-oriented economy which demands a new approach to deal with all types of problems. The basic problem as perceived by the industry/employers relates to the wide gap that exists between the principles learnt in the class rooms and what is practiced in business establishments. The broad spectrum of issues that should be covered in CME includes conception of a business proposition, evaluation of its suitability and feasibility, floatation of an appropriate business organization, overall management of a firm in the backdrop of its economic, social, cultural, legal and competitive environment is known only if there is an interaction with the industry driven curriculum. The desired goal of CME is to prepare the students for careers in business and suitable employment of higher order within the country and abroad. In recent years there is an enormous growth in the service sector in which various industry find it difficult in getting trained/professional man power. The opening up of different sectors in the Indian economy necessitated the Indian industry to evolve new strategies, adopt new approaches and develop new skills to acquire a greater competitive ability, cost effectiveness, quality consciousness so that they can make an effective inroad into a highly competitive market. In the process of rapid transformation and development of our economy corresponding changes has to be made in the structure of business education which is essential to suit the needs of the society. Companies are feeling the need for global standards to benchmark human resource.

Alvin Toffler in his famous book 'Future Shock' says “To help avert future shock, we must create a super industrial education system and to do this, we must search for our objective methods in the future rather than the past... Education must shift into future tense”. Knowledge and Information rather than capital will be the main source of economic development. Due to the information technology revolution future business would be paper-less. And gradually business world would move towards office elimination. Because of the information boom and communication revolution there will be a direct contact between consumers and producers and hence the existing chain of distribution will disappear. In the era of these fast emerging changes there is a need for future global managers with qualities and competencies in global perspective. The future CME curriculum should be based on global scenarios like the study of cross cultural dimensions, service management and including foreign language learning like French, Spanish and German since North American countries are developing at a faster rate. Therefore to effectively prepare our students for the competitive pressures of tomorrow’s business world, the colleges/universities must make a strong commitment to help them understand the global economy.

Indian students who wish to successfully compete with their international counterpart must acquaint themselves with an integrated knowledge of the global business environment. Our future global manager should have the following new skills such as information management skill, information technology management skill, innovative knowledge, time and stress management skills, environment and
customer service management skills. Students need to be aware of these and other emerging trends before they become common practice in Indian industry. Future managers should know the practical aspects of work ethics, like how ethics can be developed, how they can be managed at workplace, how individual makes his/her values, what are the contents of ethics and which can be utilized to motivate human resources at workplace. An institute can only enhance existing values/skills but can’t create them. Business ethics is something that should not be compromised. The complexities of worldwide markets must be integrated into the core undergraduate as well as post graduate management educational framework. Commerce curriculum for the future should create a wholesome personality of human beings with a view to produce effective managers, researchers and teachers for the development of our country with the uses of rigorous multifaceted pedagogy with an effective interface with the industry to translate the countries mission into action. Curriculum design for CME needs to be built on real-time learning and teaching considerations and a good understanding of the needs of individual learners.

Commerce and Management institutes must introduce new subjects of study like travel and tourism management, hospital management, construction management, hotel management, consultancy management, NGO management, advertising management, real estate, banking and insurance services management, international finance & IFRS, farm management, information and communication technology, global sourcing of services, social responsibility, corporate governance and sustainability. The new curriculum in CME must offer specialization in courses such as entrepreneurship development, service innovation, brand management, human resource development, insurance & risk management, various taxation subjects like VAT, goods and service tax, behavioral science, managerial economic, banking, stock broking, agriculture economic, etc along with traditional subjects in the areas like accounting, finance, marketing, human resource, organizational behavior etc even in the undergraduate level. Students can also take up research in the above subjects as well which should lead to the development and upliftment of the people in our country. Future curriculum of CME should coordinate, collaborate and compete within the global education community with the knowledge and skill based information and research orientation.

Quality of commerce and management education in the future

Quality is the only currency which is accepted universally and every customer of commerce education in the future will be quality conscious. To make India an intellectual capital of the world we have to rethink about the commerce and management education and effort should be made to create a dynamic environment which must have quality educational colleges. The Indian B-Schools should take many initiatives to stand up to this challenge. The affiliated colleges are in a great need of more autonomy while the autonomous institutions have to strengthen their curriculum. India's position as a lead contributor to the global IT human resources pool will need to be supported by the adoption of global standards. Professional Institutes must come forward and impart training to various teachers in the universities. CME should not just equip a student with technical skills and expertise but also develop in him the right attitude. Total quality management should be inducted to make the CME education more effective. There is an urgent need to reform the quality of commerce and management education for the creation of quality educational infrastructure in India. It is necessary for the institutions to have linkages between business and industry to understand their requirement and reorient teaching, training consultancy and research activities. A quality improvement by transparency in the management education is possible with the help of government, like selection of experts on the monitoring panel should be based on certain qualitative parameters or criteria. More liberty should be provided to private institutions with some qualitative directors. Institutions need more autonomy and flexibility to succeed in increasingly open and competitive markets.
INPORTANT FINDINGS

1. Relevance of commerce and management curriculum: Industry’s perception

Nearly 73% of the respondents from the industry felt that the current curriculum taught in not according to industries perception. The Industries response proposing a revision in the commerce curriculum was overwhelming. There is a need to consider the Industries reflections such as involving industrialists in curriculum designing, introducing practical training, work exposure, project studies and maintaining a good rapport with the Industry. They wanted value and skill based education included in the future curriculum design. Most of the employees working currently lack communication and decision making skills and leadership qualities. Industry expect future employees to have specialized knowledge on subjects like Taxation (24%), Finance & IFRS (20%), Brand Management (15%), General management studies (13%), Global Business Strategies (12%), Service Management (9%), Innovation and entrepreneurship development (7%).

2. Autonomy in colleges leads to better quality of CME

Quality in higher education can be achieved if more colleges are granted autonomy (93%). Autonomous colleges have less government interference than affiliated colleges. They update the syllabus once in two years and have innovative teaching and learning methods like case study (43%), group work (30%), interaction with field (27%). They try to make their syllabus in line with global scenario, have student exchange programs and foreign tie ups with foreign universities. Lack of educational infrastructure is a big problem in university affiliated colleges.

3. Faculty development programs for commerce and management teachers

More than 80% of students have voted in favor of faculty development programs which should be made compulsory (73%) for teachers of CME. Such programs should be conducted every year by the universities to enhance their knowledge in the respective subjects. They should be specialized in their subject and should only be felicitors for the students in their learning process.

4. Employability with the present CME

The present knowledge of students will not help them to get direct employment since they are only subject oriented and lack technical skills.

SUGGESSIONS

- Meeting with industry personnel’s at least twice a year.
- Participation of eminent industrial members on universiti es board in syllabus formation along with government officials.
- Restructuring of syllabus in a time bound manner.
- Making project work compulsory in under graduation.
- Including value and skill based education in both UG and PG courses.
- The industry personals must take up the capacity building programs in training the various university teachers imparting commerce and management education.
- Internship should be made compulsory in the future commerce curriculum for both UG and PG students.
- Curriculum design in the future should have global standards and it should be integrated into the existing framework of core courses.
- Research orientation in curriculum is required. The content of the curriculum should be similar between the what is taught in the classrooms and the ground reality which a student has to actually face.
- Conducting frequent faculty development.
- Promotion of more autonomous colleges and deemed universities.
- The recommendations of the UGC on setting up of Curriculum Development Centers (CDC) still flounder for lack of any mechanism to monitor its implementation in the universities.

CONCLUSION

Commerce and management education in India stands at a crossroads. Without change the traditional
structure of educating and training tomorrow’s business leaders is likely to be surpassed and discarded with the increasingly diverse and technological global economy. To provide our students with the talents necessary to compete in this marketplace we must recognize and accept the challenges before us today. In addition, information technology must be embraced as an opportunity to enhance educational efficiency and also respected as an important competitor in the provision of educational services. To ensure quality in management education inclusion of BPR, IDR & ISO9000 and ISO1000 etc. can be utilized. So it is an immediate requirement to shape CME in accordance with the global changes to improve competitiveness with the total quality management. These recommendations have a long way in influencing quality in commerce education from Industry perspective. A successful infusion of quality in commerce education is possible only when the industry also joins its hands with the University in designing a suitable curriculum and in implementing it.

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ABSTRACT:

This study attempted to test the discriminant validity of Recovsat instrument which was developed by Boschoff in 1997. Recovsat instrument has six dimensions namely communication, empowerment, feedback, atonement, explanation and tangibles. Discriminant validity can be assessed by using three methods: Q-Sorting, Chi-Square difference test and Average variance Extracted (AVE). This study uses Average Variance Extracted (AVE) method to assess discriminant validity because of its popularity and also it offers a more parsimonious procedure, having all constructs grouped in one matrix.

Keywords: Validity, Discriminant Validity, Average Variance Extracted (AVE), Recovsat Scale.

INTRODUCTION:

Discriminant validity is the extent to which a construct is truly distinct from other constructs. Discriminant validity assumes that items should correlate higher among them than they correlate with other items from other constructs that are theoretically supposed not to correlate. Thus, high discriminant validity provides evidence that a construct is unique and captures some phenomena other measures do not. Discriminant validity can be tested by using following methods: Q-Sorting, Chi-Square difference test, and Average variance extracted analysis. Adriana Zait (2011) suggests Q-Sorting method that can be used in early stages of research, being more exploratory, while the Chi-Square difference test and Average variance extracted analysis are recommended for confirmatory stages of research. In this paper researcher use Average variance extracted analysis (AVE) to test the discriminant validity of recovsat scale because of its accuracy.

In an AVE analysis, we test to see if the square root of every AVE value belonging to each latent construct is much larger than any correlation among any pair of latent constructs. AVE measures the explained variance of the construct. When comparing AVE with the correlation coefficient we actually want to see if the items of the construct explain more variance than do the items of the other constructs. AVE, which is a test of discriminant validity is calculated as:

\[
AVE = \frac{\Sigma [\lambda^2]}{\Sigma [\lambda^2] + \Sigma [\text{Var}(\xi)]}
\]

Where \(\lambda\) is the loading of each measurement item on its corresponding construct and \(\xi\) is the error measurement (1-\(\lambda^2\)).

The rule says that the square root of the AVE of each construct should be much larger than the correlation of the specific construct with any of the other constructs. The value of the AVE for each construct should be at least 0.50 (Fornell and Larcker, 1981).

RECOVSAT IN BANKING:

Boschoff (1999) had developed the RECOVSAT which is a scale that measures the satisfaction derived from a service recovery. Boschoff had tested the reliability and validity of the aforesaid scale on respondents from New Zealand. He had concluded that the scale was nomologically robust. Hofstede (1993) had found that behaviour, responses and likings and disliking are affected by individual's culture. He had also shown that the Asian's varied with people from parts of the world with respect to the various cultural dimensions that he had found. Therefore, it is a strong possibility that behaviour and psychologically an Indian customer would differ from a white customer.

Given this background, the author's endeavour is to test the RECOVSAT scale in Indian context and find out whether the seventeen item-six construct scale is as effective in the above context as it was believed to be by Boschoff who tested it on respondents of New Zealand, who are believed to be culturally different.
from the Indians.

RECOVSA MODEL

METHODOLOGY

For the purpose of the research, the researcher used the RECOVSAT as developed by Boschoff (1999). The scale was used to measure satisfaction from the recovery by customers using banking services. A total of 800 questionnaires were used of which 604 generated complete and usable responses.

Average Variance Extracted Analysis:

To Obtain AVE Values, firstly confirmatory factor analysis was done to get the standardized regression weights, which acts as \( \lambda \) value in above formulae. Then AVE values must be compared with the correlation coefficients of each construct with other constructs. So, first of all it is necessary to obtain a matrix were we can see the correlation among service recovery strategies. Afterwards on the diagonal we insert the AVE values in order to compare it with the other correlation coefficient.

**Table 1** shows the results of the AVE analysis. It can be easily seen that the AVE values are above 0.5 as suggested by Fornell and Larcker, 1981 and moreover are above the correlation coefficients for each type of service recovery strategy.

CONCLUSION AND MANAGERIAL RECOMMENDATIONS:

The AVE analysis confirmed the Discriminant validity of RECOVSAT Scale. We strongly recommended the business managers to use the Recovsat scale to find service recovery satisfaction of customer. In this Research we used Average Variance Extracted (AVE) analysis method to find the discriminant validity of recovsat scale because of its popularity and also it offers a more parsimonious procedure, having all constructs grouped in one matrix. For further studies, researcher suggest to use the chi-square difference test and Q-sorting method to test the discriminat validity of Recovsat scale in detail.

REFERENCES:


PURCHASE INTENTION TOWARDS PRIVATE LABELED BRANDS

Mr.A.Rajesh*, Dr.V.Sachithanantham**

Abstract

In the hyper competitive marketing environment, consumer behavior plays a vital role in the success of any business. Plenty of choices are available for the customers for any product. Especially these choices are comparatively more for fast moving consumer goods. The variables influencing purchase intention are the predictors of the success of any business. Purchase intention of FMCG is studied. Recommendation, store purchase, re-purchase and willingness to purchase the same product from other stores are taken as variables for the study. The results indicates that purchase intention slightly differ based on various demographic factors.

Introduction:

Seeing that purchase intention is a subject of great interest to policy makers and business practitioners, knowing which variable that influence purchase intention are the most important to a particular customer group and help to make predictions on consumers’ choice of product. A consumer’s attitude and assessment and external factors construct consumer purchase intention, and it is a critical factor to predict consumer behavior (Fishbein&Ajzen, 1975). Purchase intention can measure the possibility of a consumer to buy a product, and the higher the purchase intention is, the higher a consumer’s willingness is to buy a product (Dodds, et al., 1991). Purchase intention indicates that consumers will follow their experience, preference and external environment to collect information, evaluate alternatives, and make purchase decision.

In any business, customers’ level of satisfaction is strongly associated with repeated purchase intention and return patronage. Whitlark, Geurts and Swenson (1993) define purchase intention as a purchase probability associated with an intention category at the percentage of individuals that will actually buy product. The consumer behaviour plays an important role in marketing of fast moving consumer goods.

This behaviour is effected by various factors. In the present era of globalisation needs and wants of consumers changes with time. The fast moving consumer goods (FMCG) sector contributes a lot to the growth of India’s GDP. Fast moving consumers good is the fourth largest sector in India and creating employments for more than 3 million people in India with $37 billion market size. According to a study by Mc.Kinsey Global Institute, incomes in India are expected to grow three times over next two decades and India will become fifth largest consumer market by 2025. Therefore it is necessary to identify the changes in consumer buying behaviour towards FMCG products. The motive of this paper is to identify the factors affecting purchase intention towards FMCG products.

Private Label Brands (PLB) are the goods that are being custom-merchandised by the store owners or retailers. These brands are also known as Store Brands. During last few years, brands are acclaimed to be the most precious intangible asset for any organization and no one can deny the importance of brands for the organization. Ailawadi and Keller (2004) state that because of the cutthroat competition the importance of branding in the retail industry has increased to create brand loyalty in the consumers and mend their perceptions towards the store image. Many hyper stores have launched their own brands to increase store loyalty and to compete with the manufacturer brands. They do not consider themselves as the distributor of manufacturer brands but a competitor to those brands. Hoch (1996) defines private brand as the brand that is available only on the packaging of products of a specific store at a cheap price.

Statement of the problem:

The change in market trends, of late, is marked by the growth of ‘brands’ for consumable items. Now, people prefer ‘branded’ products even for household use instead of random selection. Keeping in view the changing trend, this study explores the factors

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Influencing purchase of private brands in Cuddalore district and to understand how those factors affect the purchase intentions of consumers towards private brands. Wu et al (2011) defines purchase intention as the probability of consumer’s readiness to purchase a product in near future. It is generally linked with the consumer’s attitude, perception and buying behavior. It is observed that purchase intention is a very important factor for consumers when they are making decisions about buying any product. Consumers’ purchase intentions towards private brands depend on various factors that need to be studied in order to make private brands successful. Though many research studies are conducted on private brands, they mostly cater to the United States or other Western countries (Boutsouki et al., 2008) and hence the outcomes of those studies cannot be generalized over Asian countries. In Asian countries, particularly India, private brands are at their primary stage and store owners are trying their best to make them a success. Therefore, this study attempts to explore the factors that most influence the purchase intention towards private brands.

Objectives:

1. To study the level of purchase intention for chips and floor cleaner.
2. To analyse the impact of demographic factors on the factors of purchase intention.

Methodology:

Purchase intention of customers towards two products namely chips and floor cleaner is chosen for this present study. The study area is Cuddalore district. It is planned to collect data from 500 customers of three different retail outlets which result in a sample size of 498. Convenience sampling technique is used to collect the data. A questionnaire consists of the factors of purchase intention namely, recommendation to others, repeated purchase of the product, repeated purchase from the same store and willingness to purchase the product from other retail outlets is developed. The validity and reliability of the questionnaire is tested. the reliability for all the factors is between 0.75 to 0.93. the collected data are analysed by using chi-square test.

<table>
<thead>
<tr>
<th>Purchase intention</th>
<th>Gender</th>
<th>F</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recommendation</td>
<td>Male Mean (SD)</td>
<td>Female Mean (SD)</td>
<td>0.058</td>
</tr>
<tr>
<td>Re purchase</td>
<td>3.54 (0.98)</td>
<td>3.52 (0.98)</td>
<td></td>
</tr>
<tr>
<td>Store purchase</td>
<td>3.61 (0.95)</td>
<td>3.50 (1.01)</td>
<td>1.753</td>
</tr>
<tr>
<td>Willingness to purchase Other products from the store</td>
<td>3.60 (0.95)</td>
<td>3.61 (1.00)</td>
<td>0.659</td>
</tr>
<tr>
<td></td>
<td>3.47 (0.99)</td>
<td>3.54 (0.89)</td>
<td>3.460</td>
</tr>
</tbody>
</table>

Table 1: Purchase intention vs Gender

Table -1 show the purchase intention towards private labeled brands based on gender. The observed F-values 0.058, 1.753, 0.659 and 3.460 and their corresponding p-values 0.810, 0.186, 0.417 and 0.063 clearly indicates that purchase intention did not significantly differ between male and female. From the mean value it is noted that men there is only slight difference in the mean value is observed between male and female. Further it is inferred that the mean value for all the selected variables recommendation, repurchase, store purchase and willingness to purchase other products from the store falls in between three to four, which implies the respondents have the opinion of neutral to agree.

<table>
<thead>
<tr>
<th>Purchase intention</th>
<th>Marital status</th>
<th>F</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recommendation</td>
<td>Married Mean (SD)</td>
<td>Unmarried Mean (SD)</td>
<td>0.46</td>
</tr>
<tr>
<td>Re purchase</td>
<td>3.57 (0.96)</td>
<td>3.46 (1.00)</td>
<td>0.5</td>
</tr>
<tr>
<td>Store purchase</td>
<td>3.61 (1.00)</td>
<td>3.46 (0.91)</td>
<td>3.60</td>
</tr>
<tr>
<td>Willingness to purchase Other products from the store</td>
<td>3.58 (1.00)</td>
<td>3.66 (0.91)</td>
<td>3</td>
</tr>
</tbody>
</table>

Table 2: Purchase intention vs marital status
Table 2 show the purchase intention towards private labeled brands based on marital status. The observed F-values 0.465, 1.886, and 0.167 and their corresponding p-values 0.496, 0.170 and 0.683 clearly indicates that the selected factors of purchase intention namely recommendation, repurchase and willingness to purchase other products from the store did not significantly differ between married and unmarried respondents. For the factor store purchase significant different exist between married and unmarried respondents. From the mean value it is noted that, there is only slight difference in the mean value observed between married and unmarried respondents. Further it is inferred that the mean value for all the selected variables recommendation, repurchase, store purchase and willingness to purchase other products from the store falls in between three to four, which implies the respondents have the opinion of neutral to agree.

Table 3: Purchase intention Vs age

<table>
<thead>
<tr>
<th>PI</th>
<th>Age</th>
<th>Mean (SD)</th>
<th>F</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>21-30 yrs</td>
<td>3.40 (0.9)</td>
<td>2.40</td>
<td>0.04</td>
</tr>
<tr>
<td></td>
<td>31-40 yrs</td>
<td>3.71 (0.9)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>41-50 yrs</td>
<td>3.70 (1.0)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>&gt;50 yrs</td>
<td>3.70 (1.0)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4: Purchase intention Vs income

<table>
<thead>
<tr>
<th>PI</th>
<th>Income</th>
<th>Mean (SD)</th>
<th>F</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 Rs. 2000</td>
<td>3.6 (0.9)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2 Rs. 3000</td>
<td>3.4 (0.9)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3 Rs. 4000</td>
<td>3.2 (0.9)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4 Rs. 5000</td>
<td>3.0 (0.9)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>5 Rs. 6000</td>
<td>2.8 (0.9)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>6 Rs. 7000</td>
<td>2.6 (0.9)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table -3 show the purchase intention towards private labeled brands based on age. The observed F-values 1.967, 0.518 and 1.151 and their corresponding p-values 0.098, 0.723 and 0.332 clearly indicates that the selected factors of purchase intention namely repurchase, store purchase and willingness to purchase other products from the store did not significantly differ for different age groups. For the factor recommendation respondents purchase intention differ for different age groups. From the mean value it is noted that, there is only slight difference in the mean value observed for different age groups. Further it is inferred that the mean value for all the selected variables recommendation, repurchase, store purchase and willingness to purchase other products from the store falls in between three to four, which implies the respondents have the opinion of neutral to agree.

Table 4: Purchase intention Vs income

1. Not applicable
2. Less than Rs. 20000
3. Rs. 20001 to Rs. 30000
4. Rs. 30001 to Rs. 40000
5. Rs. 40001 to Rs. 50000
6. Above Rs 50000

Table -4 show the purchase intention towards private labeled brands based on income. The observed F-values 1.398, 1.418, 1.447 and 0.222 and their corresponding p-values 0.224, 0.216, 0.206 and 0.953 clearly indicates that purchase intention did not significantly differ among different income level. From the mean value it is noted that there is only slight difference in the mean value is observed among different income level. Further it is inferred that the mean value for all the selected variables recommendation, repurchase, store purchase and willingness to purchase other products from the store falls in
between three to four, which implies the respondents have the opinion of neutral to agree.

Table 5 : Purchase intention Vs Occupation

<table>
<thead>
<tr>
<th>PI</th>
<th>Occupation</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(S)</td>
<td>(S)</td>
<td>(S)</td>
<td>(S)</td>
<td>(S)</td>
<td>(S)</td>
<td>(S)</td>
<td>(S)</td>
</tr>
<tr>
<td></td>
<td>(D)</td>
<td>(D)</td>
<td>(D)</td>
<td>(D)</td>
<td>(D)</td>
<td>(D)</td>
<td>(D)</td>
<td>(D)</td>
</tr>
<tr>
<td>Recommandation</td>
<td>3.3</td>
<td>3.6</td>
<td>3.5</td>
<td>3.5</td>
<td>3.7</td>
<td>3.4</td>
<td>3.5</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(1.00)</td>
<td>(0.97)</td>
<td>(0.92)</td>
<td>(0.90)</td>
<td>(0.94)</td>
<td>(0.89)</td>
<td>(0.93)</td>
<td>(0.90)</td>
</tr>
<tr>
<td>Re purchase</td>
<td>3.7</td>
<td>3.4</td>
<td>3.4</td>
<td>3.6</td>
<td>3.4</td>
<td>3.6</td>
<td>3.6</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.74)</td>
<td>(1.01)</td>
<td>(1.15)</td>
<td>(0.91)</td>
<td>(0.99)</td>
<td>(0.90)</td>
<td>(0.94)</td>
<td></td>
</tr>
<tr>
<td>Store purchase</td>
<td>3.7</td>
<td>3.7</td>
<td>3.5</td>
<td>3.5</td>
<td>3.6</td>
<td>3.6</td>
<td>3.3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.97)</td>
<td>(0.97)</td>
<td>(0.95)</td>
<td>(0.96)</td>
<td>(0.96)</td>
<td>(0.90)</td>
<td>(0.91)</td>
<td></td>
</tr>
<tr>
<td>Willingness to purchase Other products from the store</td>
<td>3.2</td>
<td>3.6</td>
<td>3.4</td>
<td>3.4</td>
<td>3.6</td>
<td>3.4</td>
<td>3.3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.88)</td>
<td>(0.81)</td>
<td>(0.96)</td>
<td>(0.90)</td>
<td>(0.94)</td>
<td>(0.92)</td>
<td>(0.84)</td>
<td></td>
</tr>
</tbody>
</table>

1. Student
2. House wife
3. Government employee
4. Private employee
5. Business man
6. Professionals
7. Others

Table -5 show the purchase intention towards private labeled brands based on occupation. The observed F-values 0.840, 0.892, 0.716 and 1.054 and their corresponding p-values 0.539, 0.500, 0.637 and 0.389 clearly indicates that purchase intention did not significantly differ among different occupation. From the mean value it is noted that there is only slight difference in the mean value is observed among different occupations. Further it is inferred that the mean value for all the selected variables recommendation, repurchase, store purchase and willingness to purchase other products from the store falls in between three to four, which implies the respondents have the opinion of neutral to agree.

In summary Purchase intention is an important aspect not only for consumers but for marketers as well. Purchase intention triggers a consumer to decide on which product/service or brand he or she will spend to fulfil his or her needs to which marketers can endorse their brands favourably. From the analysis it is concluded that respondents shows only slight variation based on different demographic characteristics.

References:

A STUDY ON CHALLENGES FACED BY THE MIGRANT EMPLOYEES WORKING IN SPINNING MILLS AT GUDALUR, KARUR

Dr. J. Shanthilakshmi* - Ms. T. Priyadharisini**

ABSTRACT
Employee migration is the movement of people from one place to another in search of job to have a better standard of living. The major reason for people to move to other place for job is to have the basic needs of food, shelter and clothing for which money is very essential. When the employees move to other places for working they have to face social, economical, political and technological challenges. The employee migration Indian textile Industry is in booming status and these migrants are not educated enough to face these challenges on their own as they don’t have proper education qualification. On the other hand companies can provide housing, health and safety facilities along with training for the employees related to their job, but educating the whole lot of migrants is not an easy thing. With this context an attempt was made to understand the challenges faced by migrant employees working in a spinning mill in Karur District. A descriptive type of study was planned and the primary data was collected by means of conducting interview with the employees. It was understood from the study that female migrant employees have more willingness to stay and work as the security for them was very good. Male migrant employees are spending the money earned in unhealthy ways hence the organization has opened the bank account in the family member name and the salary is deposited in the same.

EMPLOYEE MIGRATION - AN OVERVIEW
Social, economic, political and environmental problems are root causes for migration. Regarding the labor market, migration is a symptom of imbalances in sending countries, such as high rates of unemployment and underemployment among low-skilled workers, low wages for skilled workers, and unmet demand for education and acquisition of skills. International migration can help reduce poverty and raise economic growth rates in the migrants’ countries of origin. First, an increase of remittances is generally associated with a reduction of overall poverty. Second, circular migration plays an important role. Economic analyses show that an increase in circular migration between developing and developed countries could produce gains of USD 150 billion per year, which would equally benefit developed and developing countries.

The effects of migration on employment have many facets. The migration of low-skilled workers might result in rising wages or a relaxation of the local labor market in areas with high rates of emigration and an oversupply of labor. The outflow of skilled workers deprives developing countries of their human capital and results in brain drain with serious consequences on the delivery of key services like education or health care, and on economic productivity. In contrast, overseas work experience might provide opportunities to improve skills and further knowledge, while others whose qualifications are not recognized in their receiving country may see their skills diminish while abroad, making return difficult.

Another important reason for mobility is education and the acquisition of skills which are also related to employment and labor markets. Migrants come from all educational levels. Educated migrants have better prospects for the advance of skills and knowledge. The improvement of skills and the accumulation of financial capital from working abroad or by activities of the Diaspora could have positive effects on the labor market like increased employability and the capacity to start a business in the country of origin. Yet these effects might be hampered when the upgrade in qualification does not match local needs or when economic and political conditions remain unattractive for investments.

To curb brain drain, countries need to know which sectors often lose highly-skilled workers. The

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departure of professionals influences the performance and capacity of a country in many ways (for example, in service delivery and productivity). One point that is overlooked is the incidence of sector emigration prior to actual physical emigration. If such correlations were studied, the findings would strongly influence the interpretation of the social costs of the brain drain. They would also bring us closer to understanding the labor market situation and to recognizing which incentives or employment programs are needed to retain highly qualified migrants. (OECD, 2009) In some regions of India, three out of four households include a migrant. The effects of migration on individuals, households and regions add up to a significant impact on the national economy and society. There is considerable conceptual difficulty in defining a migrant, often unacknowledged in the literature. Worker mobility takes different forms, which may coexist. The worker’s place of residence and place of work may be different, and the distance covered by daily commuting. At the other end of the spectrum, workers may move permanently from their places of birth or usual place of residence, maintaining little or no contact with their places of origin. Between these two extremes, people move away for differing periods of time. It is useful to distinguish between ‘permanent’, ‘semi-permanent’ and ‘temporary’ migrants, based on how long they are away from their place of origin, the links they maintain, and the likelihood that they will return home. Temporary migrants are unlikely to stay away from their places of origin for more than a few months in a year.

In the past few decades new patterns have emerged, challenging old paradigms. First, there have been shifts of the workforce towards the tertiary sector in both developed and developing countries. Secondly, in developed countries, urban congestion and the growth of communication infrastructure has slowed down urbanization. Thirdly, in developing countries, the workforce shift towards the secondary/tertiary sector has been slow and has been dominated by an expansion of the ‘informal’ sector, which has grown over time. In countries like India, permanent shifts of population and workforce co-exist with the ‘circulatory’ movement of populations between lagging and developed regions and between rural and urban areas, mostly being absorbed in the unorganized sector of the economy. Migrants are preferred because their labor is easier to control and it is easier to extract labor from them under arduous conditions. Moreover, the supply of labor can be easily increased or decreased with little cost to employers and migrants can work for long and flexible hours. Flexibility of the migrant workforce is reinforced because of the role of contractors and middlemen in recruitment and supervision. The segmentation of the labor market, which also leads to greater control over both migrant and local labor, is another outcome of the process.

Finally, the wage payment systems which grow around industries based predominantly on migrant labor are eminently suited to side-stepping minimum wage legislation. Thus migration reduces labor cost to employers. (Ravi and Sasikumar, 2003)

**GENERAL ISSUES IN MIGRATION**

The majority of migrants experience a cut in wages for taking leave; and a few were terminated from service for absenteeism. Some are paid lower wages than the local workers. Job insecurity is one of the vital problems faced by about 70 per cent of the respondents. Informal sector and casual workers were not eligible for paid holidays and medical benefits. Another major problem is increasing competition for jobs. This can in part be due to migration pressure which is the result of an excess supply of people willing to migrate relative to the demand for people in potential destinations. The problem of seeking regular employment was found to be severe in case of respondents having poor social capital. Employers are also reluctant to absorb migrant workers, unless they are referred to them by some known people. Further, the actualization of work along with globalization has reduced the possibilities of getting regular jobs among migrants.

**TYPES OF MIGRATION**

**Highly skilled Labor Migration:**

This represents only a small percentage of migration and it is the type of migration most demanded by the host countries that develop special types of incentives to attract highly skilled labor, often in specific categories, such as doctors and nurses. The
attraction of highly skilled labor lies in the ability of the host country to accumulate human capital with no education or training costs. However, the loss of skilled labor, a phenomenon known as the “brain drain”, can have severe consequences for the sending countries, which lose human capital and all the money invested in the education and training of the people who leave. Nevertheless, it can be seen as an attractive solution for solving problems of labor shortage and a way to increase economic production. Since the 1980s, the USA, Canada and Australia have had specific policies to attract skilled labor in particular categories, using a points system to score applicants who wish to emigrate there. This policy has been followed, more recently, by some European countries and parts of Asia. Highly skilled labor tends to comprise young to early middle-aged people who are from specific sectors, for example medicine or computer programming. Many people stay in the country they migrate to and then raise families and assimilate themselves into the population, retaining a high level of educational attainment in their offspring.

Unskilled low wage Labor and Temporary Migration

After 1945 unskilled low-wage labor was the main type of migration which played a very important role in the economic reconstruction of the industrialized countries. Not all of this immigration is legal and some countries, such as the USA, have been very attractive to illegal migrants, especially from Mexico and other Latin American countries, willing to work in the “black economy”. Dual Economy of the Global cities, uses low skilled laborers as a primary source for the low wage jobs (in industry, construction and domestic service). This constitutes the largest percentage of economic migration and is the process that attracts more attention from the media and social organizations.

When the Central and Eastern European countries joined the EU in 2004, large-scale labor migration from these countries to the west started, especially to countries such as the UK and Ireland, which did not impose any interim immigration controls. The labor market in the still-growing economies (until the financial crisis of 2008 and the subsequent recession) was and is primarily in three sectors: agriculture (picking and processing agricultural and horticultural products), the hospitality industry (hotels and restaurants) and construction. Many of these people are temporary migrants – possibly seasonal and also for short periods until they have amassed enough money to start a business back home, for example. These migrants are also usually young but may include middle-aged people who may bring their dependents with them. Temporary migrants may be well-educated but unable to transfer their skills to the host country owing to the need for certain certificates for professions, for example, where the host country does not recognize their qualifications.

Forced Migration

Forced migration includes not only refugees and asylum seekers fleeing war or political repression but also people displaced from their homes by projects such as dams or roads or as a result of certain natural disasters, has also referred to another mode of forced migration, the trafficking of people, with special emphasis on women and children destined for the sex industry. While some countries may be favored destinations for such migration – asylum seekers to Britain have been an issue in recent years – other countries which do not otherwise feature as places receiving large numbers of labor migration may in fact welcome asylum seekers – Scandinavian countries, for example. The educational level of many refugees, especially asylum seekers may be quite high (their exile may result from them being politically active students for example) or, in the case of people displaced by civil war, it may be very low. Some asylum seekers return to their native country if the circumstances there improve (e.g., Iraqis returning after the fall of Saddam Hussein). Many assimilate into the local ethnic communities and become part of the multi-cultural society, often having a relatively low socio-economic status.

Internal Migration

This type of migration occurs inside a particular country, and between regions, especially from economically poor areas and rural parts to major cities. The effects during the 1990s can be explained by the social and economic disadvantages of living in some areas. This trend, which had occurred in western Europe for centuries, had been more-or-less
arrested in the Eastern bloc due to social controls but once the socialist system collapsed along with the economies, large scale migration occurred which, with the incorporation of many of these countries into the EU became transformed into international labor migration. The patterns of internal migration can be quite complex and have profound effects on land use as will become clear.

In the former Eastern Europe (now referred to as the central and eastern European countries or CEE) in the period since the collapse of the Soviet bloc, large-scale movements from rural and old industrial areas to metropolitan regions have taken place. This has been followed by out-migration to other European countries. The rural areas contain a lot of abandoned land and may be dominated by old people who have been left behind. There is a tendency for young people to leave to seek education as well as work but not to return to rural areas. However, inside the metropolitan areas there is a tendency for suburbanization away from Soviet or socialist era housing estates dominated by large panel buildings to single family houses in the suburbs, contributing to urban sprawl.

Hardill (2004) identify the aim of many people of “re-establishing some quality to life”, after working hard to build up some financial stability, as impulses for retirement migration to rural areas. In this case, the financial resources work as a “push factor” and the desire for a better quality of life a “pull factor”. Also in Ireland, the aim of living in rural areas, near to nature and with a better quality of life, as well as the wish of living in a single family house can also be considered to be “pull factors”. In addition, population growth in cities, high property prices in the city centre and the small size of houses, along with a deficient transportation system work as “push factors” for urban-rural migration.

**REASONS FOR MIGRATION**

Migration in India is mostly influenced by social structures and patterns of development. The development policies by all the governments since Independence have accelerated the process of migration. Uneven development is the main cause of migration. Added to it, are the disparities, inter regional and amongst different socio-economic classes. The landless poor who mostly belong to lower castes, indigenous communities and economically backward regions constitute the major portion of migrants. In the very large tribal regions of India intrusion of outsiders, settlements by the outsiders displacing the local tribal people and deforestation also played a major role in migration. According to a study 77% of the population i.e. nearly 840 million Indians live on less than Rs.20 (40 cents) a day. Indian agriculture became non remunerative, taking the lives of 100,000 peasants during the period from 1996 to 2003, i.e. a suicide of an Indian peasant every 45 minutes. Hence, the rural people from the downtrodden and backward communities and backward regions such as Bihar, Orissa, Uttar Pradesh travel far afield seeking employment at the lowest rungs in construction of roads, irrigation projects, commercial and residential complexes, in short, building the “shining” India. The pull factors of higher wages caused external migration to the Middle-East countries by skilled and semiskilled workers. Migration of professionals such as engineers, medical practitioners, teachers, managers etc. to developed countries constitutes another dimension of migration which we call “brain-drain”. In general we can divide factors causing migrations into two groups of factors: Push and pull factors. In general:

- **Push Factors** are economic, political, cultural, and environmentally based.
- **Pull Factors** are economic, political, cultural, and environmentally based.

**Push and Pull factors**

Push and pull factors are those factors which either forcefully push people into migration or attract them. A push factor is forceful, and a factor which relates to the country from which a person migrates. It is generally some problem which results in people wanting to migrate. Different types of push factors can be seen further below. A push factor is a flaw or distress that drives a person away from a certain place. A pull factor is something concerning the country to which a person migrates. It is generally a benefit that attracts people to a certain place. Push and pull factors are usually considered as north and
south poles on a magnet. Push Factors are: Not enough jobs, Few opportunities, “Primitive” conditions, Desertification, Famine/drought, Political fear/persecution, Poor medical care, Loss of wealth, Natural Disasters, Death threats, Slavery, Pollution, Poor housing, Landlords, Bullying, Discrimination, Poor chances of finding courtship. The pull factors are: Job opportunities, Better living conditions, Political and/or religious freedom, Enjoyment, Education, Better medical care, Security, Family links, Industry, Better chances of finding courtship

MIGRANT EMPLOYEES IN GARMENT INDUSTRY

People have started to across the boundaries in search of better job opportunities. In 2010 there were 200 million global migrant workers and their families. Garment exporters are adopting long run strategies that exploit information to achieve greater sophistication in planning and flexibility in operations to respond quickly to market shifts through migrated workers. The objective is to abbreviate lead times, reduce inventory levels, increase inventory turns and avoid stock outs and markdowns. Migrated workers are right choice to the Garments exporters for establishing their manufacture schedules closer to the selling period based on quick response strategy that links apparel retailing and manufacturing operations to make available the right product at right time.

Interstate migration is a livelihood strategy in India. The garment industry has been able to locate new items which it can sell to totally new markets and this is how the Indian garments will get an opportunity to enter into new markets. The migrated workers have played a vital role in accelerating the production of readymade garments. The migrant workers have identified readymade garments as a thrust area and is providing the support required to give continuous job and social security from this sector. Besides the clear labor advantage, the industry is now fully geared to undertake production and export of all types of readymade garments made of all varieties of fiber. Migrated workers play a pivotal role in Garment industry. Garment Industry is providing one of the essential needs of people, maintaining sustained growth for improving quality of life. It is one of the self-reliant industries, from the production of raw materials to the deliverance of finished products, with substantial value-addition at each stage of processing. This industry is a major contribution to the country’s economy with migrated workers. Migrated workers help to garment industry in India will face intensified competition in both their export and domestic markets.

CURRENT STUDY

Interstate migration is a livelihood strategy in India. Many textile/garment/retail units are dependent on these migrant workers to get their work done with less spending of time and money. This study mainly reflects on the social and economic challenges faced by the employees. The reason for choosing the social and economic challenges is that these issues are to be faced with individual perspectives which depend on the nature of the employees. The study was taken up with the objectives to understand the challenges faced by the employees and to study the consequent challenges faced by the employers. The migrant employees working in a Spinning Mills at Gudalur, Karur were the target population and the samples were chosen conveniently for the study. Primary data is collected by personal interview method whereby an Interview was administered with set of questions related to the study among the 73 migrant employees. The data collected were analyzed manually using correlation analysis to understand the relationship between the various factors used in the study.

FINDINGS

Majority of the employees left their hometown and are working as migrants due to their economic condition. More number of respondents has on an average 5 members in their family. Majority of the respondents have studied below tenth standard very minimum number of migrants have completed 10th standard. Among these migrant employees, it was noticed major portion of them are single both men and women and minor portion of married respondents are male. More number of migrants are from Orissa followed by Calcutta, AP and Karnataka. It was observed that these migrant employees have work experience ranging from few months to few years. Most of the respondents among the sample have migrated first time to this place. Few have already worked in other spinning units in Tamilnadu.
After joining this unit these migrant employees expressed that they are satisfied with their in the current place. Also it was highlighted that two major reasons that made the migrants to stay in this place are the better facilities provided and the high wages paid when compared to their hometown. Majority of them are satisfied with the health and safety measures provided, and they are able to maintain a good relationship with other employees. It was also surprising that comparatively major portion of them is able to manage with the language.

Smoking and chewing pan being a dominant habit among these migrant employees, majority of the respondents spend Rs.10-30 of their earnings on cigarettes for a day, 10.5% of them spend Rs.50-80 and 5.3% of them Rs.80-100 on cigarettes. 50% of employees spend below Rs.25, 25% of them spend Rs.25-50 and 25% of them spend above Rs.50 of their earnings on paan per day. The correlation analysis on the wages earned and the amount spent for their cigars and paan reveals that there is no statistically significant correlation between them and it is inferred that the migrant employees spend their earnings on cigarettes irrespective of their wages earned. This seems to be a critical habit in terms of health of the employees.

Female respondents who have migrated from Andhra Pradesh and Karnataka expressed that they are safe and secured to work because of the facilities provided. They are satisfied with the hostel facilities and health care measures provided. They enjoy doing the work as they have good set of friends irrespective of place, languages, etc that some of them even feel happier than being at their home. They are free to go to their hometown whenever they want without any conditions and restrictions. Very importantly they have admitted that the transparency of the management that they can even quit their job when they are not comfortable in continuing the job. As they are treated in a good manner by both the co-employees and the higher officials, majority of female migrants are willing to stay here and work.

Male respondents who have migrated from Calcutta and Orissa had a good opinion on the facilities provided such as housing along with provision of cooking utensils and gas cylinders so that they can cook the food according to their taste. They have left their hometown and came here because that they don’t have job opportunities at their hometown and also low wages. The salaries of all the migrant employees are deposited in the bank in the name of the employee so that both the employees and their parents can make use of that money when required.

CONCLUSION

Employees migrate from one place to another because of either social or economic reasons and predominantly they move to fulfill their basic needs of food, shelter and clothing. When they are met with these needs nothing else is more important than this, and most of the migrant employees also have the same meaning of livelihood. Though the employers give due importance to the safety and health of women employees’ dissatisfaction among these migrants is always an aspect to probe what could be the other factors contributing for satisfaction. The communication barrier among the migrant employees and the employer is a serious factor to be taken into consideration to get the work done. Management may take serious steps to create awareness about harmful effects of smoking, drinking and use of drugs among the migrant employees which may turn as corporate social responsibility. Employees must be given continuous sessions on managing their salary in a constructive manner and also the importance of saving money. By doing so the absenteeism of employees due to health problems can be minimized by which the company will also be benefited.

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