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Editorial

The present issue consists of seven articles in varied domains of management research. These papers have used different methodologies in arguing their findings. The first article followed the grounded theory approach to investigate the store attributes vis-a-vis assortment policies on decisions taken by small retailers. The second study pertains to the informational efficiency of financial options. Using the event-study technique on Quarterly Earnings Announcements data the study ascertains the speed of price discovery of the underlying assets. The findings have implications for firms that are currently considering hedging alternatives. The third paper picks up a controversial and sensitive topic, sexism in Indian advertisements. Based on a qualitative study among the intended audience sample of this advertisement, the authors came up with implementable recommendations for the advertising industry. Continuing on the theme of marketing promotions, our fourth article is on celebrity endorsements and their impact. Following a detailed literature review with a qualitative study of Indian celebrities and their campaigns, the paper delves into marketing promotion and provide important precursor to future studies in this area. The fifth article is a conceptual piece on the sociology of the internationalisation process currently occurring in the higher education sector. The paper makes an attempt to understand the complex mosaic of societal, technological and material factors that is causing this substantial shift in how we experience education. The paper contributes towards the theory of how 'space' as represented by urban culture, interacts with 'subjects' i.e. human beings, to give way to and even accelerate the process of internationalisation. Sixth article is a case study of Pratham Infotech Foundation and the challenges it faces in its attempt to scale up its operations. The seventh paper develops a survey instrument to capture effectiveness of management in controlling the students in a school. We are sure that you will find these articles useful.

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Small Retailer's Merchandise Decision Making: A Grounded Theory Approach

Surabhi Koul

Piyush Kumar Sinha

Indian Institute of Management, Ahmedabad

Hari Govind Mishra

Entrepreneurship Development Institute of India, Ahmedabad

Abstract

The present study is focused on small retail stores in the Jammu province of J&K and examines the relationship between retailer's perceptions of the trading area, their assortment policy decisions and reported performance levels for a product under FMCG category. The study focuses on the external and internal environment of small stores that affect the decision making of the assortment. Retailers keep only a small range of assortments since market uncertainty is high. The study focuses on the impact of store attributes on assortment policies, controlling for both store space and store location factors. The impact of customer profile and local market environment perceived by small retailers is also analyzed as an important factor towards assortment policy decision. Based on a grounded theory approach, the study argues that four criteria are used by the retailers in selecting products for their stores.

Keywords: Assortment, Grounded Theory, Product Selection, Small Retailers.

1. Introduction

Indian retail environment can be broken into two sectors: organized and unorganized sectors. Organized retailing covers supermarkets, hyper-markets and malls. Organized malls are professionally managed and offer a variety of services and products under one roof, whereas the unorganized retail sector consists of small retail stores which have small store area and are usually family-owned (Ramakrishnan, 2010). The Indian retail landscape has been dominated by small retailers and most Indians prefer to do their household shopping from such outlets. India has the highest retail density in the world and only 4 percent of these outlets are more than 500 sq. ft. in size; almost all are family-owned shops and establishments (Mukherjee & Patel, 2005). This reflects the diversification of small stores in the Indian retail environment. The

consumers prefer them due to a multitude of factors such as locational convenience, credit facilities, easy return and refund facilities, personalized attention, friendly attitude of the retailer, and sales and service assistance. The small retailers have high flexibility in designing their marketing mix according to local consumer needs (Ramakrishnan, 2010). The diversified nature of small retailers is the motivation for taking them as the target context for the current research.

The national portal of Government of India defines small retailers as retailers whose scale of operation is restricted to a small segment of the market and to a narrow range of products (National Portal of India, 2005). They generally hold small stocks of products of regular use. In the Indian retailing scenario, such retailers are very large in number but account for a small portion of the total retail business. The business potential that exists in this segment has begun to interest businesses offering branded products because urban markets have become highly competitive for brands (Burgess & Steenkamp, 2006). Small retailers face a complex and changing environment and this considerably varies from one store to another. Responsiveness to the local market environment is an important dimension of market orientation for small retail operations (Kara, Spillan & DeShields Jr., 2005). According to Reinartz and Kumar (1999), retailer performance depends broadly on retailer (store) characteristics, store merchandising policies and environmental conditions. Important dimensions of the market environment facing a retail store are diversity, uncertainty and munificence.

Although the Indian retail industry has seen large growth in organized retailing, the trademark of Indian retailing, the small shops with high levels of personalized service, is making shoppers reluctant to depart from traditional ways of shopping (Sinha & Banerjee, 2004). The paradigm shift in consumers' socio-economic, demographic and geographical proportions are driving traditional retail

¹ Corresponding Author

towards an organized retail format aimed at catering to the evolving needs and tastes of discriminating consumers. Changing consumer behavior of rural customers has led marketers to increasingly look to ventures in rural areas of India. This is a big challenge for the small retailers as they now have to compete with the organized retailers in terms of products and services provided. The upcoming retailers have forced the existing small retailers to consider reforms in retailing to attract more customers and thus maintain a profitable business. For this, the small retailers need to think about the assortments and varieties they offer within a product category. Research in western countries posits that small retailers are important because they make products available, offer customized services, credit facilities, and give importance to personal relationships (Megicks & warnaby, 2008; Smith & Sparks, 2000). In a similar direction, Sinha and Banerjee (2004) report that traditional retailers in India have a huge potential and attract customers due to their flexibility in providing retail facilities. The current research adds to existing research on merchandise selection decision of retailers in small retailer's domain in India. It explores small retail stores-related factors that can help retailers improve their competitive position. The purpose of the current research is to explore small retailers' merchandise selection criteria, i. e., new product selection criteria, and the product retention criteria.

2. Literature Review

2.1. Small retailers in India

According to Venkatesh(2008), there are about 12 million small stores spread over 5,000 towns and 600,000 villages across India. These account for more than 70 percent of grocery sales in India (Jones, Lasserre & Gehlen, 2005) and play a strategic role in Indian retail business (Ramakrishnan, 2010). So the importance of small retailers cannot be neglected in the Indian retail environment. The number of constraints to compete with other retailers is also high for the small retailers. So they need to evaluate several factors before adding new products to their product list. In the same context, the first study was published by Grashof (1970), which addressed two primary decisions affecting the mix of products carried by a retail chain. These were related to, (a) the addition of new items, and (b) the deletion of items currently stocked by the chain. But in the next 30 years, very few follow-up articles on this topic have been published (Kaufman et al., 2006; Rao & McLaughlin, 1989; White, Troy & Gerlich, 2000). The

research on product adoption by retailer has been dominated by large retail formats. However, the topic of product adoption should be observed from the point of view of small retailers. For selection of products, these retailers are not only dependent but also make decisions completely on the basis of what they believe will sell in the market. They have a high degree of freedom in determining the elements of the marketing mix. They can adopt appropriate mechanisms to tailor fit the offered products that are in line with the need and demand of the target market customers (Ramakrishnan, 2010).

Earlier research in the area of product selection have focused on main factors considered by a retailer for addition of new products such as, consumer demand, promotional programs of suppliers, rate of movement, competitive reaction to new item, test market information and estimated sales as projected by the supplier. Also, these studies were in the context of organized retail stores. Due to uncertain and heterogeneous customer preferences, the variety seeking behavior of consumers and competition between large numbers of retailers etc. product selections has gone up in all merchandise categories. With fixed shelf space, increase in variety means less store space for each product, which translates to higher operational costs due to either lower availability or higher replenishment costs. As a result of excessive levels of variety, many retailers are switching to a strategy called "efficient assortments" which primarily seeks to find the profit maximizing level of variety by eliminating low-selling products (Kurt Salmon Associates, 1993).

It is a question of how retailers of small retail shops develop assortments and stock policies in response to the market environment, which may or may not necessarily follow operational models better suited to larger stores. Even though there is limited work by analysts of the assortment planning of small retailers, the "heterogeneous nature of the marketplace demands that retailers tailor their assortments to local tastes . . ." (Mantrala et al., 2009). So, the small retailers need to select products for their stores keeping several factors in mind. The current research is a step towards finding the determinants of product selection and product retention.

2.2. Merchandise decision making

For a retailer, merchandise decision making mainly includes two decisions viz., which new products to be included in the assortment, and which products to be retained or deleted. Assortment is traditionally defined as

the number of products offered within a single product category (Levy & Weitz, 2001). A product category is defined as a group of products that consumers perceive to be interrelated and/or substitutable. Retailers need to select products keeping a tradeoff between customer expectations and retail profits. Retailers attempt to maintain a balance between variety (number of categories), depth (number of stock-keeping units – SKU - within a category), and service level (the number of individual items of a particular SKU). With appropriate tradeoffs between variety, depth and service levels, retailers hope to satisfy customers' needs by providing the right merchandise in the right store at the right time. If the retailer fails to provide the expected assortment demanded by customers, it may cause loss in both current and future sales. But the retailers in rural areas tend to be different from those in urban areas. Increasing market uncertainty and rapid technological development present challenges to new product marketing (Calantone & Benedetto, 2007). Many manufacturers sell new products to consumers through retail channels, which makes their success depend on retailer acceptance and support (Hultink et al., 1999; Kaufman et al., 2006). The retailers need to select products for their stores from the vast array of new products across multiple categories offered by the manufacturers (Kaufman et al., 2006). In case of small retailers, they need to select products from those being offered by the wholesalers.

The small retailers are predominantly small in shop size and are dependent on a long chain of intermediaries for getting their supplies. So the problems faced by these retailers are much larger. As the environment in which these small retailers operate is difficult and full of challenges, introduction of new products generally lead to a change in the retailer's assortment, not only due to the addition of a new product, but also because, given limited shelf space, a weak performing product will most likely be dropped. Substitution generally takes place within but not across categories (Kök, Fisher & Vaidyanathan, 2009). Previous researchers have investigated how retailers evaluate selection of products through examinations of category and shelf management (Dreze, Hoch & Purk, 1994), assortment optimization (Boatwright & Nunes, 2001), product attractiveness (Rao & McLaughlin, 1989), inter-firm relationships (Kaufman et al., 2006), and introductory slotting allowances (Lariviere & Padmanabhan, 1997; White et al., 2000). However, limited empirical research has examined the determinants of

retailers' selection of new products and retention of existing products in the small retail environment.

3. Research Methodology

As discussed earlier, the studies related to small retailers are limited and those related to Indian context are scant. So, a qualitative technique of data collection was preferred, based predominantly on the concept of grounded theory. Data for the study was systematically collected and analyzed to generate a theory grounded in the data. The grounded theory method is particularly employed for studying a new phenomenon or for replicating a study in new settings to understand the peculiarities of the context under study (Glaser and Strauss, 1967). A grounded theory is derived inductively through the systematic collection and analysis of data pertaining to a phenomenon (Strauss & Corbin, 1998). Very few studies were found in the field of assortment planning and category management, which have applied grounded theory. One such study is of Gruen and Shah (2000) which, in the research of factors affecting category management, developed a theoretical model using Glaser and Strauss' (1967) "grounded theory" method, similar to that used by Manning, Bearden and Rose (1998).

Since the focus of the current study is on merchandise selection criteria of small retailers, we have adhered to the definition of small retailers explained in the introduction, and interviewed small scale retailers from rural and urban regions of the Jammu province of Jammu and Kashmir (J&K), India. Semi-structured indepth interviews were conducted for collecting data. Each interview was conducted by the authors in Hindi and later verbatim in converted to English. Interviews were conducted till it was felt that data saturation has been attained. Data saturation means that with the collection and analyses of additional data, no new concepts could be developed and additional data may not alter conditions, characteristics or consequences of the existing categories (Strauss & Corbin, 1990). The interview was started by seeking the consent of the retailers to participate in the discussion. All the interviews were conducted in person and at the retailer's shop, mostly in the afternoon or morning when they were willing to participate in the discussion. Also, in response to queries on the discussion, the retailers were informed that the objective of the study was to understand how retailers decide which products to keep in their store. Wherever required, they were asked to cite examples and cases to bring out the dimensions. The average length of

interview was approximately 35 minutes, the longest one lasting for 1 hour 12 minutes. The interviews were audio-recorded and yielded about 102 pages of verbatim. The interview sessions were stopped at 24 interviews as it was observed that the data collected from the respondent were turning out to be redundant.

This qualitative survey helped generate research dimensions which, in turn, led to model development (Creswell, 1998). The respondents of the study were small retailers who typically sell FMCG products from stores, better known as Kirana stores. The study typically focuses on the study of the environment in which the retailer operates. Hence the socio-demographic strata of the customers residing in the locality were also examined from the retailers' point of view. Small retailers in villages and towns in three districts of the Jammu Province in J&K were selected for the study. These retailers form a suitable group because they served the population of small towns in rural and urban areas. The areas in Jammu province of J&K were selected on the basis of convenience from Census 2011 (See Table 1). In all, 24 interviews were conducted, out of which 21 retailers were males and 3 females. The small stores that were covered had an average size of approximately 100 – 200 square feet. The stores had multiple goods, specifically focused on foods and grocery products. A wide range of products such as FMCG, cereals, vegetables, footwear, stationery, tobacco products, electronic items and mobile recharge coupons were sold by these retailers. A few of the retailers typically sold cosmetic and stationary goods. Each village had multiple shops which were generally located in different parts of the village and served a faintly distinct area. A unique feature of the small retailers was that the retail shops were generally located within household premises.

4. Data Analysis

The recorded interviews were first converted into a transcription which, in turn, was subjected to analysis based on grounded theory (Glaser & Strauss, 1967). Three independent investigators read the transcriptions. They conducted open coding, generating 225 statements that showed the general behavior of small retailer's assortment selection criteria. The general statements were thereafter searched for in existing literature on the subject in order to identify whether the codes could be related with any theme. As work on small retailers is very limited, reference of assortment planning with respect of large retailers was taken from existing literature. Thereafter a round of axial

coding (Strauss & Corbin, 1998) was conducted to sort the descriptions into 79 first order statements. The available 79 were further analyzed to create 16 second order themes that described major themes emerging from the interviews. Further, these 16 second order themes were sorted to combine and form five final categories. The details of the sub-themes, concepts and categories have been shared in Table 2. The five categories developed from axial and selective coding served as the major constructs of the small retailer's assortment planning criteria based on external environment.

The current research divides the retailer's criteria of deciding merchandise for the store into external and internal factors. This study considers external environmental factors, which are not directly in the control of the retailer but are important when deciding the store merchandise. Examples are, the store's trading area and customer profile. Internal factors are factors under the retailer's control, such as store attributes, retail profitability and relationship management.

5. Findings

5.1. Trading area and retailer merchandise selection

Organized retailers usually operate in urban areas where population density is high and consumer shopping behavior is heterogeneous. But small retailers operate in areas of low population density where consumer shopping behavior is more homogeneous. As small retailers in India are present in both urban and rural areas, the sample of the study was also diversified to urban and rural domains. Demographic factors such as, shoppers' income and age, vary across each trading area in urban and rural areas. Heterogeneity provides the opportunity for experimentation with retail assortment; so the retailers need to keep higher diversified assortments. The construct of trading area has three sub-constructs: Competition, Market Uncertainty and Store Location. The findings of the relationship are explained below through descriptive statements of the respondents.

Competition

"I have many stores in the locality which sell the same products which I do... As the numbers are increasing my overall sales get affected."

Although the level of competition within the locality is high, retailers perceive that other retailers selling the same goods will have their own targeted customers while they have theirs. Most of the retailers perceive no direct

competition with other retailers of the village. Generally, if a product is not available with a store, the customer swaps the retailer; otherwise the customer would not leave his retailer. These retailers feel that competition will be present in terms of increased number of other retail shops, but they can retain their customers just by having their preferred goods. With increase in the number of retail stores, the customers get distributed and this affects overall sales. They add new goods to their stores if the competitive retailer nearby has added it to his/her store.

"We do not have any competition with the big retailers in the city area because the brands we sell are different and our customer demands are different."

These retailers believe that organized retailers are not a threat. They consider that these big retailers sell higher quality products and have money to run their business on big platforms whereas the small retailers have fixed customers and carry fixed merchandise. The scope of goods to be carried in the store is limited to the customer preferences and local competition.

Store location

"My store is located in the rural area so the customers are limited to my locality. Moreover I have to travel large distances to reach to the supplier."

These retail stores are located in the rural areas. These areas have localities of poor or lower middle class people. People have two-wheeler vehicles for transportation. The retailers have to travel to the city to reach their suppliers. Hence, they usually purchase a stock for more than a week so that unforeseen needs of the customers can be catered. The store is usually surrounded by small residential houses. The Indian traditional retail store format is dominated by small stores located at the front portion of the house in a small room, less than 50 sq. feet in area.

Market uncertainty

"We have a small retail store with fixed customers, so we have to know what customers will buy. The customers are fixed but the demand pattern fluctuates so we have to know which brands to keep and in how much quantity".

"We try to know what products and what specific brands have the highest sale in the locality, then accordingly we order it to the supplier on fixed basis. Sometimes a mid-day demand arises, and then the supplier sends the stock at my store only."

The most important factor in assortment selection is to know the market dynamics i.e., the demand pattern.

Nearly all the retailers emphasized that the stock to be kept is mainly guided by the purchasing pattern of the customers. But the uncertainty of sale is the highest in case of new products kept in the store; so very few such items are kept. Until the customer demands, the new product is not added in the stock. Sometimes, if the product or the specific brand does not have a distinct demand pattern in the market, chances of dropping the product from the assortment list are very high. Many retailers were reluctant to add any new product, as they feel it is a risky affair. The retailers emphasized that demand and customer choice for a brand are the main criteria of product selection.

5.2. Customer profile and retailer merchandise selection

Branded products are now sold in India through both traditional and modern retail outlets. Brand visibility has increased through multiple advertising channels such as, television, news papers, radio and lifestyle magazines. So, due to increased customer brand awareness, retailers have to put in great efforts to offer products that satisfy customer demands, attracting customers to the store. Moreover, employment opportunities for people have increased, which aids even rural customers to buy new products on a regular basis. Some of these areas lack market information, so the product consumption is relatively stable over long periods. Retailers in these areas do not show product diversity in their assortments. Rather, the assortments are typically based on customer demands and preferences. The retailers need to analyze customer demands depending upon the type of market to be dealt in. The construct of customer profile is formed using the three themes which are, market diversity, customer preferences and social strata.

Market diversity

"I cater to all types of communities. I have Hindu, Muslim, Kashmiri pundit and Dogri customers. The village does not have a distinct market place; rather it has small retail stores which are built inside the house of the retailer. People live a simple life style."

People living in the locality have a simple lifestyle. They are mainly engaged in agricultural practices or have their own small businesses. These customers prefer low cost brands. Moreover, the exposure level is low. So brand awareness among them is low. People belonging to various communities like Dogras, Kashmiri pundits, Hindu, Muslim live in the villages. Although their brand

preferences are similar, retailers have to keep certain community based products at the store. For instance, during Shivratri festival, when Kashmiri pundits purchase certain dry fruits and other Pooja accessories, the retailer has to keep an inventory of this stock depending upon the demand pattern. Some of the retailers emphasized that their major customers come from the labor class (migrated) people who buy low price products but in bulk quantities.

Customer preferences

"I select products for my store based upon what customers demand. If the product is not available at my store, I tell customers to wait for some days and I get it for them. The brands which are advertised on TV or newspapers sell more than the non-advertised brands. When a supplier comes at my shop with a new brand, I usually keep it only when its advertisements come on TV."

Retailers would keep well-known brands in their stores. They keep both national as well as local products in the store. Because of price constraint, customer preferences vary from low priced products to high priced products. These customers do not differentiate brands in terms of national, international or local; rather, they buy products either on the basis of price of the product or awareness of the brand. Retailers stock only such products that have high customer preference. Most of the customers prefer small packaged products, so the quantity of units stocked for small packaging is more than those for large packaging. Many retailers shared the fact that when they come across a brand that they were not aware of, but enjoys clear demand in other markets, they are interested in stocking that brand.

Social strata

"I cater customers from all the religions.... The customers from poor and lower middle class families come to my shop."

The customers living in the locality belong to rural areas. They have low living standards due to monetary constraints. Very few people own car but some people have two wheeler transport vehicle. The customers belong to poor or lower middle class background. Retailers have to manage their merchandise accordingly. Products of lower price as well as high range are to be kept. As the customers are rigid in their preferences, the stock of preferred brands is to be maintained always, otherwise the customers will swap to other retailers.

5.3. Relationship management and retailer merchandise selection

In the current era, relationship management is predominately used in the context of technology. However, in case of small retailers, where use of technology is not evident, retailers use the traditional approach of maintaining relations with the third party. The business environment for small retailers is different from those of large retailers in terms of the technology, infrastructure, customers as well as the merchandise they carry. In terms of product selection, the retailer's relationship management with the supplier plays an evident role.

Traditional retail stores have been providing certain extra facilities to the customers in order to have an increased level of satisfaction, leading to retention of customers. These facilities could be, providing goods on credit, home delivery of goods or providing scope for bargaining. The construct of relationship management was formed with four sub-constructs: supplier, credit facility, buy back facility and replacement facility.

Supplier

"I have a fixed supplier since I have opened my shop. I trust my supplier in terms of quality of the product and timely delivery of goods. In case of shortage of goods, he sometimes delivers goods at my store."

Many of the retailers emphasized that they have a single supplier from whom they procure goods. They go to the supplier on a weekly basis and buy goods. In case of a sudden demand, the supplier delivers goods at their stores. The relationship between the supplier and the retailer is healthy and trustworthy. Sometimes the retailer adds a new product on the recommendation of the supplier. The unsold products are also sometimes taken back by the supplier. The supplier helps the retailers in terms of providing higher margin goods. So, by building a trust worthy relationship, both the retailer and the supplier ensure a profitable outcome.

Credit facility

"I usually keep new products in the store when they provide me it on credit. I tell the supplier I do not have the money to keep something new, so I will pay you when my product gets sold."

"I also give goods on credit to my customers, as they are my regular customers and live in my locality."

Most of the retailers said they only adopt a new product provided they do not have to pay the amount to the supplier up front. The retailer pays the amount when all the units are sold. Hence, a credit from the supplier helps the retailer to add a new product to the store. If the demand of the product seems increasing, the retailer buys more stock from the supplier. The retailer also provides his/her customers goods on credit facilities. The retailer provides goods on credit to customers who are regulars at the store and buy goods in bulk. This helps in building a strong relationship between the retailers and the customers.

Buy-back facility

"When I add a new product in my merchandise, I tell the supplier to buy back all the unsold goods.... sometimes when the product turns out to be defective, I buy back the product from the customer."

Another very important factor that influences retailers in deciding the product is the buyback facility from the supplier. This facility helps the retailers to sell back all the unsold goods to the supplier. This facility is helpful to the retailers because, customer preferences being restricted, it is a risky affair to add a new product. But if the supplier gives a buy back facility, the retailer can easily add a new product in his merchandise list. Also, these retailers have limited space in the store and rarely have a stocking place. So when stock is piled up, it gets difficult for them to manage other products. Hence this facility helps them reduce their stock piling cost. Nearly all retailers prefer a brand with buy back facility.

Replacement facility

"I keep new brands only if the distributor offers replacement. This helps me to be on the safer side of the risk."

Nearly all retailers were also willing to stock a brand provided the supplier is ready to replace the unsold stock or replace defective stock. When a product is new, customers are not aware of it. So in order to minimize the risk, retailers want suppliers to offer a replacement facility. This opportunity is also beneficial for suppliers because, instead of giving products on credit basis, they would like the retailers to buy the product. If the product does not sell, the suppliers would take it back. Some retailers also mentioned that they take a new product only when the supplier is known. The retailers also offer replacement facility to the customers. When the product is defective, the retailer replaces it with a new one. In turn, this

defective product is replaced by the supplier. A retailer mentioned the example of a defective pack of 100 ml of shampoo (Brand X). He said that when he visits the supplier next time, he will give it back to him and get a new bottle.

5.4. Store attribute and retailer merchandise selection

Store size

"I have a small shop of about 100 sq. feet. I have placed shelves on all three walls and distribute all the product categories accordingly."

Almost all the retailers interviewed had small shops, about 50 sq. ft. to 100 sq. ft. in area. The retailers had placed wooden shelves on three walls. The categories of the products were divided accordingly. Nearly all stores had Over The Counter (OTC) facility. A few retailers had refrigerator provided by the supplier or company distributors. The retailers used hangers for display of products. The entire inventory was maintained inside the store; very few retailers had separate area for stocking of goods. Some retailers had a wooden plank at the center of the store where they displayed grocery items. Due to the small size of the store, they could not place the products category wise. Space management was rather haphazard. High-demand products were kept at the front and low-demand products were on the back shelves. Products preferred by children were displayed on the counter.

Product categories

"I sell nearly all the grocery items, cosmetic items and even stationary items for kids."

Products being offered by these retailers were not confined to grocery items but included certain cosmetic products like hair oil, hair shampoo and face cream. They also kept stationary items for children. As the demand for stationary items was not frequent, these items were placed on the back shelves. Brands for each product category were varied on the basis of customer preferences. Nearly all possible sizes of packaging of brands were kept in the store. The retailers were not willing to increase product categories due to space constraint and also due to customer preferences.

Ownership

"I run the store all alone and do not have any sales person."

The stores do not have sales persons as the retailers believe that they can handle it all alone since the store is

small. Some retailers have been running the stores for 20 years or more. The retailers do not want their children to man the stores in future as they aspire to see them in a better business and move to city areas. Even the second generation retailers feel that if they find a better job opportunity, they will leave this profession.

"I want to renovate this store and make it similar to ones in the big cities. I have been to various other cities; the stores there are well organized."

The next generation of the retailers, who want to run the store in future, want to renovate the store, bringing about healthy changes. The level of exposure among the new generation is high. So they want to make changes in the store in terms of assortment and variety of stock. They are also fascinated with the systems at the organized stores.

Shelf space

"I have very low shelf space and the number of products to be kept is large. So I have divided each shelf into sub-shelves. Organization of the products on the shelves is not possible as I am alone at the store managing everything. I cannot waste time in organizing products. Instead, I can cater customers in that time."

Small retailers have very small store area and hence small number of shelves. So shelf space management is a difficult task for them. Moreover, they feel that organization of the products is a difficult and time consuming task. The front shelves are organized and high selling products are displayed on them to attract more customers. The customers rarely enter the store premises; rather, they ask for products from outside the store. Since the owner knows the location of each product, the need for organized shelf placement is perceived to be low.

Retail profitability

In this study, retail margin is defined as the difference between cost price and retail price, an important determinant of a retailer's expected profit (Corstjens & Corstjens, 1995). Retail profitability has been found to be a determinant of selection of product by many researchers. It was important to check the context of retail profitability from a small retailer's perspective. New product entry in the assortment may result in dropping an underperforming product due to shelf space limitations. Therefore retailers are more likely to consider a new product for adoption if the gross margin of this product is higher than the average gross margin for comparable products in the

category. As budgetary constraints are always present in small businesses, adoption of any new product will affect the overall budget of the retailer. Thus he might delete some low performing products from the assortment.

Total budget

"My budget is limited, so I have to think over the addition of any new variety of products at my store. Sometimes I delete those products which don't sell at all, but even if the sale is less, I do retain the product."

Retailers have limited amount of money kept exclusively for the business. So the scope of adding new products is less. However, when any product or brand is in demand from the customers, the retailers have to add it in the store in order to fulfill the needs of the customers. With the addition of new varieties of the product, retailers need to provide shelf space to that product. For that, they often reduce the number of front display SKUs of the less selling products or sometimes totally delete such products from the assortments.

Retail margin

"Although I have to keep all the products which are demanded by the customers, the products that give high retail margin to me are preferred."

"When a customer asks me for a product and doesn't have a specific choice, I usually offer them products that give me high margins."

High retail margin is the basic and the most important factor for any retailer to accept a brand or product variety for the store. Customers who have low brand knowledge usually purchase products based on the retailer's advice. Retailers often offer products to the in customers products that yield a high margin and are more profitable to the retailers. Retail margin of a product also is an important factor in deciding the location of the product on the shelves. High-margin products get front shelf space in the store. One of the key findings of the study is that retailers select products on the basis of the profit they attain from the product. The higher the retailers' profitability, the better is the chance of the product to be selected for the store.

6. Discussion

The current research work is an initiative to understand the drivers of merchandise selection by small retailers. The factors considered by the retailers in selecting merchandise for their store can be seen in Fig.1. The figure explains a three order construct which leads to small

retailers' merchandise decision. The approach of merchandise selection for small retailers is multi-dimensional. The retailers need to consider customer, supplier, environmental as well the profit oriented factors, when deciding the merchandise for the store. These small retailers need to manage their merchandise keeping in view customer demands and preferences. The most basic and important strategy of retailers is to decide the appropriate product assortments for the store. Customers are heterogeneous with some belonging to high economic groups and some to low economic groups. Each of the categories of products that the retailers present in the store is selected on different bases. Products with higher demand and longer shelf life are stocked more as compared to less-preferred products. But retailers have to keep certain level of SKUs of products which have low demand to provide them to customers if there is demand. The stocking criteria of the retailers are also affected by supply from the suppliers. As these retail stores are in the rural areas, they have to maintain a substantial stock of goods. Their suppliers are located far in the city areas, so they have to travel distances to visit them. However, a very important reason for not keeping huge merchandise is that these stores are small in size with low capital investment. The findings are similar to the research by Dholakia, Dholakia and Chattopadhyay (2012). The inventory held by small retailers is small and demand based decisions ensure higher churns leading to better ROI (Return on Investment) over the year. They prefer to stock brands with definite demand rather than those with higher profit margin.

These retailers deal with various socio-economic groups and people of different religions. So they have to cater the needs of all the people living in the locality and thus manage the merchandise they carry. The people have poor background, so their preferences are very rigid. Brand awareness is low among the people, so the retailer has to ascertain the brands that the customers know and keep the same. The retailers maintain a healthy customer relationship and supplier relationship. Facilities like credit, buy back and replacement are offered by the retailers to the customers, and the suppliers to the retailers. Their relationship is paramount. They would provide what customers want and refrain from unknown products which may endanger the relationship. Since they serve a small market and are part of the community, business transactions are shaped by social relations. This relationship is used to assess demand for new products.

Customer relations mean the final word for them. Recommendations of products by suppliers are also a vital input for the retailers. For maintaining a healthy relationship, retailers keep the supplier-preferred products, but with conditions such as, buy back facility or credit facility.

The current research shows that small retailers adopt traditional assortment strategies, which primarily seek profitability. The main focus of the retailers in terms of profitability is to maximize the variety of products in the store to attract more customers by eliminating low selling products. Some of the earlier studies have focused on the importance of profit related variables on retail product adoption and shelf allocation of the products (Chaing & Wilcox, 1997). The construct of store attributes was an important aspect to study as the store features are important in the Indian retail scenario. For small retail stores, space is very limited and it is difficult for the retailers to expand the physical dimensions of the stores. So the total area of the stores remains more or less fixed. Hence, the retailers need to manage their assortments in the given limited dimensions. One of the findings of the study emphasizes that small retailers plan the space requirements for their stores by first choosing the number of categories (variety or breadth), then the space each category requires based on the number of SKUs within the category (depth), and finally the number of units within each SKU (desired service level). It was observed that the small retailers arrange products of similar category together in order to let the customers' shopping experience be more comfortable. In some settings, complementary products are kept together in order to induce customers to go for unplanned purchases. Similar results were given by Mantrala et al. (2009) in their study of assortment planning by small retailers where they mentioned that physical space of the store is directly related to the number of products a retailer will carry.

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Table 1: List of Areas Covered in the Study

Sl. No.	Sub District	Village Code	Name of village	No. of retailers covered
1	Akhnoor	0135	Pallan Wala	2
2	Akhnoor	0158	Muthi	5
3	Akhnoor	0178	ChakDhlan	3
4	Jammu	0148	Jaswan	2
5	Jammu	0154	Phalora Nagbani	3
6	Jammu	0156	Gura Brahmana	3
7	R.S Pora	020	Kadyal	2
8	R.S Pora	024	Nari	4

Table 2: Themes Deduced from Interviews

Sr.No.	First Order	Second Order	Third Order
1.	I observe other retailers in the locality and add products accordingly.	Competition	
2.	New products for my store are selected when other retailers also add it to their store.		
3.	No competition from big stores.		
4.	Competition is just within the locality retailers which sell similar products.		
5.	Competitions from other nearby retailers which also sell the same product affect my overall sales.		
6.	Number of customers coming to my store has reduced due to increase in stores nearby.		
7.	The demand from the customers is never fixed.	Market Uncertainty	TRADING AREA
8.	High demand products are being stocked more.		
9.	Products from the suppliers are bought on weekly basis.		
10.	Products are sometimes bought from the supplier on odd days when uncertain demand arises.		
11.	New products are not added unless I feel there is demand for them.		
12.	Products are added on the basis of customer recommendations.		
13.	Customers visiting are rich as well as poor, so brands are to be managed accordingly.		

Sr.No.	First Order	Second Order	Third Order
14.	Store is located in rural area so the awareness of new products is not much.	Store Location	
15.	Customers are not much aware here, so they listen to my recommendations.		
16.	Some of the customers who buy from this store come by cars, so products of their status are also to be kept.		
17.	Store is in the center of locality, so I get customers from all of the area.		
18.	Each customer has a different demand of brands, so I have to manage accordingly.	Market Diversity	
19.	Upper as well as lower class people come to my store.		
20.	The buying pattern of each stratum of customers is different in terms of the quantity they buy.		
21.	I have to add certain high price brands recommended by certain fixed customers even though demand of such product is low in the locality.		
22.	I carry products for both males and females.		
23.	I keep products of children's attraction near the counter area.		
24.	Uneducated customers recognize products through packaging of the product.		
25.	Due to variation of customer choices, products of national as well as local brands are to be kept in shop.		
26.	Customer preferences are more important for product selection than the margin I gain from products. Customer Preferences	Customer Preferences	Customer Profile
27.	For customer attraction, I keep as many brands as possible in my shop.		
28.	I usually add only those new products that are preferred by customers in my locality.		
29.	Customer recommendations for new product introduction are most important.		
30.	I keep local and national brands as I cater both kinds of demands from the customers.		
31.	Product deletion is not done until and unless the product is totally not in demand by customers.		
32.	In each product category, all possible pack agings are kept at the store as different customer prefers different priced products.		
33.	Sometimes products of low demand are to be included in the store just because a few customers prefer it.		
34.	Through TV advertisements, customers keep them selves updated and demand products of new brands, so I also have to keep myself updated.		

Sr.No.	First Order	Second Order	Third Order
35.	Poor, middle class as well as upper middle class people come to my shop.	Social Strata	
36.	As my store is in rural area, I have to keep local brands based on the monetary worth of people.		
37.	Even if I keep high priced branded products, no one will buy them as people in the locality cannot spend so much on basic utilities.		
38.	People of many religions reside in the locality and I have to keep products for all.		
39.	Labor class people usually buy a lot of products from my shop.		
40.	I have kept some products that are of exclusive use to Kashmiri people.		
41.	I buy goods from my supplier on weekly basis. Supplier RELATIONSHIP MANAGEMENT	Supplier	Relationship Management
42.	The amount of products to be bought within a product category varies with the demand of the product.		
43.	I have a single supplier since opening this shop.		
44.	I trust my supplier to have low defection rate of his products.		
45.	In case of uncertain demand, my supplier takes my order on phone and delivers it to my shop.		
46.	I travel to the city area for buying goods.		
47.	I offer credit facilities to my customers. Credit Facility	Credit Facility	
48.	Whenever I introduce new products to my shop, I take them on credit basis from my supplier.		
49.	Credit facility is my priority.		
50.	Merchandise should be available from a new supplier on credit such that payment will be done only after goods are sold.		
51.	Even known new brands have to be initially stocked on credit basis.		
52.	Products offering buy-back facility are preferred.	Buy Back Facility	
53.	If the product is defective, I replace the product for customer. Replacement Facility	Replacement Facility	
54.	Suppliers provide replacement facility for defective products.		
55.	Retailers are not ready to take the risk of unsold stock. This stock should be replaced.		
56.	Average size of the store is 100 square feet.	Store Size	
57.	Due to small store size, less number of products can be accommodated.		
58.	No extra stocking area. All the stock and goods are placed in the shop.		
59.	Small store size leads to less number of shelves in the store.		
60.	OTC system in the store.		

Sr.No.	First Order	Second Order	Third Order
60.	Product categories related to food and grocery, FMCG, cosmetics and some supplementary products.	Product Categories	Store Attributes
61.	Only variants within each product category that have high demand are kept in store.		
62.	Demand of small packaged products is more in comparison to big packaged products.		
63.	I carry merchandise of general usage.		
64.	On an average, nearly 5-6 yrs have passed since the shop began operating.	Ownership	
65.	No salesman to take care of shop. In case of emergency, family members take care of the shop.		
66.	All the three walls of the stores have shelves on it.	Shelf Space	
67.	I have segmented the size of shelves based on the category of products I carry.		
68.	Based on the availability of shelf space, I decide which varieties to be selected within each product category.		
69.	I have increased the number of shelves at my store.		
70.	The margin I get from each product affects the placement of the product.	Retail Margin	Retail Profitability
71.	When supplier offers high margin products, I often add them at my store.		
72.	When I select my supplier, I keep in mind the profit margin he will give me from each product category.		
73.	My only profit is generated through the margin I earn from non-branded products, so I prefer keeping them at my store.		
74.	Overall business profit should be large enough to accommodate at least my daily expenses.		
75.	Profitability is an important criterion for selecting a product for the store.		
76.	I purchase small stocks of goods due to budget constraint. Total Budget	Total Budget	
77.	A small amount of risk with the purchase is addressable but no huge risks are taken.		
78.	When I started with this shop, I kept few product categories.		
79.	Store size cannot be increased as I require huge money to build a big store and then maintain it.		

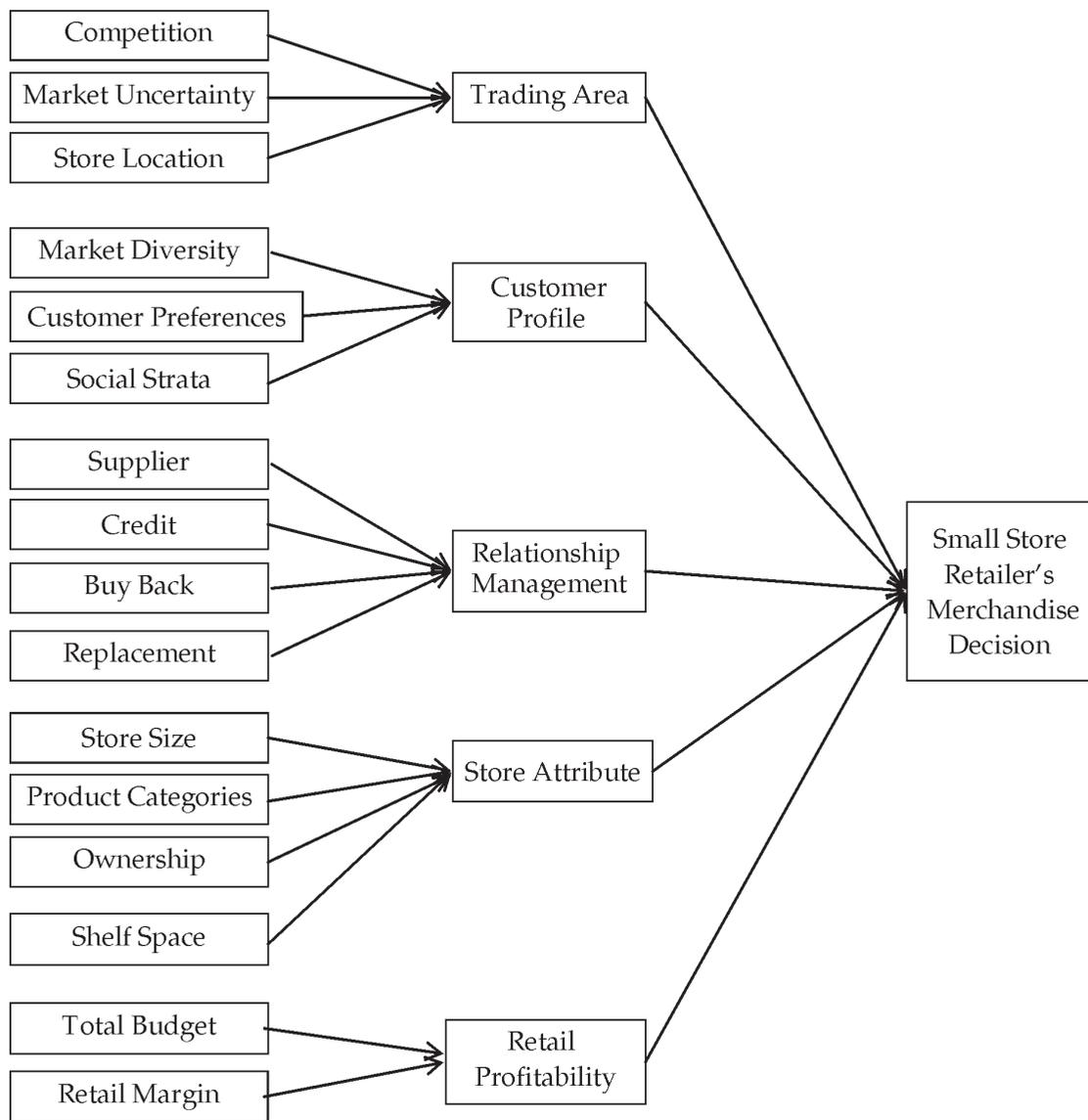


Fig. 1: Theoretical Framework for Small Retailers Merchandise Decision

Surabhi Koul is a doctorate in marketing from SMVD University, J&K. She currently works as a Research Associate at IIM-A. Her area of research broadly covers rural retailing, consumer behaviour and small scale retailers. She has published papers in several international and national journals.

H G Mishra earned his PhD from VBSPU, UP. His professional interests includes Retail Marketing, Rural marketing and Strategic Marketing. Mishra has 11 years of teaching experience. He guided three Ph.D. students. Got published articles & papers in renowned journals such as; Global Business Review, Journal of Business

Management, IIM Journal of Management Science, Journal of Business & Economics, Journal of Management Research. (Email:-govindhari1976@gmail.com)

Piyush Kumar Sinha is a professor in marketing at Indian Institute of Management, Ahmedabad. His papers have been accepted for publication in international journals like the International Journal of Retail and Consumer Services, International Journal of Retail and Distribution; Vikalpa and Decision. He has published a book "Managing Retailing with text and cases" by Oxford University Press. (Email:-pkksinha@iimahd.ernet.in)

Stock Price of Firms around Quarterly Earnings Announcements: Do Optioned Firms Perform Differently compared to Non-optioned Firms?

Abhishek Kumar

Indian Institute of Management, Kozhikode

Abstract

The present paper investigates the beneficial nature of the trading activity in options market and examines whether options enhance the informational efficiency of the underlying asset prices. I conducted an event-study to test the informational efficiency of trading in the optioned firms around the Quarterly Earnings Announcements (QEAs). I compared the information flow from the abnormal returns of the underlying asset prices around the announcements into the market, for the optioned and non-optioned firms. The empirical evidences from this paper showed that the abnormal returns adjust more rapidly for the optioned firms around the QEAs compared to the non-optioned firms. These findings reinforced the hypothesis that the optioned firms disseminate information more quickly (diminishing the impact of QEAs), there by providing new evidences of the beneficial nature of options on the price discovery of the underlying asset prices.

Keywords: Optioned firms, Non-optioned firms, Quarterly earnings announcements, Event-study.

1. Introduction

The information contained in options about the underlying asset returns has gained interest of the searchers for nearly two decades now (Amin & Lee, 1997; Ni, Pan & Poteshman, 2008). If the markets are complete and efficient, then it can be assumed that any (new) information contained in the options is completely worthless for the market participants, since options are derived from its underlying asset. However, if the markets are incomplete, the role of options become more important towards price discovery of the underlying asset prices, as most of the investors prefer to trade in options rather than its underlying asset (Pan & Poteshman, 2006). It happens because options provide a higher financial leverage and lower transaction cost, along with an absence of short-sale restriction to the investors (Mayhew, Sarin & Shastri, 1995; Back, 1993). Also, options allow the investors to trade on the volatility of underlying asset returns. Pan

and Poteshman (2006) and Chern, Tandon, Yu, and Webb (2008) further shown that the trading in options improves the informational efficiency of the underlying stock market, as the investors possessing private or new information about the future stock returns, prefer to trade in the options compared to directly trading in the stocks. These rationalizing arguments lead us to conclude that accessibility of options trading is imperative to encourage the traders to reveal their firm-specific information about its underlying asset prices to the market participants for investing. In this research paper, the focus is therefore to study whether options trading enhance the informational efficiency of the underlying asset market.

The existing literature on detecting the informational efficiency of options trading with respect to the underlying stock market has contradicting results. Amin and Lee (1997) show that there is a strong association between options trading and informational efficiency in the market. They also show that a large proportion of long (or short) positions in the options is initiated just before the earnings announcement and that affects the underlying stock prices. Pan and Poteshman (2006) shown that the equity options with the large volume of trading activity contains information about the future price movements of underlying stock prices. Easley, Hvidkjaer, and O'Hara (2002) study confirms that some investors have private information while trading in the markets, and when these investors trade in the equity market they take risk, because of the (private) information. Also, these investors prefer the options as an instrument for reasons other than just for acting on the private information; such as hedging, better liquidity or ability to trade on the volatility. Chern et al., (2008) find that the announcement of a stock split conveys less new information to the market for a stock that is optioned than for one that is not; there by, indicating that optioned firms have better price efficiency. On similar lines, Skinner (1990) finds a smaller stock price reaction to quarterly earnings news for firms that have listed options than those that do not. Empirical studies indicate

that the stock prices of the firms with options trading react quicker to the QEAs than for the firms without any options trading (Jennings & Stark, 1986; Ho, 1993). Prior researchers suggest that the options market activity discharges a lot of information that is private in nature into the stock market before the QEA and Mergers and Acquisitions (M&A) announcements (Cao, Chen, & Griffin, 2005; Amin & Lee, 1997). Jackwerth (2000) claims that options are non-redundant securities and, in fact, they drive information into the stock prices. Boluch and Chambelain (1997) also suggest that the stock prices are affected by the change in options trading volume.

On the other hand, Bauer, Cosemans, and Eichholtz (2009) show that most of the (non-informed) investors trade in options mainly due to the reasons related to speculation or gambling. This is corroborated with the fact that the traders with information, misuse the improved leverage from the options to speculate and obtain higher returns. Chen, Koutsantony, Truong and Veeraraghavan (2013) document an insignificant relationship between options listings and abnormal returns associated with S&P 500 index inclusions. The results that they obtained questions whether options listings readily enhances the informational efficiency of the underlying equity market. Specifically, as the informed trading is not present in the options market, the listing of options would become meaningless or redundant in increasing the incremental informational efficiency of the underlying equity market. This is in line with Truong and Corrado (2010) who show that options listing alone do not determine the efficiency of the stock price response to earning announcements. Skinner (1990) shows that when the volume of trading is diverted from the underlying stock to the corresponding options, it results in decreased liquidity in the stocks traded, thereby, increasing the volatility of the underlying stock returns.

Gorton and Pennacchi (1993) and Stein (1987) suggest that the informed traders are motivated to trade in the options market rather than trading in the underlying stock market; this migration of the informed traders, also, encourages the migration of uninformed traders to trade in the options. Further more, this release of information by the new traders, results in a destabilizing impact on the prices, and its effect may be strong enough to increase the information asymmetry component of the bid-ask spread of the stock prices, resulting in pricing inefficiency in the market. Mazouz (2004) further shows that this increased spread causes the increase of the bid-ask spread bounce of the

stock price; thereby, increasing the volatility of underlying stock returns. Mazouz also shows that the failure to identify the volatility change may cause return dependencies rather than the volume change; these return dependencies would always occur in optioned firms because of the endogenous nature of some news announcements or market-wide or industry-wide conditions. In a similar study to indicate market inefficiencies that may occur because of options, Nofsinger and Prucyk (2003) show that the institutional investors buy after good news and sell after bad news using options; whereas, the individual investors buy after good news but appear to not trade after bad news at all. It causes biases in the market as the institutional investors' trade in large volume using options which is not the case with the individual investors.

Easley, O'Hara, and Srinivas (1998) also provide supporting evidences, claiming that the changes in stock prices lead to the changes in options volume, and there is no information flow from the options trading activity towards the underlying asset returns. However, when they categorise the options trades on the basis of positive and negative news, they find that the stock prices are dependent on the volume of options traded; thereby, indicating that the options cannot be seen as redundant securities. I, there by, find mixed evidences in the literature on the role of options in holding the information that can be transmitted into the stock prices. According to Chakravarty, Guen, and Mayhew (2004), the information contained in the volume of equity options is reflected in its stock prices; therefore, the publicly available information affects the future stock prices allowing the traders to predict the stock returns more precisely. Kothari and Sloan (1992) designs a framework that permits an examination of how well the current stock prices predict the future earnings, and hence, provides a direct impact of trading in options on the stock prices in the equity market. Their framework explains the possible effects of options trading on the price-earnings' lead-lag relationship; that involves the impact of the introduction of options listing, the cross-sectional impact from options listing (firms with readily available options trading versus firms without available options trading) and the impact of options trading volume within a sample of firms with available options trading.

In this paper, to examine if the options provide more informational efficiency to the underlying equity market,

I compare the optioned and non-optioned firms, simultaneously. To analyse this notion of informational efficiency, I turn to conducting an event-study approach by evaluating the effects of Quarterly Earnings Announcements (QEAs) on the optioned firms with respect to the non-optioned firms. I look into whether the firms with options trading behave differently compared to the firms with no options trading. The premise of the study is; (1) that the options provide means by which more and better (positive and negative) information come into the market, (2) that the stock prices would adjust more quickly to the QEAs, maybe before the earnings announcements also, and (3) that there would be less asymmetry in the information delimited in optioned firms compared to the non-optioned firms.

Amin and Lee (1997) claims that a large amount of new trades are initiated in the options prior to the QEA of a firm. As, the options offer the traders an interpretation of the price discovery of stock and the risk associated with them in the market, options are often a very good predictor of the risks that investors hold because of the underlying assets' future price movements. Many researchers consider the informed traders as an important source of information regarding the returns, risks and sentiments of the trader's stock preferences. When an informed trader trade in the options, the stock prices quickly incorporate any information, there by eliminating the possible arbitrage opportunities. The readiness of options trading is likely to inspire the traders to disclose information about the firms' stock prices for investing in them. Thus, the availability of options trading should reproduce QEA information about the future stock prices of firms with available options trading compared to the firms with no options trading. Therefore, I use an event-study methodology to find if the firms with options trading disseminate both the public and private information about the QEAs into the stock prices, quicker, compared to the firms with no options trading. Altogether, the objective is to show the various distinctive ways in which the trading in options increases the informational efficiency of the underlying asset market. And it is examined by considering the difference in magnitude of the excess abnormal returns surrounding the QEAs for the optioned firms with respect to the non-optioned firms.

2. Data and Sample

In this paper, I use the daily options trading data on the stock and index options published by the National Stock

Exchange (NSE), India from 1st January 2009 to 30th April 2014. Since, the larger expiry options are not much traded in the market, the study uses the options data equal to or less than three months to expire. These are the European options and hence no uncertainty is introduced by an early exercise. The data on the prices of stock and index options is collected from the National Stock Exchange (NSE) website. The closing prices are used instead of the bid-ask prices of options, since they are a more relevant reflection of the current options prices than the bid-ask quotes (Liu, 2007). All the stock options and index options selected for the analysis are traded only on the NSE, and they mature on every last Thursday of the month in which they are due to expire. The daily stock returns data is obtained from the Centre for Monitoring Indian Economy (CMIE)-Prowess 4.14 database. The Prowess database provides data on the QEA dates of individual firms used in the analysis. The dates for a sample of these firms are verified manually by checking the firms' announcement dates from its website separately. The effective announcement dates for a sample of firms is also verified from the NSE, India website. The reasons for any irregularities in the dates are checked through news sources like 'The Economic Times' and 'Money Control'. Subsequently, I combine the firms' options price, stock price and volume data with the QEA dates.

For the event-study, I analyse the QEAs for the firms listed on the CNX500 as on 30th April 2014. I have used a filtering criterion on the CNX500 firms, to only select the firms that are consistently trading on NSE for the past five years from the date 30th April 2014. It is done so that each firm in the analysis would have at least 20 QEAs for analysis. If this filter was not employed, then some biases would occur because of less QEAs analyzed in certain firms and more QEAs analyzed for other firms. It also solves the purpose of standardization of the cross-sectional and time-series data points. And helps in calculating the abnormal returns around the QEA dates. Furthermore, the changes resulting solely due to the QEAs are studied uniformly to avoid any other effects that may contaminate the results. After applying the filters and data cleaning procedures (as stated above), the sample is reduced to 431 firms, out of 500 firms at the beginning. In this sample, 124 firms are optioned, across the time period of analysis and rest of the firms are non-optioned. The control variables data is obtained from the CMIE-Prowess 4.14 database and the Reserve Bank of India (RBI) website. The riskless rate data required comes from the daily listed

closing price of 3-month MIBOR rate available at the RBI website.

3. Effects of the Quarterly Earnings Announcements (QEAs)

The significance of options trading on the underlying asset market is established in the literature, but any generalization as to whether the optioned firms have a better information assimilation and contribute more towards the price discovery compared to the non-optioned firms, needs further consideration (Easley et al., 1998; Pan & Poteshman, 2006). The literature shows that the options contribute to the price discovery as they allow the investors to align their strategies with sign and magnitude of their information in a better way compared to the stocks (Johnson & So, 2012). Understanding how and why trading in options affect the price discovery differently compared to directly trading in the underlying asset, becomes essential for understanding the impact of external (public) information inflow (for example, earnings announcement).

To compare the optioned and non-optioned firms with each other in regard to better price discovery, I looked for a certain news event that conveys information about the firms' stock prices in the market. I selected the Quarterly Earnings Announcements (QEAs) as the news events to compare their effects on the optioned and non-optioned firms. I used the QEAs for the analysis because they are the regularly publicized announcements, and also because studies in the literature have shown that the significant positive abnormal returns around the periodic news announcements (QEAs) occur that are informative about the firms' stock prices (Ball & Kothari, 1991; Anilowski, Feng, & Skinner, 2007). Cohen, Dey, Lys, and Sunder (2007) show that it happens because the investors holding these securities (around the QEA) must be compensated for the 'disclosure risk' incurred when the valuation relevant information is expected to be released. Campbell, Lettau, Malkiel, and Xu (2001) show that with time there has been an increase in the earnings announcement period return variances. One of the most persistent anomaly found in the literature with respect to the earnings announcement is the post-earnings-announcement drift (Zhang, 2008). Where by the stock prices continue to drift for a long period after the earnings announcement is made. Several factors like the greater news inflow, the increased noise trading, the increased dispersion in analyst forecasts and the uncertainty associated with

announcements, contribute towards the increased variances around the QEAs (Campbell et al., 2001; Rajgopal & Venkatachalam, 2005). All these factors are supposed to increase the uncertainty around the QEAs, and are likely to result in the announcement-period premia. This inference is not surprising as an important valuation implications of the earnings changes and the rich information set are most of the times accompanied around the QEAs.

In the seminal paper, Kothari and Sloan (1992) using their 'price-earnings relation framework', show that the earnings is an important factor driving the information into the stock prices. They also scrutinize the future earnings predictability fixed in the current stock and options prices, and offer a direct proof that the investors with private-information prefer to trade in the options. In this manner options increase the informational efficiency of the firms' stock prices. Ho (1993) also established a relationship between options trading and underlying stock price response to the QEAs, but on a shorter interval of time. Studies in the literature have also linked the impact of high volume of options traded around the earnings announcement on better price discovery. Amin and Lee (1997) shows that the volume of options traded in the period prior to the QEA is predictive about the succeeding earnings information. Jennings and Starks (1986) show that the underlying stock prices of the optioned firms adjust more quickly to the QEAs than the prices of the non-optioned firms.

In a comparable research, Roll, Schwartz & Subrahmanyam (2010) identifies that the companies with greater options trading volume have higher values of Tobin-Q, and conclude that the informational efficiency in the equity market is dependent on the options trading. Cao et al., (2005) suggests that the options command disparity in the period prior to the take over announcement, and the traders can forecast the effects of the announcements on the stock prices. If the options trading exposes the informed traders by providing ability to other the traders to trade on the incremental information about the future earnings beyond what is available to the public, then it should also improve the predictions of future earnings. Truong (2012) identifies an inverse relationship between new information disclosed by QEAs and options volume. Now, whether the information efficiency increases with higher volume of options traded, or whether the optioned firms with higher volume of options traded show less excess abnormal

returns close to the QEAs, is beyond the scope of this study. In this study, I restrict myself to address the question; whether being the optioned firm enhances the firms' informative efficiency around the QEA compared to the non-optioned firms.

In this area of research, Holden and Subrahmanyam (1994) claims that when the traders having access to the information (private) trade in the options rather than the stocks, the markets assimilate such information (private) much quickly, and the prices regulate accordingly. If this happens then all the information significant to the QEAs would be integrated into the stock prices in a much faster manner on the date of announcement or even before the date of the announcement. Therefore, for the optioned firms, any (private) information will be unified into the stock prices in a much faster manner compared to the non-optioned firms. Altogether, as the options trading assimilate the private information about the earnings into the stock prices more quickly, the announcement becomes less important to the market. As a result, the firms having options trading must also exhibit a lesser variance around the announcement dates. The stock prices would regulate more rapidly to the addition of new information from the QEAs because of the firms being optioned. Hence, I propose that, the prices of optioned firms adjust quicker to the earnings announcements than the non-optioned firms; and the options market enhances the efficiency of the underlying equity market. To study this premise, I devise an event-study methodology to study the abnormal returns around the QEAs for the firms that are optioned compared to the firms that are non-optioned; and address the following question:

- Do the stock prices of optioned firms adjust more rapidly to the QEAs compared to the non-optioned firms

4. Methodology and Research Design

I examine the empirical question as to whether the abnormal stock returns of the firms that are optioned adjust quicker to the QEA than that of the non-optioned firms. Specifically, I examine the excess abnormal returns close to the announcement and check whether they are statistically different from zero. A similar methodology is used in Chen et al., (2013) for studying the impact of index inclusion on optioned and non-optioned firms. Chern et al., (2008) also used abnormal returns to study stock splits announcements. For the analysis, the trading day of the event of the QEA occurring is set as 0. I calculate the expected return as the average of the returns in the day

interval ("64, "15) prior to the QEA, to determine the pre-earnings announcement expected returns on the event day 0. It is required that a firm must have data for more than 90 days prior to the QEA. is the return of the firm *i* for the day *t* between "14 to "1 days before the QEA. Pre-earnings announcement abnormal returns for each day *t* before the *z* QEA of the stock *i* on the event day *t* is defined as:

$$Prer_{izt} = r_{izt} - E[r_{izt}]$$

$ApreR_{iz}$ represents the cumulative average pre-earnings announcement abnormal return of a stock for a particular QEA *z* for the event period from "14 to "1 days. It is the equally weighted arithmetic mean of the abnormal returns where *n* is the number of days during this period:

$$ApreR_{iz} = \frac{1}{n} \sum_{t=-14}^{-1} Prer_{izt}$$

I estimate the expected return as the average of returns in the days interval (+7, +20) post QEA to determine the post-earnings announcement expected return on the event day 0. is the return of the firm *i* for the day *t* between +1 to +6 days after the QEA. represents the post-earnings announcement abnormal returns for each day *t* after the *z* QEA of the stock *i* on the event day *t* and is defined as:

$$Postr_{izt} = r'_{izt} - E[r'_{izt}]$$

$ApostR_{iz}$ represents the cumulative average post-earnings announcement abnormal return of a stock for a particular QEA *z* for the event period from +1 to +6 days. It is the equally weighted arithmetic mean of the abnormal returns where *m* is the number of days during this period:

$$ApostR_{iz} = \frac{1}{m} \sum_{t=1}^{6} Postr_{izt}$$

EAR_{iz} represents the excess abnormal return of stock *i* for a particular QEA *z*, and is calculated by subtracting the cumulative average post-earnings announcement abnormal return and the cumulative average pre-earnings announcement abnormal return:

$$EAR_{iz} = [ApostR_{iz} - ApreR_{iz}]$$

EAR_i represents the cumulative average excess abnormal return of a stock *i* for *Z* number of QEAs in our data sample period is:

$$EAR_i = \frac{1}{Z} \sum_{z=1}^Z EAR_{iz}$$

I also perform the robustness check by constructing a market model for calculating excess returns with respect to the market for all the firms using the Capital Asset Pricing Model (CAPM). r_{izt}^m is the return of the firm i for the day t between “-20 to +20 days for the announcement made on day 0 for the QEA z and is calculated using:

$$r_{izt}^m = r_{ft} + \beta_{it} [r_{mt} - r_{ft}]$$

where, r_{ft} is the daily risk-free rate at the time t calculated using the 3-month MIBOR rate. r_{mt} is the daily return at the time t calculated using the closing price of NSE Nifty 50 index and β_{it} is the beta of the stock i at the time t . r_{izt} represents the cumulative average abnormal returns for each day t for the firm z QEA of stock i between the period from “-20 to +20 days, is defined as:

$$C_{R_{izt}} = r_{izt} - r_{izt}^m$$

ApreR_{market_{iz}} represents the cumulative average pre-earnings announcement abnormal return of a stock i for a particular QEA z for the event period from “-20 to “+1 days. It is the equally weighted arithmetic average of the abnormal returns where p is the number of days during this period:

$$ApreR_{market_{iz}} = \frac{1}{p} \sum_{t=-20}^{-1} C_{R_{izt}}$$

ApostR_{market_{iz}} represents the cumulative average post-earnings announcement abnormal return of a stock i for a particular QEA z for the event period from +1 to +20 days is the equally weighted arithmetic average of the abnormal returns where q is the number of days during this period:

$$ApostR_{market_{iz}} = \frac{1}{q} \sum_{t=1}^{20} C_{R_{izt}}$$

EAR_{market_{iz}} represents the excess abnormal return with respect to the market model of a stock i for a particular QEA z is calculated by subtracting the cumulative average post-earnings announcement abnormal return and the cumulative average pre-earnings announcement abnormal return:

$$EAR_{market_{iz}} = [ApostR_{market_{iz}} - ApreR_{market_{iz}}]$$

represents the cumulative average excess abnormal return with respect to the market model of a stock i for QEA, Z in our data sample period is defined as:

$$EAR_{market_i} = \frac{1}{Z} \sum_{z=1}^Z EAR_{market_{iz}}$$

Based on Lynch and Mendenhall (1997), I scrutinize the relationship between abnormal returns around QEAs and abnormal return surrounding QEAs using the cumulative average excess abnormal returns. The regression model is as follow:

$$EAR_i = \alpha + \beta OPT_i + \sum \gamma(\text{Control}) + \varepsilon \quad (1)$$

$$EAR_{market_i} = \alpha + \beta OPT_i + \sum \gamma(\text{Control}) + \varepsilon \quad (2)$$

Where, EAR_i and EAR_{market_i} are the dependent variables, defined as the difference between abnormal returns post-announcement and abnormal returns pre-announcement. To check whether the QEAs effects are different for the optioned and non-optioned firms, I use a dummy variable which takes the value 1 for the optioned firm and 0 for the non-optioned firms. If the coefficient of the OPT variable is significant, it shows that the optioned firms behave differently around the QEAs with respect to the non-optioned firms. If the abnormal returns before the announcement are negative (positive) for the optioned firms then the sign of the coefficient of OPT variable must be positive (negative), to implicate that being optioned improves the price discovery of the asset prices around the QEAs; otherwise, being optioned would not have any significant impact on the price discovery. And if this condition of signs is met, it would signify that the abnormal returns for the optioned firms enhances the informational efficiency of the market. In this study I have used parametric t-test when the cross-sectional mean of abnormal returns is calculated. Saens and Sandoval (2005) show that although individual stock returns and stock abnormal returns are evidently non-normal; but, whenever daily returns are used on the large sample size, the cross-sectional mean abnormal returns converge to normality. Therefore, first in this section, I will analyse the daily excess abnormal returns produced around the QEAs separately for the optioned firms and then non-optioned firms, and then I will conduct the regression analysis to compare the optioned and non-optioned firms.

4.1. Control Variables

A comparison of the underlying asset returns between the optioned and non-optioned firms, ignores the possibility of a systemic difference between the firms and the abnormal returns around the QEAs. Therefore, I included the following control variables to regulate other factors that might affect the deviations in the abnormal returns: (1) Market capitalization (*Market Cap*) as a proxy for the firms' size, as the bigger firms have a better information environment (Chen et al., 2013). (2) *BV/MV* as the ratio of the book value of asset to the market value of asset at the end of each fiscal year. Firms with a high ratios of Book to Market value (*BV/MV*) have a greater average returns compared to firms with a low value of the ratio (Fama & French, 1992). (3) Firms' stock trading volume (*Share Traded*) as a proxy for the trading costs and liquidity. It is calculated as the logarithm of the ratio of volume of stocks traded 21 days before the QEA, over the mean trading volume between event days "100 and "21, as more liquid stocks have a better organized information regularity (Chern et al., 2008). (4) Firms' beta (*Beta*) as a proxy of the firms' market risk. Amihud and Mendelson (1989) shows that the expected returns of firms is an increasing function of the systematic beta risk. (5) Idiosyncratic volatility (*Volatility*) as a measure of the risk associated with a firms' stock price around the earnings announcement. Volatility is defined as the natural logarithm of the ratio of high over low value of the stock price on any particular day. Wurgler and Zhuravskaya (2002) shows that the firms with a higher idiosyncratic volatility would be less attractive to the traders with some private information, and hence the information in these firms move slowly. Therefore, arbitrageurs are more likely to take a smaller positions in the stocks with high volatility around the QEAs. (6) And the variable is the ratio of the cumulative average stock trading volume post-announcement from event days +6 to +20 after the QEA (to the cumulative average stocks trading volume pre-announcement from event days -15 to -64 days before the QEA). It signifies the relative trading happening in the firms' post-announcement period with respect to pre-announcement period, and is represented as:

$$ShrRatio_i = \frac{PostVol_{(+6,+20)}}{PreVol_{(-64,-15)}}$$

4.2 Sample Summary and Descriptive Statistics

The Panel A of Table-1 shows the size of the final dataset

obtained after applying several filtering criteria to the firms in the CNX500 index, listed on NSE. The dataset comprises of 431 firms in the time period from 1st January 2009 to 30th April 2014. Out of these firms, 124 firms are optioned and 307 firms are non-optioned. All these firms were constantly listed on the CNX500 index during the period in analysis, and any new firm included or excluded from the index during this period are excluded from the analysis. Firms that are being acquired by other firms during this time period are also excluded. The Panel B of Table-1 provides the summary statistics of the independent variables used in the final dataset of the regression analysis for the optioned and non-optioned firms. It can be seen that there is a major difference between the market capitalization and the shares traded between the optioned and non-optioned firms. Optioned firms mostly represent the large firms in the Indian market. Although, the mean beta for both the optioned and non-optioned firms is similar, close to 1; the optioned firms are roughly half as volatile compared to the non-optioned firms. Also, the book-to-market ratio for the optioned firms is 20% lesser compared to the non-optioned firms. It implies that the non-optioned firms tend to have a higher growth potential for the investors, but investing in these firms comes with a higher risk element. The control variable *ShrRatio*, is roughly half for the optioned firms with respect to the non-optioned firms. It shows that more trading happens in the non-optioned firms after the announcement; whereas, the trading in optioned firms is more prominent before the announcement. There fore, the results from summary statistics suggest that the non-optioned firms are smaller and more volatile with a higher growth potential compared to the optioned firms.

4.3 Analysis of the Average Abnormal Returns around the QEAs

The Table-2 reports the daily average abnormal returns and cumulative average abnormal returns (CAR) from -14 days prior to the QEA to +6 days after the QEA. The abnormal returns are averaged across all the QEAs for the optioned and non-optioned firms separately for comparison. I examine whether the firms experience positive/negative average abnormal returns around the QEAs. For the pre-announcement period, I find that on any day when the t-stat of average abnormal returns is significant, the returns are on the negative side for both the optioned and non-optioned firms. It implies that on the days prior to the QEAs (-14 to -1 days), the investors are pessimistic and hold bearish sentiments about the

nature of the earning announcements. The average abnormal returns are significant and negative only on one (third) day in the post-announcement period for the optioned firms. And for the non-optioned firms, they are significant and negative on three (first, third and sixth) days in the post-announcement period. Further analysis is needed to make any conclusions on why the average abnormal returns are not significant on most of the days after the announcement.

Although, one result is prominent that the total cumulative average abnormal returns in the complete period of analysis (21 days) is almost equal for both the optioned (-2.331%) and non-optioned firms (-2.342%). But, the cumulative average abnormal returns on just one day (day -1 pre-announcement) before the QEA is -2.083% for the optioned firms and -1.586% for the non-optioned firms. Therefore, the cumulative average abnormal returns are more negative for the optioned firms compared to the non-optioned firms just before the announcement; but, after some (+6) days of the announcement the cumulative average (Table 1)

abnormal returns becomes almost equal for both the categories of the firms. One of the implication of the average abnormal returns for the optioned firms being lesser than that the non-optioned firms is; investors expect even worse results for the optioned firms compared to the non-optioned firms. And by trading in the optioned firms they trade on their expectation of the negative returns before the QEAs. Other important implication is; through options investors with the private information about the QEAs act on their information (private) and disseminate that information into the market just before the QEAs.

The Figure-1 presents the graph of the cumulative average abnormal returns for both the optioned and non-optioned firms around the QEAs, separately. It also shows that the cumulative average abnormal returns graph is negatively sloped around the QEAs. The Figure-2 presents the graph of standard deviation of the returns around the QEAs. The standard deviation increases by around 1% for both the optioned and non-optioned firms on the announcement date with respect to the other days around the announcement. Also, it can be seen that the standard

Table 1: General Statistics

(A) Data sample used for the Analysis of the firms' Quarterly Earnings Announcements (QEA)

Time period of analysis	1st January 2009-30th April 2014
Total number of days in the time-period	1324
Total number of firms selected	431
Optioned firms	124
Total Number of Earning Announcements	8974
Analysis using 'OptVol' Performed for firms	39

(B) Summary statistics of the Optioned and Non-optioned firms

Optioned firms

Number of observations: 124

Stats	ShrRatio	BV/MV	Beta	Market Cap	Share Traded	Volatility
Mean	0.20	0.51	1.07	3,88,467	28,35,637	28.95
StdDev	0.43	0.38	0.39	5,37,577	39,16,933	12.06
Minimum	-0.13	0.04	0.23	20,821	11,151	10.15
Maximum	3.52	1.72	2.28	29,59,739	3,09,54,274	74.41
Skewness	5.18	1.17	0.45	3	4	1.04
Kurtosis	33.31	0.72	0.36	9	23	1.44

Non-optioned firms

Number of observations: 307

Stats	ShrRatio	BV/MV	Beta	Market Cap	Share Traded	Volatility
Mean	0.42	0.64	1.08	32,519	5,80,700	51.82
StdDev	0.62	0.45	0.38	36,932	14,12,365	68.81
Minimum	-0.29	0.01	0.28	2,985	902	12.54
Maximum	4.82	2.56	2.07	2,71,953	1,52,42,973	116.78
Skewness	3.26	1.18	0.24	3	6	8.11
Kurtosis	16.13	1.75	-0.21	10	50	79.68

Note: In Panel A of this Table, I show the number of firms and data points (QEAs) in the analysis during the specified time period. In Panel B, I report the results of the optioned and non-optioned firms separately. *ShrRatio* is the variable demonstrating the firms' average abnormal trading volume. It is the ratio of the average stock trading happening post-earnings announcement on days between +7 to +20 and the average stock trading happening pre-earnings announcement on days between -64 to -15. Other control variables that are used in the regression analysis are; market capitalization (*Market Cap*), stock trading volume (*Share Traded*), book to market ratio (*BV/MV*), idiosyncratic volatility (*Volatility*) and firms' beta (*Beta*).

deviation of the non-optioned firms is higher compared to the optioned firms, on the day of the announcement. These findings are consistent with the literature that the optioned firms are less volatile around the QEAs. The Table-3 presents the cumulative average abnormal returns around the QEAs for a diverse set of event windows, viz. ("1,1), ("14,-1), ("1,6), (1,6) and (-14,6). Percentage returns, as shown in the Table-3 are the average abnormal returns for the days specified in the interval. The firms are categorized as optioned and non-optioned in a similar manner, as in the earlier Table-2. This Table shows that surrounding the QEAs, the cumulative average abnormal returns are negative and statistically significant at up to 5% level for all the event windows, except for the interval (+1, +6) consisting of the optioned firms. The average abnormal returns in the interval(-14, -1) is -0.148% for the optioned firms and -0.112% for the non-

optioned firms. This result further enhances the result concluded earlier, that the average abnormal returns before the announcement for the optioned firms is more negative than the non-optioned firms.

Another important result from Table-3 is that the average abnormal returns in the interval(-1, +1) is twice more negative for the optioned firms compared to the non-optioned firms. This is an important conclusion that shows greater abnormal returns occur in the optioned firms close to and before the QEAs. It implies that the optioned firms generate more informational efficiency into the market; as the trading in them occurs close to the announcements and any new information from the QEAs get disseminated into the stock prices more quickly than the non-optioned firms. One result is clear that the investors trade post-announcement in the non-optioned firms and

they trade very close to the announcement for the optioned firms. Therefore, the reason why the optioned firms attain better informational efficiency, is that right after the QEAs, investors' trade in the firms that are optioned and information quickly gets disseminated into the market. The best strategy for the investors is to go short on the optioned firms before the announcement in the interval

(-14, +1) realizing average positive returns of +0.148%, and going short on the non-optioned firms after the announcement realizing average positive returns of +0.122%. In the next section, I further analyse this result using the different measure of calculating the average abnormal returns (Table 2).

Table 2: Analysis of the Average Abnormal Returns Around the Quarterly Earnings Announcement (QEA) with Respect to the Past Stock Returns: Optioned Vs Non-optioned stocks

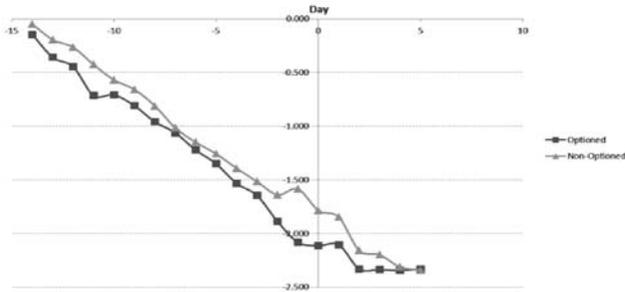
Day	Optioned			Non-optioned		
	AR	t-Stat	CAR	AR	t-Stat	CAR
-14	-0.145 **	-2.767	-0.145	-0.050	-1.323	-0.050
-13	-0.213 **	-3.228	-0.359	-0.144 **	-3.443	-0.194
-12	-0.088	-1.243	-0.447	-0.072 **	-1.688	-0.265
-11	-0.268 **	-4.006	-0.714	-0.161 **	-3.799	-0.426
-10	0.005	0.081	-0.706	-0.143 **	-3.529	-0.569
-9	-0.101	-1.591	-0.810	-0.089 **	-2.041	-0.658
-8	-0.150 **	-2.783	-0.960	-0.154 **	-4.018	-0.812
-7	-0.103 **	-1.873	-1.063	-0.204 **	-5.650	-1.016
-6	-0.160 **	-2.690	-1.223	-0.135 **	-3.076	-1.150
-5	-0.128	-1.578	-1.351	-0.108 **	-2.306	-1.258
-4	-0.182 **	-2.632	-1.534	-0.136 **	-3.051	-1.394
-3	-0.114 **	-1.695	-1.647	-0.124	-2.757	-1.517
-2	-0.241 **	-3.740	-1.888	-0.123 **	-2.731	-1.586
-1	-0.195 **	-2.929	-2.083	0.054	1.210	-1.586
-	NA	NA	NA	NA	NA	NA
1	-0.031	-0.375	-2.114	-0.200 **	-3.575	-1.786
2	0.008	0.096	-2.106	-0.063	-1.027	-1.849
3	-0.225 **	-2.896	-2.331	-0.311 **	-6.143	-2.160
4	-0.007	-0.096	-2.338	-0.041	-0.894	-2.200
5	-0.008	-0.125	-2.346	-0.112 **	-2.456	-2.313
6	0.015	0.254	-2.331	-0.029	-0.716	-2.342

Note: In this Table, I present the event day average abnormal returns of the QEA spanning the period from the year 2009 to 2014 for all the optioned and non-optioned firms. The daily average abnormal return during the pre-earnings announcement days on the day t (where t = -14 to -1) is the difference between the actual return on the day and the expected return from the days between -64 to -15. The daily average abnormal return during the post-earnings announcement days on the day t (where t = +1 to +6) is the difference between the actual return on the day and the expected return from the days between +7 to +20. The NSE Nifty50 value-weighted return index, is a proxy for the market return index.

* Statistical significance at the 10% level.

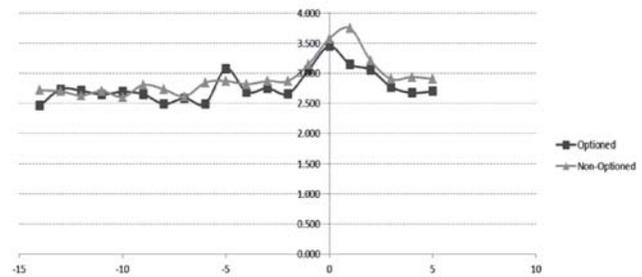
** Statistical significance at the 5% level.

Figure 1: Cumulative Average Abnormal Returns with respect to the Firms' Past Returns Surrounding the Earnings announcement Day for the Optioned Vs Non-optioned Firms.



Note: In this graph, the cumulative average abnormal returns for the optioned and non-optioned firms are plotted against the days around the QEA. The QEA is announced on day 0.

Figure 2: The Standard Deviation of Returns with respect to the Firms' Past Returns Surrounding the Earnings Announcement Day for the Optioned Vs Non-optioned Firms.



Note: In this graph, the standard deviation of returns for the optioned and non-optioned firms are plotted against the days around the QEA. The QEA is announced on day 0.

Table 3: Analysis of the Average Abnormal Returns Around the Quarterly Earnings Announcement (QEA) for various event windows with respect to the Past Stock Returns: Optioned vs Non-optioned stocks

Number of firms	Optioned firms (124)	Non-optioned firms (307)
CAR (-1,1)	-0.121 ** (-2.322)	-0.059 * (-1.710)
CAR (-14,-1)	-0.148 ** (-8.710)	-0.112 * (-9.961)
CAR (-1,6)	-0.065 ** (-2.414)	-0.093 * (-5.048)
CAR (1,6)	-0.038 ** (-1.287)	-0.122 * (-6.046)
CAR (-14,6)	-0.116 ** (-7.871)	-0.115 * (-9.604)

Note: In this Table, I present the cumulative average abnormal returns during earnings announcements for various event windows. The CARs are presented for the optioned and non-optioned firms spanning the period from the year 2009 to 2014. The daily average abnormal return during the pre-earnings announcement days on the day t (where t = -14 to -1) is the difference between the actual return on the day and the expected return from the days between -64 to -15. The daily average abnormal return during the post-earnings announcement days on day t (where t = +1 to +6) is the difference between the actual return on the day and the expected return from the days between +7 to +20. The Nifty50 value-weighted return index, is a proxy for the market return index.

* Statistical significance at the 10% level.

** Statistical significance at the 5% level.

4.4 Robustness Check: Analysis of the Average Abnormal Returns (with respect to the Market) Around the QEAs

I checked for the robustness of this procedure by comparing the average abnormal returns of the optioned

and non-optioned firms in this section. I performed a similar analysis as in the previous section by calculating the average abnormal returns for the firms using a different methodology that is with respect to the market CAPM. In this method the daily average abnormal returns for the

firms is calculated using the beta of the firm and the Nifty50 index (proxy for market) returns.

The Table-4 summarizes the results around the QEAs for -20 days pre-announcement to +20 days post-

Table 4: Analysis of the Average Abnormal Returns Around the Quarterly Earnings Announcement (QEA) with respect to the Market Returns: Optioned Vs Non-optioned stocks

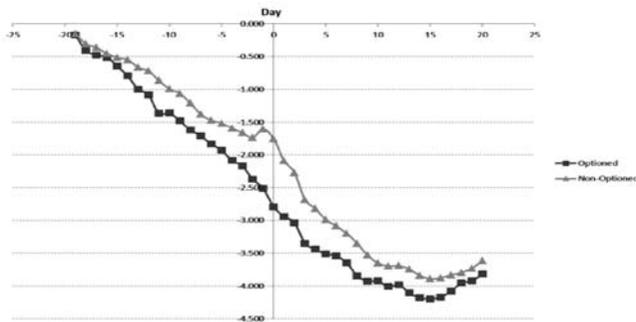
Day	Optioned			Non-optioned		
	AR	t-Stat	CAR	AR	t-Stat	CAR
-20	-0.049	-0.933	-0.049	-0.051	-0.857	-0.051
-19	-0.120 *	-1.757	-0.169	-0.102 **	-2.397	-0.153
-18	-0.234 **	-3.550	-0.403	-0.154 **	-3.732	-0.306
-17	-0.074	-1.158	-0.477	-0.054	-1.360	-0.361
-16	-0.038	-0.629	-0.514	-0.092 **	-2.129	-0.453
-15	-0.127 **	-2.284	-0.641	-0.064 *	-1.691	-0.517
-14	-0.152 **	-2.973	-0.793	-0.032	-0.873	-0.549
-13	-0.204 **	-3.166	-0.998	-0.112 **	-2.808	-0.662
-12	-0.087	-1.271	-1.085	-0.058	-1.408	-0.719
-11	-0.283 **	-4.312	-1.368	-0.147 **	-3.594	-0.866
-10	-0.005	0.072	-1.363	-0.125 **	-3.192	-0.991
-9	-0.116 **	-1.884	-1.479	-0.074 *	-1.753	-1.064
-8	-0.141 **	-2.623	-1.620	-0.143 **	-3.850	-1.208
-7	-0.088 *	-1.635	-1.708	-0.173 **	-4.982	-1.381
-6	-0.126	-2.151	-1.833	-0.089 **	-2.092	-1.470
-5	-0.096	-1.203	-1.929	-0.047	-1.062	-1.517
-4	-0.156 **	-2.299	-2.085	-0.076 *	-1.780	-1.593
-3	-0.086	-1.320	-2.170	-0.070	-1.639	-1.663
-2	-0.203 **	-3.178	-2.374	-0.070	-1.622	-1.734
-1	-0.141 **	-3.669	-2.515	-0.127 **	2.952	-1.607
-	-0.277 **	-3.673	-2.791	-0.146 **	-2.851	-1.753
1	-0.150 *	-1.857	-2.941	-0.338 **	-6.234	-2.091
2	-0.096	-1.154	-3.037	-0.180 **	-3.044	-2.271
3	-0.312 **	-4.131	-3.349	-0.413 **	-8.591	-2.685
4	-0.089	-1.369	-3.438	-0.134 **	-3.108	-2.818
5	-0.073	-1.189	-3.511	-0.173 **	-3.993	-2.991
6	-0.032	-0.560	-3.543	-0.093 **	-2.420	-3.084
7	-0.103 **	-1.901	-3.646	-0.115 **	-1.992	-3.200
8	-0.199 **	-3.408	-3.845	-0.149 **	-3.712	-3.349
9	-0.083	-1.238	-3.928	-0.182 **	-4.242	-3.531
10	0.004	0.055	-3.924	-0.119	-2.832	-3.650
11	-0.086	-1.432	-4.010	-0.045	-1.075	-3.696
12	0.026	0.433	-3.984	0.004	0.102	-3.691
13	-0.124 **	-2.323	-4.108	-0.053	-1.408	-3.744
14	-0.072	-1.294	-4.179	-0.097 **	-2.610	-3.841
15	-0.015	-0.255	-4.195	-0.050	-1.198	-3.890
16	0.023	0.342	-4.171	0.014	0.313	-3.877
17	0.092	1.327	-4.079	0.042	1.029	-3.834
18	0.126 *	1.878	-3.954	0.038	0.894	-3.796
19	0.030	0.453	-3.923	0.066	1.533	-3.730
20	0.104 *	1.845	-3.819	0.116 **	3.090	-3.614

Note: In this Table, I present the event day average abnormal returns of the QEAs spanning the period from the year 2009 to 2014 for the optioned and non-optioned firms. The daily average abnormal return on the day t (where $t = -20$ to $+20$) is the difference between the actual return on the day and the expected return from the market model. The Nifty50 value-weighted return index is a proxy for the market return index.

* Statistical significance at the 10% level.

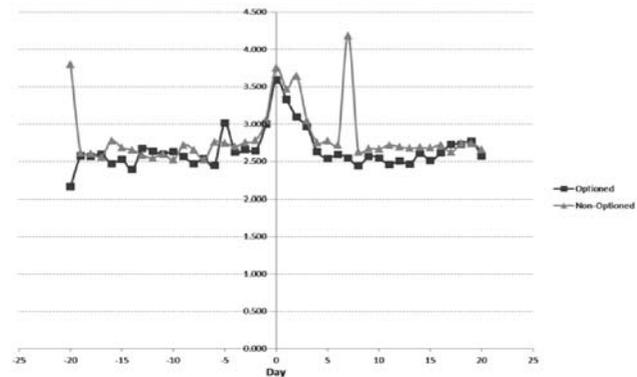
** Statistical significance at the 5% level.

Figure 3: Cumulative Average Abnormal Returns with respect to the Market Model Surrounding the Earnings Announcement Day for the Optioned Vs Non-optioned Firms



Note: In this graph, the cumulative average abnormal returns for the optioned and non-optioned QEA firms are plotted against the days around the QEA. The QEA is announced on day 0.

Figure 4: Standard Deviation of the Returns with respect to the Market Model Surrounding the Earnings Announcement Day for the Optioned Vs Non-optioned Firms



Note: In this graph, standard deviation of returns for optioned and non-optioned firms are plotted against days around QEA. QEA is announced on day 0.

Table 5: Analysis of the Average Abnormal Returns Around the Quarterly Earnings Announcement (QEA) for Various Event Windows with respect to the Market Returns: Optioned Vs Non-optioned stocks

	Number of firms	Optioned firms (124)	Non-optioned firms (307)
CAR (-1,1)		-0.121 ** (-2.322)	-0.059 * (-1.710)
CAR (-14,-1)		-0.148 ** (-8.710)	-0.112 * (-9.961)
CAR (-1,6)		-0.065 ** (-2.414)	-0.093 * (-5.048)
CAR (1,6)		-0.038 ** (-1.287)	-0.122 * (-6.046)
CAR (-14,6)		-0.116 ** (-7.871)	-0.115 * (-9.604)

Note: In this Table, I present the daily average values of the cumulative average abnormal returns around the earnings announcements for various event windows. The CAR_{market} is calculated for the optioned and non-optioned firms spanning the period from the year 2009 to 2014. The daily average abnormal return on the day t (where $t = -20$ to $+20$) is the difference between the actual return on the day and the expected return from the market model. The Nifty50 value weighted return index, is a proxy for the market return index.

* Statistical significance at the 10% level.

** Statistical significance at the 5% level.

announcement. In this analysis I have considered more number of days after the announcement, to check for the nature of returns occurring some days after the announcement. Most of the conclusions made from this Table (Table-4) are similar in nature to the results obtained in the Table-2. This Table further enhances the results of previous analysis that the returns on most of the days

around the QEAs are negative, implying bearish sentiments of the investors about the earnings announcements. It signifies that the procedure of analysing the average abnormal returns is robust, and does not depend on the methodology used to calculate the average abnormal returns.

One important finding from this analysis is that the returns after +15 days of the QEAs, are positive. This is true for both the optioned and non-optioned firms. It implies that the investors' sentiments changes after two weeks of the announcements and the firms' returns begin to become positive. The same can also be seen in the Figure-3. This also implies that the negative returns because of the QEAs are not permanent, and the stock prices would head back to the normal levels after some days of the announcement. The results implied by the Figure-4 and the Table-5 are similar in lines with the results obtained from the Figure-2 and the Table-3, respectively. Results in both these parts implies that there exist significant negative average abnormal returns around the QEAs for both the optioned and non-optioned firms. These negative returns are situated in the pre-announcement or on the announcement date for the optioned firms compared to the non-optioned firms. For the non-optioned firms the returns are mostly situated in the post-announcement period. Although in this analysis I have not compared the optioned and non-optioned firms simultaneously, which is essential for establishing the benefits of firms being optioned. Therefore, in the next section I examined, whether and how the optioned firms differ from the non-optioned firms using the regression analysis with respect to the excess average abnormal returns.

4.5 Regression Analysis Results

The Table-6 reports the results of the OLS regressions based on the firms' stock price response to the QEAs. The dependent variables of the two regression models used for the analysis are; the excess average abnormal returns (*EAR*) and the excess average abnormal returns with respect to the market (*EAR_{market}*). The binary variable *OPT* equals one for the optioned firms and zero for the non-optioned firms at the time of the announcement. It is done to examine the effect of firms being optioned or non-optioned on the excess average abnormal returns noticed around the QEAs, as shown in the earlier Tables, from Table-2 to Table-5. I include the control variables, namely, *Market Cap*, *BV/MV*, *Share Traded*, *Volatility*, *ShrRatio* and *Beta*. The F-statistic and p-value of the first regression model is significant at up to 5% level, but the value is less (3.3%). I find that the *OPT* binary variable is positive and significant at up to 10% level with respect to the dependent variable *EAR*. The coefficient of *OPT* is 0.1126 indicating a significant difference in the stock price

response between the optioned and non-optioned firms around the QEAs. The excess average abnormal returns for the optioned firms right after the QEA is positive and higher than the non-optioned firms. This shows that the positive information from the QEAs gets dissimilated into the market more rapidly for the optioned firms. It implies that the investors with (private) information about the QEAs trade on the optioned firms and disseminate the information into the asset prices.

The results conclude that the excess average abnormal return surrounding the QEAs are significantly different for both the categories of firms, but what is interesting, is the positive loading on it. Positive loading on the coefficient of the *OPT* variable implies that for the optioned firms the pre-announcement negative returns as observed in Table-2 and Table-3 are lesser, and are being adjusted with more positive returns in the post-announcement period. It implies that the investors have negative expectations about the QEAs, but once the announcements are made, the investors' sentiments improve about the optioned firms. The second regression model also shows similar results, the *OPT* binary variable is also positive and significant at up to 10% level, with respect to the dependent variable *EAR_{market}*. The coefficient of the *OPT* variable is 0.0819 and significant at up to 10% level, confirming that the price discovery in the optioned firms is different from that of the non-optioned firms. It further shows that the optioned firms increases the informational efficiency of the stock market, since all the positive information of the QEAs gets rapidly disseminated into the asset prices. The control variables *Beta*, *Volatility*, *Market cap*, *Shares traded* and *BV/MV*, load in significantly on the *EAR* and *EAR_{Market}* for both the regression equations, whereas, the variable *ShrRatio* is negative and significant at up to 10% level for the first equation. It indicates that the stock price response of the announcement is higher for the firms during this event window with a large abnormal share trading volume in the post-announcement period.

On the similar area of study, the literature has varied results; some studies differ from this result completely, as, Skinner (1990) shows that the presence of the options trading significantly decreases the stock price response to the earnings information. On the other hand, Truong and Corrado (2010) show that the trading activity in the firms with available options trading vary significantly with respect to the private information, and the number of

informed traders acting on it. They show that the firms with options trading have greater information content conveyed into the stock prices just before the QEAs, consequently reducing the contemporaneous stock price response to the announcements. It is consistent with the high stock prices of optioned firms, and therefore shows that only a part of the information is ultimately released in the QEAs (Truong and Corrado, 2010).

The results from the Table-2 to Table-6 shows that around the announcement period, the average abnormal returns for the optioned firms are negative and more in magnitude before the announcement compared to the average abnormal returns after the announcement. That is different from that of the non-optioned firms, for whom the average abnormal returns are negative and more in magnitude after the announcement. And the results from the Table-6 implies that during the earnings announcements, the difference between the post and pre announcement average abnormal returns for the optioned firms is positive, and significantly different from the non-optioned firms. Both these results are synchronous with each other and implies that the average abnormal returns for the optioned firms are more pre-announcement and take lesser time to disseminate than the non-optioned firms. It further implies that the options investors take advantage of the options market to act on the earnings information, inducing a faster price discovery of asset. And they exploit the (private) information more rapidly compared to the non-optioned stocks investors. Overall, the results from the Table-2 to Table-6 conclude that the options trading places measurable impact on the stock price response to the QEAs, and in total, the optioned firms contributes to lower eccentric announcement effects. In this manner the firms that are optioned, enhances the informational efficiency of the underlying asset prices.

Through this study, I contribute towards settling the difference of arguments with respect to the role of options in establishing price and informational efficiency in the underlying equity market. The results obtained for the emerging (Indian) options markets answers intriguing question not only for the academicians, but also for the policy makers and practitioners. The results show that it makes little sense for the investors to trade on any news announcements for the firms that are optioned, as their stock prices have already factored in the announcement surprise. In fact for trading on any news announcements, investors are better in trading non-optioned firms only.

An important inference for the policy makers from this study is with respect to the diversion of the volume of trading from the underlying stock to the corresponding options, which results in a decreased liquidity in the underlying stocks traded, thereby increasing the volatility of underlying stock returns. Therefore, when some news announcement or macroeconomic event affects the stock prices of firms, policymakers might want to regulate the trading accordingly in both stocks and options to keep a check on the volatility in the underlying stock returns. The concentration of informed traders is problematic for other individual investors in the market; and it provides potential rationales for the policymakers to monitor the trades in stock and options markets, simultaneously. Individual investors in the Indian market might just want to trade in the index options; as trading in them is not driven by non-public information, making it an ideal segment for the investors to invest their money.

This study has some limitations that might lead to implications for the future researches. First, as the measures used to represent the options trading volume in this study does not categorise the moneyness of options contracts; moneyness that could facilitate more informed trading is not highlighted. Researchers can identify the types of options contracts (OTM, ATM or ITM options) that are more likely to be associated with informed trading. Second, the study does not comment on the type of earnings relevant information (accounting variables) that gets impounded into the stock prices through options trading. Also, the effects of any other announcements or information that might have been floated in the market just near the QEAs, are not factored in the analysis. Third, future researchers may incorporate industry effect while studying the differences between optioned and non-optioned firms, as the abnormal returns may also be dependent on the industry of a particular firm. Fourth, the event study analysis could retrieve very reliable information about the optioned and non-optioned firms for comparison using the tick-by-tick data around the QEAs. (Table 6)

5. Conclusion

This research article shows that options enhance the informational efficiency of the underlying asset prices by contributing towards its price discovery. An event-study approach around the QEAs is used to examine whether the optioned firms have better information assimilation and contribute more towards the price discovery compared

Table 6: Cumulative Average Excess Abnormal Return for 431 Firms with 124 Optioned Firms

	OPT	ShrRatio	BV / MV	Beta	Market Cap	Share Traded	Volatility	Constant	Adj. R ²	F-stat	Durbin Watson	BPG test Statistic
EAR	0.1126** (0.0564)	-0.1051** (0.0372)	-0.0175 (0.0610)	-0.0649 (0.0786)	-0.0237 (0.0698)	0.0022 (0.0118)	-0.0005 (0.0024)	0.0996 (0.0797)	0.033	2.090**	2.18	3.540**
EAR_Market	0.0819** (0.0353)	-0.0349 (0.0238)	0.0434 (0.0396)	0.0409 (0.0505)	-0.0176 (0.0326)	0.0065 (0.0066)	-0.0001 (0.0010)	-0.0758 (0.0471)	0.050	3.184**	2.02	5.490**

Note: In this Table, I summarize the results of regressions analysis around the QEA day of 431 firms out of which 124 are optioned and rest are non-optioned. The dependent variable are *EAR* and *EAR_Market*, around the QEA dates for firms in the sample. A dummy variable (*OPT*) on behalf of whether a firm is optioned or not is included. The analysis is conducted on firms selected on the filtering criterion spanning the period from the year 2009 to 2014. For calculating the *EAR*, the daily average abnormal return during the pre-earnings announcement days on day *t* (where *t* = "14 to -1) is the difference between that day's return and the expected return between the days between -64 to -15. The daily average abnormal return during the post-earnings announcement days on day *t* (where *t* = +1 to +6) is the difference between that day's return and the expected return between the days between +7 to +20. The *EAR* equals the difference between the average abnormal returns post-announcement and pre-announcement. For calculating the *EAR_Market*, the daily average abnormal return on the day *t* (where *t* = "20 to +20) is the difference between that day's firms' return and the expected return from the market model assumed. The Nifty50 return index, is a proxy for the market index. The *EAR_Market* equals the difference between the average abnormal returns post-announcement and pre-announcement. Control variables used in the regression equation are: Abnormal firms' trading volume ratio (*ShrRatio*), market capitalization (*Market Cap*), stock trading volume (*Share Traded*), book to market ratio (*BV/MV*), idiosyncratic volatility (*Volatility*) and firms' beta (*Beta*). Robust standard errors are in parentheses. Durbin-Watson statistic is used as a test to detect autocorrelation. A significant BPG test statistic indicates that heteroscedasticity was present; and that is why I have used white's variance-covariance matrix to obtain heteroscedasticity consistent coefficients as shown above.

* Statistical significance at the 10% level.

** Statistical significance at the 5% level.

to the non-optioned firms. I used the firms listed on CNX500 for the analysis. The result shows that abnormal returns of the optioned firms vary significantly differently compared to the non-optioned firms. It implies that the average abnormal returns for the optioned firms are more before the announcement and take less time to disseminate compared to the non-optioned firms; the investors with (private) information about the QEAs trade in the optioned firms and disseminate the information into the underlying stock prices. The results of this paper confirm that options contribute towards the price discovery and enhance the informational efficiency, as they allow the investors to align their strategies with sign and magnitude with respect to their information in a better manner compared to the stocks. The study also shows that the effects of shocks from the news events (like earnings announcements) are felt for a longer duration for the firms that are non-optioned compared to the firms that are optioned. This phenomenon in the literature is termed as 'leverage effect'; and analysis shows that it is observed more in the firms that are non-optioned. Therefore, the firms with options trading have greater information content conveyed into the stock prices just before the QEAs; consequently showing that options trading increases the informational efficiency of the equity market by disseminating the new information more rapidly into the stock prices.

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Abhishek kumar is a Doctoral student in Finance, Accounting and Control, Indian Institute of Management Kozhikode. (Email:-abhishek05fpm@iimk.ac.in).

It is a Sexist World out there: A Qualitative Research on Sexism in Indian Advertising

Kapil Khandeparkar¹

Goa Institute of Management, Goa

Manoj Motiani

Indian Institute of Management, Indore

Abstract

Sexism in advertising is omnipresent, but these themes have been controlled in many countries by understanding sexism and its elements. However, the Indian advertising industry continues to resort to sexist themes to attract attention. In order to control it, this study tries to understand the concept of sexism and its building blocks in emerging markets such as India. Due to the gap in the understanding of the non-target segment groups, the perception of sexism persists. Sexual themes are appreciated when their usage is appropriate and context related.

Keywords: Objectification, sexism, sexy, stereotype, titillating.

1. Introduction

As per Lavidge and Steiner (1961), the aim of advertisements is to create product awareness and, eventually, sales. However, in the presence of myriad advertising messages, consumers' attention gets distracted, which diminishes recall (Riebe & Dawes, 2006). A particular advertisement must be able to stand out from the advertising clutter for it to be recalled effectively. Therefore, advertisers resort to creative and unusual ads to increase the message elaboration, which enhances recall (Till & Baack, 2005).

In the process of attracting attention to aid recall, advertisers often resort to sexual themes (Whipple & Courtney, 1981). Evidently, such themes demand the presence of attractive women and explicit plots. These themes often lead to portrayals of a particular gender (mostly women) in a derogatory fashion (Boddewyn, 1991). Such depictions are also termed as offensive and showing women as objects of sex (Lysonski, 2005). The objectification of a particular gender (sexism) can lead to a negative impact on the minds of impressionable audience such as children and adolescents (Khan, 2011).

Ryan and Kanjorski (1998) conducted an experiment on college students to understand the effect of exposure to sexist advertisements on impressionable members of the society. The results showed that exposure and enjoyment of sexist humour was positively correlated with "psychological, physical, and sexual aggression in men, self-reported likelihood of using force in sex and increased tolerance for rape and sexist attitude". Rape is also supported in cultures where it is treated as a joke (Richlin, 1992). A study by Lanis and Covell, (1995) exposed men to themes which treated women as objects of sex. The results indicated that such an exposure enhanced rape supporting attitudes.

Sexist themes and humour is created by attacking (figuratively) a particular group of individuals (mostly women). Women are shown to be "powerless", "repressed", "possessed" and in some themes, "comic". The humour is created by over powering them which leads to laughter. The enjoyment of such themes affirms the point that the audience is deriving pleasure in the misery of the attacked group (Ryan & Kanjorski, 1998). This influences the attitude of the impressionable audience towards the stereo typed group. Such attitudes are strong predictors of sexual aggression in men (Byers & Ma, 1992).

Previous studies have tried to understand the meaning and antecedents of sexism in advertising (Boddewyn, 1991; Lysonski, 2005). However, several research gaps are present in the existing literature, namely (1) The research in this field has not focused on the Indian advertising industry (2) Qualitative research in this field is scarce; therefore, the solution to curb sexism has not been understood from the participants of that study (3) Previous research has collected data from college students; therefore, the perception, meaning and understanding of sexism among other social groups remains unexplored.

This study aims at filling the above research gaps by not

¹Corresponding author

only understanding the perception of sexism in advertisements but also by finding a solution for the same from a non-student, white-collar, urban social group. This is the first qualitative study conducted on this topic in the context of an emerging market like India. The study is aimed at revealing the understanding of sexism, the reason behind its pervasiveness in the Indian advertising industry and ways to control it. Additionally, this study is also aimed at understanding the negative impact of sexism in advertising on the Indian advertising industry. Four research questions are proposed to perform in this study:

RQ1: What is the difference between 'sexy' and 'sexist' advertisements as per the Indian audience?

RQ2: What are characteristics of advertisements that lead to a sexist theme?

RQ3: What are the harmful effects of sexism on the advertising industry?

RQ4: What are the ways to curb sexism in the Indian advertisements?

2. Literature Review

2.1 Sexism in advertising

Using attractive women and showing sexual content is very common in the advertising world. Nudity and sex attract attention and keeps the audience engaged (Lyonski, 2005). But such themes often lead to sexist depictions, knowingly or unknowingly. Sometimes, sexual themes are combined with ideas that are derogatory to women (Boddewyn, 1991). These depictions lead to objectification of women which results in advertisements that are demeaning and offensive. Sexual objectification refers to "using women (mostly) as decorative or attention-getting objects, with little or no relevance to the product advertised" (Boddewyn, 1991).

Advertisements are also criticised for stereotyping women and portraying them as "inferior", "submissive", "dependent" and "helpless" whereas showing men to be "confident", "independent" and "powerful" (Khan, 2011). Sex-role stereotyping has been criticised for implying that women are meant only for performing household chores. Advertisements often depict themes where women are concerned about cleaner floors and shiny utensils. These themes limit the duties of a woman, typecasting them as being concerned only about household duties and the happiness of her children (Boddewyn, 1991).

Previous studies show that advertisements with a sexual content are enjoyed by both the sexes as long as the plot

does not resort to sexist depictions (Whipple & Courtney, 1981). However, there is a thin line between sexy and sexist depictions; therefore it is important to understand the difference between the two. "Sexism concerns distinctions which diminish or demean one sex in comparison with the other particularly through the use of sex-role stereotypes" (Boddewyn, 1991). 'Sexy' is defined as "marked by or tending to arouse sexual desire or interest" (Lyonski, 2005). Sexy advertisements show males and females enjoying each other's company (Nokes, 1994) therefore such plots do not offend women (Lyonski, 2005).

Previous research in this field posits that the problem does not lie in showing advertisements with partial nudity or sexual behaviour. The issue also does not relate to the moral norms which individuals should conform to (Boddewyn, 1991). However, the problem arises when women, especially, are offended or the dignity of the female sex is hampered. The depiction of women is often labelled as exploitative, derogatory and demeaning, which does not represent the modern woman (Lyonski, 2005). Therefore, such themes are judged as sexist where as others are referred to as sexy.

Sexism and its interpretation depend on the values of the individuals. A certain rule or a clear demarcation between sexy and sexist does not exist. Therefore, advertisers do not have specific guidelines to follow for avoiding sexist themes. However, it is seen that different locations have different perceptions of sexism (Lipman, 1991). The culture of the location primarily dictates the opinion of the people. Therefore, if we intend to understand and eradicate sexism from a certain location then we must perform the study in that particular culture (Lyonski, 2005).

2.2 Sexism in Indian culture

Sexism and gender stereotyping in advertising has been studied since the 1960s (Gilly, 1988). But the western countries have developed since then, and have been able to control sexism in their advertisements, to a certain extent (Khan, 2011). This shows that the advertising industry's norms have improved since Boddewyn (1991) study when many of the western countries like the United States of America suggested the existence of sexism. Khan (2011) showed that foreign respondents do not, largely, perceive their advertisements to be sexist anymore but the Indian respondents see the industry as sexist and the portrayal of women as objects of sex.

Religious beliefs of a particular country or a region dictate a certain tolerance towards issues like sex in advertisements and the definition of decency (Gilly, 1988). Islamic countries have a low tolerance towards nudity and sex in advertisements whereas Christian nations are relatively tolerant (Boddewyn, 1991). The Indian society is male dominated and the culture regards women to be inferior to men, and think of them as powerless and dependent. The Indian culture expects women to perform household chores and duties. The image of women shown in the advertisements is therefore a product of the treatment of women in the Indian culture (Khan, 2011).

The presence of sexist advertisements might have several ill effects on the Indian society. Ubiquitous sexist themes might disrupt the perception of women in the society (Ryan & Kanjorski, 1998). Adolescents and children might start considering women as objects of sex, denying them the respect that they deserve. Additionally, the offended sections of the population might develop a negative attitude towards the brand, therefore wasting huge amounts of advertising funds. This can also lead to a total disregard for the advertising industry. The audience might stop taking advertising seriously thus affecting the entire industry and rendering the advertising expenditure useless (Fam & Waller, 2003). In order to understand and eliminate the ill-effects of sexism in advertising, we must first understand the perception of sexism held by the Indian population

3. Data and Methodology

The target population for this study is urban, white-collared, professionals Indians. Therefore, we selected educated adults, possessing a non-manual occupation, earning more than 40,000 INR (600\$) per month.

Focus group discussions (FGDs) were used to collect data as phenomenology is the theoretical basis for this study. Additionally, since little is known about this topic, therefore it was appropriate to use FGDs in this exploratory study. The interactions between individuals with different point of views were conducive for the emergence of interesting themes (Morgan, 1993). All the FGDs were conducted face-to-face while in a place (home) that was most comfortable to all the participants. For the convenience of the participants, FGDs were conducted during holidays. The average duration of each FGD was around 35 minutes. The mode of conversation was English as all the participants preferred it over other languages. All the FGDs were recorded and then transcribed in

English (Refer Table 1 for FGD details).

The participants were chosen on the basis of purposive and snowball sampling while information saturation dictated the number of FGDs (Strauss & Corbin, 1990). Twenty-five participants were involved in the 6 FGDs conducted in the Indian state of Ahmedabad. The participants belonged to different states in India. The participants consisted of 15 men and 10 women, aged between 23 to 38 years. Most of the participants possessed a Master's degree and a fluency in English (Refer Table 2 for demographic details). Therefore, all the FGDs were conducted in English. The participants were from different professional backgrounds, such as, investment banker, marketing manager, IPS officer, consultant, area sales manager, entrepreneur, HR executive, Yoga trainer, doctoral scholar, and technical head. All the participants were aware of the 'sexism' phenomenon in the Indian advertisements. The data was collected in April, 2014.

An inductive approach was adopted to analyse the data as the aim of the study was to understand sexism from the participants' vocabulary (Haley, 1996). Therefore, the analyses were performed on the basis of the words used by the participants instead of depending on a pre-decided coding scheme. Every line of the transcripts was analysed to search for the answers to the research questions and the relevant data was assigned initial codes. An emic approach was used for the coding scheme (Chen & Haley, 2010). Further, every transcript was coded by comparing it with the previously coded transcripts to recognise similar themes in the data. Similar themes were classified together depending on its relevance and context. To reduce the initial number of codes, themes engulfing a broader concept were grouped together. Lastly, an overarching model was built to represent the overall picture of the data collected.

This study was conducted while keeping in mind the four major evaluative criteria for qualitative research: Credibility, dependability, conformability, and transferability (Chen & Haley, 2010). To maintain credibility, the discussion was not driven by the moderator as far as possible so that the biases of the researchers do not interfere with the discussion among the participants. Additionally, the FGDs were recorded to ensure that the exact words of the participants could be analysed. Three researchers analysed the same data to ensure that the interpretation of the themes was devoid of personal idiosyncrasies, thus maintaining dependability (Cresswell

& Miller, 2000). The exact words of the participants have been presented throughout the article to facilitate the interpretation of the data, converging into the major themes (Graves, 2007). The presentation of the participants' verbatim quotes is the most effective way to ensure conformability (Chen & Haley, 2010). The interpretation of the data and the emergence of the various themes can be judged by the reader for transferability in different contexts.

In order to select the two ads for the study, we adopted a procedure suggested by Weinberger and Spotts (1989). We collected a sample of 39 television ads, from various websites, that contained sexual connotation. Three coders (two authors and a colleague) retained 20 ads from this sample that were deemed appropriate for this study. The inter-coder reliability was 0.92. Furthermore, three independent judges (different from the previous step) were asked to select one sexy and one sexist ad, from the set of 20 ads. The judges were instructed to select ads that they felt were the best representations of either a 'sexy' or a 'sexist' theme. Later, the ads that were not selected by at least two coders were eliminated from the sample. The coders were instructed to continue this elimination process to select one ad for the sexy theme and one for the sexist theme.

During the data collection process, the participants were shown the sexy ad followed by the sexist ad, before commencing the FGD. Depending on their discussion, the FGD was taken forward by the moderator. The aim was to answer the four research questions. Each discussion lasted for 30-40 minutes in an unstructured fashion, with minimum interference from the moderator.

4. Results and Discussion

The participants were asked to classify both the ads (as sexist or sexy), and discuss the reason behind their classification. Most of the participants clearly categorised the first ad as sexy and the second one as sexist. As one participant said "the first ad was sexy" while another participant, while referring to the second ad, said "it was more like portraying females as sex objects". A female participant, while referring to the first ad, said "I find it beautiful and I find it sexy so sex is not a bad thing". The female participants were quick to judge the second ad, saying "the second ad was clearly demeaning to women". Even the male participants were clear about the second ad and said "I found the ad very offensive". Therefore, it is clear that the second ad was offensive to

women, therefore, sexist while the first ad was sexy.

It was necessary to find the reason behind their categorization of the two ads. Therefore, they were asked to define sexism, explaining the underlying attributes of a sexy theme and a sexist theme. At this point the participants were unsure about the difference between the two themes. One of the male participants said "there is a very thin line" and other said "it is a grey area". Therefore, the participants were asked to discuss and come to a conclusion.

4.1 What is the difference between 'sexy' and 'sexist' advertisements as per the Indian audience?

During the course of the discussion, participants expressed their liking towards sexy ads. One of the female participants, while referring to the first ad, said "I think sexy is still good" and yet another one said "I like the ad". This showed that both males and females do not mind sexy advertisements. Further, they enjoy such ads without getting offended (Lysonski, 2005).

The participants engaged themselves in identifying the making of sexy ads. One of the female participants said "in the first ad, the woman was leading the man into whatever... that's okay". We can draw the conclusion that the audience does not mind sexual themes as long as the woman is in control of her actions. The audience should be able to see that the woman is shown to be enjoying herself, willingly (Lysonski, 2005).

A male participant said "the ad can be sexy without being sexist because the script demands it or the product demands it". Another male participant pointed out "the question of being sexist does not arise in the case of a condom ad but in the case where a woman is used for selling cement then there is only beauty and no brains" (referring to a famous cement ad featuring a bikini model). As long as the nudity or sex is embedded in the theme of the ad or the product has an intimate image (like condoms) then the presence of a sexual theme is termed as sexy (Aruna & Sahni, 2008).

The participants classified those ads as sexist where the woman was treated as an object of sex. One male participant said "objectifying women as a sex object to sell" while another participant said "stereotypes like women are meant to be working in the kitchen or meant to clean the floors or meant to wash men's underwear". Therefore, most of the participants agreed that sexist themes are the ones where women are either stereotyped

or used as objects of sex. On the other hand, the participants termed sexy ads as “titillating”, “beautiful” and “arousing”. These definitions concur with the definitions provided by Lysonski (2005).

One of the participants said “sexism is not related to only women it should be related to men also”. The participants therefore were clear that sexism is not restricted to women, exclusively.

One of the female participants said “in the first ad it was more like the girl was doing it willingly and in the second as it was like once that guy used that deodorant this girl had no choice and cannot resist the temptation”. This shows that the audience does not take offense as long as the woman is shown to be under control of her actions. The first ad is termed as sexist because it implies that women are objects of desire for men (Malhotra & Rogers, 2001). One of the female participants termed the use of women in such ads as “play things”. This can be highly derogatory to the female population, therefore, termed as sexist.

The participants in two groups spoke about the fairness cream and beauty enhancement products which stereotype both the sexes. One of the male participants pointed out saying “there is a difference if it is product it is to be used for men then it will have ‘sexual content’ ... But if the product is catering to the women then... will show confidence in the women”. The advertisers try to create a desire in the minds of both the sexes by using themes which impact the respective audience greatly (Khan, 2011). This shows that advertisers, while in the process of attracting attention, end up stereotyping both the genders. The males too can get offended by such themes, as mentioned earlier.

A female participant contributed by saying “somehow the strength of the woman’s character is linked to the confidence that is derived by that beauty product: all ‘Fair and Lovely’ (a product which lightens skin tone) ads. Once that girl applies ‘Fair and Lovely’ she will get the job in an aviation centre or she will start singing and win awards”. The participants emphasized that beauty products claim that only beautiful (read fair) girls are successful in any field. Therefore, ads stereotype women by implying that only attractive girls get their work done. Most of the participants were highly offended by the themes adopted by beauty enhancement products. While comparing the male fairness creams, a female participant said “these ads, if I remember correctly, are

that you become fair and attract more women” and another responded by saying “they are no way related to a guy’s carrier”. Evidently, stereotyping is prevalent in the case of men too.

4.2 What are characteristics of ads that lead to a sexist theme?

After reaching the conclusion that sexist advertisements exist in the Indian advertising industry, it was imperative that the participants helped us in understanding the reason behind their existence.

A female participant spoke about the evolution of the ads by saying “TV or magazine... the ads have evolved... it started off, you know, as a functional basis and right now it is like what maximum can I put out in just one minute or these much seconds.... Whatever can be attractive”. The advertisers are always looking for new and innovative ways to attract the attention of the audience (Aruna & Sahni, 2008). The ads have evolved greatly over time; they used to focus on the functionality of the product in the past. Due to the increasing competition in the market every firm wants to stand out of the crowd and make ads which are catchy and interesting. One of the male participants pointed out “Maybe they don’t want to impress you but they want to shock you so that you remember that ad”. This is the best way to aid recall as there is no time to explain the product attributes and its functionality.

In the process of creating a shock, the advertiser looks for themes that are most attractive to the target segment. In the case of men, a female participant said “it is more about catching up with the man’s fantasy”. A male participant spoke about attracting the male attention by saying “they are actually catching the eyeballs of the target consumers who like sex so they show that stuff”. Therefore, unwanted nudity and sex are useful themes for advertisers to attract the male attention (Aruna & Sahni, 2008). But this can cause problems as some of the viewer perceive such themes as sexist.

One of the female participants said “it is a vicious circle thing. The marketers make ads and people get influenced and think of women as objects and marketers make more ads. So it’s this circle which makes these ads”. The participant believes, as discussed earlier, that the sexist ads are capable of influencing the impressionable population of the society. Hence, the viewers start enjoying ads which portray women as objects of sex. Since the audience seems to enjoy sexist themes, the

advertisers adopt these themes further. Interestingly, this time they go one step ahead in order to stand out from the competition (which resorts to sexist themes). Therefore, this is a vicious circle where the advertisements reinforce the behaviour of the viewers (Lysonski, 2005). Therefore, the degree of sexism in ads is increasing as time is passing.

Some of the participants did not agree to the decision that some of the previously mentioned ads were stereotyping any gender. When asked about the washing powder ads which show women being concerned about the cleanliness of their children's clothes, a male participant said "if a woman thinks that keeping her children's clothes clean then that is not sexism but if you think that it is only woman's work then it is sexism". He further added "the thing is that sexism is there when it is imposed on the woman but in most of the circumstances the women may choose that they want to work and don't want to work outside... ad is not showing that the whole achievement of the women is cleaning the clothes of their children... It is showing that one woman who is taking that decision is happy that her child's clothes are clean... that is not stereotyping... Stereotyping is when they are showing that it is true for everyone". Another male participant supported him by saying "see there might be a reason for women being there in the ads as the women are the decision makers for detergents... that depend on the market research". Therefore, these participants were of the opinion that the themes shown in such ads are not generalising the role of women, they are just focussing their communication to their target consumers who are mostly females. They are in no way stereotyping women or imposing a certain role which only women should take up.

A female participant was quick to judge the sexist ad that was shown to them, by saying "I am ok with it as it is a marketing perspective so if they want to market it to guys who want to attract women so if you look at it in that point of view that it is what it is actually doing. I don't take it as sexy or sexist as it is a people's perception how they take it". The advertisers make ads which are specifically made for their target consumers, and in the process of creating an impression on them end up offending the bait (women, in the case of deodorant ads) in the ad. Therefore, the target consumer perspective is taken into consideration by the advertiser which is fair as per her argument.

The ads are directed to attract the attention of the target consumers. For example, a washing powder company considers females, in their 30s, as their target segment; therefore, they make ads that appeal to that segment alone. But the problem occurs when the non-targeted segment views this ad. They are not able to relate to the ad, and develop a negative attitude towards it. For example, if a highly educated woman who is a social worker watches an ad which is meant for housewives then she might think that the ad is implying that only women are supposed to wash clothes. But in reality what the ad is doing is serving its target population. Therefore, the advertisers should be careful about the perception of the non-targeted segment population too.

One of the male participants pointed out a very interesting phenomenon while expressing the use of women as sex objects in the deodorant advertisements. He said "in private they find it attractive and that is where the sexism lies and I think marketers have identified the fact that I am ok as an individual watching in on the TV in my home but if I see it in the group of 20 people then I will say what the hell is happening". If individually the consumer likes objectification of women then the product will do well. In a social setting the same individual might agree with a group by calling the same ad as sexist, in order to avoid embarrassment. Therefore, it will be difficult to understand that a person who criticises ads with female objectification is actually offended by them.

4.3 What are the harmful effects of sexism on the advertising industry?

The participants were concerned about the impact of sexist advertisements on the image of women in the society. A female participant, while referring to children, said "they might not be matured enough to understand that these are just marketing gimmicks to attract the attention. They might perceive it... like distorted reality" while another said "they might perceive women as only objects of desire". Therefore, they agreed that sexism can have a negative impact on the younger generation. One of them further added "Maybe later on, in their college or work place they also might treat women like that". Therefore, there is a fear that teenagers might perceive women only as objects of sex, treating them without respect. This is a major concern for the society. It can increase the crime rate and result in a society which is unsafe for women.

The groups did not completely agree with the findings

of Fam and Waller (2003). When asked about the audience losing trust in the advertising industry, one of the participants said “these days how many people believe in ads? How many of us just by seeing the ad, go and buy something?” This shows that the audience is indifferent to the content of the advertisement. The only thing these advertisements do is aid in product recall, as mentioned by a female participant by saying “Even if I have a negative recall of that ad or it offends me, I would still pick that up”. Therefore, the audience does not develop a negative attitude towards brands telecasting sexist advertisements. This is another incentive for the advertisers to continue adopting sexist themes with female models in skimpy clothes.

4.4 What are the ways to curb sexism in the Indian advertisements?

The participants were of the view that a female should feature in the ad only if her presence is required to demonstrate the product utility. A female participant said “it is a deodorant right? You have to mask your body odour, why you have to show a woman who is half naked and what is the need for that?” Another participant responded by saying “sometimes there are ads where there is no connection between a product and the girl”. These ads should concentrate on the functionality of the product rather than having an unnecessary theme which includes sex or objectification of women. If the role of a woman (in an erotic theme) in the ad is not required then it is seen as objectification of women, therefore termed as sexist (Malhotra & Rogers, 2001).

The participants expressed that there is a very thin line between sexy and sexist advertisements. However, a female participant said “there have been ads which have certain amounts of indications and that is the strength of the marketer where you are trying to point out this is what we mean but you are not showing that”. This shows that the theme of the ad can be sexy but there is no need to show a highly explicit scene or extreme nudity. These things can be achieved subtly by implying the idea which is supposed to be understood by a keen observer. This way the involvement in the ad will be high and audience will not be offended (Dijafarova, 2008).

5. Implications

This topic is based on a sensitive issue and the discussions conducted helped a great deal in gathering useful data. Since the group members knew each other, they were comfortable in speaking out their opinion, candidly. The

discussions helped validate the literature and, at the same time, brought new insights which helped us in understanding the concept further. The objectives of this study were met in the due course (Refer to Figure 1 for the conceptual map of the findings). This figure represents the three major components that have emerged from the FGDs that were conducted for this research. These components are (1) the antecedents of sexist themes (2) the meaning of sexism in Indian ads and (3) the outcome of sexist themes in ads. While every FGD and its participant revealed their unique experiences and meaning of sexism, all of the participants mentioned the above themes either implicitly or explicitly. The antecedents that lead to the sexist themes are (1) the desired shock value from the ads to attract audiences’ attention, which leads to explicit sexual story lines, (2) the hypocrisy of the audience while evaluating sexual themes and (3) the perception of the non-targeted population. Furthermore, the participants believed that the objectification and stereotyping of a gender are the prime constituents of sexism in ads. Lastly, the participants firmly believed that sexism in ads is capable of shaping the minds of the audience in a way that can lead to the treatment women as objects of sex. (Figure 1)

As per the findings of this study, some sections of the audience are sensitive to sexism in advertisements, therefore it was important to understand the elements of sexist advertisements. The audience is looking for interesting advertisements, devoid of unnecessary sexual theme. As per the findings, consumers enjoy ads which implicitly point towards sexual activity rather than explicit depictions. Viewers appreciate ads with titillating themes as long as the product or the situation demands for it. Such ads are liked even by the female viewers. Therefore, care should be taken to ensure that erotic themes are adopted only if it is consistent with the product/campaign. Unnecessary placement of erotic themes leads to the audience perception of sexism. Campaigns depicting themes where women are not in control of their actions are perceived as sexist.

The importance of beauty can be minimized in advertising. This puts an undue importance on the physical aspects, conveying that a woman has to be attractive to be successful (Khan, 2011). This can affect the impressionable audience like teenagers and youth who might place a great deal of importance to beauty (Vacker, 1993).

Firms are looking to maximize the impact of their ad campaign by focusing on their target segment. They develop ads that depict the lifestyle of the targeted consumers. The perception of stereotyping prevails when a more liberal, non-targeted segment views these ads. Therefore, some of the ads are termed as sexist when they are actually doing what is best for their brand. This is the prime reason behind the perception of sexism in the advertising industry.

The culture also feeds the advertising themes. Since the Indian culture is viewed as sexist by the study by Khan (2011). As pointed out by a participant, another reason for the existence of sexism is that people often agree to the fact that sexist ads are offensive, when asked in public. However, they seem to enjoy such themes personally. We cannot generalise this theory but the data collected points in this direction.

Some of the participants believed that sexist ad campaigns will lead to a negative attitude towards the brand. But one of the groups did not agree with this idea as they believed that a negative recall can also lead to purchase of the concerned brand. Therefore, sexist themes might not hamper the brand image. This was contrary to the study done by Fam and Waller (2003).

The society is evolving and becoming increasingly tolerant towards sexism in advertising due to globalization. At the same time, the degree of sexism in ads is also increasing as every advertiser wants to be one step ahead of the competition, and develop themes which will stand out from the crowd (Aruna & Sahni, 2008). In the process of creating the shock value, the advertisers resort to a greater magnitude of explicit themes. Thus the perceived degree of sexism is increasing.

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Figure 1: Conceptual Map to understand Sexism in Indian Advertising

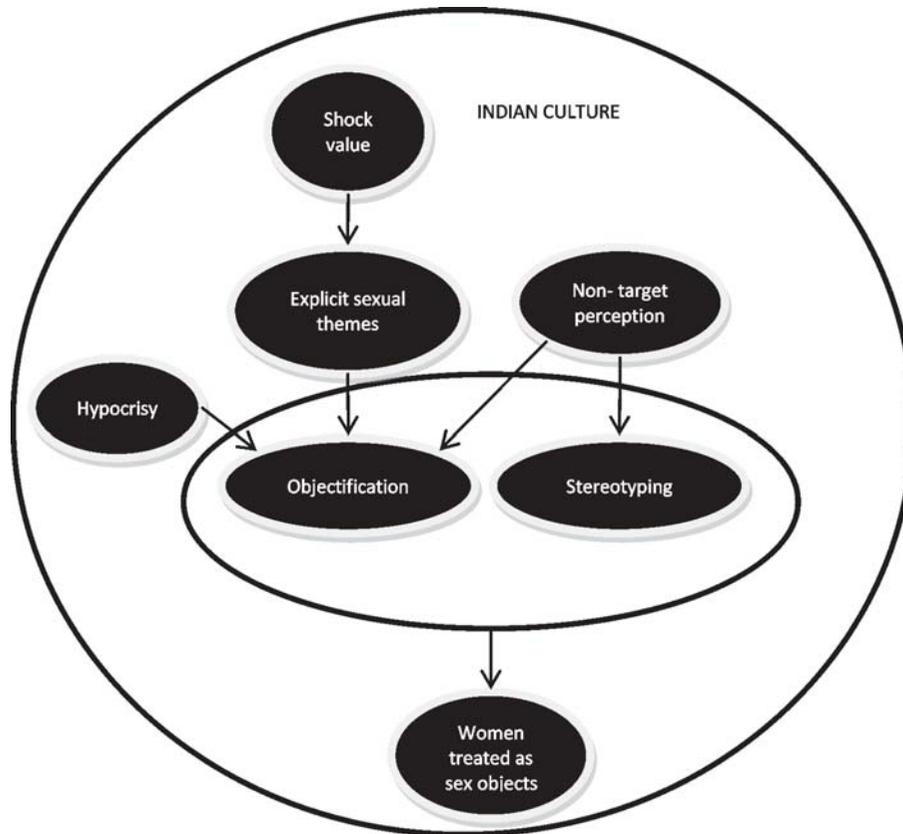


Table 1: Details of FGD

FGD number	Participants	Duration (mins)	Length of transcript (pages)
1	4	39	20
2	4	31	21
3	4	35	17
4	4	35	16
5	5	36	22
6	4	33	17

Table 2: Demographic details of the participants

	Total Number	
Age group	23-25 years	5
	26-30 years	11
	31-35 years	6
	Above 35 years	3
Gender	Male	15
	Female	10
Education	Upto graduation	8
	Upto post-graduation	15
	Others	2

Kapil Khandeparkar is an Assistant Professor of Marketing at Goa Institute of Management, Goa. He can be contacted at kapilk@gim.ac.in.

Manoj Motiani is currently working as an Assistant Professor of Marketing at Indian Institute of Management, Indore. He can be contacted at manojm@iimdr.ac.in.

Understanding the Effectiveness of Celebrity Endorsements

Danish Hussain¹

Kaleem M Khan

Aligarh Muslim University

Abstract

In this age of information, where consumers encounter promotional messages extensively, it is difficult for an advertisement to be effective. Celebrity endorsement is a strategy that many firms adopt, hoping that it would help them in overcoming this problem. However, not all celebrity endorsements deliver the desired results and significant resources get wasted. What are the benefits of using celebrity endorsers? Why are celebrity endorsers effective? What are the different factors that determine the effectiveness of celebrity endorsements? What is the relative importance of these factors? This paper tries to answer these questions through literature review and a qualitative research undertaken in the Indian context.

Keywords: Celebrity endorsers, Meaning Transfer, Match-up, Source Attractiveness, Source Credibility.

1. Introduction

Use of celebrities in advertisements is an increasing phenomenon worldwide. They are now used for endorsing different product categories. Celebrity endorsers are extremely popular in Japan and Korea (Kilburn, 1998). Celebrity endorsers are also popular in USA, UK, India, Malaysia, Turkey and New Zealand (Millward Brown, 2007; Money, Shimp, and Sakano, 2006). In USA, celebrities appear in almost 25 percent of the advertisements (Shimp, 2008). In India, according to a report by FICCI (Federation of Indian Chambers of Commerce and Industry), 60 percent of Indian brands used celebrities in 2008 whereas it was only 25 percent in 2001 (Shashidhar, 2008). FICCI also estimated that roughly six billion Rupees are spent each year as endorsement fees of celebrities.

According to McCracken (1989) a celebrity endorser is "any individual who enjoys public recognition and who uses this recognition on behalf of a consumer good by appearing with it in an advertisement" (p. 310). Celebrity endorsers have gained popularity because they are traditionally viewed as being dynamic, and having

attractive and likeable qualities, and their fame is perceived to attract attention (Atkin and Block, 1983). They are used for promoting existing products, to reinforce and reposition brand images and to introduce new brands. Researchers have also discussed potential hazards of celebrity endorsements as it can be a double edged sword (Erdogan, 1999). When the celebrity overshadows the product being endorsed, loose popularity or gets involved in a scandal, then the product endorsed can severely suffer, and this results in the failure of the endorsement campaign and huge amount of funds and resources gets wasted (Cooper, 1984; Till and Shimp, 1998). Considering potential benefits, the high cost and risks associated with celebrity endorsements, the study explores various aspects of the effectiveness of celebrity endorsements.

There are five main objectives of the study. First, to explore the factors that are affected by celebrity endorsements (benefits of celebrity endorsements); second, to understand the rationale behind the effectiveness of celebrity endorsers by reviewing various underlying theories; third, to explore various factors that determine the effectiveness of celebrity endorsers; fourth, to assess the applicability of the identified factors and theories in the Indian scenario; and, last, to gauge the relative importance of identified factors. To accomplish the first three objectives, past research regarding celebrity endorsements was reviewed. For the last two objectives, a qualitative research in the Indian scenario was undertaken.

2. Factors Affected by Celebrity Endorsements

Celebrity endorsements affect many factors which directly or indirectly impact sales of the product (Erdogan, 1999). According to Atkin and Block (1983) the fame of the celebrity endorsers helps in drawing attention to the product. Belch and Belch (2001) termed it as stopping power, which means that celebrity endorsers are able to break through the cluttered media environment and draw attention towards the advertising message. Kamen, Azhari and Kragh (1975) reported that use of celebrity

¹ Corresponding Author

endorser leads to greater awareness of advertisements and positive change in the company image. Louie and Obermiller (2002) found that selection/rejection and retain/dismissing decisions regarding celebrity endorsers has significant impact on the company's image. Petty, Cacioppo and Schumann (1983) manipulated endorser type and found that celebrity endorsers lead to greater recall of brand name as compared to typical citizens, and produced more favourable attitude towards the product than typical citizens. Friedman, Termini and Washington (1976) manipulated endorser type and found that celebrity endorser enhanced the believability of the advertisement, purchase intentions and perceived quality of the product. Friedman and Friedman (1979) manipulated endorser type and product class. They found that celebrity treatment produced greater recall for both advertisement and brand name, regardless of the product class.

The benefits of celebrity endorsers is evident from many successful examples such as, Michael Jordan for Nike, Hanes, Kobe Bryant for ADIDAS, David Beckham for H&M, Catherine Zeta Jones for T-Mobile, Nicole Kidman for Chanel and Tiger Woods for Rolex. In India, Coca Cola found that the recall rate of its campaign featuring Hrithik Roshan went from 20% to 40 % among the target audience. Further, S Kumar's, a textile company, calculated that it will incur at least 40% less, simply due to hiring Hrithik as a brand ambassador (Dasgupta and Bansal, 2001). Home Trade, a financial service portal, also found that using Hrithik led to considerable increase in the number hits on its portal. Coca Cola also reported that its sales benefited after its "Thanda Matlab Coca Cola" campaign featuring Aamir Khan (The Economic Times, 2003). Other successful examples include Amitabh Bachchan for Parker, Cadbury, SRK for Santro and Sachin for Boost, Pepsi.

There is consensus among researchers as well as practitioners regarding the use of celebrity endorsers as a powerful way of achieving greater consumer attention, awareness and recall. But the power of celebrity endorsers in achieving positive attitudes and purchase intentions for the endorsed brand has been questioned by some studies. For example, Mehta (1994) did not find significant differences in the effect of celebrity endorser and non celebrity endorser on attitudes (towards advertisement and brand) and purchase intentions for the endorsed brand. Freiden (1984) also manipulated endorsers (Celebrity, Typical Consumer, CEO and Expert) and

found mixed results. Further, several unsuccessful examples can also be found across the globe. In India, some of the biggest stars failed to deliver the desired results for the endorsed brands. Some examples include SRK for Lux, Amitabh for Versa and Nerolac Paints, Virat for Fair and Lovely and Sachin for Palio. These contradicting studies and examples suggest that there may be several factors which determine the effectiveness of celebrity endorsers, especially in influencing attitudes and behavioural intentions. Some of the major factors are discussed in the next sections of the paper.

3. Theories of Celebrity Endorsement Effectiveness

3.1 Source models

3.1.1 Source Credibility: Source credibility implies the spokesperson's positive characteristics which affects the receiver's acceptance of the message (Khan and Khan, 2002). The idea behind the model is that if the source of the message is considered credible then the message will be evaluated positively and it will have greater persuasiveness. Credible sources influence attitudes, beliefs and behaviour through "internalization". Internalization occurs when individuals conform to the attitude and behaviour advocated by a credible source because they believe in the substance of new attitude or behaviour (Freidman and Friedman, 1979). Once these attitudes or behaviour gets internalized, they remain in the minds of the consumers even after the message or the source is forgotten. The source credibility model proposed by Hovland, Janis and Kelley (1953) states that Expertise and Trustworthiness are two important factors from which credibility originates.

"Expertise" is the extent to which the source is perceived to have the ability of making correct assertions by virtue of having the relevant skills (Hovland et al., 1953). This dimension is also sometimes referred as competence, authoritativeness, expertness and qualification (Khan and Khan, 2002). A study by Crisci and Kassinove (1973) reported that the compliance of the respondents to the recommendations made by the source directly varies with the perceived level of expertise. A source perceived more expert generated more intentions to buy the brand (Ohanian, 1991). Expert endorser produced positive brand attitude and greater purchase intent than non-expert endorser in an experiment by Till and Busler (1998).

"Trustworthiness" is the degree to which the audience considers the communicator and the assertions to be valid. Consumers are sceptical regarding untrustworthy

celebrities (Smith, 1973). McGinnies and Ward (1980) studied trust worthiness and expertise and found that trust worthy source was persuasive, regardless of expertise. Contrarily, study by Sternthal, Dholakia and Leavitt (1978) found that a high credible source is not always more effective than a low credible source. They found that if the initial opinion of the audience is positive towards the issue, than a less credible source is more effective.

3.1.2 Source Attractiveness: Joseph (1982) states that more favourable evaluations of the product and the advertisement are made when attractive models are used. Attractive sources persuade consumers through a process called "identification". Identification occurs when consumers adopt attitudes and behaviour advocated by the source because they get satisfaction in the idea of being similar to the source (Friedman and Friedman, 1979). Identification is not like internalization where information from an attractive source is integrated into the belief system of the consumers; the consumers may conform only till the source remains relevant or attractive to them (Kelman, 1961).

Petty and Cacioppo (1980) found that the source attractiveness affects persuasion in both low and high consumer involvement conditions. The product, when endorsed by the attractive celebrity, resulted in greater brand recall, positive attitude towards product and greater purchase intention than the unattractive celebrity (Kahle and Homer, 1985). Till and Busler (1998) found that purchase intentions and brand attitude were significantly higher in attractive endorser condition than unattractive endorser condition.

Majority of studies have supported the positive relation between source attractiveness and attitudes, but results regarding the relation between purchase intention and source attractiveness are ambiguous (Erdogan, 1999). Further, except the study by Till and Busler (1998), literature suggests that attractive endorsers are effective only for attractiveness related products (Kahle and Homer, 1985; Kamins, 1990; Baker and Churchill, 1977; Petty and Cacioppo, 1980). Source models fail to clearly explain the endorsement effectiveness process as they consider it as a uni-dimensional process. They concentrate only on the celebrity aspect, ignoring the product and consumer aspects. McCracken (1989) states that, "According to the model, the persuasiveness of the celebrity has everything to do with the celebrity and nothing to do with the product." (p. 311). They fail to explain why some celebrities prove successful for a particular product and disaster for other products. They also fail in differentiating between celebrities; two celebrities cannot be equally good for the same product even if they are equally attractive and credible. This means that apart from credibility and attractiveness, there are other dimensions also that differentiate celebrities and thereby affect the celebrity endorsement process. Ohanian (1990) developed and tested a fifteen-item semantic differential scale for measuring celebrity credibility. It has three dimensions of attractiveness, trustworthiness and expertise. The five point scale was late used in many studies to measure source credibility (See Table: 1).

Table 1: Source Credibility Scale (Ohanian, 1990)

Attractiveness	Trustworthiness	Expertise
Attractive-Unattractive	Trustworthiness	Expert-Not Expert
Classy-Not Classy	Dependable-Undependable	Experienced-Inexperienced
Beautiful-Ugly	Honest-Dishonest	Knowledgeable-Unknowledgeable
Elegant-Plain	Reliable-Unreliable	Qualified-Unqualified
Sexy-Not Sexy	Sincere-Insincere	Skilled-Unskilled

3.2 *The match-up hypothesis*

Match-up hypothesis states that for an advertisement to have a positive impact on believability, attitudes and behavioural intentions, there should be a 'fit' between the product and the celebrity endorser. This 'fit' or 'match-up' is the congruency between the message conveyed by the image of the celebrity and the product image (Kamins, 1990). If there is no distinct and specific relation between the celebrity and the product being endorsed, then it will have negative impact as consumers will remember the celebrity but not the product. This phenomenon is termed as 'Vampire Effect' (Evans, 1988). The social adaptation theory states that the impact of information depends upon its adaptive significance, and acquisition of new information will help consumers to adapt. Therefore when an attractiveness related product, then he/she adds more adaptive information about the product as compared to an unattractive celebrity (Kahle and Homer, 1985; Kamins 1990). Attractiveness, expertise and image of the celebrity are the match-up factors proposed by researchers.

Attractiveness match-up means using attractive celebrity for an attractiveness related product. The study by Kahle and Homer (1985) supported the match-up hypothesis for attractiveness. Baker and Churchill (1977) found that unattractive female model generated more purchase intentions for coffee and attractive female model generated more purchase intentions for Perfume/Aftershave. Kamins (1990) found in his experiment that physically attractive celebrity was significantly more effective in influencing believability, attitudes and purchase intentions than physically unattractive celebrity for attractiveness related product and there was no significant impact of physical attractiveness when the product was attractiveness unrelated.

In expertise match-up, a celebrity who is perceived "expert" in the field is used for endorsing a product related to that particular field, for example, an athlete endorsing an energy drink or sports shoes. Till and Busler (1998) studied both attractiveness and expertise as match-up factors. They found that expertise is a more powerful factor for match-up as attractive endorser was found to be effective in both the situations of attractiveness related and attractiveness unrelated products.

Image based match-up is matching celebrity associations with brand associations. Misra and Beatty (1990) tested image based congruence by matching the products (jeans

and a board game) with celebrities having similar images respectively; significant positive impact on brand attitude was found. Kamins and Gupta (1994) matched the product (computer) with a celebrity who was perceived to be scientific and found positive impact on variables such as, brand attitude and spokesperson believability. Another study by Lee and Thorson (2008) also supported the positive effects of image based match-up on attitudes and purchase intentions.

The match-up hypothesis tells us how to make celebrity endorsements effective, but it is not free from criticism. It does not explain the degree of fit or match which may exist between a celebrity and the product; it simply compares a "match" with a "non match" and thus ignores the continuum across different celebrities. In real situations, there are several celebrities who match with the brand but the advertiser seeks the one who is a better match than others. Further, if a celebrity endorser is being used to reposition the brand, then little bit of incongruence between the celebrity and the brand is bound to exist, and may also be necessary for changing the perception regarding the brand. Thus strictly adhering to match-up will not be a successful strategy in this situation (Ang and Dubelaar, 2006).

3.3 *Meaning transfer model*

According to meaning transfer model (McCracken, 1989), the cultural meanings associated with the celebrity make an endorsements work. Each celebrity holds distinct cultural meanings which he or she has inherited through their careers. Rugged, intelligent, confident, sophisticated and masculine can be a few examples of the wide range of cultural meanings that celebrities carry. These meanings get transferred to the products through the celebrity endorsement process and finally to the consumers who try to take on those meanings by consuming those products. Success of a celebrity endorsement depends upon the cultural meanings which the celebrity holds and on how well these meanings are transferred to the product through advertisement. (Figure 1)

There are three stages of meaning transfer. In stage one, the celebrities earn cultural meanings through their respective careers, for example, movie performances, sports achievements, social activism. Stage two is the endorsement process in which the cultural meanings which the celebrity holds get transferred to the product he or she is endorsing through advertisements. The cultural meanings inherited by the product then influence

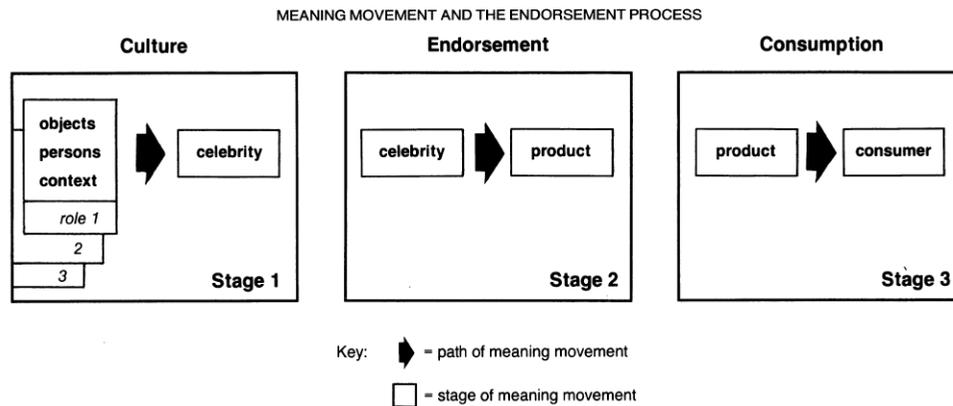


Figure 1

attitudes and purchase intentions regarding the product. In stage three, the consumers consume the product in order to take on the meanings the product holds. They try to consume the image associated with celebrities and to accomplish it they consume the products associated with the celebrity (Fowles, 1996). However McCracken (1989) argues that there is no automatic transfer of meaning because just consuming the product is not sufficient to take possession of its meaning. Consumers must claim the meaning and then work with it in order to build and project the cultural meaning they want.

Langmeyer and Walker (1991) conducted an experiment on students and found that when the products were not endorsed by celebrities, they retained only product category images but in celebrity endorsement treatment, they inherited the images of the celebrity endorser. Recently Miller and Allen (2012) investigated the cognitive process underlying meaning transfer. Using evaluative conditioning procedures they found that even beliefs about a well-known brand altered just through mere co-occurrence with a different set of celebrities. They also found that the altered beliefs regarding the brand were now more aligned with existing beliefs about the celebrities who co-occurred with the brand.

4. Factors Determining the Effectiveness of Celebrity Endorsements

4.1 Consumer specific factors

4.1.2 Demographics: Khan and Khan (2002) found that female students found celebrities more convincing than male students. Kahle and Homer (1985) found in their

experiment that likable celebrity endorser enhanced recall and recognition ability of female respondents. They also found that under high involvement condition, women recalled more arguments contained in the advertisement when a likable celebrity was used and men recalled more arguments when an unlikable celebrity was used. Atkin and Block (1983), in their study on two sets of audience, found that the younger audience’s evaluation of the celebrity endorsements (in terms of believability, attitudes toward the ad and product, and purchase intentions) were significantly higher than the older audience. Freiden (1984) also found in his experiment that attitudes of younger consumers differed substantially from older consumers. In general, younger consumers rated the advertisements higher than adults.

4.1.3 Consumer Involvement: Involvement determines the ability and motivation of consumers to process information (Andrew, Durvasula and Akhter, 1990; Petty et al., 1983). The Elaboration Likelihood Model (Petty et al., 1983) states that consumers get persuaded differently under high and low involvement conditions. High level of involvement will motivate the consumers to elaborate more i.e., engage in careful thinking and evaluation of information and arguments in the advertisement. Low elaboration means that the consumer is not sufficiently motivated and therefore he will not engage in active information processing, and will only make inferences on the basis of simple positive and negative cues. Under high Involvement conditions the strength and quality of the persuasive argument (Central route) contained in the ad is what matters more for the consumers (Petty et al.,

1983). Previous studies have shown that consumers become more motivated to elaborate on the content of an advertisement when they are highly involved (Muehling, Laczniak and Andrews, 1993). Studies have shown that “match-up” is processed as a central cue in persuasion (Kirmani and Shiv, 1998; Rice, Kelting and Lutz, 2011). Under low involvement conditions, peripheral cues such as the way the advertisement was made, the music or the imagery, source attractiveness and source credibility become more important in persuading consumers (Petty et al., 1983; Mehta 1994).

4.1.4 Initial Opinion: According to cognitive response theory, if the audience has positive initial opinion towards the message, a less credible source will be more persuasive and will positively impact attitudes and behavioural intentions. If they have negative initial opinion, then a high credible source will be more effective in persuading and having positive impact on attitudes and behavioural intentions (Sternthal et al., 1978). This happens because, when the less credible source is used the recipients who are positively predisposed towards the message will feel greater need to insure that their stand is being adequately represented; therefore they will generate more support arguments. When they are negatively predisposed, then a highly credible source will inhibit counter argumentation and stimulate persuasion. Sternthal et al., (1978) manipulated initial opinion (positive and negative), timing of the source and source credibility; their findings supported the cognitive response view of information processing. Another empirical study by Harmon and Coney (1982) reinforced the cognitive response theory.

4.2 Celebrity specific factors

4.2.1 Demographics: Findings regarding the endorser’s gender are mixed (Erdogan, 1999). Debevec and Kernan (1994) found that attractive female endorsers generated more positive attitudes than attractive male endorsers, across both the genders. In another study, male endorsers produced more purchase intentions for male consumers and female endorsers produced more purchase intentions for female consumers (Caballero, Lumpkin and Madden, 1970). Khan and Khan (2002) found that male students gave higher ratings to male celebrities vis a vis female celebrities in terms of effectiveness. Freiden (1984) found in his study that gender of the endorser did not significantly affect consumer attitudes; however, although not significantly, male endorsers scored better than female endorsers on some variables such as “ad informative”

and “spokesperson knowledgeable”. Based on his findings he suggested using male endorsers in case of doubt.

4.2.2 Number of Endorsements: An exclusive celebrity is believed to be more effective for the brand than a celebrity who has been endorsing multiple brands. Mowen and Brown (1981) found that multiple endorsements by a celebrity resulted in less favourable evaluation of the advertisement, the product and low intentions to buy. Also Tripp, Jensen and Carlson (1994) found that multiple endorsements negatively affect the perception about the endorser and attitude towards the advertisement. Rice et al. (2011) studied the interaction between involvement, number of endorsements and congruency (fit) between product and the celebrity. Their study revealed that under low involvement condition, brand attitudes became more negative with increase in the number of endorsements by the celebrity. Under high involvement, brand attitudes depend on the congruency between the brands endorsed and the celebrity. When the brands endorsed were congruent to the celebrity, multiple endorsements produced favourable brand attitude; when the congruence was low, multiple endorsements produced less favourable brand attitude. The reason is that, under high involvement condition, the congruence between celebrity and the brand is processed as persuasive argument (central cue) by the consumers, but in low involvement conditions, peripheral cues (such as, source characteristics, likability of the endorser), not the argument strength, affects brand attitude (Kirmani and Shiv 1998, Kang and Herr 2006).

Degree of Congruency: Lee and Thorson (2008) studied the effects of different degrees of congruency (extreme match, moderate mismatch to extreme mismatch) on attitudes and behavioural intentions. Based on schema-congruity framework they suggested a theoretical framework that moderate mismatch between celebrity and product image would produce more favourable responses to the advertisement. Although not statistically significant, moderate mismatch was found to be more effective than extreme match in their study.

4.3 Product specific factors

Friedman and Friedman (1979) found that products involving high social or psychological risk are better suited for celebrity endorsers. They also found that expert endorsers are better suited for products having high financial, performance or physical risks. Atkin and Block (1983) also suggested using celebrities for products with

high social and psychological risks. Packard (1957) suggested using celebrities for products that are perceived as status symbols. Floyd (1999) in his Three-Order Hierarchy model suggests using celebrity endorsers when there are minimal differences (low product differentiation) between competing brands. According to this model, when there is high product differentiation in competing brands then the consumer becomes highly involved and tends to focus more on information about the brand to evaluate each alternative. Minimal differences in competing brands leads to low involvement of consumers in the purchase process; they may focus less on information and more on non-message elements such as, the celebrity.

5. Qualitative Research

A qualitative research was carried out to study factors identified through literature review. The purpose of the qualitative research was to generate support for the identified factors and also to figure out their relative importance. Another purpose was to access the applicability of these factors in the Indian context. Based on literature review, the following factors relating to the effectiveness of celebrity endorsements were chosen for qualitative research.

Source attributes (Attractiveness, Trustworthiness and Expertise), celebrity exposure, celebrity product match-up, meaning transfer model, product differentiation in the product category and types of risk associated with the product.

5.1 Methodology

Ten most successful and eight most unsuccessful celebrity endorsement campaigns were identified in the Indian scenario. The successful campaigns included Amitabh Bachchan for Parker Pen & Cadburys; Sachin for Boost health drink, MRF tyres & Pepsi; SRK for Hyundai Santro; Aamir Khan for Coca Cola; Aishwarya for Nakshatra diamond jewellery; Zakir Hussain for Tajmahal Tea; and Hrithik Roshan for S Kumar's Suiting. The unsuccessful campaigns were Amiatbh for Maruti Suzuki Versa & Nerolac paints; SRK for Lux & Videocon; Sachin for Fiat Palio; Virat Kohli for Fair and Lovely; Harbhajan Singh for Hublot; and Sehwaq for Reliance Mobiles (Abhishek and Sahay, 2013 ; Joshi and Ahluwalia, 2008; Financial Express, 2013).

Nine experts were then chosen to analyse these ad campaigns based on the factors identified through

literature review. The experts separately analysed each campaign. They gave their personal observations about the overall opinion of consumers regarding the identified campaigns. The following steps were taken by the experts for analysing the campaigns.

Step 1: For each campaign, the positioning and meanings for which the brand stands for were assessed. Then, the level of product differentiation present in the product category and various risks associated with the brand were assessed.

Step 2: Rating of the celebrity endorsers on source factors (attractiveness, trustworthiness and expertise) was done for each campaign. For rating, the experts were asked to give a score out of five.

Step 3: For each campaign, the type of match-up present was identified and a score out of five was given to the strength of the match-up.

Step 4: For each campaign, experts were asked to identify five most prominent meanings associated with the celebrity at the time of the campaign. The meanings were identified using the celebrity meaning scale developed by Choi and Rifon (2007) and source credibility scale by Ohanian (1990), presented in Tables 1 and 2 respectively. By selecting the most recurring or common cultural meanings in the list of each expert, a final list of five cultural meanings for each celebrity was prepared. The experts were then supplied the final set of celebrity meanings for each campaign and they gave a score out of five to the relevance of the celebrity meanings for the brand and the target audience.

Step 5: An approximate figure of the number brands each celebrity had endorsed before the concerned campaign was obtained through different sources.

Step 6: Finally the mean score for each campaign was calculated (Table 2).

5.2 Results and Analysis

Results and analysis are presented in Tables 3 and 4.

Source Models: Source models do not seem reliable, as we can see that same celebrities (Amitabh, Sachin and SRK) have delivered both successful and unsuccessful advertisement campaigns (Tables 1 and 2). SRK and Virat are perceived high on attractiveness but they were unsuccessful even for attractiveness related products (Lux, and Fair & Lovely respectively). Despite high on trustworthiness, Amitabh, SRK and Sachin were not

Table 2: Celebrity Meaning Scale (Choi and Riffon, 2007)

Genuineness
Socially responsible/Socially Irresponsible
Wise/stupid
Pleasant/unpleasant
Comfortable/uncomfortable
Competence
Strong/weak
Confident/apprehensive
Enthusiastic/not enthusiastic
Determined/undetermined
Excitement
Rugged/Delicate
Excitable/calm
Dominating/submissive
Masculine/feminine
Sociability
Public/private
Bold/shy

successful for other products (Amitabh for Versa, Nerolac; SRK for Lux, Videocon; and Sachin for Palio). ‘Expertise’ seems more reliable as we can see that except in one case, none of the celebrity endorsers was perceived high on expertise in the unsuccessful endorsements. In the case of successful campaigns perceived expertise was 60% or more in seven cases and more than 70% in three cases.

Exposure of the celebrity: Out of eight unsuccessful campaigns, three had highly overexposed celebrity endorsers, while in the case of successful campaigns the exposure was comparatively low. The highest exposure in a case of a successful campaign was eight endorsements by Amitabh. SRK, Sachin and Virat were the most overexposed celebrities in the case of unsuccessful campaigns. These findings support the negative effect of celebrity over exposure.

Match-up: Celebrity product match-up appears more reliable as compared to source models in ensuring a successful celebrity endorsement campaign. The strength of match-up in the case of unsuccessful campaigns was considerably low as compared to that of successful campaigns. Nine out of ten successful campaigns had high intensity of match-up. However, in three

unsuccessful cases, the celebrity-product match-up was rated high.

Meaning transfer: According to the meaning transfer model, any product can be given almost any cultural meaning through a celebrity endorsement. But it is effective when the meanings that the celebrity brings are relevant for the brand and the target audience. In all successful cases the relevance of celebrity meanings for the brand was highly relevant (more than 60%), while in all unsuccessful cases it was considerably low (60% or less). Relevance of celebrity meanings for the target consumers was also very high in each successful campaign (70% or more). However, it was also high in five unsuccessful campaigns (60% or more). This finding suggests that the relevance of celebrity meanings for the brand is more important.

Product Differentiation: According to the three-order hierarchy model, celebrity endorsers are not effective (effective) when there is high (low) product differentiation in the product category.

Our findings support to some extent the three-order hierarchy model as in all the unsuccessful campaigns

Table 3: Successful Endorsements

Advertisement	Category Product Differentiation	Product Category Risk	Positioning of the brand/ Brand Meaning	Celebrity attractiveness	Celebrity trustworthiness	Celebrity expertise	Exposure of celebrity	Celebrity product match-up	Strength of Match-up	Celebrity meanings	Relevance of celebrity meaning for the brand	Relevance of the celebrity meaning for the target consumers
<i>Amitabh for Parker Pen</i>	Low	Moderately high social and psychological risk	luxury pens for sophisticated people/elite intelligence	3.6	4.6	3	5	Image based	3.6	classy, elegant, sophisticated, socially responsible, determined	4	4.3
<i>Sachin for Boost</i>	Low	Moderate performance risk and physical risk	No.1 Health drink for the adolescents and youth	3.4	4.6	4.3	3	Expertise based	3.6	determined, confident, pleasant, socially responsible, wise	3.3	4
<i>SRK for Hyundai Santro</i>	High	High performance, financial, physical/social	Complete Family car/stands for efficiency and advance technology	4.6	4.2	2.5	4	Image based	4.1	pleasant, enthusiastic, determined/confident, wise	3.8	4.2
<i>Amitabh for cadbury</i>	Low	Low physical risk	A trustworthy brand	3.6	4.6	2.3	8	Image based	2.5	classy, elegant, sophisticated, socially responsible, determined	3.4	3.5
<i>Amir for Coca Cola</i>	Low	Moderate social psychological and physical risk	A drink for chill /warmth, genuine, fun and joy.	4.5	4.4	3.2	2	Image based	4	socially responsible, wise, determined, pleasant, enthusiastic	3.8	4
<i>Sachin for MRF Tyres</i>	Medium	High performance, financial and physical risk	Durable strong performing, value for money Tyres/Durability, Trust	3.4	4.6	3	4	Image based	3.2	determined, confident, pleasant, socially responsible, wise	3.3	4
<i>Asi/warya for Nakshatra</i>	Medium	High social, psychological and financial risk	Jewellery for sophisticated, elite, stylish and luxury people	4.8	3.8	4.3	7	Attractiveness based	4.6	classy, sexy, feminine, confident, elegant	4.7	4.8
<i>Zakir Hussain for Tajmahal tea</i>	Low	Moderate performance and social risk	Choice of elite, sophisticated and creative people	2.9	3.6	3.1	0	Image based	3.2	pleasant, comfortable, classy, determined, sophisticated,	4.1	4
<i>Sachin for Pepsi</i>	Low	Moderate social, psychological and physical risk	Choice of gen next/joy, excitement	3.4	4.6	2.8	5	Image based	3.5	determined, confident, pleasant, socially responsible, wise	3.3	4.1
<i>Hrithik for Skunkars</i>	Medium	High social and psychological and performance risk	A choice of elite and sophisticated/ Stands for, style shophistication, patriotism	4.7	4	3.6	3	Attractiveness based	3.6	sexy, masculine, rugged, confident, strong, pleasant	3.3	3.6

Table 4: Unsuccessful Endorsements

Advertisement	Category Product Differentiation	Product Category Risk	Positioning of the brand/ brand meaning	Celebrity attractiveness	Celebrity trustworthiness	Celebrity expertise	Exposure of the celebrity	Celebrity product match-up	Strength of Match-up	Celebrity meanings	Relevance of celebrity meanings for the brand	Relevance of the celebrity meanings for the target consumers
<i>Amitabh for Versa</i>	High	High performance, financial, physical, social and psychological risk	Family Car	3.6	4.6	2.3	5	Image based	3.1	classy, elegant, sophisticated, socially responsible, determined	3	3
<i>SRK for Lux</i>	Medium	High social, psychological and moderate performane risk	Secret of the beauty/ signifies beauty, femininity, confidence	4.6	4.2	1.8	34	image based	2.5	pleasant, enthusiastic, determined, confident, wise	2.5	2.9
<i>Shwag for Reliance mobile</i>	High	High performance, financial and moderate social risk	Brand for the masses/ stands for patriotism	2.1	3.8	1.9	5	Image based	2.3	determined, masculine, strong, shy, private	2.2	3
<i>Amitabh for Nerolac Paints</i>	Medium	High performance, financial and social risk	Premium decorative paints/ stands for creativity fun and joy.	3.6	4.6	2.2	8	image based	2.6	classy, elegant, sophisticated, socially responsible, determined	2.8	3.1
<i>Kohli for Fair and Lovely</i>	Medium	High social and psychological and moderate performance risk	Best protection for skin/ Signifies confidence, ambitions, beauty	4.1	4	2.5	10	attractiveness based	3	confident, dominating, rugged, determined, bold	2.1	2.9
<i>Harbajan for Hublot</i>	Medium	High social, psychological and moderate performance risk	Brand for elite/ Signifies creativity and technology	2.2	2.9	1.9	3	Image based	1.8	enthusiastic, rugged, dominating, confident, bold	1.5	1.9
<i>Sachin for Pajo</i>	High	High performance, financial, physical, social and psychological risk	Car for smart people/ Signifies smartness and style	3.4	4.6	3.1	8	Image based	3.2	determined, confident, pleasant, socially responsible, wise	3	3.3
<i>SRK for Videocon</i>	High	High performance, physical and financial risk	India's best in class home appliances/ signy technology and patriotism	4.6	4.2	2.4	39	Image based	2.8	pleasant, enthusiastic, determined, confident, wise	3	3.9

product differentiation was either high or medium, while six successful campaigns had low product differentiation. However, among successful campaigns, one had high (SRK for Santro) and three had medium product differentiation. But in all these four cases (successful cases with high product differentiation) the strength of match-up, and the relevance of celebrity meanings for the brand and the target audience, were also high.

Risk associated with the products: According to some studies, celebrity endorsers are not suited for products involving high performance, financial and physical risks; rather, they are suitable for products involving high social and psychological risks. Again we find partial support for these studies as we see that in five unsuccessful cases, the products had high performance, physical and financial risk. Further, moderate amount of performance risk was present in the remaining three unsuccessful cases. Further, among the successful campaigns, three cases had high and three had moderate social and psychological risks. But here also, in two successful cases (SRK for Santro and Sachin for MRF) where the products had high performance, financial and physical risks, the intensity of match-up, and the relevance of celebrity meanings for the brand and the target audience, scored high.

6. Discussion

At the very outset, it should be noted that in the case of all unsuccessful campaigns, each brand was well established and successful, but it was unable to benefit from the particular celebrity endorsement.

Based on our study, we can say that the source factors alone are not sufficient in ensuring celebrity endorsement effectiveness. According to source models, any celebrity will deliver as long as he/she is perceived high on source attributes. But we see that the same celebrities have delivered both successful and unsuccessful campaigns. Attractive and trustworthy celebrities were not always successful (SRK, Virat and Amitabh). Further, two cases (SRK for LUX and Virat for Fair and Lovely) also contradict the idea that attractive celebrities are more suited for attractiveness related products. Though the 'perceived expertise' attribute of the celebrity seems a bit more reliable than the other two, yet we can see an unsuccessful case, Sachin for Palio (3.1), where the perceived expertise was high. These observations raise serious doubts on the ability of source factors in ensuring endorsement effectiveness. Match-up hypothesis offers a better way to ensure effectiveness of celebrity

endorsements. We can see that the match-up scores of successful campaigns were considerably higher than the unsuccessful campaigns. But here also, we find four cases where the results contradict the theory. They are the three unsuccessful cases with high match-up score (Sachin for Palio 3.2, Amitabh for Versa 3.1 and Virat for Fair and Lovely 3) and one highly successful campaign with very low match-up score (Amitabh for Cadburys 2.5). A question now arises that whether adhering to match-up is always fruitful.

The success of Cadburys campaign can be explained through the meaning transfer model. Initially Cadburys was positioning itself as a brand that is must at times of celebration, happiness and fun with the tag line "Asli Swad Zindagi Ka". But after the 'worm controversy' it wanted to reposition itself as a trustworthy brand. Amitabh is one of the most trustworthy and well respected celebrities in the country. His image may not be congruent to the brand but his cultural meanings were the need of the hour for Cadburys. Therefore, through the advertising campaign, Cadburys very intelligently acquired the cultural meanings of Amitabh (i.e., trustworthy, socially reliable and determined). The ad campaign also showed the new Cadburys with a quality seal. This campaign now stands as one of the most successful celebrity endorsements in the country.

Virat's endorsement of 'Fair and Lovely' is another example that supports meaning transfer. Here the product is attractiveness-related and the celebrity scored high on both attractiveness (4.1) and attractiveness based match-up (3), but still the campaign was not successful. The reason can be the irrelevance of the Virat's cultural meanings for the brand (score 2.1). A fairness cream for men requires a celebrity with highly prominent meanings of pleasant, elegant, attractive, classy, confident and wise. Virat is perceived attractive, but still his cultural meanings are not perfect for 'Fair and lovely', they are more suitable for ADIDAS, a sports apparel brand he is currently endorsing.

It is clear from the Table that all the successful campaigns scored relatively high on relevance of the celebrity meanings for both the brand and the target consumers. However, three unsuccessful campaigns scored 60% in terms of the relevance of celebrity meanings for the brand, and five unsuccessful campaigns scored more than 60% on the relevance of celebrity meanings for the target consumers. But in all these cases, the products had

high performance, financial and physical risks categorised by high product differentiation, and these product specific factors, as we know, moderate the effectiveness of celebrity endorsements.

Lets us now discuss the role of 'product differentiation in the category' and the 'risk associated with the products' in relation to these campaigns. All the eight cases of unsuccessful campaigns support the three-order hierarchy model as in all these cases, the product differentiation was either high or medium (high in four cases and medium in four cases). Conversely, four cases of successful campaigns contradict the three-order hierarchy model as one of them had high product differentiation (SRK for Santro) and three had medium product differentiation. But high score on 'match-up' and 'the relevance of the celebrity meanings' could have made these four campaigns successful. We know that when there are large numbers of perceived differences among the competing brands (Floyd, 1999), the consumers become highly involved and focus more on product specific factors rather than the celebrity, but we also know that according to ELM, the strength of the persuasive argument (central route) is more important when the consumers are highly involved. Further, studies have shown that 'match-up' is processed as a central route and it strengthens the persuasive argument. It explains why SRK was successful for Santro and not for Videocon when both these brands had high product differentiation. At the time of the launch of Santro, SRK with his family boy image had become a household name in India; Hyundai which wanted to position Santro as a 'complete family car' tried to match the 'family boy image' of SRK with the car. The target consumers (middle income families) immediately identified the similarity between SRK and Santro. Further, the cultural meanings of SRK were also very relevant for the brand and were highly desired by Indian middle income families. In our study this campaign scored extremely high on 'match-up' and relevance of cultural meanings for the brand and target consumers (4.1, 3.8 and 4.2 respectively). In the case of Videocon, SRK was neither a good match (2.8) nor were his cultural meanings very relevant for the brand (3). These findings suggest that celebrity meanings may also serve as a central route in persuasion. It should be noted that by this time SRK had become extremely overexposed. As the exposure of a celebrity increases, his image and cultural meanings also become diluted and vague. The celebrity also inherits the meanings of the brands he had

been endorsing (McCracken, 1989). Therefore, in a case of overexposed celebrity, it becomes difficult for both the consumers and the advertisers to identify prominent meanings for which the celebrity stands. Dilution in SRK's once held family boy image and his cultural meanings due to overexposure might have also contributed to the non-performance of the Videocon campaign.

Similarly, in the cases of Amitabh for Versa and Sachin for Palio (where there was high product differentiation), the match-up scores were good (3.1 and 3.2 respectively) but not up to the mark to serve as a central cue in persuasion. Further, the relevance of celebrity meanings for the brand was also not very high in both these cases. It again suggests that the relevance of celebrity meanings may strengthen persuasive argument. In the case of Versa, Amitabh was not a perfect match; he is a larger than life personality. Consumers expect a larger than life brand for him and not an ordinary 'family car'. Also, keeping in mind his cultural meanings of classy, elegant, sophisticated, socially responsible, determined, Amitabh is more suitable for luxury, elite and classy products (for example, luxury pens). One may argue that Amitabh has been successful for non luxury products, such as Navaratan Oil, but in this case the product differentiation is low and it is not a typical high involvement product. In case of low involvement, peripheral route of persuasion becomes more important; therefore just the presence of a celebrity will be sufficient, but in case of a high involvement product, Amitabh should serve as a perfect match in order to deliver an effective endorsement. Later, with repositioning and cost reduction, Versa was able to achieve some sales. Fiat Palio was also a moderately successful product in other countries. The car was a powerful hatch back with low fuel efficiency at the time when mileage was extremely important for Indian consumers. Therefore, Fiat decided to position Palio as a powerful, smart and stylish car. Unfortunately, Sachin was neither a perfect match for the car nor was he the best choice of delivering the desired meanings of style and smartness, and power to the brand. The Reliance Mobile campaign (another case of high product differentiation) also suffered due the low celebrity-product 'match-up' and low relevance of the celebrity meanings for the brand. Based on these examples we can say that in case of high differentiation and high consumer involvement, match-up and the relevance of celebrity meanings become extremely important.

Similarly, the findings suggest that when the product has high performance, financial and physical risks, the match-up and relevance of celebrity meanings become extremely important as we can see in the case of two successful campaigns (SRK for Santro and Sachin for MRF Tyres). In both these campaigns, the product had high performance, physical and financial risks, but the scores of match-up and relevance of celebrity meanings were also very high. However,, in the case of five unsuccessful campaigns (where the products had high performance, financial and physical risks) the scores of match-up and meaning relevance were not up to the mark.

7. Findings and Conclusion

Based on the review of past literature and the qualitative research undertaken, main findings of the study are as follows. One, meaning transfer model offers more comprehensive explanation for the effectiveness of celebrity endorsements. Two, the cultural meanings of the celebrity, celebrity product match-up, celebrity expertise, celebrity exposure, consumer involvement, product differentiation in the product category and the type of risks associated with the product are important factors that determine the effectiveness of celebrity endorsements. Three, the relevance of celebrity meanings for the brand is as important, if not more, as the celebrity product match-up. Four, source expertise is more reliable than the other two source model factors i.e., trustworthiness and attractiveness. Five, among the consumer specific factors, consumer involvement is an important moderator of celebrity endorsement's effectiveness. Six, the degree of product differentiation and the type of risks associated with the product also moderate the effect of celebrity endorser. Seven, match-up and relevance of celebrity meanings become extremely important in case of high consumer involvement, high differentiation in the product category and products having high performance, physical and financial risks. Last, the factors identified in past research seem important and applicable in the Indian scenario as well.

Meaning transfer model appropriately explains the rationale behind the effectiveness of celebrity endorsers. Consumers try to acquire the cultural meanings held by the celebrities they like, by imitating them and consuming the brands which symbolize those celebrities. It also overcomes the inabilities of other models (Match-up Hypothesis and Source Models) to explain certain aspects of celebrity endorsement effectiveness. However, we

cannot ignore the importance of source models and match-up hypothesis as previous studies have confirmed their benefits. Consumer involvement is another important moderator of celebrity endorser effectiveness. Celebrity endorsers are effective in low involvement conditions because they provide peripheral cues, but in high involvement conditions, they have significant impact only when they provide strength to the persuasive argument contained in the advertisement. For this purpose, match-up is very important as studies have shown that match-up, be it attractiveness based, expertise based or image based, serves as the central cue in advertisement (Homer and Kahle, 1990; Rice et al., 2011; Kirmani and Shiv, 1998; Lee and Thorson, 2008). The study also found that the relevance of celebrity meanings for the brand may serve as a central route in persuasion.

This paper has reviewed the theories and factors that can help both academicians and practitioners in understanding the dynamics of celebrity endorsement effectiveness. One cannot ignore the power of celebrities in breaking through the cluttered media environment and drawing attention towards the advertisement. They increase awareness and recall of the product and the advertisement. They also give symbolic meanings to the product through the meaning transfer process. However, the effectiveness of celebrities in improving the attitude towards the advertisement and the brand and generating purchase intentions is moderated by factors identified in the paper, especially by the cultural meanings of the celebrity, the celebrity-product congruency, type of risks associated with the product, level of product differentiation and consumer involvement.

8. Managerial Implications

The main objective of advertising is to convey information to the target audience and to build positive attitudes and purchase intentions about the product/service being offered. The celebrity endorser plays a very important role in selectively addressing the target audience. If the celebrity is relevant to and popular among the target audience, then it will help in breaking through the clutter and also in enhancing the recall of the advertisement. But enhanced recall and attention towards the advertisement does not always lead to positive attitudes and purchase intentions. Further, the fee of endorsement, especially in the case of a popular celebrity, is very high. Therefore celebrity endorsement should also justify the cost incurred by generating positive attitudes and purchase intentions.

Here are some important points that advertisers should keep in mind in order to make celebrity endorsements more effective. One, the popularity of the celebrity alone is not sufficient to induce positive attitudes and purchase intentions; celebrity meanings should also be relevant and suitable for the brand. For example, SRK is extremely popular among youth and his cultural meanings are also relevant for them. But his meanings are not perfect for a sports motorcycle or a brand of sport shoes that advertisers are trying to sell to the youth. Second, the advertisers should not always go for the most popular celebrity as a popular celebrity often endorses many brands and because of this, the cultural meanings associated with him might get diluted and vague. Advertisers should select a celebrity who very prominently has the desired cultural meanings. Third, although we have said that celebrity meanings are more important, still we cannot undermine the importance of match-up because past researches have shown that it is processed as a persuasive argument. Thus, the advertisers should ensure both high celebrity product match-up and relevance of celebrity meanings for the brand, especially for products like automobiles, consumer electronics and services.

9. Limitation and Direction for Future Research

The study was primarily based on literature review and qualitative research, both of which come with limitations. Several consumer and advertisement specific factors which may act as moderators were left out in the study. The timing of the source and repetition also have an impact on the effectiveness of celebrity endorsements. There is also dearth of research regarding the types of portrayal of the celebrity in an advertisement. Should the celebrity be used as an actor, endorser, spokesperson or testimonial (Erdogan, 1999)? Should they be used explicitly, implicitly, imperatively or co-presently (McCracken, 1989)? Whether these ways of portraying celebrities serve as a central cue or peripheral cue in persuasion? Initial opinion and demographics of the consumer are also some important determinants which were not included in the qualitative research. Subjective and objective knowledge of consumers can minimize the impact of an endorsement; therefore, the moderating effect of consumer expertise on the effectiveness of celebrity endorsement can also be inquired through future research (Rice et al., 2011). Further, an empirical work is required to conform that the match-up and relevance of celebrity meanings for the brand become more important

in case of products having high financial, performance and physical risks.

Although this study found that the relevance of celebrity meanings for the brand might serve as a central cue in persuasion, quantitative empirical support is still required. There is also a possibility that various source attributes and match-up facilitate the process of meaning transfer (Miller and Allen, 2012). This is also a potential area where future research is required.

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Danish Hussain is currently a research scholar in Department of Business Administration, Faculty of Management Studies and Research, Aligarh Muslim University. His interest lies in the area of advertising and brand management.(danishhussain23@gmail.com)

Kaleem M Khan is a professor in Department of Business Administration, Faculty of Management Studies and Research, Aligarh Muslim University. His interest lies in the field of basic Marketing, Advertising, Research Methodology, and Consumer Behaviour. He has written two books and published several research papers both in National and International journals.

The Interaction between Urban Culture Space, the Stratification Structure of its Subjects and Higher Education Internationalization

Hu Liangcai

International Exchange Department of Hunan City University, China

Rajesh Arora

University of Mumbai

Abstract

According to modern space theory, space and society construct each other through the subject. In modern cities, the subject exists in urban culture in way of time and space. It influences the cultural context of higher education internationalization through constructing stratified urban social space and accelerating the internationalization of higher education's material basis. In return, the development of higher education reacts upon the formation of urban culture space and stratification of the subjects. At the same time, with the development of modern technology, the space expands and "human beings" experience overall extension. Through media and various educational technologies, public space of higher education internationalization forms gradually. Theories for the interaction between urban culture space, the stratification of its subjects and higher education internationalization have provided much inspiration for empirical research.

The extension of the urban culture space primarily comprises that of its subject elements. Against the background of economic globalization, urban culture space and its subject extend rapidly. At the same time, the isomorphism of urbanization and higher education allows the latter subject to extend and, to a certain degree, conduce positive interaction between urban culture space and higher education.

Keywords: Urban Culture Space, Higher Education Internationalization, Subject, Structure, Interaction.

1. A Reading of the Subject of Urban Culture Space

What is space in modern cities?

The question 'what is space?' is replaced by the question 'how is it that different human practices create and make use of distinctive conceptualizations of space?'; relational space comes into its own as an important aspect of human social practice. An understanding of urbanism

and of the social-process-spatial-form theme requires that we understand how human activity creates the need for specific spatial concepts and how daily social practice solves with consummate ease seemingly deep philosophical mysteries concerning the nature of space and the relationships between social processes and spatial forms (Harvey, 1973, p.13-14). "Urban space is fixed, to the degree that the key processes are confined within fixed spaces, and perpetually in flux to the degree that those processes are in motion" (Harvey, 1985b).

Obviously, Harvey was reading "space" in the context of modern culture, which means that instead of being immobile and separated from the things occupying it, space is the product of human beings' practice and its existence means relatedness. This kind of relatedness, just as Harvey believes, is a very complex philosophical concept. However, briefly speaking, it means everyday social practice, including what Harvey called, "urban status", "process", "forms" and so on, which exist in the form of space or depend upon it for their existence. It also means the way human beings produce space and the interaction between space and human existence in urban culture forms. There is no doubt that as one of the important components of social culture, higher education has a close relationship with space, and "human beings" play a crucial role in the interaction between higher education and the production of space. According to Harvey, **physical infrastructures** denote immobilization of value in fixed facilities of long life. Ownership of a fixed capital or having material benefits in using it creates a directly spatial dependency. **Social infrastructures**, on the other hand, are harder to pin down in space. They are confined spatially to the extent that they use the built environment. These social institutions and relations that support life, work and the circulation of capital help consolidate the tendency towards structured coherence within the urban region. They are not created overnight and require a certain degree of stability in order to be effective.

The British Scholar, Doreen Massey, emphasizes even more upon the interactional relationship between space and society. We need to conceptualize space as constructed out of interrelations, as the simultaneous coexistence of social interrelations and interactions at all spatial scales...all social (and indeed physical) phenomena/activities/relations have a spatial form and relative spatial location...There is no getting away from the fact that the social is inexorably also Spatial...The spatial is socially constituted (Massey, 1994, p.264-265).

"Human being" is the owner of the society and the constructor of space.

Just like geographical space, space exists with corresponding stratifications in the cultural domain. Therefore spatial forms, at least on our planet, will be produced by human action, as are all other objects, and will express and perform the interests of the dominant class according to a given mode of production and to a specific mode of development. They will express and implement power relationships of the state in a historically defined society. They will be realized and shaped by gender domination and by state-enforced family life. At the same time, spatial forms will also be marked by resistance from exploited classes, oppressed subjects and abused women. And the work of this contradictory historical process on space will be accomplished on an already inherited spatial form, the product of history and support of new interests, projects, protests and dreams. Finally, from time to time, social movements will arise, challenging the meaning of a spatial structure and therefore attempting new functions and new forms. Such are the urban social movements, the agents of urban-spatial transformation, the highest level of urban social change (Castells, 1983, p.311-312).

The inspiration of Castell's idea is incontrovertible. Under a certain production mode, space produces and represents rights. The space structure changes with social strata. In other words, the change of the subjects' stratification and rights, to a certain extent, means the "city to space" turn. In modern society, higher education has great influence upon the subjects' knowledge structure, culture status and social rights. From another perspective, the subjects' change is one of the driving forces for the change of the social space structure or vice versa. The French philosopher Henri Lefebvre also thinks that, in the modern capitalist production mode, the nation's control is mainly mediated through "space plan". In other words, the government, technologist, social groups, and culture constructions, all get involved in the city plan, construction

and residence. And the nation's control infuses into people's everyday life through space. Against this background, higher education seems to be among the most suitable choices.

As Brenner (1999) indicates, could the university which is responsible for the spread of higher education be implicated as a relatively immobile infrastructure in re-territorialising the site of the city and capital? For instance, the internationalisation of higher education often implies that several critical theoretical currents are replaced by dominant, positivist currents, thus re-territorialising the very possibility of education and subjectivity.

The American scholar, E. W. Soja, has made a distinction between "space" and "spatiality". The former, according to him, represents objective material forms and as for the latter, he pointed out, "this physical space has been a misleading epistemological foundation...Space itself may be primordially given, but the organization, and meaning of space is a product of social translation, transformation, and experience" (Soja, 1989, p.80). Obviously, Soja's spatiality focusses more on the mutual constructiveness between space and society. As stated above, higher education is an important way of social change, transformation and experience accumulation. Therefore, the exploration of higher education in terms of the ways and significance of its reaction upon modern urban space become extremely necessary. As spatial barriers diminishes, we become more sensitized as to what the world spaces contain. The speed of communication and information has emphasised broadening of space with internationalisation of higher education. However the constraints are experienced as local differences in entrepreneurial ability, investment in higher education, science and technological development, investing in research and development etc. Hence it becomes imperative to discuss on spatiality with changing needs of society.

In summary, it is not hard to see from the above that space and society are inseparable and interact with each other. The research on urban culture space in this article is from a cultural perspective, and urban space is an important part of social space. We believe that the understanding of "human beings" as the subject of society, their structure and extension, in the interaction between urban culture space and higher education internationalization, is crucially important to the solution of the problem of urban culture space, in terms of its relationship with time, the society, the city, urban culture and higher education and so on.

2. As the Subject of the Structure of Urban Culture Space: Higher Education Internationalization's Way of Existence

In modern cities, the subject's influence upon the interaction between space and higher education is represented by the subject isomorphism of urban culture space and higher education. In other words, the structure of urban culture space constructed by the subject is parallel to that of higher education internationalization. The exterior manifestation of this kind of parallelism is the hierarchism of the subject's construction of the two. Hierarchism is the common feature of space existences and thus it represents the systematization and scale-dependence of space. The subjects' difference directly determines the hierarchism of urban culture space and higher education has to meet the demand of different subjects in this background. And it also shows hierarchism in all aspects such as, its levels, major arrangements, degree of internationalization and so on.

Human beings' urban subjectivity is not an intrinsic quality confined in themselves but an essence of the objectified subject. Urbanization or higher education, just from a certain aspect, represents the objectification of the subject. From the perspective of the subject itself, it needs to balance its autonomy because, in this way human beings' own development, their reception of higher education, improvement of initiative and creativity, construction of modern city, the variation of human activities, are all benefited, and then, their own development and that of the society is promoted in the activities of objectification. From the aspect of the relationship between the subject and the objectified subject (or things), the subject needs to distinguish itself from the objectified subject or other related city images. In other words, from the perspective of the city's development, the subject exists in hierarchy and its hierarchism in the social field is mainly represented by the difference of gender, economic, political and cultural status. Only through such difference can the construction of space, the communication between subjects, and the mutual influence between city development and higher education internationalization be possible. The subject's hierarchism or, to some degree, disequilibrium of autonomy is conducive to its initiative and creativity.

The subject's hierarchism determines that of the urban culture space. We can distinguish different levels in the hierarchy of urban culture according to the social hierarchy constructed by the subject. Material and economic basis is on the lowest level and it is the material

aspect of urban culture. On this level, as for the specific urban landscape, the hierarchy of space is very obvious and broad. From a certain street corner to the town, the city, the country and even the globe, the subway underground to the skyscrapers, even the whole earth and the universe, the urban landscape is everywhere, extending to different directions and overlapping in diverse places. From the perspective of abstract social theory, space hierarchism includes links such as, production, circulation, consumption and so on. Production means the formation of the subject and also the generation of regional space; circulation means the transformation, to a certain degree, of the space constructed by the subject; for the subject, consumption means the reproduction of the subject itself and its significance lies in the creation of urban consumption space. As internationalization gradually supersedes urbanization in modern cities, various links of production, circulation and consumption of urban material space become multivariate and internationalized.

The superstructure is on the second level and those aspects which have considerable influence upon the construction of urban culture space are politics, law and ideology. Politics and law control, regulate and integrate the subject's construction of social and cultural space, forming the institutional aspect of urban culture space namely, the institutional space of social culture. Ideology, as another aspect of social culture, mediates between material basis and superstructure, and it creates symbolic space through the subject. This symbolic space is a vivid reflection of the subject's ideology and living conditions, and at the same time reacts upon the material basis of urban culture space. With the appearance of material symbols of internationalization such as, multinational company, sky scrapers and transnational landscapes in the field of urban culture space, the convergence of ideology like, multilingual application, hybridity of different cultures and educational ideas, start to appear and become a fashion.

This kind of spatial structure of urban culture reacts directly upon higher education and its internationalization, the subject playing an active role. Higher education is the method with which the subject participates in the construction of space and realizes their interaction through "bonding" and "sequence order". This is shown in the following aspects:

Firstly, the structure of urban culture space influences the construction of the cultural context of higher education internationalization. The urban culture space influences

the development of higher education and its internationalization in aspects like the politics, law and ideology.

1. The construction of educational policies and system.

With the development of society, educational policy and system gradually get ameliorated. The enacting of the "Higher Education Act" is a good example. With economic globalization and the internationalization of talents training, "the Regulation of the People's Republic of China on Chinese-foreign Cooperative Education", "Measures for the Implementation of the Regulation of the People's Republic of China on Chinese-foreign Cooperative Education" and "The Education Promotion Act" were enacted one after another to regulate internationalized education. During the process of higher education internationalization, the formation and amelioration of the institution help to regulate subjects' behaviors and promote scientific development of education. When a society decays, early indicators of its decay may first be visible in its universities. On the other hand, when a society evolves, its universities may also flourish as sites of creative thinking and dialogue. Thus, an analysis of the spatiality of higher education has the potential to comment on the nature of civilisational or social space as well. Such an analysis of the spatiality of higher education is, for instance, available in Giroux's (2008) work on the militarisation of higher education. Giroux's basic contention is that the militarisation of the space of higher education in American campuses has led to the erosion of the possibilities of criticism, dissent and critical dialogue.

2. The Formation of Ideas, Specific Strategies and Teaching Methods of Higher Education Internationalization

Ideas of higher education internationalization are the reflection of the subject's ideology in the urban culture space. "Higher Education, which is of large scale, huge in quantity, high in quality and broad in scope, is one of the features of the main cities of developed countries." (Guo, Ling, Bai, & Jin, 2006, p.6). In actuality, with the development and amelioration of the spatial structure of urban culture, higher education inevitably extends in terms of scale, quantity, quality and radiation scope; the key to such extension is to improve the ideas of higher education internationalization and make it conform to the extension of urban culture space. Down to practical level, it is the corresponding specific strategies and teaching methods of higher education

internationalization which vary according to the degree of the city's internationalization, different groups' demand for internationalization and regional service objectives of education.

Secondly, the extension of the urban material culture space accelerates the internationalization of higher education's material basis. In actuality, the construction of urban culture's context is based upon the former and indirectly, the latter. From the perspective of urban material culture space, higher education internationalization has a close relationship with economic globalization, city construction and material culture like the city landscape.

Economic globalization is the material basis of higher education internationalization. It is the incontrovertible trend of development of the world economy and has already shown its profound impact upon social and economic development in many countries. Economy and education are interdependent. Against the background of economic globalization, the former is sure to have a profound and broad influence. (Gao & Li, 2002, p.B4)

The influence of economic globalization upon higher education internationalization is incontestable and urban material culture like, city layout and landscape etc. and its spatial structure, has great significance for and is also closely related to higher education internationalization.

Former researches on higher education internationalization seldom focused on this point. From the aspect of urban culture space, level of the city's development, to a certain degree, determines that of higher education internationalization, and the advantage of geographical position determines the direction of its development. City is the economic center of a region and in the city, material culture is advanced, traffic convenient, modern communication technology developed, population influx huge, talents concentrated. Furthermore, its subjects have considerably better cultivation, higher income and more knowledge, their concept of educational consumption is prone to internationalize. The maturity of the subjects of urban culture material space amasses great intellectual capital for the city's cultural industry and also conduces to higher education internationalization. Urban material culture space is also represented by the city landscape which is the representation of urban spiritual culture. Cultural heritage, culture venues, natural landscape, man-made landscape and all the social and human landscape which compose the resources for tourism, distribute in

the city and its surrounding area, attracting different people. The city landscape is the material representation of urban spiritual culture space and it attracts foreign subjects for its exoticness. As for the subjects going abroad, they carry with them their culture; city landscape means the extension and transportation of urban culture space.

Obviously, whatever the level of urban culture, there is parallelism between the subject's participation in and stimulation to the internationalization of higher education and the construction of urban culture space.

3. To be the Subject Extending the Significance of Urban Culture Space: The Purpose of Higher Education Internationalization

As is known to all, social life distributes in space and society operates through space. All aspects related to society including social stratum, class and other classifications (gender, race and so on) and various social power relations are all imbedded in the space. All metaphors in space reveal the interdependent relationships of the social elements and it is the mechanism of the subject's identification with and construction of the self, and separation from other subjects that mediate this kind of relationship.

This is related to the subject's way of existence and realistic significance in the context of modern urban culture. Like the distribution of social life, the subject also exists in space.

Human beings' materiality necessarily has a spatial and temporal position. In order to ensure their existence, existence of the "I" should first be guaranteed, and the precondition is that the subject becomes conscious of the body's state of existence. The skin which separates him from the outside world produces the distance between inside and outside, the interaction between "here" and "there" and this is the spatiality of existence; the body feels the change of the outside world and this is the temporality of existence. (Wang, 1998, p.237)

In the era when technology is not advanced enough, human beings' spatial and temporal existence is restricted in many ways. For example, human beings cannot be in two places at the same time and their displacement takes time. However, the development of modern technology comprehensively expanded human beings' spatial existence. In the practice of modern internationalized higher education, human beings can "separate" and "transpose" in nonphysical ways, which breaks the

limitation of time and space. For instance, one can learn from the class content recorded by micro phone or camera. Human beings' "transposition" no longer takes time, teachers and students can be any where in the world and even if they are in different hemispheres, communication is not prevented. On the one hand, the teachers communicate with students face to face. On the other hand, through camera devices, teachers and students communicate through the internet. The subject's former constraints of time and space are lifted by modern high technologies in the city. Though inseparable, with high technologies, human beings' senses are extended, empowered, even becoming independent. The spatial and temporal significance of society is reinforced with the extension of human beings and the expansion of their spatial significance.

In modern internationalized cities built with high technologies, the subject varies with development of the media and technologies. Through higher education internationalization, it extends urban culture space and shows its own values.

In fact, media appears with the development of technology and becomes one part of it, and the reason why it is distinguished from technologies is that media plays a more intimate role in human beings' self-realization and their own extension. McLuhan, the famous Canadian expert in communication studies, claimed,

This is merely to say that the personal and social consequences of any medium – that is, of any extension of ourselves – result from the new scale that is introduced into our affairs by each extension of ourselves, or by any new technology (McLuhan, 1994, p.7).

That is to say, in modern society, human beings and media are interdependent: one cannot live without media and the development and extension of media or new high technologies are intertwined with human beings' own development. Thus, it is not hard to see that one of the prominent characteristics of media society is that human beings and media are subjects of each other, develop together and extend each other. The immediacy of the media exposes the subject's needs in diverse temporal and spatial dimensions. From this perspective, modern media increase the pace of modern life and the metabolism of urban culture space, higher education being no exception. The main purpose of higher education is to extend human beings and expand their living space and that of the whole society. The interaction between

the subject and modern media provides new opportunities for higher education internationalization.

On the one hand, modern media of high technologies satisfies the subject's need for internationalization. In terms of the stages of development of education, modern media education is the continuation and development of traditional media education. It is the product of the industrial and post-industrial society, and the fruit of mass media technologies such as, film, television, broadcast, internet and so on. To a certain degree, in terms of its philosophical significance, it is also the product of the multileveled subject. What is more, it is an ineluctable stage in the development of social culture. It reflects the advancement and dissemination of modern technologies, and manifests the social members' understanding and mastery of them. Briefly speaking, modern media education, with its new media and communication technology, at the same time challenges and sets new standards for the social members.

On the other hand, modern media enables the subject's communication to break limitations of time and space. Just as McLuhan claimed, modern media is the extension of human beings and its advantage is self-evident when higher education crosses the borders of nation and culture. Modern media enables the subject to extend comprehensively in terms of its communication ideas, methods, tools, contents, artistry, teacher training of education and so on. With the support of modern educational technology, education takes on features like, diversification of methods (new methods like distant education with internet and multimedia), heterogeneous material sources, vivid presentation, visualized content, combination of pictures, text and videos in class, or other class refinements and so on. In educational communication and practice, methods are diversified with different technologies, fully realizing the potential of international education cooperation.

Development of technology has great influence upon media's role. Urban culture space develops with technology which enables human beings to become social. From the perspective of education, acquisition or development of technology is the fundamental way for social members to reach consensus on knowledge or achieve goals.

Technology comprises various artifacts, their operational procedures and related knowledge, which enable society of have a certain operation model. Thus, technology actively constructs rather than set passive limitations. At

the same time, it is also an important element which enables a human being to be a 'human being' in a specific society (Wang, 1998, p.236-237).

The positive aspect of technology is that it enables the subject of education in society for acquiring knowledge with its help to reach social consensus. During this process, the subject constructs society, and also assumes sociality which means, firstly, communication between one and another, and the spatiality and temporality in the meantime, becomes its condition and result; second, sociality means the accumulating effect of human activities, we live in a man-made world, or the history and culture, in other words (Wang, 1998, p.237).

On the basis of McLuhan's research, Wang Z. H. specifically analyzed human extension and its spatial effects under the influence of technology. Language means the structuring of human knowledge, and the ability to think and communicate. The effect of its manufacturing of social space and time is the order and endurance of the will transmission. The text extends human beings' sense, memory and communication skills, and it means a more strict order and spatial transmission. Computer extends their memory and central nervous system, and it connects numerous spaces in a moment, expanding comprehensively their spatial existence.

The sociality or the social culture space constructed by human beings, in fact, has provided a public space for the development of higher education. In this space, the subject enjoys more subjectivity, demands for internationalized education and is able to acquire knowledge with related technologies under the stimulation of the city's internationalization. The spatiality of urban culture guarantees role of the media as a mediator. The space's publicity enables participants of urban culture construction to receive education, provoke thinking and achieve consensus on the basis of full communication and extensive debate. This is exactly the purpose of education. Higher education is no longer restricted by time and space in the information age. The extension of the interaction between teacher and student, cross-border and simultaneous sharing of educational resources, and the virtualization of the education receivers' identity through internet provide expansive and multivariate space for education internationalization.

It can be predicted that with speeding internationalization of the modern city and higher education, city will be sure to open itself to its extreme and allow residents from all over the world to enter into its space. Citizens in the future will gradually open their hearts to the unfurling

reality. While the horizon is broadened, constraints on the mind will also be lifted and a generation with such a mind will be a new generation with multifaceted and fluid personality (Zhang, 2003, p.66).

The purpose of higher education is to extend the subject, and the positive multivariate interaction between the subject, urban culture and higher education will necessarily encourage society to develop rapidly. Regular failure of higher education Institution and their repeated efforts to amend working styles in alignment to education policy had been one of the biggest challenges. This has been experienced in various countries due to lack of equal educational opportunities, drop out rates, and discrimination on different basis. At the same time the emerging intersection between urban space and higher education had demonstrated the relevance of social strata in education system.

From the subject's perspective, urban culture space, constructed with high technology according to the stratification of subjects, builds the theoretical frame for interaction between urban culture space and higher education internationalization. Its significance lies in providing a referential model and theoretical methods for the corresponding empirical researches.

Firstly, it inspires empirical researches on the interaction between higher education and the subject's culture identification and institutionalized existence in the urban culture space. The subject's demand for higher education internationalization is influenced by the subject's culture identification. Research on the interaction between urban culture space and higher education internationalization focuses on solving this problem. From a quantitative perspective, in the exploration of the demand for education internationalization, the role of elements like the subject's major selection, foreign language preferences and proficiency, city preferences, comprehension of urban culture and subculture awareness etc. in urban culture structure, and higher education internationalization are issues to be covered in future empirical researches. In terms of the educational system, the subject's choice of cultural values, understanding of and attitudes towards modern curriculum are also related to the interaction between the urban culture space and higher education internationalization.

Secondly, it enlightens empirical researches on the interaction between the material life of the subject in urban culture space and higher education internationalization. The subject's construction of urban

culture space, preference for higher education internationalization and his own extension would be based upon material life. For the individual subject, the development of the regional, family income, and decision on personal investment have a close relationship with higher education internationalization; in terms of the social group subject, the latter is influenced by its material condition and the social practical value derived from its intellectual achievements. From the perspective of material life, empirical analysis of the subject's role in the construction of urban culture and its interaction with higher education is very challenging and formidable.

Thirdly, it sheds light upon empirical research on the interaction between the subject's social stratification in the urban culture space and higher education internationalization. The subjects are socially stratified. Thus, they show obvious difference in their economic material basis in the urban culture space and comprehension of the politics, law, institution and social ideology. This phenomenon arouses attention in the academia. The relationship between social stratification and higher education is a core issue in researches on educational sociology, and it mainly includes two aspects: higher education's influence upon social stratification and the latter's influence upon the former. Social stratification's influence upon higher education is multifaceted, including that upon the latter's goals, policies, content, achievements and other aspects (Yu, 2002, p.44).

However, not much attention is paid to its relationship with higher education. In actuality, with urbanization and extension of urban culture space, opportunities for higher education are multivariate and the subject's demand for education, even more. Higher education internationalization becomes one of the important choices. Thus, to explore issues like the stratification of the subjects, their ways of constructing urban culture in different strata, their understanding about urban culture space, the quantitative index of the demand for education and its internationalization in the corresponding strata, and its interrelationship with urban culture space and higher education internationalization is conducive to the equal participation in urban culture space for different social strata and the healthy development of higher education internationalization.

Fourthly, it offers illuminations to empirical researches on the interaction between higher education internationalization and the subject's extension and self-

realization with high technologies in urban culture space. "Technology has affected or is likely to affect many dimensions of higher education" (Gumport & Chun, 2000, p17). As stated above, modern urban culture space is the product of human being's extension with technology. Therefore, in the field of urban culture, it is very challenging to apply the theories mentioned in this article to solve problems like, the quantitative index of the subject's demand for technology, to what degree and in which dimension technology extends the human being, in what way technologies connect urban culture with higher education and its internationalization, how the latter extends the subject through technology and how "multiple dialectic" development of urban culture space, the subject and higher education internationalization are mediated by technologies.

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Hu Liangcai, Male, born in October of 1963. He is a full professor and has been teaching for 33 years, during which, for more than ten years, he is simultaneously the director of the International Exchange Department of Hunan City University, and several years experience as director in the other Departments like Academic Journal Center, and Party Secretary of the College of Telecommunication and Electronic Engineering of the University. He is also the Visiting professor at the University of Western Sydney from the year of 2013 to 2014 by Chinese Government. He is also the 18th and 19th Interpreter and Translator-General of World Cup Badminton Tournament by International Badminton Federation including interpreting at press conference. He has published one academic monograph and more than 40 academic articles in China and International scholarly Journals.

Rajesh Arora earned his Masters & PhD from University of Mumbai. He has been associated with International Universities as Principal in Kuwait & Dubai & later as Vice President for a University College in Ghana. He is approved as Professor by University of Mumbai and University of Pune and has earned a title of Host Scientist from Dept of Sci & Tech, Govt of India and FICCI. He is currently the President & CEO of TQMS Global. His professional interests include enhancement of Human capital at corporate through training, coaching and professional counseling. Augmenting quality in Academics is also his prime interest. He is on the editorial boards of several journals. He is awarded a title of Doctor Fellow from Royal Institutions, Singapore and Youth Peace Ambassador from American University of Sovereign Nations USA(drrajesharora1@gmail.com).

Scaling-up Social Organization: The Case of Pratham Info-Tech Foundation in India

Chandan Singhavi
Prema Basargekar

K. J. Somaiya Institute of Management Studies & Research, Mumbai

Abstract

One of the major challenges for any social organization is how to scale-up so as to increase the social impact of its innovation and bring financial sustainability for itself. The present case study deals with this challenge faced by one of the pioneering social organizations working in the field of use of Information and Communication Technology (ICT) in education to bridge the digital divide and improve the quality of mass education in India. "Pratham Info-Tech Foundation" has been working in the area of application of ICT in schools operated for unprivileged students in India. The case describes the unique strategy used by its founder, PremYadav and his team to achieve dual goals of achieving social mission with higher scales. The objective of the case is to identify the factors favoring scaling-up of social venture's after an assessment of internal and external environment.

It is a critical case of a single social organization which explains how a social enterprise can achieve scalability by implementing right strategies with the help of 'SCALERS' model. It also validates existing theories of scaling-up of social organizations.

Keyword: SCALERS Model, Information and communication technology, ICT, social organization, scaling-up.

1. Introduction

Social organizations are usually set up by entrepreneurs to fulfill their individual dream for bringing about social change. As a result, most of the social ventures are driven by personal attributes of the social entrepreneurs. This has significant influence on the way a social venture evolves and impacts the society. Thus, these organizations mainly remain person driven rather than process or strategy driven. As a result, most of the social ventures remain small in size in proportion to the magnitude of the social challenge they are dealing with. Due to lack of proper strategies and processes, an organization is unable to sustain itself after the promoter passes away or leaves the organization. This also results in low sustenance level of social organizations. It is therefore essential that social entrepreneurs strive to make the organization scalable and sustainable by adopting

right strategies.

This case deals with "Pratham Info-Tech Foundation", a social venture working in the field of application of Information and Communication Technology (ICT) for mass school education. The case focuses on how the protagonist of the case and the social entrepreneur, Prem Yadav deals with the challenges of scaling-up to increase the social impact without diluting its social mission.

2. Objective of the study

The objective of the case was to identify the factors favouring scaling-up of social venture after assessing internal and external environment

The case attempted to answer the following questions:

- What are the benefits and challenges of scaling-up for the social enterprise?
- What is the importance of assessment of internal and external environment before implementing scaling-up strategies?
- What are the various ways of scaling-up and how can one apply 'SCALERS' model to see in which direction the enterprise can grow?

3. Current State of Research

The review of literature is divided into three parts. First part deals with the state of education in India. The second part covers the role and use of ICT in education with special reference to its application in India. Finally, the last part covers challenges and strategies used by social enterprises for scaling-up.

3.1 Status of Education in India

Educational status in India though improving, is still in dire condition. Although the enrollment of children in school is on a continuous rise, the quality of learning is a persistent question. The national literacy level in India have gone up from 64.8% in 2005 to 74% in 2011¹ but are still low when compared to world average of 84.1 % in

¹ The Report to the People on Education 2011-12 published by the Ministry of Human Resource Development

² <http://www.uis.unesco.org/literacy/Documents/fs20-literacy-day-2012-en-v3.pdf>

2010². The level of female literacy is still lower at 65%. It is further worsened by high drop-out rates at primary (29%) and elementary level (42%)³.

Annual Status of Education Report (ASER) assesses children's schooling status and basic learning levels in reading and arithmetic. The ASER report, 2013, shows that while there is an improvement in overall enrollment (96.7%) and attendance level of children (74.3%) between the age group of 6 to 14 years, there is no significant improvement in learning abilities. For instance, fifty percent of the children from grade II are not able to read simple everyday words in their regional languages and nearly 78 % of children in grade II and about 50 % of children in grade V cannot read grade II text⁴.

3.2 Role and use of ICT in education with special reference to India

Numerous reports state that ICT has a potential to bring out an information and knowledge disseminative process which is learner centric and participative in nature and which can improve the quality of education. Government policy encourages use of ICT in education through disbursement of computers, development of labs, provision of grants for running programs, etc. However the achievement is far below expectation. The reasons can be cited as below:

- ICT technology implemented at school level such as radio-cum-cassette players, colour televisions, computer, computer labs or satellite receiving terminals, etc. has been supply-driven and equipment centric. As a result, the context specific ICT curriculum was not readily available. Very less attention is given to build the complete ecosystem which is required to make ICT as a relevant and timely intervention in achieving the objective of education.
- There is lack of contextual e-content based on state curriculum and developed in vernacular languages. The available e-content is mainly developed for western education and useful for English medium schools. Though ICT is a compulsory subject for higher gradestudents, it is mainly taught using textbooks that describe computers and their utility rather than through practical demonstration.
- Most of the unprivileged children in India are enrolled in schools run by state governments and are devoid

of basic infrastructure such as computers, tables, electricity, etc. required for ICT implementation.

- Availability of committed, skilled and experienced teaching staff is another major challenge. Most of the teachers in public schools are burdened with existing teaching load and additional administrative duties such as election duties, census survey duties, etc. The teachers lack motivation as well as time to learn new technology and new method of teaching which is a crucial success factor for implementation of ICT (Das, 2012).
- Regular maintenance, repairs and up-gradation of computer hardware is a key factor in retaining the interest of students as well as instructors. If it is not done on time due to various reasons such as distance, remote location, lack of funds, no skilled people etc. It results in large number of drop outs from the programme.

3.3 Challenges and strategies used by social organization for scaling-up

It is seen that social enterprises face number of challenges in scaling-up in comparison to their counterparts, i.e. commercial enterprises. Davis and Simon (2013) state that very few social innovations can help social enterprises grow like social ventures as many innovations operate within institutional framework. As many social innovations are designed to tackle the problem of a specific community or a target group its impact is limited by its socio-economic context. In such cases, the standardization of products/ services/ processes which is required for scaling-up is either difficult or less effective in bringing out positive impact. The out reach of such innovations can be enhanced by using 'diffusion' techniques than 'scaling-up' techniques. Briga (2009) mentions that sourcing finances, retaining and recruiting new staff, changing management styles to make it more professional and measuring the impact of scaling-up are some of the crucial challenges of the social enterprises. Westley, Antadze, Riddell, Robinson & Geobey (2014) discuss various strategies adopted by social enterprises to scale-up by studying 24 social organizations from Canada. They conclude that the process of converting social entrepreneurial venture into institutional entrepreneurial organization is difficult as it involves reframing existing social problem, changing the mind set and reorienting organizational strategies.

³ DISE Report, 2009-10

⁴ Annual Status of Education Report, ASER, 2013 <http://img.asercentre.org/docs/Publications>, accessed on 12th Dec, 2015.

Numbers of studies have been done to identify new strategies of scaling-up. Dess, Anderson, and Wei-Skillern. (2004) have done pioneering work in identifying various pathways for the social organizations to scale-up their innovations. These involve a) dissemination about social innovation or programme and encouraging others to replicate it or b) affiliation with other organizations having common set of principles, or c) branching out to spread the innovations. The authors further mention that the vital decision about how to scale up depends on five major 'R's such as 1) Readiness of the organization and social innovation to scale-up, 2) Resources availability to carry out scaling-up, 3) Receptivity or readiness of other communities to accept the social innovation, 4) Risk associated with poor implementation of social innovation or the cost of failure and 5) Returns in terms of serving better, improving efficiency or effectiveness. The different pathways taken by social enterprises for scaling-up are influenced by various dimensions such as initial starting conditions, leadership competencies and vision, availability of resources and the obstacles or opportunities (Westley et al., 2014). Some of the examples of successful scaling-up reported by Gabriel (2014) adopted influencing through advocacy, consultancy and training; building a cheaper and more efficient delivery network through licensing, franchising or collaborations; forming strategic partnerships or joint ventures or through setting out new branches. Many social organizations have also used innovative ways such as using of social media to create web based platform to disseminate key information; building intermediaries to play the role of catalyst for bridging the gap between end users and implementing organizations; developing talent at the ground level; promoting advocacy to bring out policy changes and using social marketing techniques to change attitudes and behaviors.

After a qualitative study of a number of social enterprises in India, Kulkarni, Ganesh, Bhatt, & Allen (2012) found that most of the successfully scaled-up social enterprises have a holistic view of looking at a social problem, are flexible in their business models and have invested in customer education to show how their lives would be better with the product or service offered to them. A. T. Kearney's Social Enterprise Accelerator model gives a framework to social enterprises for planning growth in a strategic manner (Kearney: 2014). At the foundation level, the social enterprise must have an exceptional leadership having clear vision and mission about the direction in which the enterprises is likely to grow, right core product or services and/or delivery channels and dynamic strategies to get adequate funding to grow. At the second level, when growth takes place, the

social enterprise should leverage technology to achieve scalability and to reduce average costs. It should use other cost effective platforms like leveraging existing infrastructure, partnering with other organizations, using existing delivery channels, etc. Sharing knowledge from each other and mentoring other social organizations also will help achieving scalability. At the third level, the social enterprise should look into bringing a long term change in attitudes and behaviors. Thus the social enterprise must get positively engaged in creating a dialogue with government, investors, other organizations, educational institutes and also get involved in shaping the market as well as in forming the policies.

The SCALERS model developed by Bloom and Chatterji (2009) identifies seven potential drivers of scaling social impact such as Staffing, Communicating, Alliance building, Lobbying, Earnings generation, Replicating and Stimulating market forces. These seven drivers form the acronym SCALERS. The SCALERS model looks into identifying and strengthening internal and external forces affecting the organization and helps in strengthening organization by scaling up in a viable manner.

Many authors have used a case study approach to show how various social enterprises have dealt with the challenge of growth. Faster and Heeks (2013) present a case on scaling strategy of ICT based social innovation in providing greater access to finance for Bottom of the Pyramid (BOP) population through mobile money transfer. The lead organization implemented a systematic scaling-up strategy by moving from 1) pilot project to make the product ready for mass market to 2) incremental rollout by integrating all the stakeholders to 3) aggressive growth by finding new partners and lastly 4) standardization to bring more control over management and quality. The authors further found that the importance of scaling in ICT was even more important as it ensured greater benefits to users as well as implementing organizations due to higher network effects. Lyon and Fernandez (2012) use the case study methodology to analyze the scaling strategies of social enterprises working in the field of 'Early years' providers in UK. They categorized scaling up strategies into three groups such as a) growth occurring due to higher impact from within the organization; b) forming formal relationships with other providers or social franchising and c) encouraging others to use social innovation or good practices through open sharing. Each type of strategy required a different set of institutional capabilities and different degree of control of the parent organization. In another case study, Basargekar (2012) described how a social enterprise working in various

fields such as microfinance, education, child care, etc. converted itself from a non-governmental organization, NGO trust into an umbrella firm covering small organizations under different legal structures and supporting them to grow in an orderly manner.

It can be observed that number of social ventures is coming-up in the area of digitization of education. ICT as a tool can bring significant impact on the overall educational status in India. It is still in nascent stage. Hence, it is important to notice and study how different organizations are using it to bridge digital divide and to improve the educational status of the unprivileged class. As mentioned earlier, most of the existing research is focused on case study methodology as there is no single or standardized way of scaling-up or spreading social innovations. This study also focuses on single case study which has used a unique and effective strategy to scale-up the innovations to bring wider impact.

It can be concluded that the issue of scaling-up is vitally linked with making higher social impact through better spread of social innovations. It further helps to bring higher financial sustainability for social organizations. Various social enterprises have adopted different strategies for scaling-up. Some of the common points arising out of these studies are i) changing management style and making it more process driven, ii) recruitment, retaining and training of suitable staff, iii) affiliation with other organizations having complementary competencies is crucial, iv) use of technology to build-up cheaper and efficient delivery and v) striving for financial sustainability. Most of these are covered in the SCALERS model. Hence, it can be considered as an effective tool to assess the scalability strategy of the social enterprise.

4. Research Methodology

The research uses a case study method. It is a single case and focuses on the unique way the social organization tackles the challenge of scaling-up. It is a critical case in nature as it tries to see if the SCALERS model will fit to the strategy of scaling adopted by the organization. It uses the embedded structure by covering opinions and interests of various stakeholders of the social programme. Specifically the case covers following stakeholders:

- Programme leader: Prem Yadav
- Program Designers: Involved in administration, designing of the project, designing curriculum & e-content
- Program Implementers: Involved in field work such as programme implementers at the class room level (Sancharikas), project leaders, supervisors, repairs &

maintenance staff

- Government organizations at the Central, state and local level
- Corporate partners
- School Management Committees
- School principals & teachers
- Students
- Parents

The details regarding interviews conducted are given below:

1. Prem Yadav – Programme leader
2. Core team involved in designing the programme – Two persons
3. Implementers of the programme – Five sancharikas/ sancharkas, three principals of the schools, teachers teaching IT at schools
4. Monitoring organization: Three members from School Management Committee
5. Beneficiaries of the programme: Children from 6,7 and 8th Grade, few parents

The researchers conducted unstructured interviews of the stakeholders over a period of one month. Some of the interviews were conducted in the field i.e. in the schools where the programme is implemented. All the interviews were transcribed and revalidated from the organization. They were used for further content analysis. The core issues emerging out of these were as follows:

- How did the core team design a strategy to create a long term impact through CAL programme? How did scanning of internal and external environment help in this process?
- What were the direct and indirect benefits of this programme for the various stakeholders?
- Can the SCALERS model be used as a framework to assess the strategy used by Pratham to scale-up the programme?

5. The Protagonist, PremYadav

The founder and director of "Pratham Info-Tech Foundation", Prem Yadav started his career in "Pratham Foundation," a leading NGO working in the field of education in India in 1991. Till 1998, he worked on various projects such as remedial education, literacy, library programmes, etc. He stumbled into the field of ICT in education by accident. ICICI Bank, a leading private bank in India wanted to dispose-off its 120 used computers. Prem used this as an opportunity to start his journey in use of 'ICT in education'. Pratham Info-Tech Foundation, a sister

concern of Pratham Foundation was set up in the year 2000 with specific focus on using ICT for providing better quality of education to unprivileged children. Annexure I show the Mission and Vision of Pratham Info-Tech Foundation.

6. The Beginning

Prem introduced Computer Aided Learning (CAL) project with few schools in Mumbai Metropolitan region for four years from 1998 to 2002 under the umbrella of parent organization, Pratham. CAL involves integrating school curriculum with the help of ICT right from pre-primary level to secondary level. Annexure II gives an overview of CAL. It involved careful selection of partner schools, recruitment/training of teachers, community mobilization, curriculum development, development of teaching-learning aids and base line testing. The programme was run in all the schools providing education in vernacular languages such as Marathi, Hindi, Gujarati, Telgu, etc schools in Mumbai. Though initially it was fully sponsored by ICICI Bank, India for a year, Prem and his team faced ample difficulties in terms of inadequate infrastructure, untrained and unwilling teachers, uninterested parents and children, etc. Indigenous softwares were not available in vernacular languages, e-content was completely missing and the existing imported software was not compatible with the available older models of computers (version 386). Local communities and parents of respective children had their own reservation about the programme. Prem and his team were not deterred by these challenges. In these four years of experimentation nearly 12,000 students of 3rd and 4th grades from 54 schools attended the CAL programme and they received a moderate success. One of the core team member states that "Though the children were happy to learn new tools using computers, the programme was not fully integrated with school curriculum and it was looked upon as a stand alone programme".

At the same time, Prem realized very clearly that the impact of the programme will be felt only if this programme can be run at a larger scale. To do so, the organization required to design and implement new business model. "Our foundation can create value in the long term only and only if it becomes sustainable and scalable" he vehemently said.

7. Scanning of Internal & External Environment

Prem and his team critically assessed the internal and external environment before taking major decisions. This helped them to design the strategy for the organization.

7.1 Internal environment:

- One of the major strength of the Foundation was its founding organization 'Pratham Foundation' that had

created a presence across India and was reputed for its strong leadership and innovative approach to deal with the challenges in education. Prem and his team knew that the founding organization will give a lot of support in terms of providing resources, bringing new ideas and creating new structure if required.

- Availability of dedicated and skilled core team was second major strength. As most of the team workers from Pratham Info-Tech Foundation had also worked with 'Pratham Foundation' they had good experience in working in the field on various programmes such as remedial education, literacy and reading programmes, etc. They had a good mix of skill-sets such as finance, IT technology, media and communication, etc.
- Leadership qualities of PremYadav were additional strength. The team had full faith in Prem's leadership qualities and was willing to put his ideas in to practice.
- Rekha Mohit, one of the core team members states that "Prem is fully convinced about the role digital education in mitigating the rural-urban divide in education. His passion and dedication is highly infectious".
- One of the major weaknesses was that the Foundation did not have team of trainers who could work at local / rural level. The Foundation also did not have good quality of software and e-content which can be readily taken to the classrooms.

7.2 External environment:

- The critical evaluation of external environment would show that though Pratham Foundation had created its mark in the field of education, Pratham Info-Tech Foundation was relatively new.
- Another major weakness was lack of awareness and willingness of the major beneficiaries such as parents and children to adopt ICT for improving the quality of teaching learning process at school level. Other major stakeholders like schools, school principals and school management committee were also equally apathetic to introduce ICT in schools.
- The weak economic conditions of the children and parents were another challenge to make this programme financially sustainable in the long run.
- External environment also showed that Central as well as state governments were in favour of use of ICT at the school level. This was reflected in the new

ICT policy designed in 2012 wherein the Central government made Rs. 50 lakh provision to devise, catalyse, support and sustain ICT and ICT enabled activities and processes in order to improve access, quality and efficiency in the school system (National Policy on ICT: 2012). At the same time the major weakness of the policy was there were no clear guidelines, rules or procedures about proper implementation of the policy at the ground level. As a result the fund was being used in a haphazard manner. For instance, there was no clear guideline about from which source the salary of the ICT teacher will come from. This resulted into either not appointing teacher for ICT or by giving additional responsibilities to existing teachers without proper training and incentives. In very few cases Gram Panchayats (Local Governing Bodies operating at village level) took their own initiative and managed salaries of ICT teachers from their own funds. The overall impact therefore was not as expected.

- Prem and his team also found that the policy guideline to encourage ICT at the ground level though positive was inadequate. It launched ICT as a subject only at the higher level of 9th and 10th grades without building any base at the earlier grades. The integration of ICT to the overall school curriculum was lacking.
- The market forces affecting use of ICT in school education were mixed. On one hand private schools and education institutes had started using various IT based education modules in their curriculum. They were well accepted by children and the parents. In fact, it had become an additional source of revenue for the private schools. The limitation of this trend was that almost all the software used was in English language and required improved hardware technology to run. The medium of delivery used by state run schools for unprivileged children was vernacular and these schools were devoid of the necessary infrastructure to run these IT based modules. This showed that even if ICT based education was catching-up very fast in private schools run for privileged children, it had yet to take ground in mass education. The digital divide was growing over the years.

Looking at internal and external environment the team became clear that its technical expertise, domain expertise in the field of school education and rising importance of ICT in education are the supportive factors for designing any strategy. One of the limiting factors is low level of awareness

about ICT amongst the main beneficiaries of the programme such as school children and their parents, school principals, teachers and the local community. Using this analysis the team designed the strategy.

8. Strategy for Building Business Model

Prem and his team decided to take a major challenge of integrating ICT in mass education so as to improve the quality of learning and teaching. Prem identified that there are three main interventions which are required to be done at the ground level. These are as follows:

- Creation of e-content in vernacular languages which is aligned to school curriculum from early standards such as 5th grade onwards.
- Creation and maintenance of hardware to align the software at the school level.
- Developing a team of ICT instructors who are willing to work in rural areas and in the schools providing education in vernacular language.

Pratham Info-Tech decided that it is extremely necessary that they should have control on all the three parameters. Thus the organization appointed a team of e-content designers and decided to develop the software which is not only aligned to school curriculum but also interactive, fun oriented and self-learning oriented. The organization also created IT infrastructure at the school level and employed a dedicated team of engineers to look after its maintenance. It decided to employ and train local level instructors to take classes at the school level. The entire modality of selection, training and monitoring their work needed to be formed up.

The team started implementing this model from 1998. It received good response from the stakeholders. Prem and his team started planning for scaling-up in a systematic manner.

9. Scaling Up The Pratham's CAL Project Using SCALERS Model

9.1 Staffing

One of the major challenges in front of all the social ventures is to attract, recruit, train and retain talent. Invariably social organizations start with individual dream or vision of a social entrepreneur who wants to bring out social change through some social innovation. In the beginning the inspirational leadership of the social entrepreneur helps to attract committed workforce willing to work for the social cause, many times at lower wage rates. As an entrepreneurial team everybody is involved in all the activities and decisions are mainly taken ad hoc or by consensus. But as the organization grows up, there is a

need for professional staff to look after specific functional areas. There is also a need for training staff and retaining the trained staff.

As CAL programme was steadily spreading into semi-urban and rural areas, Prem understood in the beginning itself CAL will need a dedicated team of engineers (to look after repairs and maintenance), instructors (to conduct classes) and administrative staff. He decided to recruit semi-skilled local people and train them as against employing urban professionals. It would help in reducing the cost and to retaining the employees in the long run. The foundation has given lot of prominence in recruiting and training of local youth especially of young women who have minimum qualification of 12th grade and some basic understanding of computers. These young women were thoroughly trained on technical as well as non-technical subjects (such as communication skills, soft skills etc.) and were groomed to become instructors (such as sancharaks or sancharikas). The young women trained by PrathamInfo-Tech took the immense pride in their jobs as it was for the first time they received economic independence and mobility along with social status in a predominantly patriarchal society. "Working with Pratham project helped me personally in gaining self-confidence and getting recognition from the society" says Geeta, one of the sancharika. The foundation also groomed them further to take the positions of group leader. This strategy helped foundation to retain the talent and to reduce the cost. The programme head (Head of CAL programme from PrathamInfo-Tech) meets group leaders four times in

a year to understand the progress of programme and issues faced by group leader or sancharaks and sancharikas.

PrathamInfo-Tech also developed a team of hardware experts from the local area to reduce system downtime in a school. This team was also made responsible for preventive maintenance. Hiring could have helped easy scalability, but capacity building and developing efficient hardware team could be the issue in the long run.

9.2 Communicating

Effective communication is a crucial success factor to persuade all the key stake holders such as potential beneficiaries, volunteers, employees, donors and financiers as well as key partners. The potential stakeholders for CAL project were school management committees formed in the local villages or communities, schools along with principals and teachers, sponsors, Government bodies, employees, students and parents. Pratham Info-Tech clearly defined and communicated each and every stake holder about the benefits of ICT and their role in its implementation.

Pratham Info-Tech identified stakeholders and their roles in the following manner (Table 1):

For effective internal communication, Prem and his team designed processes for recapitulation and monitoring at regular intervals. For instance, it is the duty of a group leader to visit every school twice a week to assess the progress by discussing with sancharikas, students and school heads. Along with this formal tests are also conducted to check the progress of students. At the end of the year

Table : 1

Sr. No	Stakeholder	Roles and responsibilities
1	Pratham InfoTech Foundation	Identifying appropriate hardware and software, development of e-content, training and capacity development of manpower, monitoring and evaluation
2	Govt organizations like Gram Panchayat, Zilla Parishad, Municipal Councils	Implementation of government policies, setting-up School Management Committees (SMCs), monitoring the work of SMC, supporting school programmes
3	Corporate partners	Funding for fixed and recurring expenses, identification of location and schools, monitoring & evaluation
4	School Management Committees	Monitoring the programme, acting as an interlink between local governing bodies, schools, PrathamInfo-Tech and parents
5	Schools (including principals and teachers)	Provision of premises, infrastructure, accommodating the programme in regular timetable, monitoring of the programme
6	Students	Participating in the programme
7	Parents	Monitoring the progress

students are supposed to make projects based on learning in the class. Members of the School Management Committee (SMC) and Parents are invited for the exhibition of these projects (Annexure III) "We were pleasantly surprised to see the children's projects in this exhibition. We never knew that these kids can learn computers so quickly.", few members of SMC commented after visiting computer exhibition.

"We neither have computer at home, nor we know how to use it" states one of the invited parents, "Yet, I know this training will help my child to get better job tomorrow. I am very happy and proud to see my child's project here today".

Schools have benefitted in terms of better involvement in school activities. One of the school's Principal Mr. Chavan from the local area states: "CAL project has increased enthusiasm amongst the children. Their daily attendance for other subjects has also improved a lot",

"We learnt various new tools and games such as SCRACH, Libre Office Calc, Paint, etc. It's such a fun. Now I teach to my parents about how to create and use email, how to search, etc", few school children responded.

9.3 Alliance building

Forging alliances and partnership is essential for social ventures for various purposes such as for fund raising, creating awareness, gaining assistance related to specialized area, lobbying with government, etc. As per The Company's Act, 2013 every corporate, having annual turnover of 1000 crore INR or more or net worth of 500 crore INR or more or net profit of 5 core INR or more, is required to spend at least 2 % of average net profit in the last three years on CSR activities.⁵ The Foundation made strategic alliances with corporate houses such as BPCL, Larson & Toubro Ltd., Tata Power Ltd, etc for sponsoring CAL projects (Annexure IV). It also made alliances IT technology companies like IBM, Microsoft, Syntel, etc for development of software and provision of certification after completion of the programme and with hardware maintenance firms.

Ms Priya Satish from BPCL (who handles CAL project from BPCL) states "We have been operating refineries in Uran district for a long time. Thus working with Pratham InfoTech Foundation in CAL project helped us in maintaining good relations with the local community as well as engaging our employees and their family members in a constructive manner."

⁵ <http://www.pwc.in/assets/pdfs/publications/2013/handbook-on-corporate-social-responsibility-in-india.pdf>

9.4 Lobbying

Lobbying is required to advocate government to bring out desirable policies which may make a significant impact in achieving social cause. The promoters of parent organization "Pratham" who are at advisory positions today help Prem and his team to build importance of ICT in education on various fronts. For instance, Madhav Chavan, the founder of Pratham has been a member on National Advisory Council from 2004 to 2008.

He was also a member of Governing Body Council of Sarva Shiksha Abhiyan mission (SSA) of the Government of India. Farida Lambay, Co-founder of Pratham is an active member of Child Labour and Research in education Committee of Government of India.

9.5 Earning generation

Sustainability of social venture depends mainly on its revenue stream which comes from its own income generating activities such as sale, investments, membership fees, etc. Permanent dependence of grants or donations may make the organization vulnerable in the long run. In the year 2001, Government brought out a Government Resolution that each government aided school must have a computer lab and also allowed schools to charge marginal fees. Pratham took advantage of this to find out if few of their programmes can become financially sustainable. Prem also identified other projects such as providing computer training to local youth or parents of the students to make projects financially viable. It is the vision of the Foundation that each project should at least be able to recover its variable cost (which mainly takes care of salaries and maintenance) in three years' time.

9.6 Replication

Replication of social innovation with the help of alliances or partners without losing control on delivery or quality is vital for enhancing the social impact. The foundation formed partnership with other social organizations to implement the CAL projects in their locations. This helped Pratham Info-Tech to expand its activities to different states. At the same time it retained its control on its core activities such as development of e-content, soft-wares, competency mapping and assessment modules. It helped the project to bring standardization in content and delivery. One such example is its partnership with Bharti Foundation wherein Pratham's CAL programme is run in other states such as Gujarat, Punjab and Uttar Pradesh.

9.7 Stimulating market forces

The true success of social venture depends on linking its programme to the market forces in such a way that it encourages private parties such as consumers, investors, sellers to adopt the product or programme for pursuing their own private interest. Pratham is slowly and steadily becoming successful in convincing schools and parents about the importance of computer knowledge in modern digital world in getting good employment opportunities. Pratham is one of the few organizations creating e-content in vernacular language. If many other schools and parents get convinced with this idea, it may create a good demand in future, specifically for the subjects like Mathematics, Science etc. It is expected that with the increasing popularity of ICT led interactive and activity based teaching, the attendance of the students will improve. The Programme will slowly become financially sustainable.

10. Conclusion

The social ventures invariably face the challenges of scaling-up which limits the impact of social innovation. As mentioned in the review of literature, the social enterprises can use various ways for scaling-up. SCALERS model is one of the model which covers most of the dimensions of scaling-up. The case of Pratham Info-Tech Foundation explains the effective way of scaling-up by identifying seven drivers shown in SCALERS model.

- Early realization of social entrepreneurs/ leaders, etc about need for scaling-up social ventures is very essential. The case shows that PremYadav was fully aware not only about the reasons for scaling-up, but also about the pros and cons of it.
- It is very essential to scan external environment before taking major strategic steps such as scaling-up, etc. The case shows that Pratham Info-Tech Foundation used the external resources easily available in local areas such as young girls, local schools, local School Management Committees consisting of prominent personalities from villages to its advantage in a very effective manner. It also created fruitful alliances with private corporate firms to raise funds for the programme.
- Financial sustenance is one of the major challenges for any social venture. The case shows that the Foundation is consistently striving out to find different ways to make the programme financially viable. Approaching public and private organizations for funding, chagrining minimal fees, running similar programmes in private schools for higher charges,

building awareness about e-learning and creating e-content for other schools, etc are some of the measures towards gaining financial sustainability in the long run.

- The overall progress of the Foundation has been impressive. The foundation has become successful in reaching more than 1.5 lakh students in more than 7 states. The details of the same are given in Annexure V.
- Thus it may be stated that this case asserts the existing research by concluding that SCALERS model can be used to assess the potential of scalability of the social enterprise.

It is seen that more and more opportunities are created in the field of social entrepreneurship. One of the major challenges these ventures may face is of scaling-up. While doing so, these ventures can assess their strengths and weakness on all the seven drivers of the SCALERS model and can build-up their strategies.

11. Limitations and Scope for Future Research

One of the limitations of this case is that it may not be replicated exactly in the similar way by other social organizations. As any social organization works in a given socio-economic context, it will give only broad indication in which direction the organization can grow.

In future, it is possible that study of other social organizations in the similar manner with the use of SCALERS model will give different dimension on how social organizations are growing or what are the challenges faced by social organization in scaling-up.

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Annexure I: Mission and Vision statements of Pratham InfoTech Foundation

Vision

All people- regardless of social background, income level, geographic isolation, skill gap and educational qualifications, reap the social and economic benefits that information technologies promise to all in the new world in which information and technology touch every aspect of our life.

Mission

Aim to boost digital literacy, bridge digital divide, facilitate the adoption of information technologies in education, and equip at risk youths with skills, tools and capabilities that new global economy demands.

Approach

In pursuit of the vision, the following principles guide our operations and outreach,

Programs, products and services that stress the use of IT to address socio-economic problems of the disadvantaged and underserved population.

- Holistic program development, value-addition to stakeholders and sustainability of efforts are key determinants of success.
- A low cost, scalable and quality driven operational model that relies on recruiting smart, talented youth from the underserved communities we serve.
- Emphasis on capacity building, skill development, social integration and inclusive growth.

Source: www.pif.org.in accessed on 9th July, 2014

Annexure II: What is Computer Aided Learning Programme?

Computer Aided Learning Program (CAL) involves integrating school curriculum with the help of ICT. The preliminary stage of CAL programme involves careful selection of partner schools, recruitment/training of teachers, community mobilization, curriculum finalization, development of teaching-learning aids and base line testing. Classes are kept small to ensure individual attention and optimal learning. The Hardware used is of a high quality and the software includes that developed in local languages designed around school curriculum. To make certain that desired goals & outcomes are being achieved, evaluation and monitoring is done at regular intervals.

Source: BPCL- Pratham Computer Aided Learning Programme, Half-Yearly Report, Oct 2009 to March 2010.

Annexure III: Computer exhibition held in sample school in Uran Taluka



Source: Photograph snapped by researchers

Annexure IV: List of Corporate Partners

Sr. No	Company	Year of association	Programme
1	Tata Consultancy services	2014	CAL and digital literacy as life skill programme
2	Tech Mahindra	2014	CAL Programme and Community Information and training centre
3	IBM	2004	Kids Smart early Learning Porgram through Young Explorer (Computer) as a tool.
4	BPCL	2009	CAL Programme
5	WNS	2010	CAL Programme
6	K. Raheja Corp	2011	CAL Programme
7	Larsen & Toubro	2014	Community Learning Program
8	Tata Power co. Ltd	2008	CAL Programme
9	Syntel	2008	CAL Programme
10	Saint-Gobain	2008	CAL Programme
11	IDFC	2015	CAL Programme
12	DMART	2015	CAL Programme

Source: <http://pif.org.in/PartnersandAssociates/CorporatePartners.aspx> accessed on 10th July 2014

Annexure V: Summary Report of CAL Programme implemented in India (as on June, 2015)

Sr. no	State	Digitech Centers	Schools	Students	Team Size
1	Gujarat	31	40	9490	36
2	Haryana	22	22	7801	27
3	Maharashtra	318	407	108371	599
4	New Delhi	9	9	1930	14
5	Rajasthan	36	38	6196	44
6	Uttar Pradesh	55	64	20126	68
7	West Bengal	6	7	1439	7
	Total	477	587	155353	795

Source: <http://pif.org.in/Publications/MainReports.aspx> .accessed on 10th July 2014

Chandan Singhvi is presently working in K. J. Somaiya Institute of Management Studies & Research, Mumbai, India. Her areas of research are ICT in education, ERP implementation, etc. Email: chandans@somaiya.edu

Prema Basargekar is presently working in K. J. Somaiya Institute of Management Studies & Research, Mumbai, India. Her areas of research are microfinance, impact assessment of social programmes, women empowerment and social entrepreneurship. Email: prema@somaiya.edu

Management Controls of Students - Scale Development and Validation

Devesh Baid¹

International Management Institute, Bhubaneswar

S.V.D. Nageswara Rao

Indian Institute of Technology, Bombay

Abstract

Students' actions and behaviors need to be controlled to ensure better academic outcomes. Review of literature identifies the gap that there is no instrument to measure students' controls of students' behavior in a holistic manner covering both formal and informal controls. This paper develops a scale based on Merchant (1998) 'objects of control' framework for controlling students' behavior and actions. Formal controls include *results and action controls* while informal controls include *personnel and cultural controls*. Since there are no studies in the *management control systems* literature that have considered controls being applied to students, this study reviews *school effectiveness and school improvement research* to draw items for scale relating to students' controls. Descriptive correlational design using survey method was found suitable for the study. Simple random sample of private unaided schools affiliated to a state board of examination was drawn. A close-ended questionnaire was administered to teachers teaching in tenth class only. In all 241 teachers from 51 schools participated in the study. Classical test theory was used to develop the scale. Confirmatory factor analysis, post hoc analysis using sub-samples, multiple validity tests were conducted to check the robustness of the scale, and it was found appropriate for future use.

Keywords: Management Control Systems, Students Controls Scale, Secondary Teachers, K-12 Private Unaided Schools, India.

1. Introduction

Schools are not like business organizations in terms of final product or service they provide. However, since they are organizations, management control systems (MCS) form an integral part of the school functioning. According to Tucker and Parker (2013) the trend towards a confluence of various sectors is in agreement with neo-institutional theory. Based on this viewpoint, schools may adopt many structural and processual aspects of for-profit organizations, including

approaches to MCS. However, differences between schools and commercial organizations will influence the context in which MCS operates.

Madan (2012) argues that public institutions like schools share the essential characteristics of private institutions, and so many of the same processes and methods can be used in them. The concerns and directions of the top are expected to be implemented by employees at various levels in effective and competitive manner. The strategies include detailed surveillance of behaviour, output, etc. At the same time, schools like any other organizations are believed to be formed not just by formal rules and norms but by the cultures that emerge within them. Teacher and student identities and the process of identity work are seen as integral to how teaching and learning takes place. Improvement of schools takes the form of cultivation of commitment rather than, say, scrutiny of what is being done and reward or penalties for them. Studies on school effectiveness and school improvement have provided substantial evidence that students have an important bearing on school outcomes. It is also acknowledged that students' behaviour and actions need to be controlled through rules, policies, etc. However, there are no studies that have applied the MCS framework to study students' control in school. This study identifies the gap in the literature on MCS in schools and proposes that Merchant's 'objects of control' (1998) framework can be used to study the types of controls applied to students.

Merchant (1998) takes a "broader view of MCS" and defines control as "all the devices managers use to ensure that the behaviors and decisions of people in the organization are consistent with the organization's objectives and strategies". Personnel limitations of employees, lack of motivation, and lack of direction are stated as three main reasons for having controls. Four types of control - action control, results control, personnel control and cultural control - are identified as "objects of control". Each type of control can be used tightly or loosely. The objective of this framework is to control human behavior. There are no instruments that

¹ Corresponding Author

have measured types of controls applied to students. So this study develops constructs of control types as identified by Merchant and prepares and validates a management control of students scale.

This study is structured as follows. Section two presents a brief review of studies relating to students controls in schools and identifies the gap. Section three discusses the research design and provides variable definitions. Section four elaborates on the process followed for questionnaire development and revision while Section five summarizes the results of reliability and validity tests conducted for scale development. The last section discusses the relevance of scale, limitation of the study and scope for future research.

2. Review of Literature

Agasisti, Bonomi, and Sibiano (2012) quoting from earlier studies, state that the quality of learning is influenced to a great extent by the way schools are managed as compared to resources available to them. Abbi (2013) found school management as a leading factor in influencing the quality of primary education. School management makes policies that are conducive to the academic environment. As such, school management is a very strong factor in influencing the academic achievement of students.

There are many studies that have studied MCS in educational organizations. Weick, (1976) states that in the case of schools there is a loose control on the work but tight control over who does the work and on whom (students). Murphy, et. al., (1982) have identified policies on student's progress as crucial for determining school performance. These include policies related to giving homework to students, grading assignments, monitoring academic progress, arranging remedial for weak students, reporting students' progress, and setting promotion (retention) policy of students.

Purkey and Smith (1983) state that explicitly stated rules and policies that are consistently, fairly, and firmly applied reduce behaviour problems among students that hamper their learning. At the same time, rules and policies also develop feelings of pride and responsibility among school members thus contributing to school effectiveness. Scott (2011), applying Simons (1995) 'levers of control' framework to schools, states that schools convey their belief system through their charter. Many policies and rules with known consequences, if not followed by students, make their boundary systems. Within schools, information on budgets and student outcomes are the primary examples of diagnostic types of controls. Also, MCS information is used in an interactive manner during school planning days.

Kyriakides, et. al., (2010) identify four important school-level factors affecting school performance. The first two factors relating to school policies on teaching and students learning environment refer to actions schools take to help students and other participants in the system have clarity on what is expected from them. The last two factors relate to the systems and channels used to assess the functioning of the first two factors. Kyriakides et. al., (2010), quoting Creemers (1994) claim that "control is one of the major principles operating in generating educational effectiveness."

Kyriakides et.al. (2010) report a direct effect of school policies on student's outcome. They identified school policies relating to admission, teaching, evaluation of the policies on teaching, and policies on school learning environment as having an effect size of more than 0.13 on student's achievements. Student's achievements in these studies were considered either as cognitive, affective, and psychological performance or a combination of these.

Aidla and Vadi (2008) found that schools where students indulged in activities such as violence, robbing, disorder, etc reported lower academic achievements. Also, many studies have shown a strong relationship between student's engagement with extracurricular activities and their grades. Extracurricular activities increase student's involvement that helps them to perform better, resulting in increased levels of achievement. Wiesenthal et al. (1997) found that schools with focus on homework policy improved school climate, student work habit, student knowledge acquisition, students' attitude, and parent involvement.

Previous studies refer to more formal controls being applied to schools. There are studies that have found that informal controls also play a significant role in schools. Tucker and Parker (2013) in their study of nonprofit organizations including education, state that informal MCS rather than formal MCS is the predominant means of exercising controls in these organizations. Among various forms of informal control, "management by walking around" was the most prominent form of control. Madan (2012) cites previous research as holding either or position between a control and command approach and a commitment approach. While strong forms of both approaches appear to be improving school functioning, it was the mild and mixed models that tended to fall between two stools.

We reviewed many studies which examined specific control items and these are mentioned in section four relating to questionnaire development. Based on the discussion, it can be said that students' controls play a significant role in

school functioning. We did not come across any instrument that measures various control types applied to students. This paper develops a tool for measuring controls applied to students in schools. It covers both formal and informal controls and is contextual.

3. Research Design

This section provides an outline of the methods used in conducting the study. As this study develops a scale, descriptive correlational design (Creswell, 2011, p. 337) using surveys (Creswell, 2011, p. 375) was adopted. Diamond's (2000) framework was used for planning and conducting this study.

Based on the type of management, schools in India can be classified as government schools or private schools. Private schools are either government aided or unaided. The performance of students enrolled in private schools is better than their counterparts in public schools. As per the Annual Status of Education Report (ASER) of 2013 (Pratham, 2014), private schools have done much better than government schools. Fifty-nine per cent of children of class 3 in private school can read class 1 level texts compared to 32.6 per cent children of same class in government schools. Even at class 5, private schools maintain their lead as 63.6 per cent children from these schools compared to 41.1 per cent children of government schools can read class 2 level texts. The scenario is same for arithmetic.

Kingdon (2007) reports better academic performance of private school students compared to students of government school, even after considering the differences in schools' student intake. Tooley et.al. (2007) in their study of schools in Hyderabad found that test scores of children enrolled in private schools were approximately one sigma higher than that of children enrolled in government schools. Muralidharan and Kremer (2006) used nationally representative data to compare students' performance in private and government primary schools situated in rural India. They found that private school students performed better by 0.41 sigma than students' from government schools of the same village even after taking into account various home and school characteristics. Desai et al. (2008) found that, after controlling for variables such as parental socio-economic status, highest qualification of any adult family member, household size, number of children under age 15, and state of residence, children's enrolled in private schools performed better in reading and arithmetic than children enrolled in government schools. Chudgar (2012) found that, after accounting for variables such as sex, age, SES, parent

schooling, household type and size, children enrolled in private school performed better on reading and mathematics than those enrolled in government schools.

It is also reported that there is enormous difference in performance of private unaided schools in terms of marks of students and other outcomes (Narula, 2012; Sujatha and Geeta Rani, 2011). Since private unaided schools in India have a considerable autonomy in managing school affairs, differences in school MCS may explain the difference in performance between these schools. In the Indian context, it becomes all the more important as private unaided schools have seen a phenomenal growth over the last two decades as shown in Table 1. So this study develops a scale for students control relevant to private unaided schools.

Population for the study consisted of secondary teachers of K-12 private unaided schools while the survey unit was secondary teachers. Ahmedabad city was chosen for drawing the sample. In the city approximately 75 percent schools are affiliated to the state board of examination. The sampling frame was drawn from the website of the Gujarat Secondary Education Board (GSEB) and school information books published by the Ahmedabad District School Principal Association. Based on these two sources a sampling frame of 188 schools was prepared.

Simple random sampling was used to draw a sample of 100 schools. On average three responses were expected from secondary teachers of each school making a total of 300 responses. A close-ended questionnaire was used to collect data from respondents. Multiple statistical tests such as Cronbach alpha, composite reliability, exploratory factor analysis (EFA), confirmatory factor analysis (CFA), and FornierLacker Criterion were conducted using IBM SPSS STATISTICS (Version 22) and IBM SPSS AMOS (Version 20).

Bisbe, Batista-Foguet, and Chenhall (2007) have criticized management accounting studies for lack of construct definition. This study paid particular attention to the conceptual specification of constructs. Theoretical and operational definition of constructs of control types - results, actions, personnel and cultural controls - are based on Merchant (1998), modified to students' context to suit the purpose of the study.

Result controls are a form of control in which students are highly rewarded for good performance and treated as heroes in schools while punished for bad performance including class repetition and expulsion from school. School is not particular about students being regular

in class, doing homework etc as long as they achieve good marks. The operational definition includes items with respect to recognition, security, autonomy and plum assignments.

Action controls aim to ensure that students perform actions that are stipulated by the school and are not held accountable for the results which action produces. The operational definition includes items with respect to pre-action review, action accountability, behavioural constraints, and redundancy.

Personnel controls are defined as providing students with necessary training (like remedial sessions) and resources to do their studies. The operational definition includes items with respect to job design, provision of necessary resources, and training.

Cultural controls are defined as controls that work in organizations due to shared tradition, values, and beliefs, etc. which may be written or unwritten and work through peer pressure in the group. The operational definition includes items with respect to the code of conduct, group rewards, students' rotation, physical arrangements, social arrangements, and tone at the top.

Based on above conceptualization all four control types were measured as latent constructs with reflective variables.

4. Questionnaire Development and Revision

Based on the literature, a questionnaire was prepared. There are no previous studies relating to four control types in the school context. All items were taken from a review of case studies, experimental studies, and survey studies in the domain of school effectiveness and school improvement literature. Studies referred to are Abdullah and Kassim (2011); Aidlaand Vadi (2008); Bray and Lykins (2012); Diwan (2011); Dong, Liu, and Ding (2012); Monds, Wang, and Bennet (2013); Fugazzotto (2009); Gray (2004); Hallinger (2011); Hallinger and Lu (2013); Hulpia and Valcke (2004); Muralidharan (2013); Mythili (2013); Pratham (2011); Purkeyand Smith (1983); Rosenholtz (1985); Sammons, et al., (2011); Scoop News (2011); Sebastian and Allensworth (2012); Sen (2010); Slate, et al., (2008); Stemler, Bebell, and Sonnabend (2011); Sujatha and Geeta Rani (2011); Suraweera (2011); Teodoroviæ (2009); Thoonen, et al. (2011); Tyagi (2011); Verma (2009); Weiss and Piderit (1999); Wilkins and Balakrishnan (2013); Witte and Walsh (1990). (A list of items will be provided by the authors on request.)

Student's controls had a total of 29 items. Student's results

controls had nine items. It included allowing students to appear in tenth board examination; promoting students to tenth standard; withdrawal of student from school after ninth standard; informing parents about performance after every test (examination); assigning responsibilities to students: rewarding students for academic performance in school and in competitive examinations; and encouraging students to take tuition for good academic performance. Action control included five items relating to ensuring attendance in class, completing homework, discipline, and acquiring additional resources in library, lab etc so students did not miss on learning.

Personnel control for students included six items related to organizing additional sessions for improving performance, career counselling, co-curricular activities, and providing adequate infrastructure facilities for students. Cultural control of students had nine items with respect to grouping of students, achieving school mission and vision, and ensuring equity to students. On the control items, we constantly kept in mind that questions were framed to seek the perception of teachers about controls applied to students and not facts about controls as stated in a rule book. The focus was on perception about restrictions in practice. It was decided to use a five-point Likert scale to measure these constructs.

After the questionnaire was had been prepared, it was given to two professors from a reputed management institution for checking its face validity. Based on suggestions the five-point scale for measuring items relating to controls constructs was changed to '1= never and 5= always'. At this stage the questionnaire was given to an expert in the area of school education. No significant changes were suggested. The questionnaire was then rolled out for pre-testing with secondary teachers of three English medium schools. Based on pre-testing two items relating to recognition of students who are rankers in school, and securing a rank in the board exam, Olympiads, etc. were changed from perceptual to factual.

The revised questionnaire was given to an ex-head of a linguistic department of a university for translation to Gujarati. Validation of both English and Gujarati versions was done by a professor of marketing who had translated many English books to Gujarati and wrote columns in Gujarati newspapers regularly. The translation was found appropriate. For reverse conversion from Gujarati to English, the questionnaire was given to the principal of a school. Based on suggestions some changes were made he English

version to meet the reverse conversion requirement. At the same time, a few changes were made in words in Gujarati questionnaire since it was felt that words used were more technical and teachers might find it difficult to understand. A question relating to students carrying mobile phones, etc. was changed from "Students carry mobile phones, video games, etc. on school premises" to "In our school students who are found carrying mobile phones, video games, etc. on school premises face strict action". Finally, the Gujarati questionnaire was pre-tested with teachers of a Gujarati medium school and was found appropriate.

Fifty schools were selected from randomly arranged sampling frame for pilot data collection. Three e-mails were sent out to them over a period of one week introducing the topic of study and establishing credentials of researchers. A mail was sent to school principals with a copy of the letter from the post bearer of Ahmedabad Principals Association. This letter stated that no confidential information was sought from school and requested principals to cooperate. Positive reply was received from only one school; other schools did not reply to the mails at all.

There were very few schools where principals had seen the e-mails sent earlier and gave permission to administer the questionnaire in very first visit. Most principals didn't check their mails very often. Many school principals did not have computers on their desk. Photocopies of letters sent to them by e-mail was provided and a brief about the research work was given for permission to administer the questionnaire to teachers teaching in tenth class and had been with school for more than a year.

In some schools, especially those serving low-income group students, principals were themselves trustee and a subject teacher. This quickened the process of decision making. Most of them agreed to administer the questionnaire. But in other schools, principals were hesitant in giving permission since all decisions were taken after consulting with the trustee. So meetings were held with trustees to persuade them to participate in this study. In all 120 teachers from 26 schools completed the questionnaire.

A detailed analysis was conducted of the data, and five-factors emerged for students control scale. Results control scale had two factors, one relating to internal controls by reward and punishment and another relating to external control by encouraging tuition. Many items got dropped in arriving at factor solution. Taking a conservative view, seven items having a negative or insignificant correlation with more than 50 percent of items under the same construct

were removed. In construct relating to students result controls, one item, 'academically weak students who fail in the ninth standard are promoted to tenth standard', was found irrelevant. Principal told us that as per guidelines from the District Education Office (DEO), if a student did not secure minimum pass marks, he/she was given remedial sessions and then examined and promoted. So this item was dropped. This guideline is an extension of a provision in the Government of India (2009) RTE Act where a school is not supposed to fail a student up to eighth class. Based on these changes a revised questionnaire was drawn for final data collection.

5. Scale Development and Validation

The second block of 50 schools was taken from the already arranged sampling frame for final data collection. To this list schools contacted during pilot analysis but not converted were added. Three emails were sent to schools in a week's time before starting final data collection as was done earlier. Some schools did not cooperate in data collection. The DEO was approached for help and permission was sought to tell schools that the DEO office had requested cooperation. When this was tried with two schools, they gave permission to administer the questionnaire survey but the questionnaires had to be left with the principal. Many responses were incomplete. So it was decided to convince schools on our own.

In all 121 teachers from 31 schools participated in final data collection, resulting in 241 responses from 57 schools. The effective annual fees charged by school to tenth class students varied from a low of Rupees 1,200 to a high of Rs. 35,000 with an average of Rs. 8,896 per year and standard deviation of Rs. 7,192.5. Number of students in each school varied from a low of 100 to a high of 3500 with a median of 911.5 students. Average school size was 1018 students and the standard deviation was 706.79. Mostly of the schools had one section in tenth class except while one school which had nine sections. Number of students in tenth class varied from a low of five to a high of 484 with a median of 54 students and an average class size of 77 students. Schools covered in this study had started offering tenth class as early as 1987 and as late as 2013, with median year being 2004.

There were 130 female and 105 male teachers; 152 of these teachers were post graduates, 58 were graduates, 14 had completed high school, 11 were M. Phil / Ph.D. 187 had undergone B.Ed training, 15 had undergone M. Ed training while 33 teachers did not have any training. Six teachers did not provide information about gender, education

qualification, training and experience. Average teaching experience was 7.8 years with 5.7 years at tenth level and only 4.1 years (including current academic year) at the current school teaching tenth class.

Respondents with more than 10 percent missing items and who had left sections completely blank were removed. Little's MACR test (Meyers, Gamst, and Guarino, 2013, p.88) was applied to assess the nature of the missing value pattern. Chi-square value of 331.188 with significance of 0.533 confirmed that data were missing completely at random, so values were filled using simple linear regression. Outlier analysis was conducted using box plots (Meyers et al., 2013, p.128) leaving 204 responses from 55 schools. Since this dataset was part of a larger dataset, common method bias was checked for the complete dataset. Harman's single factor test was applied using principal component analysis (PCA) without rotation. As the first factor explained a small proportion of variance in data, common method bias was ruled out (Podsakoff, et al., 2003). Overall response rate was 80.28 per cent (57 out of 71 schools approached) which showed that non-response bias being not very high was not a cause of concern.

For scale development, Cronbach alpha was calculated for assessing the reliability of each dimension. Based on the analysis, one item was removed from personnel control of students to increase alpha value. Also one entire construct of results control - internal with three items was dropped due to a small alpha value of 0.515. All other dimensions reported alpha value above 0.6 as shown in Table 2. A value of 0.7 or higher indicates adequate reliability; however, a value above 0.6 is also considered acceptable (Nunnally, 1967, p. 226; Peterson, 1994).

Factor structure was derived using IBM SPSS. Exploratory factor analysis (EFA) was conducted for each dimension using PCA with varimax rotation. It confirmed the one-factor solution for all constructs except cultural control of students which resulted in the two-factor solution. The second factor had two items with loading above 0.5 and so was retained at this stage. Now four control types relating to students control were put together for examining four factor students control scale. Again PCA with varimax rotation was used. Factors with eigenvalue more than one were retained resulting in four-factor solution explaining 64.30 percent variance. Explained variance above 60 percent is good (Meyers et al., 2013, p. 708). All cross-loadings were removed to the extent possible retaining at least three items for each construct. Kaiser-Meyer-Olkin (KMO) test gave

value of 0.706 and Bartlett's Test of Sphericity was significant at p value less than 0.001. These tests are measures of sampling adequacy, and KMO value of above 0.7 is considered adequate (Meyers et al., 2013, p. 691). Descriptive statistics for these control items is given in Table 3.

To confirm above factor structure, CFA was conducted using AMOS. No items were dropped at this stage. The final values showed a reasonable fit (Byrne, 2001, pp. 82–85) and confirmed our scale. To further examine the fitness of the four-factor control scale, this initial model (H1) was compared with a competing model H2. In the case of H2, a second order CFA model was drawn based on the four first order control constructs. The second order construct of 'Management Control of Student' was drawn as a reflective construct by fixing its variance to one. These competing models were compared using various fit indices and chi-square difference test (Byrne, 2001, p. 114) to determine the better fit of the initial model (H1). Table 4 confirmed our initial four-factor solution (base model H1) as a better fit. Fit indices for both H1 and H2 models were obtained after drawing two covariance's path between error terms in the CFA diagram. These paths were drawn based on two modification indices values (Byrne, 2001, p. 90) given by AMOS output (Table 5).

One way to establish discriminant validity is to verify that item loading on related construct is greater than its loading on other constructs. Table 6 provides loadings of each item on the respective construct that is marked bold, and its cross-loadings on other constructs. It is clear that item loading on the associated control construct is greater than cross-loadings on other control constructs and so discriminant validity is established (Hair, et al 2013, p. 105).

The above method of comparing loadings and cross-loadings for establishing discriminant validity is considered liberal. So Fornell Larcker Criterion (FLC) analysis was used to determine the discriminant validity of all constructs (Hair et al., 2013, p. 107). According to this criterion, the square root of average variance extracted (AVE) of a construct should be higher than its correlation with other constructs. Also composite reliability (CR) is a better measure of validity as it considers different loadings of the items associated with a construct (Hair et al., 2013, p.). Table 7 shows the values of CR, AVE, FLC and other measures like maximum shared variance (MSV) and average shared variance (ASV) (calculated using Gaskin (2012) "Stats Tools Package").

Hair et al., (2012, p. 107) and Hair et al., (2013, p. 832) have

suggested values of 0.7 for CR, 0.5 for AVE, and MSV, ASV to be less than AVE, and the square root of AVE to be greater than inter-construct correlations for meeting convergent and discriminant validity. Tseng, Dörnyei, and Schmitt (2006) and Diamantopoulos and Siguaw (2000 p.91) have suggested that CR should be greater than 0.6. Fornell and Larcker, (1981) say that CR alone is sufficient to establish convergent validity even if AVE is less than 0.5. Ylinen and Gullkvist, 2014 reported AVE of 0.375 and CR of 0.639 for the construct of organic control and used it in an analysis. Based on these threshold values, it can be concluded that all constructs meet the reliability and validity requirements.

A post hoc analysis was also conducted for Management Controls of Students Scale. The dataset was divided into subsets based on school fees and school medium of instruction. School fee was measured as the effective annual fee charged to tenth class students, and a median split was used as the basis for creating subsets based on school fees. Medium of instruction was classified as either English or Gujarati. These factors may influence control practices in schools (Table 8 show valid results). Slightly small values for English medium and low fee-charging schools may be due to the small sample size of these subsets.

To assess the predictive validity of this scale a relationship was hypothesized between students control types and teachers workload stress. Teacher's workload stress was measured by using a four item subscale of workload stress drawn from Klassen and Chiu (2010). A two-step process was followed for this purpose. First, the structural model was tested for all four control types and workload stress using CFA. Results showed a reasonable fit (CMIN/DF = 1.756 at $p < 0.001$, GFI = 0.916, IFI = 0.927, TLI = 0.904, CFI = 0.927 and RMSEA = 0.061). It confirmed that teachers workload stress and students control types are different constructs. Next, a measurement model was tested between four control types and workload stress. No study had drawn a relationship between students control types and teachers workload stress. So this study tested a non-directional null hypothesis of no significant association between students control types and teachers workload stress. Findings show the null hypothesis was not accepted. Student control types explained 26.6 per cent variance in teachers workload stress and all path coefficients were significant at $p < 0.05$ except personnel control of students. Based on modification indices a path from ACS (Action Control Students) to PCS4 (School organizes additional remedial

sessions for academically weak students) was also found significant. It is logical as students' action control helps determine whether students' needs additional help for improving academic achievements.

6 : Discussion, Limitation, and Scope for Future Work

The above analysis confirms a four-factor model for students' control. Action controls, based on the mean value of 4.46 on a five-point scale, are the most prominent form of controls applied to students followed by cultural, personnel, and results controls. Action controls include measures relating to students attendance, discipline and timely completion of homework. This control is necessary but not sufficient for students' performance. This control helps the school identify students' who require additional academic support and motivation for improving performance. Other three controls try to address this requirement of students. Items relating to personnel control of students include measures such as organizing remedial sessions for academically weak students and career counselling for all students. These measures have a direct impact on school performance. On the other hand, items relating to results controls (external) include measures like tuition and withdrawal of students from the school lead indirectly to ensure good results. Good pass results and students' securing ranks influence admission in private schools. The school advertises their success results through newspapers, pamphlets, and hoardings to influence parents' decision about choice of school for their child. So results control (external) is an important mechanism used by schools to ensure students' performance. Cultural control emphasizes school mission through various activities to create an environment where students work through peer learning to achieve school goals and objectives. Group rewards are used as incentives to promote this culture. These 12 control items can serve as a basis for measuring and improving school control functions.

The study was conducted in a scientific manner. But there is always a scope for improvement. In this study responses for students' controls were sought from teachers. Better responses could have been obtained if students were administered questionnaire relating to controls exercised on them. Also due to time and resource constraint, this study was conducted in schools affiliated with one state examination board in a city. This limitation influences the generalizability of results. Future studies can be conducted across boards and geographical areas. Even with these limitations, the results are robust and can be used for

managing students to improve the teaching – learning process.

There is considerable scope for future research. First, the scale can be tested over time and geographical area for establishing reliability and validity. Although this scale is prepared for private unaided schools, it can be tested for government and private aided schools and also across various education levels such as primary and higher secondary. Second, this scale can be used to study the

association between students’ performance, stress, and satisfaction of various stakeholders like students, teachers, and parents. Third, there is a debate in the literature on the nature of control constructs. Future studies can prepare a student’s control Index using formative constructs and compare the predictive power of both instruments to confirm whether control constructs are formative or reflective.

Table 1: CAGR of Institutions

Year	Primary 1993-2003	Primary 2003-2013	Upper Primary 1993-2003	Upper Primary 2003-2013	Secondary 1993-2003	Secondary 2003-2013	Higher Secondary 1993-2003	Higher Secondary 2003-2013
Govt.	2.08%	3.55%	3.90%	6.85%	2.50%	5.87%	5.90%	8.12%
PU	-0.60%	5.90%	1.22%	10.12%	2.30%	1.92%	5.40%	0.23%
PUA	6.98%	16.77%	11.88%	11.33%	9.20%	9.09%	11.70%	13.90%

Note –Authors own calculation based on data from 1. DISE and 2. Development of Secondary Education In India, Sujatha and Geetha Rani (2011)

Table 2: Cronbach Alpha for All Constructs

No	Construct	Cronbach Alpha
1	Cultural Controls of Students	0.699
2	Action Controls of Students	0.685
3	Result Controls of Students – Internal	0.515
4	Result Control of Students – External	0.622
5	Personnel Control of Students	0.794

Authors own calculations using IBM SPSS STATISTICS Version 22.

Table 3: Descriptive Statistics

Item ^a	Mean	Std. Deviation	Skewness	Std. Error of Skewness	Kurtosis	Std. Error of Kurtosis	Minimum	Maximum
CCS1	4.32	.856	-1.772	.170	4.140	.339	1	5
CCS2	4.25	.862	-.891	.170	-.126	.339	2	5
CCS3	4.25	.888	-1.194	.170	1.193	.339	1	5
ACS1	4.56	.801	-2.284	.170	5.842	.339	1	5
ACS2	4.18	.881	-.877	.170	.215	.339	1	5
ACS3	4.64	.739	-2.571	.170	7.395	.339	1	5
RCS2	1.79	.976	1.130	.170	.794	.339	1	5
RCS4	1.50	.980	2.142	.170	3.976	.339	1	5
RCS5	1.21	.678	3.455	.170	10.956	.339	1	4
PCS2	4.21	.981	-1.088	.170	.374	.339	1	5
PCS3	4.25	.888	-1.152	.170	.851	.339	1	5
PCS4	4.25	.944	-1.348	.170	1.606	.339	1	5

a. CCS stands for cultural controls of students, ACS for action controls of students, RCS for result control of students, and PCS for personnel control of students.

b. Authors own calculations using IBM SPSS STATISTICS Version 22.

Table 4: Comparison of Competing Models

	Base Model H1	Comparative Model H2	
Chi Square	76.077	84.335	
Degrees of Freedom	46	48	
CMIN/DF	1.654	1.757	
GFI	0.946	0.939	
IFI	0.953	0.943	
TLI	0.931	0.920	
CFI	0.952	0.942	
RMSEA	0.057	0.061	
AIC	140.077	144.335	
Chi-Square Difference Test			
	ΔX^2	Δdf	Critical value
H1 vs.H2	8.258	2	5.991 at p = 0.05

Authors own calculations using IBM SPSS AMOS Version 20.

Table 5: Covariance Path Drawn Based on Modification Indices

No	Path	item	Covariance's	Path	Item / Construct
1	e1	School recognizes good team work of students in group projects & assignments etc.	<—>	e10	School encourages students to participate in various career counseling events and forums.
2	e2	School encourages team work by giving group projects etc. to 10th standard students.	<—>	e5	A student is required to submit an application signed by his/her parent if he / she fail to complete his / her homework.

Prepared by authors based on output of IBM SPSS AMOS Version 20.

Table 6: Items, Loadings and Cross Loadings

Rotated Component Matrix ^a							
Code	Item	Variance	Component				
			1	2	3	4	
PCS3	School encourages students to participate in various career counseling events and forums.	29.394%	0.889	0.190	0.059	0.005	
PCS2	School provides formal career counseling services to students.		0.829	0.202	0.098	-0.035	
PCS4	School organizes additional remedial sessions for academically weak students.		0.572	0.227	0.333	-0.052	
CCS3	School recognizes good team work of students in group projects & assignments etc.	14.563%	0.09	0.852	0.038	-0.008	
CCS2	School encourages team work by giving group projects etc. to 10th standard students.		0.262	0.775	0.146	-0.089	
CCS1	School emphasizes its mission & vision in various activities involving students.		0.199	0.707	0.066	-0.076	
ACS1	A student is required to submit an application signed by his/her parent if he/he is absent from school.	11.570%	-0.033	0.106	0.844	-0.087	
ACS2	A student is required to submit an application signed by his/her parent if he/she fail to complete his/her homework.		0.158	0.077	0.749	0.068	
ACS3	A student is required to get signature from parents for remarks made in their diary by teachers about his / her indiscipline.		0.324	0.034	0.626	-0.226	
RCS5	School encourages students to take tuition from school teachers while preparing for the 10th board exams.	8.774%	-0.09	-0.075	-0.129	0.838	
RCS4	School encourages students to take tuition while preparing for the 10th board exam.		-0.027	-0.026	-0.11	0.819	
RCS2	Academically weak students who do not perform well in 9th standard withdraw from the school.		0.024	-0.045	0.047	0.607	

a. CCS stands for cultural controls of students, ACS for action controls of students, RCS for result control of students, and PCS for personnel control of students.
 b. Authors own calculations using IBM SPSS STATISTICS Version 22.

Table 7: Values of Reliability, Convergent and Discriminant Validity

FornellLarcker Criterion								
	CR	AVE	MSV	ASV	RCS	CCS	ACS	PCS
RCS	0.683	0.442	0.099	0.055	0.665			
CCS	0.742	0.493	0.356	0.165	-0.228	0.702		
ACS	0.660	0.394	0.173	0.120	-0.315	0.296	0.628	
PCS	0.781	0.551	0.356	0.181	-0.114	0.597	0.416	0.742

Authors own calculations using Gaskins (2012) Stats Tools Package .

Table 8: Post Hoc Analysis for Sub Samples

		N	CMIN/DF	GFI	IFI	TLI	CFI	RMSEA
Medium of Instruction	English	91	1.678	0.888	0.895	0.838	0.887	0.087
	Gujarati	113	1.394	0.912	0.957	0.935	0.955	0.059
School Fees	High	110	1.433	0.916	0.945	0.916	0.941	0.063
	Low	94	1.671	0.890	0.904	0.854	0.898	0.085

Authors own calculations using IBM SPSS AMOS Version 20.

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Devesh Baid is associate professor at International Management Institute (IMI), Bhubaneswar. He is a graduate from Shri Ram College of Commerce, management accountant from Institute of Cost Accountants of India, and PhD from IIT Bombay. He has more than 15 years of teaching and research experience. His area of specialization is accounting and finance. He has presented and published papers and case studies in various conferences and journals. He is also fellow member of Institute of Cost Accountants of India (Email: f07devesh@iima.ac.in).

S.V.D. Nageswara Rao is a Professor in Finance and Economics area at School of Management, IIT, Powai, Mumbai since August 1996. I have done B.Tech. (Mech. Engg.) from National Institute of Technology (NIT) Warangal, and I received the title "Fellow of IIM Ahmedabad" in 1996. I was Senior Manager with ICRA Ltd. in New Delhi prior to joining IIT Bombay (Email: sonti@iitb.ac.in).

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