Sukkur IBA

Journal of

Management

and BUSINESS

Sukkur IBA Journal of Management and Business (SIJMB) is the semi-annual research journal published by **Sukkur Institute of Business Administration-Sukkur IBA**, Sukkur Pakistan. **SIJMB** is dedicated to serve as a key resource to provide practical information for the people associated with business, management and economics research at global scale.

Disclaimer: The opinions expressed in **Sukkur IBA Journal of Management and Business (SIJMB)** are those of the authors and contributors, and do not necessarily reflect those of the journal management, advisory board, the editorial board, Sukkur Institute of Business Administration press or the organization to which the authors are affiliated. Papers published in **SIJMB** are processed through blind peer-review by subject specialists and language experts. Neither the **Sukkur IBA** nor the editors of **SIJMB** can be held responsible for errors or any consequences arising from the use of information contained in this journal, instead errors should be reported to corresponding authors of articles.

Mission Statement

Sukkur IBA Journal of Management and Business is peer-refereed and multidisciplinary journal. The mission of **SIJMB** is to contribute and promote research in the field of business and management sciences. The journal encourages findings of innovative and solution oriented applied research.

Aims & Objectives

Sukkur IBA Journal of Management and Business aims to publish cutting edge research in the field of business, economics and management sciences. It accepts original research articles, case studies, reviews, and short comments on diverse issues, problems, unique concepts, hypotheses, and solution oriented findings in interdisciplinary studies of economics and management sciences.

Research Themes

The research focused on but not limited to following core thematic areas;

- Entrepreneurship
- Finance
- General Management
- Globalization
- Economics
- Knowledge Management
- Leadership
- Marketing
- Operation Management
- Organization Behavior
- Organization Development
- Supply Chain Management
- Sustainability
- Human Resource Management
- Total Quality Management

Director's Message

Sukkur Institute of Business Administration (SIBA) has been imparting education with its core values merit, quality, and excellence since foundation. SIBA has achieved numerous milestones in a very short span of time that hardly any other institute has achieved in the history of Pakistan. The institute is continuously being ranked as one of the best business school in Pakistan by Higher Education Commision (HEC). The distinct service of SIBA is to serve the rural areas of Sindh and also underprivileged areas of other provinces of Pakistan. SIBA is committed to serve targeted youth of Pakistan who are suffering from poverty and deprived of equal opportunity to seek quality education. SIBA is successfully undertaking its mission and objectives that lead Pakistan towards socio-economic prosperity.

In continuation of endeavors to touch new hallmarks in the field of business education and research, SIBA publishes an international referred journal. SIBA believes research is an integrated part of modern learning and development. Consequently, Sukkur IBA Journal of Management and Business (SIJMB) is the modest effort to contribute and promote the research environment within the institution and Pakistan as whole. SIJMB is peer reviewed and multidisciplinary research journal to publish findings and results of the latest and innovative research in the fields, but not limited to business, economics and management. Following the tradition of SIBA, SIJMB is also aimed to achieve international repute and high impact research publication in the near future.

Sukkur IBA is mission driven institute and committed to serve towards the socioeconomic development of Pakistan through education and research.

Prof. Nisar Ahmed Siddiqui
Sitara-e-Imtiaz
Director Sukkur IBA
Patron SIJMB

Editorial

Dear Readers,

I am really excited to bring you the latest issue of Sukkur IBA Journal of Management and Business (SIJMB). This issue contains double blind peer reviewed articles which address key business, management and economic issues pertaining to both national and international levels. SIJMB adopts all standard that are prerequisite for publishing quality research work. The Editorial Board of the Journal is having academicians and researchers from technologically advanced countries. Their valuable contribution is crucial in maintaining the quality of the Journal. The findings of the published papers are exceptionally important for the both policy formulation and decision making. Hence, various stakeholders can benefit from it. Moreover, the open access policy of the Journal further increases the readership and grant access to wider audience.

The mission statement of Sukkur IBA clearly demonstrates the importance of research. The research that does not only solves and identifies the existing problems but also generates new and innovative ideas. SIJMB is a unique effort of Sukkur IBA towards its commitment to create research based community. The journal provides valuable platform for national and international researchers to publish their research findings and disseminates it to the largest stakeholders. The journal charges no any fees and also provides complimentary copy (in hard form) to each author also the supplement copies of the journal distributed to HEI and R&D institutions of the country. The journal has been archived by world's renowned scientific repositories. Journal has received recognition from several research agencies, universities and renowned professors. In coming years, the journal aim to improve its current state by attracting more national and international researchers in the field of Business, Management and Economics.

On behalf of the SIJMB, I welcome submissions for the upcoming issue (Vol-3 No. 1 2016) of the journal and looking forward to receive your valuable feedback.

Sincerely,

Dr. Khalid Ahmed
Editor-in-Chief
SIJMB

Contents

Adoption of Technology Upgrading by Rural Smallholders in the Nepalese Coffee Sector

Rishi Ram Kattel [1]

Assistant Professor, Department of Agricultural Economics and Agribusiness Management,
Faculty of Agriculture, Agriculture and Forestry University, Nepal

Abstract

The ecological settings in the Himalayan hills provide a unique opportunity to the resource-poor farmers in Nepal to sell their organically produced coffee as specialty coffee in the global market. However, there is little research about the cultivation methods and adoption of profitable technological upgrading in coffee cultivation in the country. Against such a back drop, this paper seeks to explore the factors that influence the small-scale coffee farmers' decision to adopt technological upgrading such as wet processing in the farming process. Semi-structured interviews as well as focus group discussions were conducted in selected coffee-growing rural regions of Nepal. The cost-benefit analysis of different modes of coffee processing shows that the adoption of wet processing has a large potential of increasing the profit margins of farmers. Results from an adoption model identify education, book keeping on coffee activities, training, and access to credit and household location as the key determining factors for the adoption of technology upgrading.

Keywords: Adoption model, cost-benefit analysis, upgrading, smallholder, coffee, Nepal.

1. Introduction

Among the different agricultural goods produced in and exported from Nepal, the competitiveness of coffee has quickly increased in recent years, thus contributing to the development of rural regions in Nepal. In the fiscal year 2006-07, a total of 181 tons of green beans coffee were produced in Nepal, almost five times the quantity produced in 2000-01. It is estimated that the coffee production area has expanded from around 425 ha in 2001-02 to 1,400 ha in 2006-07 employing around 12,800

farming households (Osorio, 2002). Annually, total coffee production and area of production of coffee in Nepal is increasing by 35% and 28%, respectively (AEC/FNCCI, 2007)

The trend of exporting coffee from Nepal has been impressive. The share of coffee exports currently amounts to around 7% of the country's total 15% agricultural export share (FAOSTAT /World Bank, 2006). The total export of green beans coffee from Nepal has increased from 37 tons in 2004 to 114 tons in 2007. Around 55% of these 114 tons went to Japan, 34% to European countries, 3% to the USA and 8% went to other countries. The remaining 67 tons (37%) of green beans coffee were sold in the domestic market (Helvetas, 2007). The current expansion of coffee cultivation in Nepal shows that coffee could be one of the high-value niche products for export contributing to the development of rural areas in the country. Lewin et al. (2004) state that the specialty coffee segment has been growing at an annual rate of 5-10% in the world market.

Coffee has been found to be nearly three times more profitable than other crops in the present context (Bajracharya, 2003). But profitability crucially depends on the quality of the coffee produced which in turn not only depends on the coffee production management, but also on post-harvest processing management at village and processors' level. Current evidence from Indonesia, for example, shows that the farm-level price of coffee increases substantially with wet processing compared to coffee processed using dry processing (Susila, 2005). Until the year 2001, dry processing of coffee was also predominantly practiced in Nepal. However, since the shift from dry processing to wet processing, the income of smallholder coffee farmers has increased due to more consistent quality of coffee (Shrestha, 2005).

In the context of entering the global market, Nepalese coffee farmers face problems related to upgrading. Participation in international trade with the developed countries will offer great opportunities but, at the same time, these countries set very high standards related to quality and upgrading of agricultural products which Nepali producers in many situations fail to meet due to lack of financial and technical resources (Adhikari, Adhikari, & Network, 2005). Given the fact that wet processed coffee is high-priced possibly securing farmers a higher income, this paper aims at investigating the incentive mechanism that influences farmers' decision towards adoption of process upgrading.

The remainder of the paper is organized as follows. Section 2 presents a brief review of relevant literature while the methodology of this study is outlined in section 3.

Section 4 presents the empirical results, and the conclusions and policy implications are drawn in section 5.

2. Literature Review

In the value chain literature, upgrading is understood "as the process that enables a firm or any other actor of the chain to take on more value intensive functions in the chain, make itself harder to replace, and thus appropriate a larger share of the generated profits" (Stamm, 2004, p.27). The value chain literature focuses on the role of global buyers and chain governance in defining upgrading opportunities. Humphrey & Schmitz (2000) use the concept of upgrading to refer to three different shifts that firms might undertake. First, process upgrading - firms can upgrade either through transforming inputs into outputs more efficiently by re-organizing the production system or introducing superior technology; second, product upgrading - firms can upgrade by moving into more sophisticated product lines and third, function upgrading - firms can upgrade by higher value added. Kaplinsky & Morris (2002) added a fourth case, intersectional upgrading - where firms can upgrade by moving out of a chain into a new one.

Upgrading is highly determined by its enabling environment and lead actors' interests for cooperation. Due to complex business environments and governance structures in the value chains, institutional issues should be further included in the definition of upgrading. These are related to managerial capacity of the cooperatives, organizational processes and services provided by chain actors (Kaplinsky & Morris, 2001; Laven, 2006). Upgrading can be the pre condition in order to get integrated into a value chain at all, or it becomes necessary to secure the position in or respectively of a chain (Schipmann, 2006). Grote & Stamm (2007) pointed out that developing countries can capitalize on their natural advantages on the one hand and generate employment and income opportunities through primary and secondary processing on the other. Global value chain analysis emphasizes that local producers learn a great deal from global buyers about how to improve their production processes, attain consistent and high quality, and increase the speed of response (Humphrey & Schmitz, 2002).

Approximately 125 million people in the developing world depend on coffee for their livelihoods and 70% of them are small-scale farmers (Osorio, 2002; Santos, 2003; Fitter & Kaplinsky, 2001). Heterogeneity among coffee varieties and cross origins allows roasters to produce differentiated products geared to tastes in specific markets and specific market sectors, and brands are often heavily promoted which may create barriers to the markets' entry (Gilbert, 2006). Even more problematic is the fact that

many firms indicate or believe that they sell sustainable coffee although they lack independent certification or verification (Ponte, 2004).

Coffee farmers generally lack economic incentives to improve their product and service quality because it does not give them a higher price (USAID, 2005). OXFAM (2002b, p.3) also reported that the low coffee price creates a buyers' market, leaving some of the poorest and powerless people in the world to negotiate in an open market with some of the richest and most powerful. "Changes in the international policy environment, new arrangements in supply and demand, technological changes and/or the asymmetrical character of power in the 'coffee value chain', have increasingly narrowed the opportunities for vulnerable economies to secure the benefits from coffee trade needed for economic development and poverty reduction" (Petit, 2007, p.225). According to Lewin et al. (2004), industry surveys indicate that quality and its consistency belong to the most important factors in order to become competitive in today's markets in the coffee sector. Additionally, increased information management and product definition regarding distinct quality attributes is important to enhance the bargaining power at production level and realize incentive schemes for quality production (Ponte, 2004). The poorest farmers often grow coffee in agro-ecological conditions that make it impossible for them to meet certain quality standards. Thus, Calo & Wise (2005) pointed out that quality is a significant barrier for the smallholders seeking to enter the niche markets and the smallest farmers often grow coffee in poor agro-ecological conditions with less care and management that make it impossible for them to meet increasingly high quality standards.

Households rank acquisition of technology indirectly through the characteristics various items possess, and a given technology embodies characteristics that influence adoption decisions (Somda et al., 2002). A number of studies have investigated the influence of various social, economic and institutional factors that affect the willingness of farmers to use new technology (Feder et al., 1985; Polson & Spencer, 1991; Somda et al., 2002; Lemchi et al., 2003; Heisey & Mwangi, 1993; Staal et al., 2002; Abebe et al., 2008).

3. Data and Methodology

In 2008, primary data was collected in the coffee sector in Nepal. A survey was conducted in two districts, namely Gulmi and Kavre from August to October (Figure 1). A total of 120 respondents were selected by a three-stage sampling procedure. In the first stage, Gulmi and Kavre districts were purposively selected on the basis that they are the two major coffee producing districts in Nepal. In the second stage, three

Village Development Committees (VDCs)[2] in each district were purposively chosen based on similar geographical characteristics. Finally, in the third stage, 20 farming households were randomly selected from each VDC.
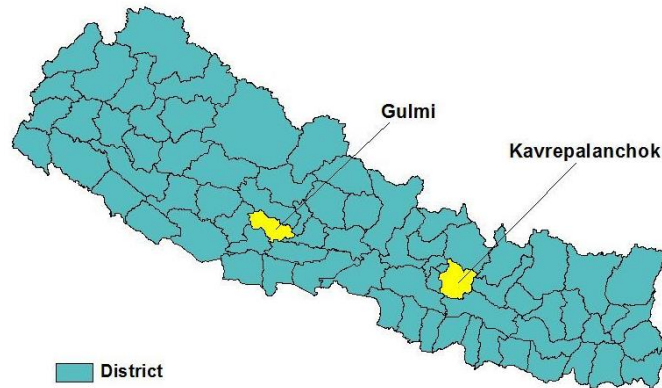
Figure 1: Map of Nepal showing the district where the research sites are located.

Before conducting the survey, the questionnaire was pre-tested with five farmers in Kavre district. The data were collected by trained enumerators supervised by the first author, using semi-structured questionnaires. To complement the household survey, a series of formal and informal focus group discussions with farmers were also conducted along with interviews of experts from the Coffee Cooperative Federation in Gulmi, two District Coffee Producers' Associations, and of three traders/exporters. The focus group discussions and expert interviews provided qualitative information for conducting a SWOT analysis highlighting the strengths, weaknesses, opportunities and threats of coffee production and marketing as well as contractual relationships between farmers and buyers (either cooperative or companies). This information helps to explain the finding of the econometric results.

The methodologies applied in this paper build on a two-step approach. First, a cost-benefit analysis is undertaken to ascertain the relative profitability of different modes of post-harvest processing such as fresh cherry, dry cherry and wet processing. Based on focus group discussions with 15 representative farmers, detailed costs and benefits of different modes of post-harvest coffee processing were collected for a period of 14 years. The objective of this exercise is to systematically analyze the relative profitability of wet processing of coffee vis-à-vis other methods.

---

[2] A VDC is the lowest administrative unit in Nepal comprising of small villages.

Second, an adoption model is estimated with the help of econometric tools to identify the determinants of farmers' decision to adopt wet process upgrading of coffee at farm level. Logistic regression is used to investigate the determinants of the farmers' decisions whether they adopt wet process upgrading of coffee or not. The decision may be influenced by a range of different variables including their characteristics, demographic, physical, economic and institutional factors. Thus, a logistic model is used for the analysis of binary responses and it allows one to examine how a change in any independent variable changes all the outcome probabilities (Hosmer & Lemeshow, 2000). In general, the results are reasonably robust to changes in the set of independent variables included in the regression. Thus the relationship between the discrete variable and a parameter is non-linear. In the basic model, let Y_i be the binary response of a coffee farmer taking one of two possible values: $Y = 1$ if the farmers decide to adopt wet process upgrading and $Y = 0$ if not. Suppose x is a vector of explanatory variables contributing to the adoption decision and β a vector of slope parameters, measuring the changes in x on the probability of the farmers' decision to adopt wet process upgrading and sale of dry parchment. The model can be written as follows:

While stratification in the sampling process can decrease the sampling variance

$$Y_i = \alpha + \beta_i \chi_i$$

(1.1)

where, α and β_i are the unknown constant term and vector of regression coefficients to be estimated respectively.

The binary model used in the study is specified as follows:

$$E(Y_i = PROCESS) = \alpha + \beta_1 AGE_i + \beta_2 GENDER_i + \beta_3 EDUC_i + \beta_4 HHSIZE_i + \beta_5 LAND_i + \beta_6 SHARE_i$$
$$\beta_7 BOOK_i + \beta_8 CREDIT_i + \beta_9 TRAIN_i + \beta_{11} POOR_i + B_{12} NLOCAT_i$$

(1.2)

For the logit regression model, explanatory variables need to be selected according to their relevance. Generally, the explanatory variables cover characteristics of the producers, characteristics of their farms, trading relations and marketing chains. Equation (1.2) hypothesizes that the farmer's decision to adopt or not to adopt wet processing of coffee depends on the ten explanatory variables in Table 1, which also summarizes the expected sign for the effect that they have on decision (PROCESS) for each case.

Table 1: Description of variables for adoption model and à *priori* expectation

Variables	Description and type of variable	Expected Signs
Dependent Variable:		
PROCESS	Farmer decision to adopt wet processing of coffee and sale of dry parchment. Dummy (1=Yes, 0=No).	
Independent variables:		
AGE	Age of the smallholder farmer. Continuous (Years)	+/-
GENDER	Gender of the farmer. Dummy (1= Male, 0= Female).	+
EDUC	Education level of the farmer. Continuous (Years of schooling).	+
HHSIZE	Number of family members in household (Household size). Discrete (Numbers)	+
LAND	Land under coffee cultivation. Continuous (in ropani)	+
SHARE	Percentage of coffee income to annual household income. Continuous (%)	+
BOOK	Whether farmer keeps books on coffee activity. Dummy (1=Yes, 0=No).	+
CREDIT	Whether farmer receives credit from formal institution during last two years. Dummy (Yes=1, 0=No).	+
TRAIN	Whether household received training in quality-enhancing practices. Dummy (1=Yes, 0=No).	+
POOR	Whether per capita household member income is less than US $1.25 per day. Dummy (< US $1.25=1, 0= otherwise).	-
NLOCAT	Location of coffee farmer near the inputs market. Dummy (1=Kavre, 0=Gulmi).	+

Source: Own illustration

4. Results and Discussion

In the following, first the descriptive, then the cost-benefit analysis results, and finally the econometric results from the adoption model are presented

The summary of descriptive statistics is presented in Table 2. With respect to the socio-demographic characteristics, 9% of the 120 sampled respondents are illiterate or have not received any type of education. The average education level of producers is 6.3 years of schooling. Adopters of wet processed coffee have been found to have obtained on average 7.6 years of schooling as compared to 5.6 years of non-adopters. Notwithstanding, one third of the population of smallholder coffee farmers (34%) in the study area live below the poverty line. The majority of poor smallholders (39.5%) are non-adopters. Other demographic characteristics such as age of farmer, gender and

household size[3] do not seem to be statistically different between adopters and non-adopters.

Regarding farm characteristics, an average land holding is 0.81 ha per household in the study area. Adopters have slightly more land than the non-adopters, but there is not a significant difference between the two groups. Average land area put to coffee cultivation by smallholder farmers is 2.03 ropani (equivalent to 0.10 ha), ranging from 0.15 to 10 ropani. Adopters of wet processing of coffee are found to put more land area (2.68 ropani) to coffee cultivation than non-adopter (1.71 ropani). Regarding fresh coffee production in 2007/08, about 2.36 quintals (qq) are obtained per smallholder household, ranging from 4 to 24 quintals. Adopters have higher annual household coffee production (4.66 qq) as compared to non-adopters (1.26 qq). The average fresh coffee productivity is 1.19 quintals per ropani (equivalent to 23.8 quintals per ha). The mean coffee yield for adopters and non-adaptors is 1.79 quintals per ropani and 0.91 quintals per ropani, respectively. The variability of coffee productivity among the sampled farms may have been partly due to climatic differences and biennial yield patterns of coffee. The yield of coffee is influenced by the age of coffee trees (potential coffee yield after 7 years of tree age) and agronomical practices (including cultivation practices, varieties selection, shade tree management, irrigation and pruning). Further, annual income from coffee is on average Rupees (Rs.) 6,044 in the total sample, with wet process adopting farmers having higher shares of coffee income (Rs.11,627) as compared to the non-adopters (Rs. 3,562).

The farming system in Nepal is generally of a subsistence nature, with little commercialization in the coffee sector. The average share of annual household income from coffee is 14%. Adopters have a higher share of coffee income (20%) than the non-adopters (12%). Both the adopters and non-adopters have diversified their income sources with non-farm income contributing a significant proportion (around 43%) in both groups.

It is observed that the majority of adopters (51%) maintain records on coffee activities (book-keeping) as compared to the non-adopting farmers (20%). As far as access to credit is concerned, 51% of the adopters have reported to have access to credit from formal and informal institutions as opposed to only 20% of the non-adopters. The survey also reveals that most of the adopters (82%) have received training in coffee quality enhancing practices either from cooperatives or from development organizations like Winrock, Coffee Promotion Project/Helvetas (Helvetas, 2007)and other national NGOs as compared to 56% of the non-adopters.

---

[3] A household is often defined as a group of people who live together and eat from one pot (Bellon, 2001).

Table 2: Means of factors affecting adoption of wet processing of coffee at farm

Variables	Total sample (n=120)	Adopters[+] (n=39)	Non-adopters (n=81)	Test of Significance[++]
Characteristics of farmers				
Age (Years)	45.9 (13.73)	45.7 (14.72)	46.2 (13.32)	0.179
Gender (Male=1)%	58.3	64.1	55.6	0.791
Education (Years)	6.3 (5.86)	7.7 (5.31)	5.6 (6.13)	2.409**
Household size (Numbers)	7.0 (3.12)	6.9 (2.66)	7.1 (3.33)	-0.143
Poor[4] (Yes=1)%	34.2	23.1	39.5	-3.159*
Characteristics of farms				
Total cultivation land (Ropani)	16.2 (13.23)	16.5 (14.43)	16.1(12.49)	0.182
Land under coffee (Ropani)	2.0 (1.85)	2.7 (1.19)	1.7 (1.75)	2.727***
HH coffee production (qq)	2.4 (3.63)	4.7 (5.13)	1.3 (1.81)	5.329***
Productivity of coffee (qq/ropani)	1.2 (1.14)	1.7 (1.34)	0.9 (0.90)	4.118***
Income from coffee sector (Rs.)[5]	6,044(9117)	11,627(12065)	3,562(6048)	4.821***
Income share by coffee (%)	14.33(20.23)	19.84 (21.48)	11.68 (19.18)	2.097**
Income share by off-farm	43.2(37.10)	41.6 (34.75)	44.1 (38.36)	0.342

---

[4] Poor is calculated as total annual household income (income from both farm and off-farms) divided by total number of members in household. The per capita household income below US$ 1.25 is defined as poor. Purchasing Power Parity (PPP) exchange rate, which was US$ 1 (equivalent to Rs. 26.01) for 2007/08, was used to calculate the poverty line (ADB, 2008). National poverty incidence is 31 % (in 2007).

[5] Rs. is the currency of Nepal (Nepalese Rupees). The exchange rate at the time of the survey was approximately 71 Rs. /$US).

(%)[6]

Documentation and Services

Book keeping (Yes=1)%	30.8	51.3	20.0	11.329***
Access to credit (Yes=1)%	41.7	59	33.3	7.121***
Training received (Yes=1)%	64.2	82.1	55.6	8.038***

Cost-benefit analysis of post-harvest processing in the coffee value chain

The major actors participating in the coffee value chain in Nepal are the inputs suppliers, the smallholder farmers, pulper operators, producers' associations, cooperatives and private companies. The pulper operators at the village level are the coffee farmers who have a pulper machine on their farm. High quality green beans are exported while low and medium quality coffee is sold in the domestic market either as roasted beans or filter/ground coffee through retailers in hotels and major city markets. The domestic marketing channel for coffee was found to be very short; the producers either sell to the pulper operators or to a group (association of producers, cooperative or private company).

The coffee at the farm level is mainly sold in three forms: fresh cherry, dry cherry or dry parchment. Out of the total 120 sampled smallholders, 45% smallholders sell their coffee immediately after harvest to the village level pulper operators as fresh cherry, 22.5% smallholders process their coffee to dry cherry meaning drying the cherry under the sun. The remaining 32.5% smallholders sell their coffee in the upgraded form of dry parchment after wet processing. On average, 40% of the smallholders from the Kavre district sell their dry parchment after wet process upgrading to the private company as compared to 25% of the smallholders from the Gulmi district who sell their dry parchment to the cooperative[7]. Regarding the average prices received, the survey reveals that the smallholders receive around Rs.28/kg for fresh cherry, Rs.70/kg for dry cherry, and Rs.156/kg for dry parchment (Table 3).

---

[6] Several studies have reported that non-farm income also constitutes a significant proportion of total income for agricultural households in other developing countries (e.g. Chin, 1997; Shand, 1987).

[7] In the wet processing, the coffee is pulped by a pulper, fermented, washed and dried to produce dry parchment at the village level, which requires the use of specific equipment and substantial amounts of water. At the end of fermentation, the wet processed beans are washed and dried. The final product is a "washed" or "parchment" coffee (Smith, 1985).

Table 3: Forms of coffee sales in the study area

Item sold:	From Kavre (n=60)		From Gulmi (n=60)		Total in % (N=120)
	% Farmers	To whom		To whom	
Fresh cherry	60 (36)	Pulper operaters	30 (18)	Pulper operaters	45 (54)
Dry cherry	-	-	45 (27)	Cooperative	22.5 (27)
Dry parchment	40 (24)	Private company / Farmers' Association	25 (15)	Cooperative	32.5 (39)

Note: Figures in parentheses indicate the number of sampled farmers.
Source: Own field survey, 2008.

The cost and benefit streams are calculated from the 14 years of period. For the initial three years, farmers do not harvest coffee but rather they harvest some intercrops from their coffee orchards. The cost components in coffee production include fixed costs like opportunity cost of marginal coffee land and fencing. Variable costs include fertilizers and bio-pesticides (only organic; no one used inorganic fertilizer and pesticides in their coffee farm), and costs of labor used in different intercultural operations like plantation, manuring, pruning, weeding, mulching, harvesting, grading, communication and additional value adding costs at farm level.

The findings show that the average benefits from fresh coffee cherry, dry cherry and dry parchment production per ropani (508.72 m²) per year at farm are Rs. 5153, Rs. 2449 and Rs. 9998, respectively. Table 4 shows that the average total cost of production of fresh cherry, dry cherry and dry parchment is Rs. 13.8, 14.8 and 15.8 per kg respectively. The gross margins of coffee cultivation thus, are Rs.11, Rs.5 and Rs.22 per kg of fresh cherry in the different processing forms, namely fresh cherry, dry cherry and dry parchment, respectively. Thus, it is clearly shown that if a farmer sells only dry parchment (wet processed), he/she could get around 75% and 49% higher profits compared with sales of dry processed cherry and fresh cherry respectively per kg of fresh cherry. The overall benefit cost ratio (BCR) of coffee cultivation is found to be 1.81 (if fresh coffee is sold), 1.36 (if dry cherry is sold) and 2.37 (if dry parchment is sold), which are obviously higher than 1 required for an enterprise to be just profitable. Table 4 shows that the BCR at farm is higher for dry parchment (wet processed) as compared to the sales of dry cherry and fresh cherry. Thus, wet processing at farm is relatively more profitable for the smallholder coffee producers in Nepal.

Table 4: Cost of coffee production, gross return and gross margin

Item sales	Costs/ropani (Rs.)	Revenue/ropani (Rs.)	Benefit/ropani (Rs.)	
Fresh Cherry (FC)	6383	11536	5153	
Dry Cherry	6845	9294	2449	
Dry Parchment	7306	17304	9998	
	Costs/kg of FC (Rs.)	Revenue/kg of FC (Rs.)	Gross margin per kg of FC (Rs.)	BCR
Fresh Cherry	13.83	24.99	11.17	1.81
Dry Cherry	14.83	20.14	5.31	1.36
Dry Parchment	15.83	37.50	21.67	2.37

Note: The annual cost-benefit was calculated for the 14 years of coffee cultivation period.
1 US $ = Rs. 71.06 (at the survey period, 2008).
Source: Own field survey data, 2008.

The cost-benefit analysis of Nepalese coffee has shown that wet process upgrading of coffee at farm level is more profitable (in term of prices and net benefits) than dry processing and sales of fresh cherry. Thus, our empirical model is used to identify factors determining farmers' decision to adopt wet process upgrading of coffee.

Findings from the adoption model

The econometric analysis focuses on the 120 smallholder coffee producers spread in the two district clusters. The Wald test shows that the model has good explanatory power at the 1% level. The overall predictive power of the model (80%) and explanatory power (33 %) are quite high. The Hosmer-Lemeshow' goodness-of-fit yields a chi-square with a large P-value indicating that the model presents a good adequacy and fits the data well (Table 5).

A perusal of the estimates shows that the education level of respondent (EDUC) has a positive impact on farmers' decision to adopt wet process upgrading. Holding other factors constant, when education increases by 1 year, there is an increase of 3% in the probability that farmer will decide to adopt wet processing. This is consistent with previous research results by Lin (1990) and Abebe et al. (2008). Numerous studies

have found that farmers' education plays a positive role in the adoption of new agricultural practices (Lin, 1990; D'Souza et al., 1993). Education increases the access to information and thereby possible knowledge of wet processing regarding coffee. It also increases the understanding of the value adding technique leading to benefits from process upgrading at farm level and facilitates its application. Lemchi et al. (2003) noted that technological change is achieved through formal education. This may be because relatively higher educated farmers are able to assess the value adding technique and benefits from process upgrading at farm.

The variable 'share of coffee to annual household income' (SHARE) has also a positive and significant impact on the adoption decision, with 1% increase in the share of coffee income to total household income resulting in an increase of the probability of adopting wet processing of coffee by 0.5%.

The variable 'book keeping' on coffee activities (BOOK) has a positive and significant impact on the decision to adopt process upgrading. 50% of the adopters keep book records on coffee production and marketing activities at farm level. In the case study, we asked, "why are you keeping record on coffee activities?", an adopting farmer said, "It provides information about coffee production and prices in the past years, so I am able to calculate costs of inputs' use and benefits from process upgrading". This result is according to our expectations, since book keeping allows a closer monitoring of input use, timing and a better understanding of the value adding system which increases the efficiency level of farmers towards wet processed adoption. The probability of adopting wet processing increases by 43% if a farmer keeps record on coffee production and marketing activity.

Access to credit (CREDIT) plays a significant role in enhancing the technology adoption. As anticipated, credit affects adoption decisions positively and significantly in our sample with the marginal probability of 29%. The result is supported by Abebe et al. (2008) who found that adoption of improved box hives by smallholder beekeepers has a highly significant and positive correlation with access to credit. Feder & Umali (1993) also mentioned that access to credit is the most important factor in influencing farmers' decision of technology adoption. About 59% of the adopters have received credit from local level saving and credit cooperatives and the Agricultural Development Bank in the study area. The focus group discussions revealed that the majority of farmers had difficulty to receive a loan from the bank due to stringent and inflexible requirements for loan application; unfavorable repayment terms and the lack of collaterals. One adopting male farmer in Kavre district indicated that he had received a loan from the Agricultural Development Bank in minimum and nominal interest rats of 14%, while a female farmer in Gulmi district said that she got credit from a village level saving and credit cooperative in minimum and nominal

interest rates of 12%. In many cases the credit is used for immediate consumption needs, like food or medicine and only partially invested in the farm.

The variable 'training dummy' (TRAIN) has a positive impact on farmers' decision. The probability to adopt wet process upgrading increases by 20% when a farmer has received training in quality-enhancing practices. The argument is that formal and informal training has the potential to increase the rate of adoption by directly increasing awareness, imparting skills to better understand the value chain system and increasing knowledge on the new technology.

The variable POOR has a negative significant effect on the processing decision at a confidence level of 5%. For those farmers whose households' income is below US$1.25 per member, the probability to adopt wet processing at farm decreases by 18%. This negative relationship can be explained by the fact that poor farmers are less likely to adopt due to financial limitations and the fact that they may need money immediately after the coffee harvest. Poor farmers also have low coffee yields, leading again to a low income and most of the household income is spent on household consumption and little for farm investment.

The econometric estimates reveal that the location dummy (NLOCAT) has a positive and significant impact on smallholders' decision to adopt wet process upgrading. Those farmers who live near the central input market i.e. in the Kavre district are 42% more likely to adopt wet process upgrading on their farm as compared to those who live far from the central input market i.e. in the Gulmi district. A reasonable explanation could be that the central inputs market provides better inputs access, research and extension facilities. Furthermore, it may be due to the frequent contacts with service providers and development organizations. A review of technology adoption studies in Africa by Heisey & Mwangi (1993) also showed that factors influencing adoption differed by location.

Table 5: Logit regression results on the adoption decision of wet process upgrading

Variables [a]	Coefficients	Robust Std. Error	z	dy/dx [b]
Constant	-5.533***	1.639	-3.38	-
AGE	0.010	0.029	0.34	0.002
GENDER	0.105	0.830	0.13	0.020
EDUC	0.167**	0.069	2.42	0.032**
HHSIZE	-0.063	0.087	-0.72	-0.012
LAND	0.109	0.150	0.73	0.021
SHARE	1.028**	0.012	2.38	0.005**

---

[1] Data collected through multistage sampling design (District level and then village level) with households clustered within villages, deviate from the standard assumptions. Hence, clustering (location dummy) is taken into account for the analysis, using robust standard errors (Carlson, 1998; Huber, 1967).

BOOK	2.051***	0.675	3.04	0.433***
CREDIT	1.453***	0.535	2.71	0.288***
TRAIN	1.112*	0.577	1.93	0.195**
POOR	-1.053**	0.528	-1.99	-0.184**
NLOCAT	2.273***	0.615	3.69	0.419***

Number of observations (n) = 120 (39 adopters and 81 non-adopters).
Pseudo R^2 = 0.3368.

Note: Statistical significance at the 0.01(***), 0.05(**) and 0.01(*) level of probability.
[a] Definitions for variables as Table 1.
[b] Marginal change in probability (dy/dx) evaluated at the sample means.
Source: Field survey, 2008, own calculations.

There are a number of variables which were found not to be significant. More in detail, AGE has been found to play no role in the adoption decision. There are other studies which have shown that age of the farmer can be related to adoption decisions. Polson & Spencer (1991) found that farmer's age and adoption of technologies were negatively related, while Hossain et al. (1992) revealed that the probability of adopting new farming practices increased with age among farmers in Bangladesh. Thus, the results in the literature are also ambiguous. GENDER and household size (HHSIZE) were found to be also insignificant. There is one study by Staal et al. (2002) showing that gender does play a role as male-headed households are more likely to have access to information and services and hence be innovators. The same authors also found that family size may be significant. Large family size implies that more labor is available for labor intensive activities (Staal et al., 2002). The adoption of technologies is considered as positive in reducing the labor constraints faced by farms. However, these results were not supported by our model.

5. Concluding Remarks

This paper provides insights into the production methods, marketing channels, and farmers' attitude towards technology upgrading in producing one of Nepal's fastest growing agricultural crops, namely coffee. In recent years, Nepalese coffee has grown to an important cash crop; however, the quality of the coffee is still under scrutiny. Considering that quality improves significantly with certain post-harvest process upgrading such as wet processing of the fresh coffee cherry, we have first assessed the cost benefit analysis of wet processing. It is obtained that the benefit cost ratio of wet processing is way above the break-even point of one and moreover the former is higher than the benefit-cost ratios of other forms of coffee such as fresh cherry and dry processing. In the second step, we have estimated a logistic regression model to identify the determining factors that lead farmers to adopt wet processing. The results from the regression model reveal that level of education, share of coffee income in total household income, book keeping on coffee activity, access to credit, training and location play a significant and positive role in farmers' decision to adopt wet process

upgrading of coffee at farm level. Also the variable 'poor' plays a significant and negative role in the adoption decision. Farming households below the poverty level have been found to be less likely in adopting technologies like wet processing. They are trapped in a poverty cycle as their poor quality coffee is less likely to fetch higher prices which would have been reflected in higher income which again would allow to invest in farming activities. These findings point towards developing both institutional support such as credit delivery to needy farmers and provision of training and extension programs and individual farm level farm management practices like book keeping. Of course, the latter is also a part of the training that farmers need to learn in order to be able to manage their own accounts.

In light of the above discussions, this study concludes that there is a need for strategic investment in both product and process upgrading of coffee in Nepal to improve production management. Moreover, increased research in the coffee sector and extension of institutional support are necessary to improve the livelihoods of the smallholder coffee producers in some rural parts of Nepal.

Acknowledgements

References

Abebe, W., Ranjitha, P. & Ranjan, S. K (2008). Adopting improved box hive in Atsbi Wemberta district of Eastern Zone, Tigray Region: Determinants and financial benefits. Improving Productivity and Market Success (IPMS) of Ethiopian Farmers Project, International Livestock Research Institute (ILRI), Addis Ababa, Ethiopia. Working Paper No.10, pp.14-15.

ADB (2008). Nepal quarterly economic update, Nepal. Asian Development Adesina, A. A. & Baidu-Forson, J. (1995). Farmers' perception and adoption of new agricultural technology: evidence from analysis in Burkina Faso and Guinea, Western Africa. Agricultural Economics, 13:1-9.

Adhikari, R., Adhikari, K., & Network, T. K. (2005). Market Access Barriers to Select Nepalese Agricultural Exports: International Institute for Sustainable Development.

AEC/FNCCI, F. o. N. C. o. C. a. I. A. E. C. (2007). Trade Competitiveness of Neplease Coffee: Federation of Nepalese Chambers of Commerce and Industry Agro Enterprise Center.

Bajracharya, P. (2003). Business plan for HCPC limited, AEC/FNCCI. Katmandu. Nepal.

Bellon, M. R. (2001). Participatory research method for technology evaluation. A manual for scientists working with farmers. Mexico, D.F.:CIMMYT.

Calo, M. & Wise, T. A. (2005). Revaluing peasant coffee production: Organic and Fair trade markets in Mexico. Global Development and Environment Institute, Tufts University, USA. Available:

   Carlson, B. L. (1998). Software for statistical analysis of sample survey data. In: Armitage P. and Colton, T.(eds.) Encyclopedia of Biostatistics, John Wiley,   USA.

Chin, N, D. L. (1979). Rural poverty and the structure of farm household income in developing countries. Economic Development and Cultural Change, 27: 283-301.

CoPP/Helvetas (2007). Coffee Promotion Project, Helvetas Nepal. Annual progress report.

De Souza, G., Cyphers, D. & Phipps, T. (1993). Factors affecting the adoption of sustainable agricultural practices. Agricultural and Resource Economics Review. Northeastern Agricultural and Resource Economics Association, vol. 22(2):159-165, October.

FAOSTAT/World Bank (2006).Country report: Nepal, prepared by ESSGA Available:www.fao.org/es/ess/compendium_2006/pdf/NEP_ESS_E.pdf.

Feder, G. & Umali, D. L. (1993). The adoption of agricultural innovation. A review. Technological Forecasting and Social Change. 43: 215-239.

Feder L, Just R. E. & Zilberman, O. (1985). Adoption of agricultural innovation in developing countries: A survey. Economic Development and Cultural Change, 32 (2):255–298.

Fitter, R. & Kaplinsky, R. (2001). Who gains from product rents as the coffee market becomes more differentiated?: A value-chain analysis. IDS Bulletin. 32(3): 69-82.

Gilbert, C. L. (2006). Value chain analysis and market power in commodity processing with application to the cocoa and coffee sectors. In: ICO. Discussion paper N-5, p. 14. Available:79Hhttp://econpapers.repec.org/paper/trnutwpde/0605.htm.

Grote, U. & Stamm, A. (2007). Quality requirements and quality infrastructure in value chains reaching out to developing countries, Study for the PTB, International Technical Cooperation, Braunschweig.

Heisey, P. & Mwangi, W. (1993). An Overview of Measuring Research Impacts Assessment, In: Heisey, P. and Waddington, S. (eds.). Impacts on Farm Research. Proceedings of a Networkshop on Impacts on Farm Research in Eastern Africa. CIMMYT Eastern and Southern Africa on Farm Research Network Report No. 24. Harare. Zimbabwe, pp. 28-36.

Helvetas, N. (2007). Coffee Promotion Programme Annual Report.

Hosmer, D. W. & Lemeshow, S. (2000). Applied logistic regression. Second edition, John Wiley and Sons, Inc. p. 373.

Hossain, S., Alamgir, M. & Croach, R. (1992). Patterns and determinants of adoption of farm practices: evidence from Bangladesh. Agricultural Systems, 38:1-15.

Huber, P. J. (1967). The behavior of maximum likelihood estimates under non-standard conditions. Proceedings of the fifth Berkeley symposium on mathematical statistics and probability, 1: 221-223.

Humphrey, J. & Schmitz, H. (2000). Governance and upgrading in global value chains. Paper for the Bellagio value chain workshop, Institute of Development Studies University of Sussex.

Humphrey, J. & Schmitz, H. (2002). Developing countries firms in the world economy: Governance and upgrading in global value chains. INEF Report

Kaplinsky, R. & Morris, M. (2001). A handbook for value chain research. Prepared for the International Development and Research Centre (IDRC).

Kaplinsky, R. & Morris, M. (2002). A handbook for value chain research. University of Sussex, Institute of Development Studies.

Laven, A.C. (2006). Relating cluster and value chain theory to upgrading of primary commodities: the cocoa chain in Ghana. University of Amsterdam, December 2005.

Lemchi, J. M., M. Ishiunza & Tankouana, A. (2003). Factor driving the intensity and rate of cooking banana adoption in Nigeria. Journal of Agriculture and Social. Research, 3: 135-166.

Lewin, B. D., Giovannucci & Varangis, P. (2004). Coffee market: New Paradigms in global supply and demand. Washington, D. C. Work Bank.

Lin, J. Y. (1990). Education and the adoption of innovation in agriculture: Evidence from hybrid rice innovation in China. IRRI Social Science Division Paper No. 90-19. International Rice Research Institute, Manila, Philippines.

Osorio, N. (2002). The global coffee crisis: a threat to sustainable development. International Coffee Organization, London. 21 August 2002. Submission to the World Summit on Sustainable Development, Johannesburg.

Osorio, N. (2002). The global coffee crisis: a threat to sustainable development. Paper presented at the presentation to the ICO World Coffee Conference

OXFAM (2002b). MUGGED. Poverty in coffee cup. Oxfam, Market Trade Fair. Petit, N. (2007). Ethiopia's coffee sector: A bitter or better future?. Journal of Agrarian Change, 7(2):225-263.

Polson, R. A. & Spencer, D. S. C. (1991). The technology adoption process in subsistence agriculture: the case of cassava in South Western Nigeria. Agricultural System, 36: 65-77.

Ponte, S. (2004). Standard and sustainability in the coffee sectors. A global value chain approach. International Institute for Sustainable Development (IISD).

Santos, J. M. (2003). Statement at the ICO/World Bank High-Level Round Table on the International Coffee Crisis. London, May 19.

Schipmann, C. (2006). Value chains for better integration of smallholders to trade-the case of chilli in Ghana. Master thesis in the study program: Agricultural Economics, Humboldt-University Berlin, Faculty of Agriculture and Horticulture. pp. 13-19.

Shand, R. T. (1987). Income distribution in a dynamic rural sector: some evidence from Malaysia. Economic Development and Cultural Change, 36: 35-50.

Shrestha, P. M. (2005). Organic coffee production processing and marketing to improve the livelihood of farmers in the mid-hills of Nepal.

Smith, A. W. (1985). Agricultural practices. In: R.J. Clarke and R. Macrae, Editors, Coffee chemistry, Amsterdam, Elsevier, Applied Science (1985), pp. 18–23.

Somda, J., Nianogo, J., Nassa, S. & Sanou, S. (2002). Soil fertility management and socio-economic factors in crop-livestock system in Burkina Faso: a case study of composting technology. Ecological Economics, 43:175-183.

Staal, S. J., Baltenweck, I., Waithaka, M., deWolff, T. & Njoroge, L. (2002). Location and uptake: Integrated household and GIS analysis of technology adoption and land use, with application to smallholder dairy farms in Kenya. Agricultural Economics, 27:295-315.

Stamm, A. (2004). Value chains for development policy, challenges for trade policy and the promotion of economic development. Materialien zum Handel, GTZ, Eschborn.

Susila, W. R. (2005). Investigation of the feasibility of wet processed Robusta by smallholder farmers in East Java. Enhancement of coffee quality through prevention of mould formation. Socio economic report. FAO/UN, Jakarta, 2005. p. 9.

USAID (2005). Smallholder coffee increase income. Value chain upgrading and improved transparency increase smallholder farmer's income in Maxico.

Impact of Dynamic Capabilities on Firm Performance: Moderating Role of Organizational Competencies

Khaliq ur Rehman[1]

PhD Scholar at Management Department, School of Business and Economics, University of Management and Technology, Lahore Pakistan

Zafar Saeed[2]

MS Scholar at Management Department, School of Business and Economics, University of Management and Technology, Lahore Pakistan

Abstract

This study observes the phenomenon of organizational performance with the lens of dynamic capabilities. This study investigates the impact of dynamic capabilities on organizational performance, taking organizational competencies as moderating variable, focusing on a paper industry at Lahore, Pakistan.

The measurement of dynamic capabilities is based on the multi-dimensional construct underlying the four main factors which include i.e. Sensing, Learning, strong coordination, and competitive response to the rivals. This will lead to explore relationship of dynamic capabilities with organizational performance. Empirical research posits that dynamic capabilities have a direct impact on the organizational performance of the firm. It also proves that organizational competencies have positive moderating role in relationship of organizational performance and dynamic capabilities. This suggests that the direct relationship between dynamic capabilities and performance is insignificant.

Keywords: Dynamic capabilities, Organizational competences, Organizational Performance, Sensing capabilities, Learning Capabilities, Integrating Capabilities, and Coordinating capabilities.

1. Introduction

The world is a global village and everything is changing rapidly. The environment of the business market becomes very dynamic. Only the best can survive and the rest will drive back home. So highlighted issue now a day for every organization is challenging to survive in such environment. The very first thing needed by all of the organization is dynamic capability so they can adjust according to the dynamic environment. (Smith & Prietow, 2008) argued that the dynamic capabilities are those abilities which

[1] khaliqcheema@gmail.com

[2] ch.zafarsaeed@gmail.com

an Organization uses specially to deal with the changes in the external environment. So it enables an organization to avail opportunities when they are available and it helps to achieve an organization all the obligatory modifications in day to day operational routine and processes. Dynamic capabilities are a core element for an organization to survive in the today's dynamic environment.

According to (Eisenhardt & Martin, 2000), dynamic capabilities are considered to be final and it does provide a basis to the firm to create sustainable competitive advantage. Thus a firm can create sustainable competitive advantage if they able to possess superior dynamic capabilities as these capabilities help the firm to create functional competences. So dynamic capabilities do have an indirect impact on the outcome of the firm (Helfat & Peteraf, 2003). In addition, (Zott, 2003) also confirmed the indirect relation of dynamic capabilities and performance through the findings of situation analysis.

Environments today are changing and are becoming more dynamic due to the incorporation of new technology, diffusion of new practices that a firm must have to follow and due to the increasing global competition. These challenges erode the value of existing firm competences and encourage the firm to build new function competences in order to survive in the dynamic environment (Fredrickson & Mitchell, 1984). Dynamic environments encourage the firm to respond to the changes to the environment by sensing, reallocating, reconfiguring and renewing the existing capabilities. For this, a firm must invest in its capabilities to develop that particular product.

In the last decade or so, a number of researchers was considering the concept of dynamic capacities which was to be at the heart of strategy and the methodology of the firm, firm's competitive advantage and the value creation (Eisenhardt & Martin, 2000; Teece DJ, 1997; Winter, 2003); (Helfat et al., 2009; Teece, 2007).Hypothetical contentions have been progressed about their relationship of DC and firm performance. Existing research, however, is still stacked with ambiguous declarations and translations which have not yet been affirmed by experimental analysis. Numerous researchers are still doubtful about the part and conceptualizations progressed about dynamic capabilities (Winter, 2003; Zahra, Sapienza, & Davidsson, 2006). So the main objective of this paper is to examine the link between dynamic capabilities, functional competence of the firm and the performance. It proposes a model which suggests that the relationship between dynamic capabilities and the performance is mediated by the functional competence of the firm. This reflects that dynamic capabilities are considered to be the antecedents which enhance the firm's functional competence which then have a positive impact on the performance. In an effort to explore this model experimentally, this paper's aim is to operationalize a composite and to operationalize the unified and combined measures of dynamic capabilities which lead to the integration of their constituent dimensions.

In doing so, it creates and measurably tests a multi-dimensional construct which is composed and compiled of four dimensions including coordination capability, learning capabilities, integrating capabilities and firm's sensing capabilities to sense competitors and their strategic moves. By using such construct it gives the practical way for the measurement of the dynamic capabilities that could be possible by the questionnaire and the items included in the questionnaire can easily be perceived by the respondents i.e. business managers.

In this regard, the development as well as the empirical usage of a practical measurement regarding the concept of dynamic capabilities improves the toolbox of business strategic analysis. Likewise, it upgrades the perspective that such things as dynamic capacities do really exist. The literature contributed the three fold purpose. Firstly, it aims to operationalize and to measure empirically dynamic capabilities by incorporating three main dimensions by clearly identifying the distinction between dynamic capabilities and the functional capabilities; hence the notion of dynamic capabilities has been more clarified. Second, the relationship between the dynamic capabilities and performance has been explored and determined by using the data of manufacturing firms. The relationship between DC and performance seems not to be tautological as there DC had an indirect impact on the performance of the firm. The third part aims to propose the model that links Dc with the functional competences of the firm and the firm's performance.

1.1. Objectives of the study

This study investigates the impact of dynamic capabilities on organizational performance, and explores the moderating role of organizational competencies between the relationship of dynamic capabilities and organizational performance in paper sector of Lahore, Pakistan. More specifically the following objectives are addressed.

- To examine the impact of Dynamic capabilities on organizational performance
- To examine the moderating effect of organizational competencies in relationship of dynamic capabilities and organizational performance

1.2. Research Questions

To achieve the above stated objective, we formulate these research questions.

- Does dynamic capabilities impacts Organizational Performance?
- Do Organizational competencies moderate the relationship between dynamic capabilities and organizational performance?

1.3. Significance of the study

This study observes the phenomenon of organizational performance with the lens of dynamic capabilities. This study investigates the impact of dynamic capabilities on organizational performance, taking organizational competencies as moderating

variable, focusing on a paper industry at Lahore, Pakistan. This is quite a unique study in its nature, because no one earlier even tried to observe the phenomenon of organizational performance of Small Medium Enterprises. Especially no investigation has been made in Paper sector of Pakistan so far.

The remainder of the paper is organized as follows: The subsequent section presents the theoretical background. The third section details the proposed model linking dynamic capabilities to Organizational performance. The fourth section describes the research methodology; the fifth section presents the data analysis and the results obtained, while the last one discusses theoretical and managerial implications and conclusion.

2. Theoretical Background
2.1. Dynamic Capabilities
The concept of Dynamic capabilities is rooted and based on the resource based view (Wernerfelt, 1984); (Barney, 1991); (Peteraf, 1993); (Amit R, 1993); a perspective that emphasizes on the distinct resources of the firm which leads to the sustainable competitive advantage. Research scholars consider dynamic capabilities as antecedents which are the strategic routine of the firm that help to alter or change the resource base of the firm when needed; the aim is to design such value creating strategies that enhance the performance of the firm (Eisenhardt & Martin, 2000). This suggests that the role of the dynamic capabilities is to act as a buffer mainly between the two factors that are the firm's resources and the shifting or responsive business environment by assisting the firm in terms of the adjustment of the resource base so to create and sustain the competitive advantage. So, the resource-based view on one hand focuses on the choice of the resources choice, the dynamic capabilities view on the other hand emphasize on the development of the resources as well as its renewal., (Amit R, 1993) define the notion 'capabilities' as the ability of the firm to exploit its resources as well as integrates or combines its resources by its organizational routines for the purpose of achieving its target.

(Kogut & Zander, 1992) utilize the term 'combinative capacities' to refer mainly to the organizational procedures by which firms obtain and incorporate learning assets or knowledge resources which result in the creation of new applications by combining of all those resources. While the estimation of the thought of dynamic abilities is still tested by a few researchers, there is by all accounts a rising accord in the literature that they vary from operational capabilities or from the functional competences by emphasizing on the concept of change (Winter, 2003).

2.2. Types of Capabilities
2.2.1. *Integration Capability*
Integration capacities are the capabilities of the firm to evaluate the worth of their resources already available and integrating them in order to shape new competencies (Iansiti & Clark, 1994); (Amit R, 1993). Along with this, the operation of the new

configurations or outline of the functional competencies rests in two things; first one being the effective organization of all the tasks in hand and second one being the synchronization or organization of all of the activities active (Collis, 1994); (Helfat & Peteraf, 2003). The processes of coordination link as well as interface single routes through a variety of process like communication, assigning of the tasks, scheduling, etc. (Teece DJ, 1997) proposes the deficiency of the above elements, proper coordination and the combination of the variety of numerous resources, and tells us the reason behind the devastating effects on the competitive position of the incumbent firms when there are minor changes or variations in technology. Like (R. M. Henderson & Clark, 1990), in photolithographic industry, have actually shown the shattering impression of trivial innovations on the incumbent firms and these actually had a huge impact on the way the systems required configuration. Their debate is on these innovations which are systematic or architectural, that they require proper coordination as well as integration of various engineering tasks. The capability of learning cannot be comprehended as a primary means of achieving the strategic renewal.

2.2.2. Coordinating Capabilities
To realize the Coordination procedures is considered to be significant by the management of the firm. Coordination capabilities help the firm to integrate all the tacit knowledge as well as codified knowledge in order to produce and deliver those products that are cost effective and get more information and data about the needs and demands of the customers (Helfat & Raubitschek, 2000).

Coordination capabilities serves for the development of new product where cross functional team composed of different departments works together to design any particular product e.g. (Clark & Fujimoto, 1991; G. D., 1988; Dougherty, 1992; Helfat & Raubitschek, 2000).

2.2.3. Learning Capabilities
In order to achieve this renewal, the organizations are required to find out and learn innovative ways along with being able to exploit the things which they have learned in the past.(March, 1991). (Teece DJ, 1997) debate that learning is a vital process and by investigations and doing repetition, the results would be impressive as problems would be solved in an appropriate manner and this would also help the firms in the identification of the new ways or opportunities of production. The processes of learning are very dynamic. Even though the individuals might get the innovative ideas, those ideas are then actually shared within the context of the organization and at the same time some of those ideas become the artifacts of organization. Strategic competitive response capability extends the definition and concept of dynamic capabilities proposed by (Eisenhardt & Martin, 2000) in order to include or embrace the formation of market change along with the response to exogenous change (Helfat et al., 2009).

Learning procedures or process that aim to enhance and advance technological knowledge is critically significant for sustainable competitive advantage; particularly in the pharmaceutical industries or it can enhance such industries like semiconductors (Bogner WC, 1994; Helfat, 1997; R. Henderson & Cockburn, 1994). In addition to that, sharing knowledge as well as the creation of cross cultural teams would result in the combination of that knowledge that is novel or new. The reason is that the cross functional teams engage employees to interact with each other who belongs to different functional department and that leads to the recombination or renewal of technological as well as marketing competences. Moreover, job rotation fosters the process of absorption of knowledge more effectively (Cohen & Levinthal, 1990).

2.2.4. Sensing Capabilities
This ability can be conceptualized as the capability of the firm to detect new opportunities, scan environment, answer to competitive planned moves and evaluates the competitive position. Even though if an established organization gets to know about the change need to address the requirements of the environment, still it is not easy for them to respond properly. Let's take the example of an empirical research. It clearly provides proofs that minor technology shifts related changes are not easy to be handled precisely (R. M. Henderson & Clark, 1990; Tushman & Anderson, 1986). The most important thing however is the ability to know and respond effectively to the environmental changes. So basically what encourage change within a firm are strategic competitive response and the way of coordination. Like this, they may add to a better understanding and measurement of the compound concept of dynamic capabilities.

Dynamic capabilities have been troubled by few problems related to their operations, explanations and by their expected terms with the performance of the organization. There are however some proofs which show that performance of an organization can be affected by its dynamic capabilities (R. Henderson & Cockburn, 1994) provides evidence that capability of the firm to mix information from an outside source has positive impacts to its research productivity. (Singh & Zollo, 1998) confirms that acquirers who focused more on organizing their integration procedures come up with better and more productive performance comparative to their competitors. (Deeds, DeCarolis, & Coombs, 2000) proves that dynamic capabilities like the process of forming alliance is considerably related to the number of products that are developed newly in biotechnology area.

The firm must have the ability to reshape its resource base by sensing the changes in the environment effectively and respond accordingly. If a firm has the ability to be responsive to the changes of the environment including analyzing the competition, ii would have a positive impact on redefining the marketing as well as technological competences which lead to the redefining and renewal of the product portfolio. Last, the flexibility of the firm in terms of being responsive to the changes in the environment is also linked with the organizational structure that a firm is following

which is decentralized structure. If a firm doesn't possess dynamic capabilities, it would restrain to seek the renewal opportunities.

2.3. Organizational Competencies

Organizational competences are depicted as the purposive combinations of all the assets or resources that empower an association to perform operational exercises or activities, for example, logistics, promoting and deals and assembling or manufacturing. The archetypical firm equipped with competences/resources but lacking dynamic capabilities will, in equilibrium, earn "it's living by producing and selling the same product, on the same scale and to the same customer population over time"(Winter, 2003). Dynamic capabilities on the other hand emphasize on the renewal of the functional competence which is the source of sustainable competitive advantage. DC are also referred as a complex routines by some scholars (Zollo & Winter, 2002), some scholars are of the view that the existence of DC has taken for granted by ignoring the main processes that results in the creation and formation of these capabilities (Galunic & Eisenhardt, 2001).

Organizational competencies are of two kinds. One division is made on the basis of marketing capabilities and the second one is technical competencies. When talking about the marketing competence, it helps the firm to understand the basic needs and wants of the customers, to identify the new customers and to analyze as well as respond to the competition (Fowler, King, Marsh, & Victor, 2000). This shows that marketing competences is a key driver that enhances the performance of the firm (Day, 1994). Technological competencies serve a firm to engage in a problem solving process as well as implementing and creating or developing the new prototypes and to absorb knowledge from the environment that is from outside the firm (L.-B. D., 1995). Firms that are not able to advance their technological capabilities are not able to compete and hence cannot be able to achieve the commercial success (Fowler et al., 2000).

(Eisenhardt & Martin, 2000), responded to the above criticism by commenting that dynamic capability processes have been comprised of "precise and identifiable or exclusive routines" which have been researched. Mainly, they suggest that the use of the several processes can be taken as examples of dynamic capabilities for instance, product development, and the process of strategic decision making reallocation and renewal of the routines. This paper mainly recognizes three dimensions: facilitating/coordination of the activities, learning and key aggressive reaction or competitive response.

2.4. Organizational Performance

There are a few studies that investigate the direct relation of DC and its impact on performance. David (Collis, 1994) define Dynamic capabilities as a higher- order capabilities and suggest that DC aims a firm to avoid or ignore path dependencies that are particularly imposed by the competencies that are at lower level. So a firm must have to reconfigure its resources and aim to continual renewal of the new resources in

order to attain the sustainable competitive advantage.(Eisenhardt & Martin, 2000) is of the same view and suggest that DC is distinct as well as valuable, moreover DC is considered to be equi-final and that are inimitable which shows its uniqueness and hence not easy to copy. It suggests that DC alone is not results in creating the sustainable competitive advantage rather it results in the contribution of firm's superior performance. In nutshell, DC aim to create and reconfigure resource base (Eisenhardt & Martin, 2000), zero-order capabilities (Winter, 2003) as well as operational capabilities, and thus have an impact on performance. This shows that there exist an indirect link between DC and performance. The phenomenon of DC and its impact on performance is not clear and hence not well understood (Zott, 2003).

2.5. Dynamic Capabilities in SME's
Innovation is one of the most fundamental processes underpinning economic growth. The role of innovation in SMEs that drives and influences on innovation performance which makes a distinction between a few very high-performance new and small firms that can have a disproportionate effect on innovation, often by introducing breakthrough innovations to the market. In this study we present dynamic capabilities that facilitate innovative strategies (proactive-creativity strategy and growth-risk orientation) in Small- and Medium-sized Enterprises (SMEs). Corporate entrepreneurship is seen as the integration of opportunity-seeking and advantage-seeking actions providing new, valuable and unique business concepts. We build upon the Resource-Based View (RBV) of the firm and in particular elaborate on the accumulation of dynamic capabilities contributing to innovation .We develop four categories of dynamic capabilities that are critical for the SMEs entrepreneurial position: internal and external reconfiguration and integration capabilities, resource acquisition capability, learning network capabilities and strategic path aligning capabilities. Most of the relations are medium to highly statistical significant for dynamic capabilities relationships with innovative strategies.

In Dynamic capabilities and entrepreneurial team development in SMEs by DonatoIacobucci Entrepreneurial companies create, define, discover, and exploit opportunities frequently well ahead of their rivals. A key outcome of the entrepreneurial process is a new business creation. Most new businesses employ only one or very few persons. The emergent literature on dynamic capabilities and their role in value creation are riddled with inconsistencies, overlapping definitions, and outright contradictions. Yet, the theoretical and practical importance of developing and applying dynamic capabilities to sustain a firm's competitive advantage in complex and volatile external environments has catapulted this issue to the forefront of the research agenda of many scholars. In this paper, we offer a definition of dynamic capabilities, separating them from substantive capabilities as well as from their antecedents and consequences.

3. Theoretical Framework and Hypothesis

Keeping in view a hierarchical view of DC a new model has been proposed which suggests that DC serves not only as acquiring the resources but also serves as to reconfigure the lower level competences of the firm. So this model takes organizational competencies as moderating variable, that means organizational competencies enhances the intensity of dynamic capabilities to achieve superior organizational performance. The relationship and impact of predominant firm's capabilities on its overall performance has been widely examined and studied in the literature. The aim of this paper is to emphasize mainly on the role of organizational competences, which empower firms to perform viably their everyday exercises with respect to competition prevailing in the market (Danneels, 2000; Song, Droge, Hanvanich, & Calantone, 2005).
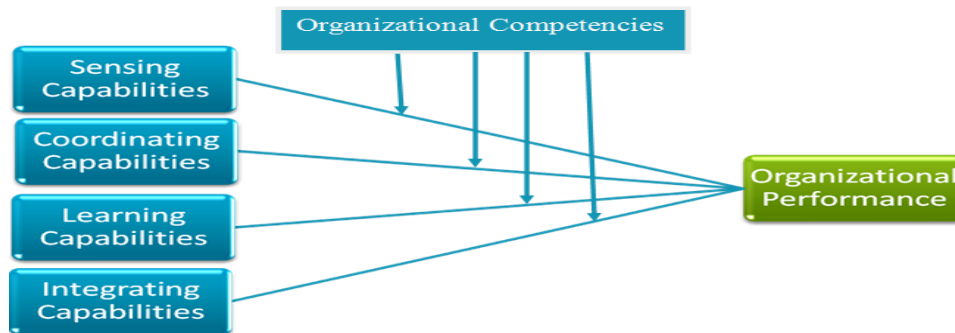
Figure 1: Theoretical Framework

For the theoretical framework of this study, Dynamic abilities have been defined as higher-request skills that permit firms to endeavor or to exploit lower-request capabilities that exist in the organization, and all the more significantly to identify as well as recognize the new innovative technological capabilities and marketing capabilities. Higher order capabilities must be developed by the firms because it fosters the process of learning which results in the leveraging of all the firm's resources. Moreover, Dynamic capabilities do eliminate the impact of path dependencies. The exploitation of existing resources would not result in creating the competitive advantage of the firm. But if a firm possesses superior dynamic capabilities then they would able to create functional competences more effectively and faster relative to its rivals. However, if a firm has some of superior competences, they will not able to respond to the changes in the environment effectively.

Above proposed model and the debate lead this study towards the hypothesis stage. In light of above discussion, these are the hypothesis that this study will be able to prove or disprove.

H1: *Dynamic Capabilities have Impact on Organizational Performance.*

As dynamic capabilities have four types (ingredients), so we are supposed to develop sub hypothesis.

H1 (a): *Sensing Capability has influence on organizational Performance.*
H1 (b): *Learning Capability has influence on organizational Performance.*
H1(c): *Integrating Capability has influence on organizational Performance.*
H1 (d): *Coordinating Capability has influence on organizational Performance.*
H 2: *Organizational Competencies have moderating role in relation of Dynamic Capabilities and Organizational Performance*

As dynamic capabilities have four types (ingredients) so we are supposed to develop sub hypothesis.

H2 (a): *Organizational Competencies have moderating role in relation to Sensing Capabilities and Organizational Performance*
H2 (b): *Organizational Competencies have moderating role in relation to Learning Capabilities and Organizational Performance*
H2 (c): *Organizational Competencies have moderating role in relation to Integrating Capabilities and Organizational Performance*
H2 (d): *Organizational Competencies have moderating role in relation to Coordinating Capabilities and Organizational Performance*

4. Methodology
4.1. Participants and setting of Research
This study was conducted in Paper sector that is contributor towards economy of Pakistan, which consist of five medium level organizations, and forty small organizations working in Lahore. Data was collected through self-administrated questionnaire. Participants of the survey were professionals and top and middle level managers who were responsible for implementing the strategies about the production, new product development, and selling, promotional, and pricing strategies. Response rate of this study was about 80% as 130 professionals were selected and questionnaires were distributed to them, but only 104 participants took part actively in this study.

4.2. Construct Measurement
All the variables of this study were measured by the professional responses to the instrument that was used in this study. All the items were measured on five point Likert-Scale having range from Strongly Agree to Strongly Disagree. Complete range of measure was discussed under findings including Cronbach's Alpha, Descriptive Statistics, Correlation, and Regression Analysis.

4.2.1. Dynamic Capabilities
For Dynamic Capabilities we adopt the items from the questionnaires developed and tested by (Teece DJ, 1997) having alpha value (.692). This measure consists of 4

dimensions like "Sensing Capabilities", "Learning Capabilities", "Integrating Capabilities", and "Coordinating Capabilities".

4.2.2. Organizational Performance

To Measure Organizational Performance, we adopt items from (Khuram Shahzad, 2014) having alpha value (.693) that consist of 11 items

4.2.3. Organizational Competencies

Organizational Competencies were measured on a six-dimensional scale and the reliability of those six items (.695).

5. Findings
5.1. Reliability

Reliability Statistics of overall Instrument	
Cronbach's Alpha	N of Items
.700	33

Item-Wise Reliability Statistics

Determinants	Cronbach's Alpha
Sensing Capabilities (SC)	**0.694**
We frequently scan the environment to identify new business opportunities.	.683
We periodically review the likely effect of changes in our business environment on customers.	.705
We often review our product development efforts to ensure they are in line with what the customers want.	.682
We devote a lot of time implementing ideas for new products and improving our existing products.	.708
Learning Capabilities (LC)	**0.698**
We have effective routines to identify, value, and impart new information and knowledge.	.680
We have adequate routines to assimilate new information and knowledge.	.715
We are effective in transforming existing information into new knowledge.	.685
We are effective in utilizing knowledge into new products.	.697
We are effective in developing new knowledge that has the potential to influence product development	.716
Integrating Capabilities (IC)	**0.696**
We are forthcoming in contributing our individual input to the group.	.697
We have a global understanding of each other's tasks and responsibilities.	.698
We carefully inter-relate our actions to each other to meet changing	.705

conditions.	
Group members manage to successfully interconnect their activities.	.686
Coordinating Capabilities (CC)	**0.676**
We ensure that the output of our work is synchronized with the work of others.	.669
We ensure an appropriate allocation of resources (e.g., information, time, reports) within our group.	.689
Group members are assigned to tasks commensurate with their task-relevant knowledge and skills.	.680
Overall, our group is well coordinated.	.669
Organizational Performance (OP)	**0.692**
Quality of your company's products/services compared with competitors, is	.689
Level of your customers' satisfaction compared with competitors, is	.697
Technological developments in your company compared with competitors, are	.697
Profitability of your company compared with competitors, is	.689
Sales growth in your company compared with competitors, is	.706
Your company's "Returns on Investment" compared with competitors, are	.671
Your company's market share compared with competitors, is	.675
New products launched by your company compared with competitors, are	.714
Overall growth of your company compared with competitors, is	.714
Image of your company in market compared with competitors, is	.659
Our organization believes in having co-operation with universities and other research institutes to be competitive in market.	.715
Organizational Competencies (OC)	**0.693**
Our Organization has a very strong brand name among its competitors.	.683
Our Organization put its emphasis to build strong sales force.	.705
Our organization has well-organized marketing department.	.681
Our organization believes in continuous adaptation of new manufacturing technology.	.709
Our organization has very strong R&D department, and organization spend a lot on R&D	.680
Our organization believes in having co-operation with universities and other research institutes to be competitive in market.	.715

5.2. Correlation

	Correlations Matrix			
	SC	LC	IC	CC
LC Pearson Correlation	.167	1		

	Sig. (2-tailed)	.090			
	N	104	104		
IC	Pearson Correlation	.473**	.416**	1	
	Sig. (2-tailed)	.000	.000		
	N	104	104	104	
CC	Pearson Correlation	.220*	.672**	.179	1
	Sig. (2-tailed)	.025	.000	.069	
	N	104	104	104	104
OP	Pearson Correlation	.420**	.083	.529**	.129
	Sig. (2-tailed)	.000	.000	.000	.192
	N	104	104	104	104

**Correlation is significant at the 0.01 level (2-tailed).
*Correlation is significant at the 0.05 level (2-tailed).

To determine the relationship between dynamic capabilities and organizational performance Pearson correlation test was used. Above mentioned table indicates that each type of organizational capabilities has positive relationship with organizational performance. Dramatically, Learning capabilities and coordinating capabilities have weak but positive relationship with organizational performance.

5.3. Regression

Regression Analysis for Sensing Capabilities and Organizational Performance

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.420[a]	.176	.168	.229

a. Predictors: (Constant), SC

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.147	1	1.147	21.860	.000[b]
	Residual	5.350	102	.052		
	Total	6.497	103			

a. Dependent Variable: OP
b. Predictors: (Constant), SC

Coefficients[a]

Model	Un-standardized Coefficients	Standardized Coefficients	t	Sig.

		B	Std. Error	Beta			
1	(Constant)	2.876	.278			10.359	.000
	SC	.319	.068	.420		4.675	.000

a. Dependent Variable: OP

To analyze the influence of Sensing Capabilities (SC) on Organizational Performance, we use regression analysis .Finding shows that the Organizational Performance is moderately dependent on sensing capabilities of the organization. As table shows that value of R square is 0.176 for Sensing Capabilities (SC) and Organizational Performance. Hence we can say that we have become able to prove our H1 (a) hypothesis.

Regression Analysis for Sensing Capabilities and Organizational Performance with moderating effect of Organizational Competencies

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.475[a]	.225	.218	.222

a. Predictors: (Constant), Interaction term 1

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.464	1	1.464	29.676	.000[b]
	Residual	5.033	102	.049		
	Total	6.497	103			

a. Dependent Variable: OP
b. Predictors: (Constant), Interaction1

Coefficients[a]

Model		Un-standardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.266	.167		19.526	.000

Interaction1	.054	.010	.475		5.448	.000

a. Dependent Variable: OP

To check the moderating role of organizational competencies between relationship of organizational performance and sensing capabilities, we add an interaction term and regress it with organizational performance. Table indicates that organizational competencies do moderate, and positively moderates the relationship between organizational performance and sensing capabilities. As the value of R square has increased to 0.225 from 0.176. Hence H 2 (a) Hypothesis has also proved.

Regression Analysis for Learning Capabilities and Organizational Performance

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.083[a]	.007	-.003	.251

a. Predictors: (Constant), LC

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.045	1	.045	.715	.400[b]
	Residual	6.452	102	.063		
	Total	6.497	103			

a. Dependent Variable: OP

b. Predictors: (Constant), LC

Coefficients[a]

Model		Un-standardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.423	.301		14.700	.000
	LC	-.062	.074	-.083	-.846	.400

a. Dependent Variable: OP

To analyze the influence of Learning Capabilities (LC) on Organizational Performance, we use regression analysis .Finding shows that the Organizational Performance is slightly dependent on learning capabilities of the organization. As table shows that value of R square is 0.007 for learning Capabilities (LC) and Organizational Performance. Hence H 1 (b) hypothesis also proved.

Regression Analysis for Sensing Capabilities and Organizational Performance with moderating effect of Organizational Competencies

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.213[a]	.046	.036	.247

a. Predictors: (Constant), Interaction2

ANOVA[a]					
Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	.296	1	.296	4.866	.030[b]
Residual	6.201	102	.061		
Total	6.497	103			

a. Dependent Variable: OP

b. Predictors: (Constant), Interaction2

Coefficients[a]					
Model	Un-standardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	3.621	.250		14.488	.000
Interaction2	.033	.015	.213	2.206	.030

a. Dependent Variable: OP

To check the moderating role of organizational competencies between relationship of organizational performance and learning capabilities, we add an interaction term and regress it to an organizational performance. Table indicates that organizational competencies does moderates, and positively moderates the relationship between

organizational performance and learning capabilities. As the value of R square has increased to 0.046 from 0.007. Hence H 2 (b) Hypothesis has also proved.

Regression Analysis for Integrating Capabilities and Organizational Performance

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.529[a]	.280	.273	.214

a. Predictors: (Constant), IC

ANOVA[a]

	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.820	1	1.820	39.704	.000[b]
	Residual	4.676	102	.046		
	Total	6.497	103			

a. Dependent Variable: OP

b. Predictors: (Constant), IC

Coefficients [a]

	Model	Un-standardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.118	.485		2.305	.023
	IC	.737	.117	.529	6.301	.000

a. Dependent Variable: OP

To analyze the influence of Integrating Capabilities (IC) on Organizational Performance, we use regression analysis .Finding shows that the Organizational Performance is moderately dependent on integrating capabilities of the organization. As table shows that value of R square is 0.280 for Integrating Capabilities (IC) and Organizational Performance. Hence H 1 (c) hypothesis has also proved.

Regression Analysis for Integrating Capabilities and Organizational Performance with moderating effect of Organizational Competencies

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate

| 1 | .567[a] | .321 | .315 | .208 |

a. Predictors: (Constant), Interaction3

ANOVAᵃ

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.087	1	2.087	48.279	.000[b]
	Residual	4.410	102	.043		
	Total	6.497	103			

a. Dependent Variable: OP
b. Predictors: (Constant), Interaction3

Coefficients ᵃ

Model		Un-standardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.636	.222		11.892	.000
	Interaction3	.091	.013	.567	6.948	.000

a. Dependent Variable: OP

To check the moderating role of organizational competencies between relationship of organizational performance and integrating capabilities, we add an interaction term and regress it to an organizational performance. Table indicates that organizational competencies does moderates, and positively moderates the relationship between organizational performance and integrating capabilities. As the value of R square has increased to 0.321 from 0.280. Hence H 2 (c) Hypothesis has also proved.

Regression Analysis for Coordinating Capabilities and Organizational Performance

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.129[a]	.017	.007	.250

a. Predictors: (Constant), CC

ANOVAᵃ

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.108	1	.108	1.728	.192[b]
	Residual	6.389	102	.063		
	Total	6.497	103			

a. Dependent Variable: OP
b. Predictors: (Constant), CC

Coefficientsª

Model		Un-standardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.876	.225		17.223	.000
	CC	.072	.055	.129	1.314	.192

a. Dependent Variable: OP

To analyze the influence of Coordinating Capabilities (CC) on Organizational Performance, we use regression analysis. Finding shows that the Organizational Performance is slightly dependent on integrating capabilities of the organization. Table shows that value of R square is 0.017 for Integrating Capabilities (IC) and Organizational Performance. Hence H 1 (d) hypothesis has also proved.

Regression Analysis for Coordinating Capabilities and Organizational Performance with moderating effect of Organizational Competencies

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.337ª	.114	.105	.238

a. Predictors: (Constant), Interaction4

ANOVAª

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.739	1	.739	13.096	.000[b]
	Residual	5.758	102	.056		
	Total	6.497	103			

a. Dependent Variable: OP
b. Predictors: (Constant), Interaction4

Coefficients[a]

Model		Un-standardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.497	.187		18.665	.000
	Interaction4	.041	.011	.337	3.619	.000
a. Dependent Variable: OP						

To check the moderating role of organizational competencies between relationship of organizational performance and coordinating capabilities, we add an interaction term and regress it to an organizational performance. Table indicates that organizational competencies do moderates, and positively moderate the relationship between organizational performance and coordinating capabilities. As the value of R square has increased to 0.114 from 0.017. Hence H 2 (d) Hypothesis has also proved.

6. Discussion

The aim of this study was to determine the relation between dynamic capabilities and performance through the use of large scale survey. The result suggests that there exists the indirect relationship between dynamic capabilities and firm's performance. Dynamic capabilities don't directly create the sustainable competitive advantage, but DC contributes to the firm a superior performance by combining, reallocating and renewing the organizational competencies. So the result posits that dynamic capabilities affect the performance of the firm in both high dynamic or less dynamic environment. According to (Eisenhardt & Martin, 2000), dynamic capabilities can be operated in high dynamic environment that supports the rapid change (Helfat et al., 2009). So, the managers should always try to advance its competencies in order to seek superior firm performance. They must have to see what competencies that they already have and what competencies they need to create in order to respond to the environment effectively. So, managers should have to invest in dynamic capabilities to enhance the performance of the firm.

7. Limitations

The limitations of the study should also be considered when evaluating the findings and implications of the research. Efforts have been made to ensure the data quality, but the survey biases cannot be ignored and excluded. It should be noted that the perception of the respondents may not coincide with the objective and rational reality, which may deviate from the actual or true findings. Furthermore, the cost of creating and incorporating the dynamic capabilities has not been studies which is an issue, as developing and maintain dynamic capabilities in the firm is costly and managers must have to invest keeping in view the budget of the firm, so this is another limitation of

the study. Further research could be done in this regard that covers the cost of developing dynamic capabilities and its benefits for the firm.

8. Conclusion

This study determines the relationship between dynamic capabilities and firm performance using organizational competencies as a moderator. Results suggest that source of superior organizational performance lies in relationship between organizational capabilities and organizational competencies. So organizational competencies are the most important variable of the study and study shows that organizations having more competencies can have superior performance. Results also suggest that dynamic capabilities can be operationalize in both high dynamic environment as well as less dynamic environment.

References

Amit R, S. P. (1993). Strategic assets and organizational rent. . *Strategic management journal, 14*(1), 33-46.

Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of management, 17*(1), 99-120.

Bogner WC, T. H. (1994). Core competence and competitive advantage: A model and illustrative evidence from the pharmaceutical industry. In Competence-Based Competition, Hamel G, Heene A (eds.). *Wiley: Chichester*, 111-143.

Clark, K. B., & Fujimoto, T. (1991). *Product development performance: Strategy, organization, and management in the world auto industry*: Harvard Business Press.

Cohen, W. M., & Levinthal, D. A. (1990). Absorptive capacity: a new perspective on learning and innovation. *Administrative science quarterly*, 128-152.

Collis, D. J. (1994). Research note: How valuable are organizational capabilities. *Strategic management journal, 15*(8), 143-152.

D., G. (1988). Managing Quality. *Free Press, New York*.

D., L.-B. (1995). Wellsprings of Knowledge. *Harvard Business School Press: Boston MA*.

Danneels, E. (2000). *The dynamics of product innovation and firm competences.* Paper presented at the Academy of Management Proceedings.

Day, G. S. (1994). The capabilities of market-driven organizations. *the Journal of Marketing*, 37-52.

Deeds, D. L., DeCarolis, D., & Coombs, J. (2000). Dynamic capabilities and new product development in high technology ventures: an empirical analysis of new biotechnology firms. *Journal of Business venturing, 15*(3), 211-229.

Dougherty, D. (1992). Interpretive barriers to successful product innovation in large firms. *Organization science, 3*(2), 179-202.

Eisenhardt, K. M., & Martin, J. A. (2000). Dynamic capabilities: what are they? *Strategic management journal, 21*(10-11), 1105-1121.

Fowler, S. W., King, A. W., Marsh, S. J., & Victor, B. (2000). Beyond products: new strategic imperatives for developing competencies in dynamic environments. *Journal of Engineering and Technology Management, 17*(3), 357-377.

Fredrickson, J. W., & Mitchell, T. R. (1984). Strategic decision processes: Comprehensiveness and performance in an industry with an unstable environment. *Academy of Management journal, 27*(2), 399-423.

Galunic, D. C., & Eisenhardt, K. M. (2001). Architectural innovation and modular corporate forms. *Academy of Management journal, 44*(6), 1229-1249.

Helfat, C. E. (1997). Know-how and asset complementarity and dynamic capability accumulation: The case of R&D. *Strategic management journal, 18*(5), 339-360.

Helfat, C. E., Finkelstein, S., Mitchell, W., Peteraf, M., Singh, H., Teece, D., & Winter, S. G. (2009). *Dynamic capabilities: Understanding strategic change in organizations*: John Wiley & Sons.

Helfat, C. E., & Peteraf, M. A. (2003). The dynamic resource-based view: capability lifecycles. *Strategic management journal, 24*(10), 997-1010.

Helfat, C. E., & Raubitschek, R. (2000). *Product sequencing: co-evolution of knowledge, capabilities and products.* Paper presented at the Tuck-JFE Contemporary Corporate Governance Conference.

Henderson, R., & Cockburn, I. (1994). Measuring competence? Exploring firm effects in pharmaceutical research. *Strategic management journal, 15*, 63-63.

Henderson, R. M., & Clark, K. B. (1990). Architectural innovation: The reconfiguration of existing product technologies and the failure of established firms. *Administrative science quarterly*, 9-30.

Iansiti, M., & Clark, K. B. (1994). Integration and dynamic capability: evidence from product development in automobiles and mainframe computers. *Industrial and corporate change, 3*(3), 557-605.

Kogut, B., & Zander, U. (1992). Knowledge of the firm, combinative capabilities, and the replication of technology. *Organization science, 3*(3), 383-397.

March, J. G. (1991). Exploration and exploitation in organizational learning. *Organization science, 2*(1), 71-87.

Peteraf, M. A. (1993). The cornerstones of competitive advantage: a resource-based view. *Strategic management journal, 14*(3), 179-191.

Singh, H., & Zollo, M. (1998). The impact of knowledge codification, experience trajectories and integration strategies on the performance of corporate acquisitions.

Song, M., Droge, C., Hanvanich, S., & Calantone, R. (2005). Marketing and technology resource complementarity: An analysis of their interaction effect in two environmental contexts. *Strategic management journal, 26*(3), 259-276.

Teece, D. J. (2007). Explicating dynamic capabilities: the nature and microfoundations of (sustainable) enterprise performance. *Strategic management journal, 28*(13), 1319-1350.

Teece DJ, P. G., Shuen A. (1997). Dynamic capabilities and strategic management. *Strategic management journal, 18*(7), 509-533.

Tushman, M. L., & Anderson, P. (1986). Technological discontinuities and organizational environments. *Administrative science quarterly*, 439-465.

Wernerfelt, B. (1984). A resource-based view of the firm. *Strategic management journal, 5*(2), 171-180.

Winter, S. G. (2003). Understanding dynamic capabilities. *Strategic management journal, 24*(10), 991-995.

Zahra, S. A., Sapienza, H. J., & Davidsson, P. (2006). Entrepreneurship and dynamic capabilities: a review, model and research agenda*. *Journal of Management studies, 43*(4), 917-955.

Zollo, M., & Winter, S. G. (2002). Deliberate learning and the evolution of dynamic capabilities. *Organization science, 13*(3), 339-351.

Zott, C. (2003). Dynamic capabilities and the emergence of intraindustry differential firm performance: insights from a simulation study. *Strategic management journal, 24*(2), 97-125.

Authentic Leadership – A Multi-Component Model

Sunnia Farrukh[1]
NUST Business School

Jawad Ahsan
NUST Business School

Abstract

The need for research on authentic leadership in social sciences has emerged in the last few years. Until, now there has been done a very little research on this construct with respect to organizational sciences. There exist many ambiguities in conceptualization of authentic leadership and there exist many gaps in literature. In this paper, the critical review of literature on authentic leadership is done and literature gaps are identified. On the basis of identified gaps, a multi-component model is given for development of authentic leadership and its consequences on organizational outcomes. Hence, the main aim of this research is to present a theory-driven model of AL that presents consequences of the AL and gives suggestion of researchable propositions. Previous model could not address the multi level analysis for analyzing antecedents and consequences of AL; hence, this paper contributes to the literature by presenting a multi-level model. The significance of this paper is that it links the authentic leadership with organization-wide outcomes. Furthermore, this model has presented the mechanism. By using that authentic leaders can influence the followers and develop them in authentic followers and authentic leaders that have considerable implications for research and practice. Hence, the present model contributes to the literature by conceptually reviewing the construct of 'authenticity' and proposing a framework with testable propositions. This paper stimulates inspiration in future researchers to empirically investigate the presented model. Moreover, this also has practical implications as this model provides guidelines for interventional programs to foster authenticity at workplace.

Keywords: *Authentic Leadership, authenticity, Authentic Followership, Follower Work Attitude, Follower Behavior, Organizational climate.*

1. Introduction

In the last few years many cooperate and government malfeasance events were observed, as a result of such events, need for ethical conduct of leaders have emerged. Authors like (BILL, SIMS, & GERGEN, 2007) and (Cashman, 1992) asserted the need for genuine and authentic leadership. Similarly, (Luthans & Avolio, 2003) mentioned that there is a need for a theory-driven model that is based on antecedents and consequences of authentic leadership along with suggestions for researchable propositions. Currently, there exist various definitions and explanations of this construct, namely authentic leadership. These several competing definitions of AL have resulted in great confusion. Few areas of confusion have also been identified by (Cooper, Scandura, & Schriesheim, 2005) and they stated that this conceptual ambiguity needs rigorous clarification of this construct through carefully defining this construct. Likewise, (Yammarino, Dionne, Schriesheim, & Dansereau, 2008) also raised an issue related to this construct and mentioned that most of the literature is focused on single level of analysis (i.e. leader-centric) and literature has ignored dyadic, group and organizational level of analysis. They suggested that AL theory needs to consider multiple levels of analysis for being more rigorous and explanatory. Unfortunately, up till now, the recommendations and cautions suggested by these authors have not been considered by researchers of AL, thus there exist many confusions and ambiguities related to development of AL and this problem is spurred with limited amount of empirical research because validity of so many assertions is not assessed yet.

The purpose of this research is to review the available literature on AL. While reviewing literature, attempt is made to clarify this construct along with identification of antecedents and consequences of AL. As there are different views that are presented by authors from different disciplines so this paper critically analyses views of different authors. So this paper fills the literature gap identified by (Cooper et al., 2005) by clarifying the construct of authentic leadership.(Luthans & Avolio, 2003) said that there is a need for a theory-driven model based on antecedent and consequence along with suggestion of researchable propositions. After this research direction, many researchers have presented models for AL and most of them presented antecedents and ignored consequences of AL. This shows there exists gap in literature. Therefore, another purpose of this paper is to present a theory-driven model of AL that presents consequences of the AL and give suggestion of researchable propositions. As (Yammarino et al., 2008) also showed a research direction to move further from single level analysis. So this research moves from single level analysis to dyadic level of analysis by presenting a model of authentic leadership and the following.

2. Literature Review
2.1. Authenticity
The roots of this term authenticity can be traced back to ancient Greek philosophy. In the Temple of Apollo at Delphi, the aphorism "Know Thyself" was inscribed (Parke & Wormell, 1956). The etymology of authenticity says that word 'authentic' is derived from a Greek word 'authento' which means 'to have full power' which also reflects the authentic functioning of an individual who is the master in his domain (Kernis & Goldman, 2006; Trilling, 2009). When Socrates focused on the notion of the self-inquiry and said that it is not worth living to have an unexamined life, this can also be referred to the authentic functioning of individuals. After this, Aristotle throws light on the concept of self-realization and said that 'higher good' can be achieved when activities of soul and virtue are aligned with each other (Hutchinson, 1996).(Kernis & Goldman, 2006) mentioned that this self-realization is linked with, *eudemonia,* which means that an individual gains happiness when she/he successfully performs activities that are according to her/his inner self values.

In words of (Harter, 2002), authenticity is defined as a set of one's personal experiences, along with needs, desires, emotions, thoughts and beliefs. So, it can be analyzed that, as also mentioned by (Luthans & Avolio, 2003), authenticity is to be self-aware and to perform according to true inner self, beliefs and thoughts. Interestingly, it is not possible to attain complete authenticity. (Erickson, 1995) mentioned that it is important to consider that authenticity and in authenticity is not dichotomous, means it is an either condition. One cannot only be defined as authentic or unauthentic, but one can be said less authentic, more authentic or unauthentic.

Even though the concept of authenticity can be traced back in ancient Greek philosophy, its conception evolved in previous century (Erickson, 1995). (Kernis & Goldman, 2006) mentioned that modern psychological conception of authenticity has borrowed a great work from philosophy. In addition, meta-physics and existentialism have also helped this construct 'authenticity' to emerge as it is now. Historical literature from philosophy and psychology concludes that authenticity consists of cognitive and behavioral processes related to discovering a sense of self along with maintaining core self at different times and situations. Furthermore, literature says that there are four central themes about authenticity i.e. "authentic functioning of people's (1) self-understanding, (2) openness to objectively recognizing their ontological realities (e.g., evaluating their desirable and undesirable self-aspects), (3) actions, and (4) orientation towards interpersonal relationships" (p. 284). The current conceptualization of AL is also based on these four central themes, namely 1) awareness, 2) unbiased processing, 3) behavior, and 4) relational orientation. Awareness is to have knowledge about own values, motives, thoughts and feelings. Unbiased processing is to accept positive and negative attributes. Behavior is to act only according to own preferences, values and needs and not for pleasing others or to get some reward. Relational orientation is to ensure truthfulness and openness in relationship with others (Kernis, 2003). On the basis of these four themes, various definitions of AL have emerged.

2.2. Conceptualization of Construct 'Authentic Leadership'

There is a variety of definitions of AL and these definitions are summarized in table 1 [Appendix]. From those definitions, it can be analyzed that, as said by (Halpin, 1966) organizational authenticity is function of climate and it becomes apparent through ability of its members to resist personal change with respect to leadership and professional roles. Furthermore, (Seeman, 1966) mentioned that authenticity is the ability to minimize the inconsistency and uncertainty about the leadership role.

It was (Henderson & Hoy, 1982) who defined and operationalized the constructs of authentic and inauthentic leadership. The analysis of their definition shows that AL is to (1) accept responsibility, (2) non-manipulation with others and (3) importance to self over roles. When these components are missing, leadership is declared inauthentic. These three components proposed by (Henderson & Hoy, 1982) confound with dimension of authenticity (Kernis & Goldman, 2006), abusive supervision (Tepper, 2007), accountability (Hall, Blass, Ferris, & Massengale, 2004), and organizational politics (Hall et al., 2004). From these three dimensions, the third dimension that is salience of self over role is closer to the philosophical conception of authenticity (Henderson & Hoy, 1982).

After fourteen years, AL emerged in social sciences. The definition that was presented by (Bhindi & Duignan, 1997) says that AL is about being authentic, spiritual and sensible. (Begley, 2001) defined AL as being open-minded, optimistic, visionary and creative problem solver. This definition is broader in scope, but it is much similar to ethical leadership. Few components of view of Begley e.g. optimism, are shared by some later definitions given by (Luthans & Avolio, 2003). Later on, (Begley, 2004) proposed another definition of AL and he acknowledged the most commonly accepted component of authenticity and authentic leadership i.e. self-awareness (Kernis & Goldman, 2006).

George's work (BILL et al., 2007; B. George, 2003) has played a crucial role in development of scholarly and practitioner interest in AL. It can be analyzed that the definition that was provided by him was more of descriptive nature, but his definition vividly captures the central components of AL as presented by AL scholars. George presented that there are five dimensions of AL and these dimensions are (1) to have a passionate purpose (2) commitment to values, (3) leading with heart, (4) develop persistent relationships, and (5) demonstrate self-discipline. Even though the terminologies used by (B. George, 2003) are different, these dimensions have alignment with dimensions proposed by (Kernis & Goldman, 2006). For instance, persistent relationship orientation and relational orientation are similar and commitment to values and authentic behavior are similar.

According to (Gardfner, Avolio, Luthans, May, & Walumbwa, 2005), the conceptualization and development framework of AL given by (Avolio, 2003) is the most instrumental work for developing scholarly interest in AL. From organizational perspective, (Avolio, 2003) have taken perspective from positive organizational

behavior, transformational leadership theory and ethical perspective for development of individuals (Avolio, 1999; Kegan, 1982; Luthans & Avolio, 2003). By using these perspectives, (Luthans & Avolio, 2003) stated that authentic leadership develops self-awareness and positive behaviors on the basis of self-regulation both in leaders and followers and this ultimately encourages self-development. The critical analysis of conceptualization of (Avolio, 2003) is based on confluence of different perspectives. Therefore, it has become difficult to differentiate between positive organizational behavior, psychological capital, transformational leadership and ethical perspective in individuals raising concerns of discriminate validity (Cooper et al., 2005). According to (Avolio, 2003) authentic leaders are self-aware, self-regulated, and they have positive self-development and moral perspective. The positive moral perspective says that authentic leaders have high moral standards and values, thus their words and actions are always congruent to their core values and beliefs (May, Chan, Hodges, & Avolio, 2003). The analysis of the conceptualization of (Avolio, 2003) tells that it effectively incorporates the core components of AL that were identified by previous and subsequent scholars.

(Gardner et al., 2005) mentioned that when leaders be true to their own core beliefs and values and they exhibit behavior that is appropriate according to these beliefs and values, they basically promote development of their followers as well. Authentic leadership is also based on positive psychology, psychological well-being and optimal self-esteem and it develops confidence, hope, and flexibility in followers.

After some time, (Avolio & Gardner, 2005) worked on refinement of their conceptualization of AL. They presented a model of AL development that was based on multi-component definition of authenticity given by (Kernis, 2003). After this, (Ilies, Morgeson, & Nahrgang, 2005) developed another model of AL through using Kernis perspective and scientifically proved that Kernis framework has utility. The framework presented by (Walumbwa, Avolio, Gardner, Wernsing, & Peterson, 2008) was also advancement of conceptualization of AL given by (Kernis & Goldman, 2006). (Walumbwa et al., 2008) said that AL is based on four components and that are 'self-awareness, balanced processing, relational transparency and internalized moral perspective' (p. 906).

These four components are being refined conceptually and empirically. The major change was made the component of unbiased processing to the balanced processing. The rationale for this refinement was that all individuals are biased inherently and it is not possible to be properly unbiased. It is human nature to process self-relevant information only. Therefore, the component of unbiased processing is changed to the balanced processing (Tice & Wallace, 2003). Likewise, the component of behavior/action is replaced with internalized moral perspective. Similarly, the two distinct components named internalized regulation and positive moral perspective are merged in one component named internalized moral perspective (Gardner et al., 2005). As mentioned by (Walumbwa et al., 2008), this refinement was made because
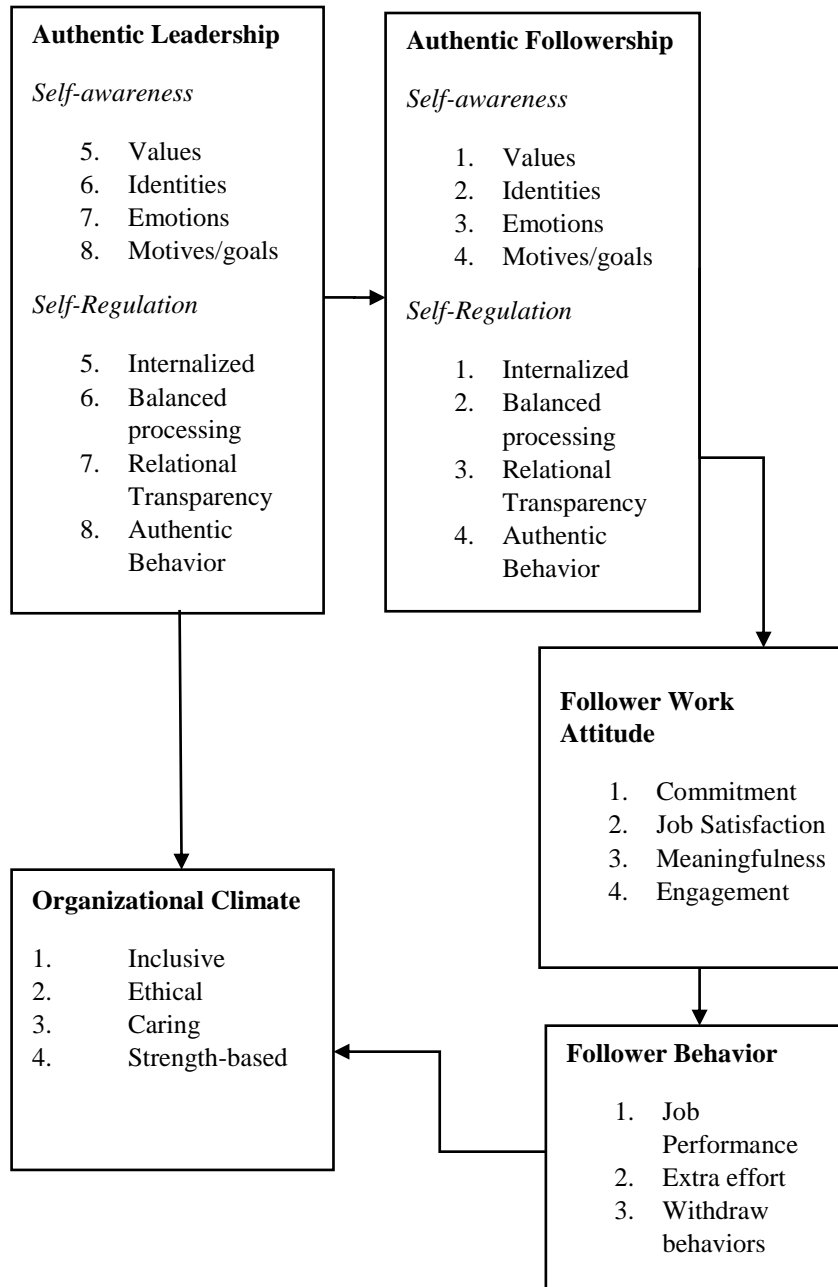
both components were based on manifestation of behavior that is consistent with internal standards and values.

(Shamir & Eilam, 2005) presented the AL conceptualization that is different from previous definitions and they said that AL has four characteristics. By using the life-story approach, they said that AL has genuine leadership and they have 'real' and 'true' self. They have a value-based mission to lead. Authentic leaders are not copies but they are originals. Their actions are based on their deeply rooted values. There is consistency in their actions, values, and beliefs. The critical analysis of (Shamir & Eilam, 2005) conception tells that nothing is told about content of leader's values like other definitions consider morality of leaders' values. Basically, AL is based on self-concept and linkages among these self-concepts and behaviors. Furthermore, AL has role of leadership in their self-concept and they have high level of clarity of their self-concept. The self-congruence and stable behavior are also part of their personality. Interestingly, (Shamir & Eilam, 2005) stated that AL also includes authentic followership along with authentic leader. Authentic leaders are followed because followers seek for authenticity so that they can develop an authentic relationship with leaders. By using life story approach, they also assert that life of leaders is source of reflection and key life events of leaders become source of self-development.

There are a few other alternative explanations of AL. (Sparrowe, 2005) used the hermeneutic philosophy and by using the narrative process the authentic leadership development process was explained. (Michie & Gooty, 2005) said that AL has some spiritual ideas and values and emptions of others play a crucial role in their development. Another explanation is provided by (Eagly, 2005), he used the role incongruity theory and explained that why women cannot become authentic leader. (Whitehead, 2009) said that AL is based on three components, namely (1) self-awareness, (2) trust that is developed on the basis of ethical and moral framework of organization, and (3) social values leading to organizational commitment. Even though, these alternative perspectives differ but an overlap can also be observed. The purpose of this section was to review different conceptualizations of the AL. From different conceptualization, the definition presented by (Gardner et al., 2005) is most appropriate because more or less different researchers' conceptualization is overlapping with this definition. They presented that AL have self-awareness, balanced processing, relational transparency and internalized moral perspective. Therefore, the next section that proposes a model of AL development and its consequences is also based on this model.

3. Model of Authentic Leadership Development

Figure 1: Model of Authentic Leadership Development

Authentic Leadership

Self-awareness

5. Values
6. Identities
7. Emotions
8. Motives/goals

Self-Regulation

5. Internalized
6. Balanced processing
7. Relational Transparency
8. Authentic Behavior

Authentic Followership

Self-awareness

1. Values
2. Identities
3. Emotions
4. Motives/goals

Self-Regulation

1. Internalized
2. Balanced processing
3. Relational Transparency
4. Authentic Behavior

Follower Work Attitude

1. Commitment
2. Job Satisfaction
3. Meaningfulness
4. Engagement

Organizational Climate

1. Inclusive
2. Ethical
3. Caring
4. Strength-based

Follower Behavior

1. Job Performance
2. Extra effort
3. Withdraw behaviors

Source: Presented by authors (2015)

3.1. Authentic Leadership
3.1.1. Leader self-awareness

In the proposed model, it is asserted that authentic leaders (AL) have high level of self-awareness and self-awareness plays the most crucial role in process of authentic leadership development. As suggested by (Kernis, 2003), self-awareness is to be aware of motives, feelings, desires, and other self-relevant cognitions. It is to be familiar with multi-faceted self along with strengths and weaknesses. Self-awareness includes being aware of values, identities, emotions, goals, abilities, talents and knowledge. There are many positive consequences of self-awareness that have been identified by literature (Hoyle, Kernis, Leary, & Baldwin, 1999). (Campbell et al., 1996) considered the construct of self-concept clarity that is to have clear and internally consistent self-concept. The self-concept clarity is positively linked with self-esteem, extraversion and positive effect. At the same time, it is negatively associated with neuroticism, depression and negative effect. (Baumgardner, 1990) presented the construct of self-certainty that is to be confident about self-views. The study showed that self-certainty is positively associated with self-esteem and positive effect. Interestingly, whether self-concept consists of positive or negative traits, this relationship holds true. From this, it can be said that self-awareness consists of two elements i.e. self-clarity and self-certainty and it is important for psychological well-being. So the self-awareness is function of self-clarity and self-certainty. Therefore, it is proposed that:

Proposition 1: *Authentic leaders have high level of self-clarity and self-certainty.*

The concept of self-awareness can be traced back to the notion of self-concept that was presented by Marcus and (Markus & Wurf, 1987) that is about one's self-views. Basically, self-views are about perception of one's attributes, including intelligence, social abilities, academic and athletic aptitude. (Lord & Brown, 2001) mentioned that self-views include present goals and possible selves. Present goals are short term and possible selves are long term standards. So in the next section, relationship of self-views is studied with respect to values, identity, emotions/motives and goals of authentic leaders and followers.

3.1.1.1. Values

Values are concepts of social actors that guide the actions of individuals. Values are helpful in directing evaluations of people and events along with explaining the rationale of actions (Schwartz, 1999). These act as the normative standards that guide individual's behavior and evaluations (Schwartz, 1992). According to (Lord & Brown, 2001), values stimulate actions for good of others and community. Even though socialization processes help to learn these values, once learned these become integral part of an individual's self. With respect to authenticity, it is posited that leaders remain true to their core values and they never compromise their core values due to some situational or social pressure (Erickson, 1995). Definitely, it is mandatory to be aware of these values and that can be ensured with the help of self-awareness,

suggesting that self-awareness is prerequisite for authentic leaders (B. George, 2003). Therefore, it is proposed that:

Proposition 2: *Authentic leaders have high level of awareness and commitment to their core values.*

3.1.2. Identity

According to (Schlenker, 1985), identity is defined as an individual's relevant features, characteristics and experiences. There are two parts of identity namely personal identity and social identity. On the basis of one's personal identity i.e. traits, attributes, characteristics, one can be differentiated from others (Banaji & Prentice, 1994). On the other hand, social identity is about emotional and value assessment of an individual for being part of a certain group (Hogg, 2001). So it is basically, to have a feeling that is developed through being similar to a certain group (Hoyle et al., 1999). According to (Erickson, 1995), the personal identity reflects social identity as one develops her/his identity after socializing with others.

Inherently, individuals make interpersonal comparison and more often individual identity reflects those values that are valued by their leaders ((Brewer & Gardner, 1996); (Gardner & Avolio, 1998)). (Luthans & Avolio, 2003) stated that the identity of authentic leaders is to have elements of trustworthiness, morality, and credibility, and they are more likely to have high level of moral integrity. Thus, the trustworthiness of leaders develops a positive relationship with followers. Credibility is achieved when there is no difference in an individual's actions and words. So leaders' credibility is proved when their claims are confirmed and AL gain this credibility by proving that they possess required knowledge and expertise that are necessary to deliver tangible results (Gardner & Avolio, 1998). So, it is asserted that ALs are those individuals who exhibit high moral conduct, fairness and accountability (May et al., 2003). So it is proposed that:

Proposition 3a: *Authentic leaders' self-identity includes characteristics of trustworthiness, integrity, credibility, fairness and accountability.*

At interpersonal level, self-concept is explained with the help of relationships with others (Lord, Brown, & Freiberg, 1999). As posited by (Gardner & Avolio, 1998), leader identification is a process in which role of leader is incorporated by an individual in his interpersonal relationships. Likewise, follower identification is a process in which individuals reflect themselves as the follower of a leader. So the role of authentic leader, i.e. one who is trustworthy, loyal and transparent, is incorporated through interactions. The main point is that according to interpersonal identity of authentic leader, leader considers himself as one who can be trusted and act as a positive role model. This means that the characteristics of authentic leaders are incorporated in self-identity of leaders. Therefore, it is proposed that:

Proposition 3b: *The identity of authentic leaders incorporates role of leader in their identity and they believe that they are positive role models for others.*

3.1.3. Emotions

It is not enough only to be aware of thoughts, values and motives. The review of literature on emotional intelligence tells that self-awareness is also to be aware of emotions (Salovey, Mayer, Caruso, & Yoo, 2002). Furthermore, emotionally intelligent people also understand the cause and effect of their emotions so they are aware of the fact that how emotions can influence the cognitive processes and decision making (J. M. George, 2000); (Salovey et al., 2002). Emotional intelligence is one of the determinants of effective leadership (Caruso, (2001) and transformational leaders (Ashkanasy & Tse, 2000). Through this awareness of emotions, leaders become able to understand their own and others' emotions thus they become better able to respond to followers' need. Additionally, this awareness helps authentic leaders to take value-based decisions and they consider emotions only when appropriate. It is mentioned by (Ashkanasy & Daus, 2002) that authentic leaders are self-aware of their own and others' emotions so they do not take decisions only on the basis of emotions that are triggered by the moment. From this, it can be analyzed that emotional awareness is root construct for positive forms of leadership. So it is asserted that authentic leaders have emotional awareness. Therefore, it is proposed that:

Proposition 4: *Authentic leaders have higher level of emotional-awareness and emotional intelligence.*

3.1.4. Goals and Motives

According to (Lord et al., 1999) goals are defined as 'schema that directs current information processing' (p.180). In leadership context, goals can range from performance benchmarks to personal strivings (Emmons, 1986). There are two types of self-concepts i.e. self-views and possible selves (Lord & Brown, 2001). As already mentioned, self-view is the perception of an individual about her/his standing on certain attributes, the possible selves is basically perception of playing a role in the future context and it also reflects that one could be in future context (Markus & Wurf, 1987). In authentic leaders, it is expected that their possible selves reflect the roles of leader and they have aim to be an agent who can bring positive change for followers and others. In addition, hoped-for selves they also have feared selves where they have feared to divert followers from organizational values and mission. Basically, the possible selves are completely future oriented and usually they are also hypothetical, but this has crucial and significant influence on current goals and reactions of leaders (Lord et al., 1999). The authentic leaders have motive to work on pro-social goals so that they can contribute in the development of followers.

(Lord & Brown, 2001; Lord et al., 1999) stated that current goals of an individual are set on the basis of self-views; there are more chances that self-enhancement motives become more important for individuals. Conversely, when goals are set on the basis of possible selves, there are more chances that self-verification motives become salient. The self-verification theory states that interpersonal behavior has many motives and one motive is to verify, validate and sustain one's existing self-concepts. Self-views help people to make sense of the world, organize behavior and predict response of

others, and it is exactly what is represented as self-clarity. Therefore, people monitor their self-views by making others understand and confirm the authentic self (Swann, Polzer, Seyle, & Ko, 2004). Authentic leaders are future-oriented individuals and they struggle for self-development therefore they are driven by their self-verification motives, where they do not only seek feedback from others to confirm current self-views, but also want feedback so that discrepancies from self-relevant standards can be identified (Avolio, 1999, 2003). Thus, with the possible-selves focus, leaders get motivated for self-improvement. So their goals are directed towards self-improvement (Hoyle et al., 1999). Therefore, with this self-improvement motive, authentic leaders present themselves as they are and depict their strengths and weaknesses so that they can get original appraisals to develop a better understanding of their actual selves and this facilitates attainment of their hoped-for-selves. Therefore, it is proposed that:

Proposition 5: *Authentic leaders are motivated by their self-verification and self-improvement goals*.

3.1.5. *Leader Self-Regulation*

According to (Stajkovic & Luthans, 1998), self-regulation is a process that involves three steps i.e. to set internal standards, to evaluate differences between current and set standards, and to identify actions that can minimize or abolish these differences. Previously, it is mentioned that internal goals and standards guide the behavior of authentic leaders. In this section, it is asserted that regulatory processes define the authenticity of leaders. As it is also said in (Deci & Ryan, 1995) self-determination theory, authenticity is linked with internalized regulatory process. Likewise, (Kernis, 2003) argued that there are four components of authenticity i.e. balanced (unbiased) processing, authentic behavior, and relational transparency. The self-determination theory is based on the postulate that self-development processes are stimulated by needs for autonomy, competency and relatedness. So the emergence of authentic self is when an individual performs autonomously, experiences the efficacy and is liked or appreciated by others for who one is (Deci & Ryan, 1995). So the one who finds leadership in herself/himself would be satisfied with the self-identity when it provides opportunity to express her/his true self stimulates sense of efficacy and helps to feel related with others (Ryan & Deci, 2003).

According to (Deci & Ryan, 1995), there are four types of motivation for internalization and integration. Firstly, Deci and Ryan have talked about external regulation that reflects behaviors of individuals that are not internalized yet, but these are stimulated because of some consequence that is external to the individual. For instance, reward or punishment can stimulate such behavior that involves external regulation. Next to this, is the introjected regulation and it is about those behaviors that are stimulated by internal pressures and because of these regulatory processes individuals incorporate behavior without integrating it. Third is the identified regulation and that is when individuals accept a behavior because they consider it valuable so they incorporate certain behavior for some extrinsic activity. Finally, there is integrated regulation that is the highest form of external regulation and in this type

individuals fully integrate values in their selves. It is said that extrinsic regulation process that individuals integrate as it is aligned with the actor's sense of self is authentic.

An advancement to self-determination theory is the self-concordance model of goals that says that higher level of adjustment and growth can be achieved when set goals are aligned with actual current values, needs and interests of individuals (Sheldon & Elliot, 1999; Sheldon & Houser-Marko, 2001). As also mentioned by self-determination theory, all those identities that can satisfy basic needs for autonomy, competence and relatedness are self-concordant identities and individuals internalize these at integrated level of regulation. On the other hand, non-concordant identities are not integrated but these are introjected and regulated externally for compliance. Through integrated regulation, individuals become able to realize possible selves. At the same time, the self-concordant goals attainment is good for higher levels of well-being and personal development and this produces higher level of concordance and fosters upward spiral of adjustment (Sheldon & Houser-Marko, 2001). As mentioned by (Deci, 1975), authentic leaders are more likely to internalized regulation process that directs their behavior, they have integrated goals and they have self-concordant identities. In authentic leaders, the integrated regulatory process is more dominant as compared with other self-regulation levels. They are more knowledgeable about their true self. With attainment of self-concordant identities, they show a high level of commitment to internalized values and goals. On the basis of this literature, it is proposed that:

Proposition 6: *Authentic leaders have high level of self-awareness so they become able to attain self-concordant identities where their decisions and actions become self-determined and concordant with internalized values and goals.*

3.1.5.1. Balanced Processing
(Kernis, 2003) identified another basic component of authenticity, namely unbiased processing which is referred to the absence of disowning, overstatements, misrepresentation and unawareness of internal experiences, personal knowledge and external assessments of the self. Authenticity is also to accept strengths and weaknesses objectively, but the ample evidence has proved that it is not possible for humans to be unbiased particularly when something is related to self (Tice & Wallace, 2003). Therefore, (Gardner et al., 2005) introduced the construct of balanced processing instead of unbiased processing.

Balanced processing is when motivational biases do not influence the process of selecting and interpreting information. Those who are with high or low self-esteem remain unable to acknowledge their personal shortcomings (Kernis, 2003). The literature on ego defense mechanism indicates that those with ego remain failed to acknowledge and resolve negative emotions that is a reason of psychological difficulties and this also leads to lack of self-clarity (Ungerer, Waters, Barnett, & Dolby, 1997; Vaillant, 1992). Authentic leaders have moderate self-esteem and they

do not find difficult to acknowledge personal weaknesses which is actually the balanced self-processing and it is only apparent in authentic individuals (Kernis, 2003). With optimal self-esteem level, authentic leaders process relevant self-esteem and non-relevant self-esteem information by remaining objective. They are ready to acknowledge both positive and negative aspects of their self and they pursue their actions and evaluations on the basis of core beliefs and values without considering ego-defense motives (Swarm Jr, 1983). On the basis of this literature, it is proposed that:

Proposition 7: Authentic leaders are more likely to engage in balanced processing of information that is related to others and their own self so that they become better able to come at accurate perceptions.

3.1.5.2. Authentic behavior

As said by (Kernis, 2003), the authentic behavior is to act according to one's values, goals and needs. It is to not acting falsely only for pleasing others or getting rewards or avoiding punishments. It is not to follow and reflect true self only for some external compulsion but rather it is to act freely and naturally in a way that core values, motives, feelings and inclinations are reflected. It is natural to experience the internal conflicts because of the inconsistencies in true self and environmental contingencies. How these conflicts are solved is quite important for integrity of authentic individuals. When there is such conflict that values of an individual are not compatible with values of larger groups, authenticity is reflected through responding according to internal cues (Deci, 1975; Deci & Ryan, 1995). These individuals who are not with contingent self-esteem rather with optimal self-esteem, they do not depend on others for validation and they possess genuine feelings of self-worth. Thus they are more impervious to external pressures and they do not compromise to their values and views.

According to (Kernis, 2003), authenticity consists of mutually interdependent components. Therefore, it can be better understood with the help of interactive effects of self-awareness, balanced processing and environmental contingencies on the behavior of an individual. In practical life, this is quite common that leaders have to face such situations in which their needs and values are not compatible with needs and values of group, organization and society. In such situations, authentic leaders are required to be aware of their own needs and they have to do balanced assessment of the situation. As the perception of followers for leader depends on the behavior and actions of the leaders, it is necessary to have an alignment in actions and values so that followers will be convinced for the integrity of leaders. Furthermore, the authentic leaders always have consistency and alignment in values and actions. On the basis of this literature, it is proposed that:

Proposition 8: Authentic leaders always have consistency and alignment in felt and espoused values, beliefs, identities and behavior.

3.1.5.3. Relational Transparency

As mentioned by (Kernis, 2003), one component of authenticity is relational in nature. It is about to value and achieve openness and truthfulness in close relationships. It is to be committed to help others considering both positive and negative aspects of their selves. This component says that authenticity is to show relational transparency that is to be genuine in creating bonds and building relationships on the basis of trust and affection and promoting this behavior in others as well. The benefits of leaders' transparency are acknowledged by corporations as well (Pagano & Pagano, 2004). Management scholars e.g.(Jones & George, 1998), also assert that with this transparency where knowledge and information is freely exchanged is important for unconditional trust which promotes interpersonal cooperation and improves the team effectiveness. Likewise, it also plays a crucial role in organizational learning (Popper & Lipshitz, 2000). Furthermore, (A. D. Brown & Starkey, 2000) mentioned that self-reflexivity dialogues among organizational members promote development of organizational identity along with organizational learning process. Therefore, authentic leaders are required to show transparency such that openly shared information can be ensured and interest of group members is prioritized on self-interest (Avolio, 2003; May et al., 2003). For authentic leaders, it is also expected that they show transparency in expressing their feelings and emotions and at the same time they regulate their emotions so that inappropriate and potentially damaging emotions are not displayed. So authentic leaders are self-aware therefore they know and accept themselves, they show high level of responsibility, candidness, transparency and willingness to share their emotions with close relations. Therefore, it is proposed that:

Proposition 9: *With increased self-awareness and self-acceptance, authentic leaders develop higher level of relational transparency.*

3.2. Positive Modeling

Positive modeling is an important mechanism through which authentic leaders influence their followers. Through this mechanism, positive values and self-development behaviors of leaders are observed by followers and they learn the authenticity of their leaders. As also mentioned by (Bandura, 1997), positive values like prestige, trustworthiness and credibility are more likely to be observed, valued and learned by observers. The core behaviors that followers learn and imitate by observing actions of leaders are 'confidence, high moral standards, innovative problem solving, commitment, and self-sacrifice' (Gardner et al., 2005). As suggested by (Luthans & Avolio, 2003), this positive modeling is crucial in development of authentic relationships among authentic leaders and followers. This is through positive modeling that positive values, beliefs, emotions, attitude, motives, goals and behaviors of leaders are transferred in followers. For instance, when leaders have a higher level of self-awareness and self-regulation and there is consistency in their actions and values, actually they are communicating that similar code of conduct is expected from their followers. So they stimulate the process of self-discovery and self-development in followers that leads to desired outcomes.

Proposition 10: Through positive modeling, authentic leaders stimulate process of authenticity in followers.

3.3. Authentic follower development

3.3.1.   Follower Self-awareness

Similar to authentic leadership development, it is important to develop self-knowledge and acceptance in followers for authentic followers' development (Kernis, 2003). The key aspects of self-awareness of followers are values, identities, emotions, motives and goals. Authentic leaders do positive modeling of authentic values and behavior and they encourage self-development in followers. This fosters the self-discovery process among them. As suggested by (Gardner et al., 2005), it is expected that along with behavior and conduct of leaders, the self-concept of followers plays a crucial role. So like authentic leaders, awareness of values, identity and goals of followers are important for follower self-awareness. Furthermore, the extent to which the values, identity and goals are matched with leader's values, identity and goals is also important.

(Weierter, 1997) presented a model of charismatic relationship in which it was identified that self-clarity and value congruence significantly influences the response of followers to the messages of leaders and thus a charismatic relationship is developed in leaders and followers. As mentioned by (Gardner et al., 2005), it is expected that a similar relationship is expected in authentic leadership and authentic followership development. One with the high self-concept clarity is more likely to follow that leader whose values, mission and vision are congruent with values of the follower. Like the authentic leader, the authentic follower also is aware of her/his values, beliefs, motives, goals, emotions and feelings. Therefore, even though such individual respects the leader with whom her/his values do not match, but she/he never follows that leader. Such individuals willingly follow the authentic leaders and one reason might be that they learn leadership skills from them because they assume that they have to become a leader in future. Thus without showing any direction to transform in the leader, followers grow and develop into leaders. Therefore, it is proposed that:

Proposition 11: *Individuals who have high self-concept clarity and high congruence among their values and those of the authentic leader are more likely to follow the authentic leaders along with emulating the leader.*

Those individuals who do not have or possess low self-clarity respond to authentic leadership in a complex manner. As such individuals are not aware of their core values, beliefs and emotions they find authentic leaders very interesting. So they come to be personally identified with the authentic leaders and they start adopting values of their leaders as their own (Howell & Shamir, 2005; Lord & Brown, 2001; Weierter, 1997). As suggested by (Kernis, 2003) and (Ryan & Deci, 2003), such individuals are not authentic because they do not possess self-awareness and external source of regulation. As proposed by (Gardner et al., 2005), it is expected from authentic leaders

to motivate such individuals for achieving higher level of self-awareness and this can be done through modeling processes.

It is also posited by (Howell & Shamir, 2005) that leaders direct such followers to adopt the values of collective group and not to identify with them personally. It means, as told by (Kark & Shamir, 2002), authentic leaders foster the collective and shared values of organizations instead of promotion of their own values. It is expected that this process leads to internalization of organizational core values and this allows followers to achieve the higher level of self-clarity that complements the authenticity (Kernis, 2003).

At the other extreme, individuals with low self-clarity might show the defensive behavior and are vulnerable by the authenticity of the leader (Campbell et al., 1996). As an individual with low self-clarity does not have clear beliefs and perspectives, to the remains unable to develop authentic relationship with the leader. Because of their internal confusion, such people do not find authentic leaders as a source of influence. That is another part of the story, that over time the authentic leader's genuine, consistent and attractive behavior develops trust in followers and the self-discovery process is triggered that leads to value internalization as stated above (Gardner et al., 2005).

Proposition 12a: *The individuals who have low self-concept clarity start personally identifying with leaders and they also start showing dependence on leaders and they simply start adopting values, beliefs and goals of the leaders.*

Proposition 12b: *Authentic leaders develop those individuals who are with low self-concept clarity by positive modeling of self-discovery process, they also shift their focus from personal identification with leaders to the collective and shared values, and this ultimately leads to internalization of collective core values.*

According to (Lord & Brown, 2001), authentic leaders influence the self-awareness of followers by having a significant impact on cognitive, affective and behavioral processes of followers and they groom the specific values of followers and activate their identity. The leadership is effective when there is a congruency between salient values and those values that are invoked in followers (Lord & Brown, 2001).

According to (Ros, Schwartz, & Surkiss, 1999), there are different levels of the values namely self-enhancement, modal and end values. Already mentioned that there are three levels of identity, namely individual, interpersonal and collective (Brewer & Gardner, 1996). According to (Lord & Brown, 2001), with the activation of self-enhancement values by the leader, coherence is attained when the self-concept of follower is at the individual level. On the other hand, when self-transcendence values (end values) are activated, coherence can only be attained if the follower is at the interpersonal or collective level of the self-concept.

The deeds and words of authentic leaders demonstrate those values i.e. integrity, trust, transparency that are aligned with self-transcendence values. As suggested by (Luthans & Avolio, 2003), it is expected that leaders direct followers to focus more on possible selves than the current self-views. (Lord et al., 1999) told that the linking of goals with self-reviews promotes self-enhancement motivations, on the other hand, when goals are linked with the possible self selves, the self-verification motivations become salient. So when followers follow their authentic leaders for the purpose of self-development, with the help of self-transference and self-verification motives, they become able to get accurate feedback. Therefore, it is proposed that:

Proposition 13: *Authentic leaders do modeling of self-awareness, they make salient the self-transcendence motives, they motivate followers to focus on desired possible selves, and they trigger self-verifying motives in followers. This all leads to get accurate feedback from others and that facilitates the process of personal growth and development.*

3.3.2. *Follower Regulation*

Like authentic leaders, the authentic followers' development also incorporates internalized regulatory processes. As previously mentioned as well, the work of (Kernis, 2003) and (Ryan & Deci, 2003) has identified few components of authenticity, they mention that it is about self-awareness, internalized regulatory process, balanced processing, authentic behavior and transparency. In this section, it is proposed that authentic leaders triggers the self-regulatory processes in followers and thus these elements of authenticity are realized.

In this section, foundation of initial arguments is based on the theory of relational discrepancy theory (Higgins, 1987; Robins & Boldero, 2003) that is about cognitive, affective and motivational impact of discrepancies among actual selves and self-guides. Further, this self-guide consists of two selves i.e. ought and ideal selves. In this theory of relational discrepancy, authors have examined those discrepancies that occur when comparison of actual self and self-guides is done with another person's actual and self-guides. Authors presented a term 'commensurability' that refers to the degree to which the aspects of self are common for both members (e.g. follower and leader). For example, if both leader and follower have a common element of self like trustworthiness, the commensurability is higher. Further, the theory says that even both members share a common self-aspect, there is possibility that discrepancies can arise that is because of difference in the level or quantity of the quality of common self-aspect. For example, if both follower and the leader want to be and value transparency and it is ideal for both of them, but leader is highly transparent and follower is moderately transparent, the self-aspects of both members are commensurate but at the same time discrepancy also exists. When self-guides of both members of dyads are not opposite like rich and poor, it is termed as consistent commensurability. So the previous example of leader and follower is the consistent commensurability as one was highly transparent and other was moderately transparent.

The theory of relational discrepancies also sheds light on distinction between unconstrained and constrained context. In unconstrained context, members are allowed to freely select their relational partners, conversely, in constrained context, they do not have right to freely choose and they have limited discretion. For instance, in volunteer organization context is unconstrained as there is a freedom to select your relational partner while business organizations have constrained context where members are not allowed to select partner according to their own choice (Robins & Boldero, 2003).

In unconstrained contexts, when the consistent commensurability between potential partners is higher the motivation to develop relationships is greatest. This high commensurability can be critical for interpretation of the meaning assigned to the relationship. For example, if the actual self is commensurability source then follower might feel that leader is like her/him and then she/will get feelings of reassurance. If the ought-self is source of commensurability, then follower might feel that my leader is exactly how I should be and she/she will be experiencing the feelings of approval. Likewise, if the ideal-self is source of commensurability, the follower may believe that she/he wants to be like this leader and she/he will be experiencing the feeling of admiration.

It is proposed by (Robins & Boldero, 2003) that as the consistent commensurability of the actual self in the dyadic relationship increases, the relationship becomes more trusting. In unconstrained settings, the close relationship will be developed in members with similar self-aspects. Furthermore, when source of commensurability is the ought-selves, then interpersonal feelings of justification are produced. When source of commensurability is the ideal selves, feelings of cooperation are experienced. On the basis of these arguments (Gardner et al., 2005) has argued that with the congruency in actual, ought and ideal selves of the leader and followers, highest level of trust, closeness, support and goal alignment is achieved. With the greater consistent commensurability, effective authentic leader-follower relationship is formed because both leaders and followers have alike ought and ideal selves along with they also present and perceive actual selves in an accurate way.

For the model presented in this article, the relevant instance for follower self-regulation is when there is congruency in ought and ideal selves of leaders and followers and there is discrepancy in the actual selves. As mentioned by (Robins & Boldero, 2003) with the combination of actual selves and self-guides, the roles of followers and leader are assumed. Through this, the one who adopts the role of follower (usually one who is with discrepant actual-self) is in position to shift from individual identity to the collective identity (Lord et al., 1999). For example, the member who is with higher self-aspect like higher in confidence and other is lower in a certain self-aspect i.e. low in confidence, the one who is more confident will assume the role of leader and other will assume the role of follower. Now, with cooperation between both leader and follower can work as a team. So now the individual identity i.e. 'I' is shifted to collective identity i.e. 'We'. As also mentioned by (Hogg, 2001),

the members who are with most ideal selves will emerge as the leaders and (Robins & Boldero, 2003) extends this argument and argues that this enactment of role of leaders and followers go beyond dyads and it ranges from groups to the organization. Thus, with respect to authentic leadership development, when authenticity is the ideal selves of members, the members with the most authentic attribute emerge as the authentic leader and other members follow that leader willingly for achieving desired goals.

(Robins & Boldero, 2003) further mentioned that when there is no congruency in ought and ideal selves, there is more probability for emergence of superficial and hierarchical roles and relationships. Moreover, in constrained settings, there are fewer chances of prevalence of consistent commensurability because in constrained settings members usually do not have overlapping self-aspects. In this situation, the one who is formal and/or authentic leader wants her/his followers to develop their actual, ought and ideal selves as the followers do not aspire to be. Thus for compliance with formal leader's direction, follower do external regulation. As mentioned by (Ryan & Deci, 2003), this behavior is not authentic. Nonetheless, at the other extreme, even in constrained settings, there are cases when higher level of consistent commensurability is found in the leader and followers. As asserted by (Gardner et al., 2005), such congruency is for followers of those authentic leaders who provide opportunities for self-determination.

Authentic leaders always strive to develop their followers who are authentic like them and they do so by depicting them that how they can move from external and introjected regulation to the internalized regulation (Ryan & Deci, 2003). Sheldon and (Sheldon & Houser-Marko, 2001) states that with positive modeling and direct communication, self-concordant identities in followers can be achieved. Authentic leaders help followers to discover their talents, along with the help in developing their talents into strengths and they empower and motivate them to do tasks of which they are capable to do (Clifton & Harter, 2003). By using their mastery, experiences and providing task engagement opportunity, authentic leaders boost up the confidence level and competencies of followers (Bandura, 1997; Harter, 2002). Authentic leaders also enhance the collective identification of followers by directing them towards common mission and goal and they also promote the high quality connections development that fulfills the relatedness need of followers and provides meaningfulness in the work (Dutton & Heaphy, 2003; Kark & Shamir, 2002). On the basis of above literature, following propositions are proposed:

Proposition 14a: *With the higher level of congruency in actual, ought and ideal selves of the leader and followers, authentic relationship between the leader and followers emerges that contributes in the development of high level of trust, closeness, support and aligned goals.*

Proposition 14b: *In unconstrained organizational context, when members want to be authentic as authenticity is the attribute of their ideal selves, the one who is most*

authentic will emerge as the leader and others will follow that authentic leader and work collaboratively to achieve shared goals.

Proposition 14c: *Authentic leaders provide opportunities for self-determination and they foster genuine and self-concordant identities in followers, this fulfills the autonomy, competence and relative need of followers.*

3.4. Follower Attitude

In the presented model, follower attitude is considered in terms of four constructs, namely commitment, satisfaction and engagement (Allen & Meyer, 1990; Iaffaldano & Muchinsky, 1985; Locke, 1976; May, Gilson, & Harter, 2004; Thomas & Velthouse, 1990).

The studies of (Judge & Piccolo, 2004) and (A. D. Brown & Starkey, 2000) has shown that leadership positively influences the commitment level of followers/employees. As mentioned in previous sections, authentic leaders show and also develop high level of self-awareness and self-regulation in followers and they also increase the personal and social identification of followers. The increased personal and social identification develops the sense of trust and optimism in employees and this ultimately results in increased commitment and satisfaction of employees (Avolio, 2003; Ilies et al., 2005).

In previous studies, job satisfaction is linked with effectiveness of different leadership styles (e.g. transformational, ethical and charismatic leadership (Bono & Judge, 2004; M. E. Brown, Treviño, & Harrison, 2005). As mentioned by (Fisher, 2010), job satisfaction is the attitude of employees towards their jobs and it is also referred to as the positive psychological state resulting from experience of a job. It is considered as an important attitude of employees because it leads to many positive outcomes for organizations (Dormann & Zapf, 2001). The satisfaction of employees is often linked with the behaviors that are linked with the authentic leadership and authentic following. Those behaviors are self-determination, high quality relationships, and ethical behavior (M. E. Brown et al., 2005; Deci & Ryan, 1995; Ilies et al., 2005). Furthermore, (Fisher, 2010) and (Turner, Barling, & Zacharatos, 2002) has mentioned that satisfaction is a component of well-being of individuals and well-being is also associated with authenticity. Authentic leaders offer opportunities to followers for self-awareness, self-development and self-regulation. This facilitates the followers and enable them to develop and grow and this ultimately satisfies followers/employees (Chiva & Alegre, 2009). Furthermore, formal leaders also have authority to manage and allocate resources, offer rewards and development opportunities. Likewise, the relatedness need of followers is also fulfilled with authenticity, and according to (Lok & Crawford, 2004) and (Chiva & Alegre, 2009) satisfaction is also associated with need of belonging and team relationships. Therefore, authentic leadership and followership also results in satisfaction of followers/employees.

Employee engagement is another mediator between authentic leadership, followership and employees behavior. Engagement is described as the experience of absorption, dedication, meaningfulness and flow (Nakamura & Csikzentmihalyi, 2003). According to (Ilies et al., 2005), people become engaged when the perception of capabilities and challenges are balanced with each other. This state prevails as this balance continues. (May et al., 2004) stated that engagement is the involvement of self in the work at three levels i.e. physical, cognitive and emotional. The researchers of engagement have explored that how meaningfulness along with other factors like availability of resources and psychological safety at work influence the engagement. Meaningfulness is the most important element for engagement. Likewise, co-worker relations and fit in personal and work roles influences the work-related meaning. As suggested by (Harter, 2002), in this research employee engagement also refers to the involvement, satisfaction and enthusiasm. As it is also asserted by (Luthans & Avolio, 2003) and (Gardner et al., 2005), it is proposed that engagement is the result of authentic leadership and followership. Basically, authentic leaders help followers in self-discovery through which they can recognize and develop their talents and they also help them in developing a fit between work roles and authentic self-roles, and this ultimately promotes the engagement in followers. Therefore, it is proposed that:

Proposition 15: *Employee attitude (commitment, satisfaction, engagement) mediates the relationship between authentic leadership and followership and employee behaviors.*

3.5. Follower Behavior

In the presented model, follower behavior is considered in terms of three constructs, namely performance, extra effort and withdrawal behavior. These behavioral outcomes are also considered in previous literature and it is proved that leadership significantly influences these behaviors (Avolio, 1999; Bass, 1985; Bass & Stogdill, 1990; Lowe, Kroeck, & Sivasubramaniam, 1996; Yukl, 2002). In this research, it is proposed that authentic leadership is helpful in achieving these outcomes. With the intervening follower authenticity and positive attitude, followers' behavior is influenced by authentic leadership.

Performance has been linked with positive attitude of employees by many researchers. According to (Dormann & Zapf, 2001), performance of employees and productivity improves with employee satisfaction. The leadership influences the performance of employees, indirectly and directly (Hogg, 2001). The most important influence of leadership on followers is through the social processes of interdependence that contributes in working collaboratively. Leaders offer a sense of well-being and they direct followers towards the organizational goals. Therefore, as suggested by (Conger, Kanungo, & Menon, 2000), leadership improves the job performance of employees.

(Seligman, 2002) says that leadership is also useful for other positive behavior of employees, namely organizational citizenship behavior and withdrawal behavior management. Withdrawal behavior can be measured at two levels i.e. physical and

psychological level. The physical withdrawal is shown with the lateness, absenteeism and turnover. While the psychological withdrawal behavior is observed in terms of presentism and turnout (Redmond, 2014) The authentic leaders develop self-awareness and self-regulation in followers thus brings the positive attitude in followers. In this model, it is presented that the authentic leadership ultimately abolishes or minimizes the withdrawal behavior.

(Organ, 1988) defines organizational citizenship behavior as it is the voluntary behavior of employees and it is not linked with formal reward system. This behavior has ultimate impact of organizational performance. The study of (Valsania, León, Alonso, & Cantisano, 2012) have also proved that authenticity of leaders ultimately results in the organization citizenship behavior. To be more specific, this study proved that leadership moral perspective and relational transparency significantly and positively influence the organization citizenship behavior. Likewise, as mentioned by (Gardner et al., 2005) and (Ilies et al., 2005) authentic leadership increased the personal and social identification of followers that increased the commitment of employees. This increased commitment of employees result in organizational citizenship behavior. Another study that was conducted by (Walumbwa et al., 2008) and that study also proved that authentic leadership is positively associated with organizational citizenship behavior.

On the basis of above arguments, it is proposed that:

Proposition 16: *Authentic leadership ultimately results in positive organizational behaviors of employees (performance, withdrawal, organizational citizenship behavior) through intervening variables of authentic followership and positive attitude.*

3.6. Organizational Climate
In a dynamic context, this leader and follower development occurs (Day, 2001). For sustained authentic leadership and followership, it is important to have a supportive organizational climate. Interestingly, potentially this authenticity of leader and followers also influences the climate and it becomes more authentic (Avolio, 2003). The foundation of the role of organizational climate in development of the authentic leader and followers can be found in structural theory of organizational behavior that was provided by(Kanter, 1977). The theory says that an environment where open access to information, resources, opportunity and support prevails and facilitates leaders and followers to achieve their task goals. To be more specific, this theory states that for effectiveness of self and followers, it is responsibility of the leader to develop an organizational climate where continuous opportunity to learn and grow is provided and this opportunity for learning and growth can primarily be provided with transparency in culture.

According to (Rhoades, Eisenberger, & Armeli, 2001) and (Dirks & Ferrin, 2002), when leaders treat followers in a fair and positive manner, they remain more

committed and display positive attitudes and this results in the greater trust in the leader and the whole system as well. From this, it can be analyzed that for positive attitude and behavior of followers, leaders are required to provide supportive climate where access to information and resources and fair opportunities to learn and grow are provided. The organizational climate cannot be created easily. It takes considerable time and energy from both leaders and followers. Once created, it becomes a source of competitive advantage for organizations.

Proposition 17*: Authentic leaders create organizational climate that is more inclusive, caring, engaged and it is more oriented towards developing strengths of followers.*

4. Conclusion

A thorough review of literature on AL tells that up till now, majority of AL publications are conceptual and very few publications propose the testable proposition that is necessary component of a testable theory(Bacharach, 1989). The nascent state of this field along with lesser rigor is because of the influence of practitioner-oriented writings (BILL et al., 2007; Cashman, 1992; B. George, 2003). So as encouraged by (Corley & Gioia, 2011) and (Gardner et al., 2005), this paper has attempted to contribute theoretically to many testable propositions. A four-component model of authentic leadership is proposed in this paper. What makes this paper unique is that it links the authentic leadership with organization wide outcomes. Furthermore, this model has presented the mechanism by using that authentic leaders can influence the followers and develop them in authentic followers and authentic leaders that have considerable implications for research and practice. Given the nascent state of this construct in organizational sciences, it is expected that the present model has a) conceptually reviewed authenticity for clarification of construct, b) contributed theoretically by proposing a framework and testable propositions c) stimulated inspiration in future researchers to empirically investigate the construct and d) have provided guidelines for interventional programs to foster authenticity at workplace.

Appendix:

Table 1: Definitions of Authentic leadership

(Rome & Rome, 1967)	The authenticity of an organization is apparent through the acceptance level of uncertainty, finitude and contingency throughout its leadership. It is also reflected through its capacity to realize is responsibility and acknowledge weaknesses and errors.
(Henderson & Hoy, 1982)	Authentic leadership is the perception of subordinates/followers that personal and organizational actions and outcomes of their leaders are responsible and they accept this responsibility. Authentic leaders have non-manipulating relationship with followers and they give importance to self-value over their role. Inauthentic leadership is the perception of subordinates/followers that their leaders do not take responsibility of their actions and outcomes. Inauthentic leaders have manipulative relationship with followers and they give importance to roles over their self-value.
(Bhindi & Duignan, 1997)	Authentic leadership is based on the authenticity. It involves a process to discover one's own authentic self with the help of true and meaningful relationships that supports core values. It is also about having vision and intentions to shape future of followers in a good way. It is also a new form of spirituality in which one's spirit is rediscovered in the light of relationships, feelings and needs of others.
(Begley, 2001)	Authentic leader is one who is professional, effective, ethical, conscious and skillful.
(B. George, 2003)	Authentic leaders do not have supernatural abilities but they use their natural abilities and acknowledge their weaknesses and try to overcome their weaknesses. Their leadership is based on values, meaning and determination. Their relationships with followers and subordinates are durable. They are self-disciplined and they do not comprise on their values and principles.
(Luthans & Avolio, 2003)	Authentic leadership is a process that results in self-awareness and self-regulated behaviors in leaders and followers. This encourages positive self-development. The authentic leader is assertive, optimistic, enthusiastic, resilient ethical future oriented. They also foster

	development of leadership in their followers through their authentic values, beliefs and behavior.
(Avolio, Luthans, & Walumbwa, 2004)	Authentic leaders are self-aware about their own values, knowledge, strengths, weaknesses, moral perspectives and context. They are confident, optimistic and have high moral character.
(Begley, 2004)	Authentic leaders have self-knowledge and they are sensitive to others and their leadership leads to synergy.
(Ilies et al., 2005)	Authentic leaders are fully aware of their own values and beliefs. They are self-confident and genuine. They are consistent and trustworthy. They focus on developing their followers by broadening their thinking, developing positivity and build them on their strengths. They do so without ignoring the organizational context.
(Shamir & Eilam, 2005)	Authentic leaders have importance of leadership role in their self-concept, they have self-concept clarity, their goals and behaviors are consistent with their values and convictions.
(BILL et al., 2007)	Authentic leaders are true to themselves and they also have strong belief that they are true. Their relationships are always genuine and trust-based. They are self-motivated and good motivators for others. They feel satisfied by serving others and their self-recognition and success is less important as compared to serving others.
(Walumbwa et al., 2008)	Authentic leadership is a behavior that is built upon and encourages psychological capacities and ethical climate. Authentic leaders have self-awareness, ethical perception, stable processing of information and interpersonal transparency. They also encourage self-development of followers.
(Whitehead, 2009)	Authentic leader is self-aware, humble, trustworthy and committed to organizational success.

References

Allen, N. J., & Meyer, J. P. (1990). The measurement and antecedents of affective, continuance and normative commitment to the organization. *Journal of occupational psychology, 63*(1), 1-18.

Ashkanasy, N. M., & Daus, C. S. (2002). Emotion in the workplace: The new challenge for managers. *The Academy of Management Executive, 16*(1), 76-86.

Ashkanasy, N. M., & Tse, B. (2000). Transformational leadership as management of emotion: A conceptual review.

Avolio, B. J. (1999). *Full leadership development: Building the vital forces in organizations*: Sage.

Avolio, B. J. (2003). Examining the full range model of leadership: Looking back to transform forward. *Leadership development for transforming organizations: Grow leaders for tomorrow*, 71-98.

Avolio, B. J., & Gardner, W. L. (2005). Authentic leadership development: Getting to the root of positive forms of leadership. *The Leadership Quarterly, 16*(3), 315-338.

Avolio, B. J., Luthans, F., & Walumbwa, F. O. (2004). Authentic leadership: Theory building for veritable sustained performance. *Lincoln: The Gallup Leadership Institute*.

Bacharach, S. B. (1989). Organizational theories: Some criteria for evaluation. *Academy of Management Review, 14*(4), 496-515.

Banaji, M. R., & Prentice, D. A. (1994). The self in social contexts. *Annual review of psychology, 45*(1), 297-332.

Bandura, A. (1997). *Self-efficacy: The exercise of control*: Macmillan.

Bass, B. M. (1985). *Leadership and performance beyond expectations*: Free Press; Collier Macmillan.

Bass, B. M., & Stogdill, R. M. (1990). *Bass & Stogdill's handbook of leadership: Theory, research, and managerial applications*: Simon and Schuster.

Baumgardner, A. H. (1990). To know oneself is to like oneself: self-certainty and self-affect. *Journal of personality and social psychology, 58*(6), 1062.

Begley, P. T. (2001). In pursuit of authentic school leadership practices. *International Journal of Leadership in Education, 4*(4), 353-365.

Begley, P. T. (2004). Understanding Valuation Processes: Exploring the Linkage Between Motivation and Action. *International studies in educational administration, 32*(2).

Bhindi, N., & Duignan, P. (1997). Leadership for a new century authenticity, intentionality, spirituality and sensibility. *Educational Management Administration & Leadership, 25*(2), 117-132.

BILL, G., SIMS, P., & GERGEN, D. (2007). True North: Discover your authentic Leadership. *Kindle Edition*.

Bono, J. E., & Judge, T. A. (2004). Personality and transformational and transactional leadership: a meta-analysis. *Journal of applied psychology, 89*(5), 901.

Brewer, M. B., & Gardner, W. (1996). Who is this" We"? Levels of collective identity and self representations. *Journal of personality and social psychology, 71*(1), 83.

Brown, A. D., & Starkey, K. (2000). Organizational identity and learning: A psychodynamic perspective. *Academy of Management Review, 25*(1), 102-120.

Brown, M. E., Treviño, L. K., & Harrison, D. A. (2005). Ethical leadership: A social learning perspective for construct development and testing. *Organizational behavior and human decision processes, 97*(2), 117-134.

Campbell, J. D., Trapnell, P. D., Heine, S. J., Katz, I. M., Lavallee, L. F., & Lehman, D. R. (1996). Self-concept clarity: Measurement, personality correlates, and cultural boundaries. *Journal of personality and social psychology, 70*(1), 141.

Caruso, D. R., Mayer, J. D., andSalovey, P. . ((2001). Emotional intelligence and emotional leadership. *Multiple intelligences and leadership . Mahwah, NJ: Erlbaum*, 55 – 74).

Cashman, K. (1992). Leadership from the inside out: Seven pathways to mastery. Provo, UT. *Executive Excellence Publishing*.

Chiva, R., & Alegre, J. (2009). Organizational Learning Capability and Job Satisfaction: an Empirical Assessment in the Ceramic Tile Industry*. *British Journal of Management, 20*(3), 323-340.

Clifton, D. O., & Harter, J. K. (2003). Investing in strengths. *Positive organizational scholarship: Foundations of a new discipline*, 111-121.

Conger, J. A., Kanungo, R. N., & Menon, S. T. (2000). Charismatic leadership and follower effects. *Journal of Organizational Behavior, 21*(7), 747-767.

Cooper, C. D., Scandura, T. A., & Schriesheim, C. A. (2005). Looking forward but learning from our past: Potential challenges to developing authentic leadership theory and authentic leaders. *The Leadership Quarterly, 16*(3), 475-493.

Corley, K. G., & Gioia, D. A. (2011). Building theory about theory building: what constitutes a theoretical contribution? *Academy of Management Review, 36*(1), 12-32.

Day, D. V. (2001). Leadership development:: A review in context. *The Leadership Quarterly, 11*(4), 581-613.

Deci, E. L. (1975). Intrinsic motivation. New York and London: Plenum Press.

Deci, E. L., & Ryan, R. M. (1995). Human autonomy *Efficacy, agency, and self-esteem* (pp. 31-49): Springer.

Dirks, K. T., & Ferrin, D. L. (2002). Trust in leadership: meta-analytic findings and implications for research and practice. *Journal of applied psychology, 87*(4), 611.

Dormann, C., & Zapf, D. (2001). Job satisfaction: A meta-analysis of stabilities. *Journal of Organizational Behavior, 22*(5), 483-504.

Dutton, J. E., & Heaphy, E. D. (2003). The power of high-quality connections. *Positive organizational scholarship: Foundations of a new discipline, 3*, 263-278.

Eagly, A. H. (2005). Achieving relational authenticity in leadership: Does gender matter? *The Leadership Quarterly, 16*(3), 459-474.

Emmons, R. A. (1986). Personal strivings: An approach to personality and subjective well-being. *Journal of personality and social psychology, 51*(5), 1058.

Erickson, R. J. (1995). The importance of authenticity for self and society. *Symbolic Interaction, 18*(2), 121-144.

Fisher, C. D. (2010). Happiness at work. *International journal of management reviews, 12*(4), 384-412.

Gardner, W. L., & Avolio, B. J. (1998). The charismatic relationship: A dramaturgical perspective. *Academy of Management Review, 23*(1), 32-58.

Gardner, W. L., Avolio, B. J., Luthans, F., May, D. R., & Walumbwa, F. (2005). "Can you see the real me?" A self-based model of authentic leader and follower development. *The Leadership Quarterly, 16*(3), 343-372.

George, B. (2003). *Authentic leadership: Rediscovering the secrets to creating lasting value*: John Wiley & Sons.

George, J. M. (2000). Emotions and leadership: The role of emotional intelligence. *Human relations, 53*(8), 1027-1055.

Hall, A. T., Blass, F. R., Ferris, G. R., & Massengale, R. (2004). Leader reputation and accountability in organizations: Implications for dysfunctional leader behavior. *The Leadership Quarterly, 15*(4), 515-536.

Halpin, A. W., and Croft, D. B. . . (1966). The organizational climate of schools. *In A. W. Halpin (Ed.),Theory and research in administration. New York: Macmillan*, (131–249).

Harter, S. (2002). Authenticity.

Henderson, J. E., & Hoy, W. K. (1982). Leader Authenticity: The Development and Test of an Operational Measure.

Higgins, E. T. (1987). Self-discrepancy: a theory relating self and affect. *Psychological review, 94*(3), 319.

Hogg, M. A. (2001). A social identity theory of leadership. *Personality and social psychology review, 5*(3), 184-200.

Howell, J. M., & Shamir, B. (2005). The role of followers in the charismatic leadership process: Relationships and their consequences. *Academy of Management Review, 30*(1), 96-112.

Hoyle, R. H., Kernis, M. H., Leary, M. R., & Baldwin, M. W. (1999). *Selfhood: Identity, esteem, regulation*: Westview Press.

Hutchinson, D. (1996). Ethics'i Jonathan Barnes (ed.)(1996 [1995]). *The Cambridge Companion to Aristotle*, 195-232.

Iaffaldano, M. T., & Muchinsky, P. M. (1985). Job satisfaction and job performance: A meta-analysis. *Psychological bulletin, 97*(2), 251.

Ilies, R., Morgeson, F. P., & Nahrgang, J. D. (2005). Authentic leadership and eudaemonic well-being: Understanding leader–follower outcomes. *The Leadership Quarterly, 16*(3), 373-394.

Jones, G. R., & George, J. M. (1998). The experience and evolution of trust: Implications for cooperation and teamwork. *Academy of Management Review, 23*(3), 531-546.

Judge, T. A., & Piccolo, R. F. (2004). Transformational and transactional leadership: a meta-analytic test of their relative validity. *Journal of applied psychology, 89*(5), 755.

Kanter, R. M. (1977). *Men and Women of the Corporation* (Vol. 5049): Basic books.

Kark, R., & Shamir, B. (2002). The dual effect of transformational leadership: Priming relational and collective selves and further effects on followers. *Transformational and charismatic leadership: The road ahead, 2*, 67-91.

Kegan, R. (1982). *EVOLVING SELF P*: Harvard University Press.

Kernis, M. H. (2003). Toward a conceptualization of optimal self-esteem. *Psychological inquiry, 14*(1), 1-26.

Kernis, M. H., & Goldman, B. M. (2006). A multicomponent conceptualization of authenticity: Theory and research. *Advances in experimental social psychology, 38*, 283-357.

Locke, E. A. (1976). The nature and causes of job satisfaction. *Handbook of industrial and organizational psychology, 1*, 1297-1343.

Lok, P., & Crawford, J. (2004). The effect of organisational culture and leadership style on job satisfaction and organisational commitment: A cross-national comparison. *Journal of management development, 23*(4), 321-338.

Lord, R. G., & Brown, D. J. (2001). Leadership, values, and subordinate self-concepts. *The Leadership Quarterly, 12*(2), 133-152.

Lord, R. G., Brown, D. J., & Freiberg, S. J. (1999). Understanding the dynamics of leadership: The role of follower self-concepts in the leader/follower relationship. *Organizational behavior and human decision processes, 78*(3), 167-203.

Lowe, K. B., Kroeck, K. G., & Sivasubramaniam, N. (1996). Effectiveness correlates of transformational and transactional leadership: A meta-analytic review of the MLQ literature. *The Leadership Quarterly, 7*(3), 385-425.

Luthans, F., & Avolio, B. J. (2003). Authentic leadership: A positive developmental approach. In K. S. Cameron, J. E. Dutton, and R. E. Quinn (Eds.). *Positive organizational scholarship*, 241 – 261.

Markus, H., & Wurf, E. (1987). The dynamic self-concept: A social psychological perspective. *Annual review of psychology, 38*(1), 299-337.

May, D. R., Chan, A. Y., Hodges, T. D., & Avolio, B. J. (2003). Developing the moral component of authentic leadership. *Organizational dynamics, 32*(3), 247-260.

May, D. R., Gilson, R. L., & Harter, L. M. (2004). The psychological conditions of meaningfulness, safety and availability and the engagement of the human spirit at work. *Journal of occupational and organizational psychology, 77*(1), 11-37.

Michie, S., & Gooty, J. (2005). Values, emotions, and authenticity: Will the real leader please stand up? *The Leadership Quarterly, 16*(3), 441-457.

Nakamura, J., & Csikzentmihalyi, M. (2003). The construction of meaning through vital engagement.

Organ, D. W. (1988). *Organizational citizenship behavior: The good soldier syndrome*: Lexington Books/DC Heath and Com.

Pagano, B., & Pagano, E. (2004). *The transparency edge: How credibility can make or break you in business*: McGraw Hill Professional.

Parke, H., & Wormell, D. (1956). The Delphic Oracle. *Oxford: Blackwell*.

Popper, M., & Lipshitz, R. (2000). Organizational learning mechanisms, culture, and feasibility. *Management learning, 31*(2), 181-196.

Redmond, B. F. (2014). Withdrawal Behaviors, PSYCH 484: Work Attitudes and Job Motivation

Rhoades, L., Eisenberger, R., & Armeli, S. (2001). Affective commitment to the organization: the contribution of perceived organizational support. *Journal of applied psychology, 86*(5), 825.

Robins, G., & Boldero, J. (2003). Relational discrepancy theory: The implications of self-discrepancy theory for dyadic relationships and for the emergence of social structure. *Personality and social psychology review, 7*(1), 56-74.

Rome, B., & Rome, S. (1967). Humanistic research on large social organizations. *Challenges of humanistic psychology*, 181-193.

Ros, M., Schwartz, S., & Surkiss, S. (1999). Basic individual values, work values, and the meaning of work. *Applied psychology*, 49-71.

Ryan, R. M., & Deci, E. L. (2003). On assimilating identities to the self: a self-determination theory perspective on internalization and integrity within cultures.

Salovey, P., Mayer, J. D., Caruso, D., & Yoo, S. (2002). The positive psychology of emotional intelligence. *Handbook of positive psychology, 159*, 171.

Schlenker, B. R. (1985). Identity and self-identification. *The self and social life, 65*, 99.

Schwartz, S. H. (1992). Universals in the content and structure of values: Theoretical advances and empirical tests in 20 countries. *Advances in experimental social psychology, 25*(1), 1-65.

Schwartz, S. H. (1999). A theory of cultural values and some implications for work. *Applied psychology, 48*(1), 23-47.

Seeman, M. (1966). Status and identity: The problem of inauthenticity. *Pacific Sociological Review*, 67-73.

Seligman, M. E. (2002). Positive psychology, positive prevention, and positive therapy. *Handbook of positive psychology, 2*, 3-12.

Shamir, B., & Eilam, G. (2005). "What's your story?" A life-stories approach to authentic leadership development. *The Leadership Quarterly, 16*(3), 395-417.

Sheldon, K. M., & Elliot, A. J. (1999). Goal striving, need satisfaction, and longitudinal well-being: the self-concordance model. *Journal of personality and social psychology, 76*(3), 482.

Sheldon, K. M., & Houser-Marko, L. (2001). Self-concordance, goal attainment, and the pursuit of happiness: Can there be an upward spiral? *Journal of personality and social psychology, 80*(1), 152.

Sparrowe, R. T. (2005). Authentic leadership and the narrative self. *The Leadership Quarterly, 16*(3), 419-439.

Stajkovic, A. D., & Luthans, F. (1998). Social cognitive theory and self-efficacy: Goin beyond traditional motivational and behavioral approaches. *Organizational dynamics, 26*(4), 62-74.

Swann, W. B., Polzer, J. T., Seyle, D. C., & Ko, S. J. (2004). Finding value in diversity: Verification of personal and social self-views in diverse groups. *Academy of Management Review, 29*(1), 9-27.

Swarm Jr, W. B. (1983). Self-verification: Bringing social reality into harmony with the self. *Social psychological perspectives on the self, 2*, 33-66.

Tepper, B. J. (2007). Abusive supervision in work organizations: Review, synthesis, and research agenda. *Journal of Management, 33*(3), 261-289.

Thomas, K. W., & Velthouse, B. A. (1990). Cognitive elements of empowerment: An "interpretive" model of intrinsic task motivation. *Academy of Management Review, 15*(4), 666-681.

Tice, D. M., & Wallace, H. M. (2003). The reflected self: Creating yourself as (you think) others see you.

Trilling, L. (2009). *Sincerity and authenticity*: Harvard University Press.

Turner, N., Barling, J., & Zacharatos, A. (2002). Positive psychology at work. . *In C.R. Snyder and S.J. Lopez (Eds.), Handbook of positive psychology . New York: Oxford University Press*, 715-728.

Ungerer, J. A., Waters, B., Barnett, B., & Dolby, R. (1997). Defense style and adjustment in interpersonal relationships. *Journal of Research in Personality, 31*(3), 375-384.

Vaillant, G. E. (1992). *Ego Mechanisms of Defense: A Guide for Clinicans and Researchers*: American Psychiatric Pub.

Valsania, S. E., León, J. A. M., Alonso, F. M., & Cantisano, G. T. (2012). Authentic leadership and its effect on employees' organizational citizenship behaviours. *Psicothema, 24*(4), 561-566.

Walumbwa, F. O., Avolio, B. J., Gardner, W. L., Wernsing, T. S., & Peterson, S. J. (2008). Authentic leadership: Development and validation of a theory-based measure†. *Journal of Management, 34*(1), 89-126.

Weierter, S. J. (1997). Who Wants to Play "Follow the Leader?" A theory of charismatic relationships based on routinized charisma and follower characteristics. *The Leadership Quarterly, 8*(2), 171-193.

Whitehead, G. (2009). Adolescent Leadership Development Building a Case for an Authenticity Framework. *Educational Management Administration & Leadership, 37*(6), 847-872.

Yammarino, F. J., Dionne, S. D., Schriesheim, C. A., & Dansereau, F. (2008). Authentic leadership and positive organizational behavior: A meso, multi-level perspective. *The Leadership Quarterly, 19*(6), 693-707.

Yukl, G. (2002). Leadership in organizations. . *Upper Saddle River, NJ: Prentice*.

Transactional Leadership and Job Performance: An Empirical Investigation

Syed Mir Muhammad Shah [1]

University Utara Malaysia and Sukkur Institute of Business Administration, Pakistan

Dr. Kamal Bin Ab. Hamid [2]

University Utara Malaysia

Abstract

Present study investigates the relationship between transactional leadership and job performance in the six large banks of Pakistan. The survey method was used to collect data from the middle managers of six large banks of Pakistan. The data was analyzed and reported using Smart-PLS and its standard reporting style. The findings of the study reveal that transactional leadership has significant relationship with job performance. The last part of the paper presents insights on future research.

Keywords: Transactional leadership; Job Performance; Banks; Pakistan.

1. Introduction

Job performance has been reported as one of the important factors and significant indicators of organizational performance but it has been conceptualized in different ways (Organ, 1997). (Schmitt & Chan, 1998) had break up performance into "will do" and "can do". The concept *will-do* relates to knowledge, skill, ability, and other distinctiveness which one individual needs to carry out a particular job. The *can-do* creates inspiration for employees to perform the job. Whereas, (Jamal, 2007) defined job performance as an individual's function carrying out efficiently within the prevailing constraints and the resources available. The meaning and scope of job performance varies depending upon job to job. Some researchers including (Campbell, 1990) have comprehended broader scope of performance which can be generalized for various jobs. The scholars have pointed out job performance as a multidimensional concept that consists of task and contextual elements of job performance. However, job performance that contributes to organizational effectiveness has been measured differently and literature reports numerous factors influencing job performance.

Leadership is one of the factors that significantly contribute to job performance (Vigoda-Gadot, 2007; Wang, Law, Hackett, Wang, & Chen, 2005). Furthermore, the term leadership could be expressed in numerous ways and has been commonly referred to as leadership style (Avolio, 1999). Prominent scholars have suggested

[1] syedmir@iba-suk.edu.pk

[2] abkamal@uum.edu.my

many different leadership styles and transactional and transformational leadership styles are the most popular among them (Bass, 1985). Particularly, transactional leadership focuses on the achievement of the set goals (Bass, 1985). Additionally, (Humphreys, 2001) explained that transactional leadership is characterized by a reward system for their subordinates that motivate them to meet organizational goals.

Numerous studies suggest that transactional leadership has positive influence on job performance; these studies have been looking into how transactional leadership enhances job performance. Since organizations are unique in terms of their culture and people, hence how do people react towards leadership decision making varies across the globe. Particularly the focus of past studies have been dominantly on the job performance of employees; however the present study aims to address the potential influence of transactional leadership on job performance of the middle managers of six large banks of Pakistan.

2. Literature Review
2.1. Job Performance

In the research domain of industrial and organizational psychology the job performance has been considered as one of the most important construct (Borman, 2004; Borman & Motowidlo, 1997; Organ, 1997) In general job, performance refers to effectiveness of individual behaviors that contribute to the organizational objectives (McCloy, Campbell, & Cudeck, 1994).

Job performance is gauged usually in financial terms, but sometimes other factors are also taken into consideration like task related aspects and expected behaviors, which affect performance (Borman & Motowidlo, 1993; Britt & Jex, 2008). Job performance consists of both monetary and non-monetary factors and these are linked with organizational performance and success (Anitha, 2014).

The word "performance" highlights upon the concepts such as "attainment," "accomplishment," and "the execution of a task". Campbell introduced eight factors related to job performance those are; a) job specific proficiency, b) non-job specific task proficiency, c) effort to demonstrate, d) written and oral communication, e) to maintain personal discipline, f) marinating team and peer performance, g) supervision and leadership, h) administration and management. He further elaborated that all of these factors are not relevant to all jobs and can be used to portray job performance for any possible occupation. Moreover, all factors and content of factors varies from job to job, primarily each factor is one of motivational elements. The study conducted by (Hochwarter, Kiewitz, Gundlach, & Stoner, 2004) has further added social worth towards all these factors. Studies report that job performance comprised two dimensions; task performance and organizational citizenship behavior (Borman & Motowidlo, 1997; Organ, 1988). The importance of task performance and OCB performance is highlighted in the work of (Borman & Motowidlo, 1993; Motowidlo & Van Scotter, 1994), according to which these dimensions of measuring job performance play a critical role.

According to (Motowidlo & Van Scotter, 1994) and (Campbell, 1990) model provide a comprehensive explanation in terms of defining job performance by further breaking it into task performance and OCB.

2.2. Transactional Leadership

The transactional leadership emphasizes on the need recognition of the followers and it clarifies the ways in terms of how these needs are to be fulfilled with a mere objective of enhancing job performance for attaining desired objectives. It is comprised of contingent reward and management-by-exception (Bass & Avolio, 2000).This style of leadership is comprised of behavior of an exchange in between the leader and follower, where rewards are always linked with the effort and output produced by the subordinate (Burns, 1978). (Bass, 1985) has mentioned two types of behaviors of transactional leadership styles; contingent reward and management by exception. Contingent behavior is related to positive feedback by the supervisor. This type of behavior is related to criticism and negative feedback by the leader subject to unsatisfactory performance by the subordinate.   The risk of punishment makes a transactional conduct which differentiates this from "arbitrary and punitive behavior" (Kohli, 1985).

Transactional leaders make their subordinates happy by rewarding them with the best possible way of identifying their desires (Wegner, 2004). Transactional leader is concerned with a stable environment and with less competition (Tichy & Devanna, 1986). According to (Zaleznik, 1977) transactional leaders are those who set goals for their followers; allocate tasks and get the work done; finally reward those followers who perform better and punish those who do not perform. In the organizational behavior studies, they have widely used the type of transactional leadership style as effective style which can motivate the followers to enhancing their inspiration to achieve the objectives of the organization. (Burns, 1978) as a pioneer to the study on transactional leadership pointed out those transactional leaders are motivating their followers through appealing them to their self interests. The theories of transactional leadership are based on the idea that leader-follower relationships are based on a number of exchanges or implicit bargain between them. Transactional leadership is characterized by behaviors and attitudes that emphasize the quality of exchanges between superiors and subordinates. According to (Bass & Stogdill, 1990) the achievement of tasks and goals are the responsibilities of the leaders who are the main actors to motivate the followers in identifying the objectives and developing confidence to meet the desired high performance levels.

2.3. Transactional Leadership and Job Performance

The relationship between leadership and job performance has received considerable scholarly attention. Most of the studies on the relationship between transformational / transactional leadership and job performance have yielded both significant as well as insignificant results. According to (Bass, 1985), transactional, transformational, and laissez-faire leadership style plays an important role in management. Additionally, this study also reports a high correlation between job performance and transactional leadership using Multifactor Leadership Questionnaire (MLQ).

According to (McGrath & MacMillan, 2000), the effective leadership styles contribute towards better performance in the times when new challenges are faced; this notion of the positive relationship between transactional leadership and job performance is also supported by (Gumusluoglu & Ilsev, 2009; Mahdinezhad, Suandi, bin Silong, & Omar, 2013; Zhu, Chew, & Spangler, 2005). A strong relationship is evident in most studies about the relationship between performance of the organization and its managerial leadership. Leadership is critical at all levels in an organization. However, the managerial level embraces high significance. In many organizations, it seems that leadership is one of the most effective processes in influencing employees to drive best out of them. (Rickards & Moger, 2006) stated that leaders of the organization have the ability to educate as well as support their employees while challenging them with creative and innovative work at the same time. Leaders hence, with their words, actions and behavior encourage the employees to put extra effort to promote achievement of set aim and goals. On the contrary, other studies report a negative relationship between transactional leadership and job performance (Geyer & Steyrer, 1998; Lowe, Kroeck, & Sivasubramaniam, 1996; MacKenzie, Podsakoff, & Rich, 2001; Parry & Proctor-Thomson, 2002).

Hence the relationship between transactional leadership and job performance still stands confusing and the results evident a mixed relationship between the two. The present study, in the light of leader member exchange (LMX) theory (Graen, 1976), aims at investigating the postulated relationship between transactional leadership and job performance in the banking sector of Pakistan.

3. Methodology
3.1. Sample and Population
The Full time branch managers of six large banks of Pakistan were surveyed. For the total population of 1314 (Pakistan Banks Association, 2014) branch managers all around the province of Sindh a minimum of 302 (Krejcie & Morgan, 1970), responses were required. Hence using proportionate random sampling a total of 500 questionnaires were mailed to the bank branches with self-addressed returned envelops out of which 297 useable questionnaires were received.

3.2. Measures
The job performance was measured using job performance scale developed by (Williams & Anderson, 1991) with 37 items and Transactional leadership was measured using Multifactor Leadership Questionnaire (MLQ) developed by (Bass & Avolio, 2000) with 12 items.

Respondents were asked to self evaluate about perceived job performance and transactional leadership style. The five point Likert scale with 1 indicating (strongly disagree) and 5 as (strongly agree) was employed.

3.3. Demographic Profile of the respondents
The majority of managers were fall in 31 to 40 years of age group with 39.1% and lowest percent falls in 51 or above age group that is with 8.1 percent. The majority of

the managers were male with 94.9% whereas females are 4.7% percentage only. 84.2% managers are married and 15.8% are unmarried. A larger portion of mangers were graduates with 91.2%, undergraduate. The major two groups of the managers have salaries PKR 40,000 or less with 21.5% and PKR 80,000 or above with 21.2%. The detailed demographics of the respondents are given in the table 1 below:

Table 1: Demographic Profile of Respondents

Characteristics	Frequency	Percentage
Gender		
Male	282	94.9
Female	14	4.7
Age		
20-30 years	74	24.9
31-40 years	116	39.1
41-50 years	82	27.6
51 and above	24	8.1
Position		
Branch Manager	155	52.2
Operations Manager	141	47.5
Experience		
Less than five years	46	15.5
5 to less than 10 years	117	39.4
10 to Less than 15	49	16.5
15 to less than 20	32	10.8
20 to less than 25	17	5.7
25 to less than 30	15	5.1
30 and above	21	7.1
Qualification		
Undergraduate	22	7.4
Graduate	271	91.2

Post Graduate	4	1.3
Monthly Income		
40K or less	64	21.5
41 to 50 K	56	18.9
51 to 60K	51	17.2
61 to 70K	33	11.1
71 to 80K	30	10.1
81 to above	63	21.2
Marital Status		
Married	250	84.2
Unmarried	47	15.8

4. Analysis and Results

Before performing the analysis, the assumptions related to linearity, normality and multi-co-linearity were assessed (Hair, Ringle, & Sarstedt, 2011; Tabachnick & Fidell, 2001). After satisfying these assumptions, the partial least square (PLS) path modeling (Wold, 1974, 1985) using Smart PLS 2.0 (Ringle, Wende, & Will, 2005).

4.1. Measurement Model Results

The individual item reliability, internal consistency reliability and discriminant validity were ensured for assessing the psychometric properties of the scales that have been adopted in the present study. In order to determine individual item reliability the outer loadings were used following on (Hair Jr, Hult, Ringle, & Sarstedt, 2013).

Table 2 a: Results of Measurement Model

Latent Variables	**Items**	**Loadings**	**AVE**	**CR**
Contingent Reward (CR)	LS1	0.76434	0.619921	0.765223
	LS31	0.809708		
Management by Exception -Active	LS22	0.824517	0.632942	0.774977

(MBEA)

	LS25	0.765543		
Management by Exception –Passive (MBEP)	LS10	0.815171	0.51476	0.807711
	LS15	0.612149		
	LS18	0.723341		
	LS3	0.704689		
Task-Performance	JPTSK1	0.83753	0.568512	0.793924
	JPTSK2	0.820655		
	JPTSK3	0.574981		
Organizational Citizenship Behavior (OCB)	JPOCB28	0.634294	0.507909	0.877523
	JPOCB32	0.642152		
	JPOCB33	0.790144		
	JPOCB34	0.758635		
	JPOCB35	0.774777		
	JPOCB36	0.634145		
	JPOCB37	0.733758		

Table 2 b: Correlation and Discriminate Validity

	__1__	__2__	__3__	__4__	__5__
CR	**0.7873506**				
MBEA	0.190901	**0.7955765**			
MBEP	0.056968	0.288594	**0.7174678**		
OCB	0.284067	0.35446	0.185216	**0.7126773**	
Task	0.279529	0.147699	0.011416	0.298467	**0.7539973**

Note: bold diagonal figures are the square root of AVE.

The items which consisted of 0.5 and above loadings were retained (Barclay, Higgins, & Thompson, 1995; Chin, 1998). The loadings are presented in Table 1.Further, in order to ascertain internal consistency reliability the composite reliability coefficient were used which according to (Bagozzi & Yi, 1988) and (Hair et al., 2011) should be at least 0.7 or above (refer table 1). Therefore, it can be said that the present study meets the internal consistency reliability.

The average variance extracted (AVE) was used for determining discriminant validity drawing on the suggestions of (Fornell & Bookstein, 1982). According to whom the square root of AVE should be greater than the correlations among latent variables. The results of discriminant validity are presented in Table 2.

## 4.2. Structure and Model Results

In order to assess the significance of the path coefficients the bootstrapping procedure was used with 5000 bootstraps and 297 cases (Hair, Sarstedt, Ringle, & Mena, 2012). The path coefficients are presented in Table 3 and Figure 1.

Table 3: Path Coefficients and Hypothesis testing

Hypothesis		Relationship	Beta	SE	t-statistics	Decision
	H1	Transactional -> Job-Performance	0.084075	0.044026	1.909667	Supported

Note: Transactional = Transactional Leadership

Figure 1: Assessment of structure model
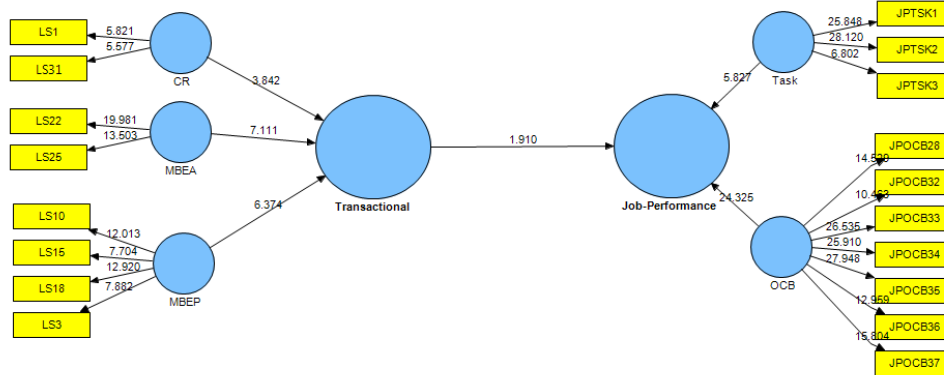
The relationship between transactional leadership and job performance is discussed in Table 3. According to which the path coefficient from transactional leadership to job performance is 0.08 (t-value = 1.90). Hence it suggests that there is a relationship between transactional leadership and job performance. Table 4 presents the r-square value of job performance which is 0.87. This informs us that the transactional leadership explains 87 percent of the variance in the job performance.

Table 4: Variance Explained in the Endogenous Variable

Latent Variable	Variance Explained
Job Performance	87%

5. Discussion, Recommendations and Conclusion

The purpose of the present study was to assess the transactional leadership and job performance relationship. The results of the study suggest that transactional leadership has positive relationship with job performance. These results are also consistent with the previous research (Dolatabadi & Safa, 2010; Mohammad Mosadegh Rad & Hossein Yarmohammadian, 2006; Voon, Lo, Ngui, & Ayob, 2011).

In the light of Leader Member Exchange (LXM) theory (Graen, 1976), this study provides empirical evidence that transactional leadership adds positively to the increase of employees job performance. It posits that transactional leadership style is perceived to be very critical factor that influences employee's job performance. The results of the present study suggest that leaders by adopting transactional style could influence dramatically job performance of employees. Therefore, prominent leaders should consider this style of management.

The present study addresses the examination of transactional leadership with job performance among the branch managers of big six banks of Pakistan. Drawing upon LXM theory the results suggest a positive association between the two. Hence it is suggested to broaden the scope of this study into the other banks of the country to better explain this relationship and collect further evidence to validate these results.

Besides, only transactional leadership style was investigated under this study. Therefore, it is also suggested to investigate the influence of other potential leadership styles over job performance in this industry. This study might also have limitations particularly due to its cross-sectional design. Further analysis on longitudinal basis is suggested.

Although the present study has several limitations despite that it reports a positive relationship between transactional leadership style and job performance. Thus, it can be concluded that leaders opting transactional style can potentially contribute to the employee's job performance and ultimately increasing organizational effectiveness.

References
Anitha, J. (2014). Determinants of employee engagement and their impact on employee performance. *International Journal of Productivity and Performance Management*.

Avolio, B. J. (1999). *Full leadership development: Building the vital forces in organizations*: Sage.

Bagozzi, R. P., & Yi, Y. (1988). On the evaluation of structural equation models. *Journal of the academy of Marketing Science, 16*(1), 74-94.

Barclay, D., Higgins, C., & Thompson, R. (1995). The partial least squares (PLS) approach to causal modeling: Personal computer adoption and use as an illustration. *Technology studies, 2*(2), 285-309.

Bass, B. M. (1985). *Leadership and performance beyond expectations*: Free Press; Collier Macmillan.

Bass, B. M., & Avolio, B. J. (2000). *MLQ: Multifactor leadership questionnaire*: Mind Garden.

Bass, B. M., & Stogdill, R. M. (1990). *Bass & Stogdill's handbook of leadership: Theory, research, and managerial applications*: Simon and Schuster.

Borman, W. C. (2004). The concept of organizational citizenship. *Current directions in psychological science, 13*(6), 238-241.

Borman, W. C., & Motowidlo, S. (1993). Expanding the criterion domain to include elements of contextual performance. *Personnel Selection in Organizations; San Francisco: Jossey-Bass*, 71.

Borman, W. C., & Motowidlo, S. J. (1997). Task performance and contextual performance: The meaning for personnel selection research. *Human performance, 10*(2), 99-109.

Britt, T. W., & Jex, S. (2008). Organizational psychology: A scientist-practitioner approach: New York, NY: Wiley.

Burns, J. M. (1978). Leadership New York. *NY: Harper and Row Publishers*.

Campbell, J. P. (1990). The role of theory in industrial and organizational psychology.

Chin, W. W. (1998). The partial least squares approach to structural equation modeling. *Modern methods for business research, 295*(2), 295-336.

Dolatabadi, H. R., & Safa, M. (2010). The effect of directive and participative leadership style on employees' commitment to service quality. *International Bulletin of Business Administration*(9), 31-42.

Fornell, C., & Bookstein, F. L. (1982). Two structural equation models: LISREL and PLS applied to consumer exit-voice theory. *Journal of Marketing Research*, 440-452.

Geyer, A., & Steyrer, J. (1998). Messung und Erfolgswirksamkeit transformationaler Führung. *Zeitschrift für Personalforschung/German Journal of Research in Human Resource Management*, 377-401.

Graen, G. (1976). Role-making processes within complex organizations. *Handbook of industrial and organizational psychology, 1201*, 1245.

Gumusluoglu, L., & Ilsev, A. (2009). Transformational leadership, creativity, and organizational innovation. *Journal of business research, 62*(4), 461-473.

Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. *Journal of Marketing Theory and Practice, 19*(2), 139-152.

Hair, J. F., Sarstedt, M., Ringle, C. M., & Mena, J. A. (2012). An assessment of the use of partial least squares structural equation modeling in marketing research. *Journal of the academy of Marketing Science, 40*(3), 414-433.

Hair Jr, J. F., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2013). *A primer on partial least squares structural equation modeling (PLS-SEM)*: Sage Publications.

Hochwarter, W. A., Kiewitz, C., Gundlach, M. J., & Stoner, J. (2004). The impact of vocational and social efficacy on job performance and career satisfaction. *Journal of Leadership & Organizational Studies, 10*(3), 27-40.

Humphreys, J. H. (2001). Transformational and transactional leader behavior: The relationship with support for e-commerce and emerging technology. *Journal of Management Research, 1*(3), 149.

Jamal, M. (2007). Job stress and job performance controversy revisited: An empirical examination in two countries. *International journal of stress management, 14*(2), 175.

Kohli, A. K. (1985). Some unexplored supervisory behaviors and their influence on salespeople's role clarity, specific self-esteem, job satisfaction, and motivation. *Journal of Marketing Research*, 424-433.

Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educ Psychol Meas*.

Lowe, K. B., Kroeck, K. G., & Sivasubramaniam, N. (1996). Effectiveness correlates of transformational and transactional leadership: A meta-analytic review of the MLQ literature. *The Leadership Quarterly, 7*(3), 385-425.

MacKenzie, S. B., Podsakoff, P. M., & Rich, G. A. (2001). Transformational and transactional leadership and salesperson performance. *Journal of the academy of Marketing Science, 29*(2), 115-134.

Mahdinezhad, M., Suandi, T. B., bin Silong, A. D., & Omar, Z. B. (2013). Transformational, transactional leadership styles and job performance of academic leaders. *International Education Studies, 6*(11), p29.

McCloy, R. A., Campbell, J. P., & Cudeck, R. (1994). A confirmatory test of a model of performance determinants. *Journal of applied psychology, 79*(4), 493.

McGrath, R. G., & MacMillan, I. C. (2000). *The entrepreneurial mindset: Strategies for continuously creating opportunity in an age of uncertainty* (Vol. 284): Harvard Business Press.

Mohammad Mosadegh Rad, A., & Hossein Yarmohammadian, M. (2006). A study of relationship between managers' leadership style and employees' job satisfaction. *Leadership in Health Services, 19*(2), 11-28.

Motowidlo, S. J., & Van Scotter, J. R. (1994). Evidence that task performance should be distinguished from contextual performance. *Journal of applied psychology, 79*(4), 475.

Organ, D. W. (1988). *Organizational citizenship behavior: The good soldier syndrome*: Lexington Books/DC Heath and Com.

Organ, D. W. (1997). Organizational citizenship behavior: It's construct clean-up time. *Human performance, 10*(2), 85-97.

Parry, K., & Proctor-Thomson, S. (2002). Leadership, culture and performance: The case of the New Zealand public sector. *Journal of Change Management, 3*(4), 376-399.

Rickards, T., & Moger, S. (2006). Creative leaders: a decade of contributions from Creativity and Innovation Management Journal. *Creativity and Innovation Management, 15*(1), 4-18.

Ringle, C. M., Wende, S., & Will, A. (2005). SmartPLS 2.0 (beta): Hamburg.

Schmitt, N., & Chan, D. (1998). *Personnel selection: A theoretical approach*: Sage.

Tabachnick, B. G., & Fidell, L. S. (2001). Using multivariate statistics.

Tichy, N. M., & Devanna, M. A. (1986). The transformational leader. *Training & Development Journal*.

Vigoda-Gadot, E. (2007). Leadership style, organizational politics, and employees' performance: An empirical examination of two competing models. *Personnel Review, 36*(5), 661-683.

Voon, M. L., Lo, M. C., Ngui, K. S., & Ayob, N. B. (2011). The influence of leadership styles on employees' job satisfaction in public sector organizations in Malaysia. *International Journal of Business, Management and Social Sciences, 2*(1), 24-32.

Wang, H., Law, K. S., Hackett, R. D., Wang, D., & Chen, Z. X. (2005). Leader-member exchange as a mediator of the relationship between transformational leadership and followers' performance and organizational citizenship behavior. *Academy of management Journal, 48*(3), 420-432.

Wegner, L. (2004). Organizational leaders and empowered employees: The relationship between leadership styles, perception of styles, and the impact on organizational outcomes. *Capella University. From ProQuest database*.

Williams, L. J., & Anderson, S. E. (1991). Job satisfaction and organizational commitment as predictors of organizational citizenship and in-role behaviors. *Journal of Management, 17*(3), 601-617.

Zaleznik, A. (1977). Managers and leaders: Are they different. *Harvard business, 55*(May–June), 67-78.

Zhu, W., Chew, I. K., & Spangler, W. D. (2005). CEO transformational leadership and organizational outcomes: The mediating role of human–capital-enhancing human resource management. *The Leadership Quarterly, 16*(1), 39-52.