INCUBATING WOMEN ENTREPRENEURSHIP

Incubating Women Entrepreneurship: Measuring Effectiveness of Women Business Incubator in Pakistan

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Abstract

Purpose
Business incubation is one of the implementation tools of government’s strategy, for facilitating women entrepreneurship development in Pakistan. Very few of the business support initiatives in Pakistan have translated into accrual of genuine benefits for target beneficiaries. That being so, purpose of this study is to measure importance and effectiveness of incubation related facilities/services for women entrepreneurs in Pakistan from the perspective of its primary beneficiaries (tenants) and draw implications for future women specific incubation programs.

Methodology
Study was carried out by using survey method. Tenants from women specific incubator participated in this survey. Self-administered questionnaire measuring importance and effectiveness of 34 incubation related facilities/services was incorporated in this study.

Findings
Results revealed that tenants generally perceive all the investigated incubation related facilities/services very important for the success of their businesses. In general, tenants have shown their agreement with incubator’s ability to deliver all the facilities/services effectively. However, difference in perceived importance and perceived effectiveness for majority of the incubator’s facilities/services has been found.

Originality
There is no research study conducted, whatsoever, on incubation and/or its effectiveness in women entrepreneurship development in Pakistan. In an attempt to fill this gape, this study provides an empirical evidence of perceived value and effectiveness of incubation related services for its tenants. The results of study have also been interpreted in the light of similar prior
empirical studies on measuring effectiveness through client’s satisfaction. In this sense, this study also intends to discuss, somehow, the world wide scope of incubation model.

Key Words: Gender Development, Entrepreneurship, Incubation, Importance, Effectiveness, Pakistan
Introduction

Incubation, by definition, is a unique business support model that contains inbuilt capacity to contribute valuable interventions for enterprise creation and development (Eshun Jr 2009). The concept of incubation has achieved worldwide popularity for its efficacy in enabling a conducive environment for nurturing and supporting small and medium enterprises (OECD 1997). A typical incubator stimulates creation and development of SMEs by providing physical work-space, shared office facilities, counseling, information, training, access to finance and professional services etc. at affordable prices (Lalkaka 2001).

In Pakistan, women-owned businesses constitute merely 3% of the total enterprises (FBS 2005). Research suggests that impediment pertaining to women entrepreneurship development in Pakistan is primarily embedded in lack of access to capital, land, business premises, information technology, training and agency assistance (Roomi & Parrott 2008). Furthermore, goal of women entrepreneurship development can be reached by developing a coherent framework and undertaking collaborative initiative of government bodies, donor/int’l agencies, academia, financial institutions, chambers and business associations (Goheer & Development 2003).

Women business incubation program in Pakistan aims to support and build capacity of women entrepreneurs in formation and initial periods of their businesses so that ventures gets established and gain capability of operating independently. Although it is maiden initiative in Pakistan (Afaqi & Nadia 2009), business incubation has been practiced as a tool for women entrepreneurship development in various countries of the world (Scaramuzzi 2002). In China, for example, Tianjin Women’s Business Incubator has been set up under a joint project of UNDP, Australian and Chinese Governments. The program aims at promoting women’s role in business for alleviation of poverty. Similarly in Jordan, business incubators have been established for assisting
underprivileged women in income generation endeavors. The subject program is supported by Japanese Government and United Nations Development Fund for Women.

Incubators are growing in numbers, across the world, and so is the concern of their performance evaluation, among governments and other sponsors who continue to support them (Lalkaka 2001). Systematic review of incubation literature, however, shows that incubation impact is surprisingly highly understudied area and thus represents vide scope for future research (Hackett & Dilts 2004b). The situation is not so different in case of Pakistan. There is acute paucity of research on effectiveness of incubation program. This study, indeed, is the first attempt to investigate effectiveness level of incubation services for women entrepreneurs in Pakistan.

Whilst providing feedback on incubation program in Pakistan, it draws implications for donor agencies, working for business development in Pakistan, in considering incubation approach as a potential tool for women entrepreneurship development in Pakistan.

**Effectiveness of incubation**

In broader sense, the term effectiveness of incubator connotes all the benefits and satisfaction, which stakeholders derive across the value chain, in relation to the resource incurred (Lalkaka 2000). A typical incubator may involve large number of stakeholders, including state authorities, local community, related universities, new start-ups, chambers and business associations, business development services provides, and donor/Int’l business development agencies. This diversity brings interests and compound inputs (resources for our purpose) to incubator and is fundamental feature of incubator – Incubation process. Access to multiple resources like easy approach to government departments, collaboration with universities, networking with industry and other incubators, provision of subsidized legal and other business development services etc. put forward a decisive part in winning performance of incubators (Peters, Rice & Sundararajan...
Involvement of different stakeholder is therefore imperative for incubators. Given that all stakeholders have their own objectives and agendas behind lending support to incubator, effectiveness of incubator relates to the fulfillment of the respective objectives for each stakeholder. Since different stakeholders have varied interests & objectives, it becomes a daunting task to develop a laid down criteria of measuring the success of incubators. For the same reason, as we shall see in the following review, study of literature reveals that there are no agreed benchmarks for measuring the effectiveness of incubators.

**Measuring effectiveness of incubators**

This study presents literature review effectiveness in two sections. In the first section, an overview of wide – ranging studies on measuring incubator performance is described; whereas second part specifically consists of those studies which included value offered to tenants and their satisfaction as a benchmark to evaluate performance. It is pertinent to note that terms ‘effectiveness, performance and evaluation’ have been alternatively used in this paper.

**Section 1: Overview of research on measuring incubation performance**

Growing popularity of incubation model invited number of studies to explore and examine various facets of incubator – incubation process. The notion of incubator performance evaluation, however, is rooted in preliminary studies of incubators. Accordingly, we see that initial studies on incubators by Campbell and Allen (1987) and Allen and Weinburg (1988) concentrated on two indicators – rate of success of incubated businesses and new jobs created by them – for evaluation purposes. Following a rather broader prospective, Bearse (1998) maintained that goals and objectives of incubators are valid and henceforth frequently used standards to gauge effectiveness. However, he also noted that this approach has limited researchers and sponsors to set benchmark for cross comparison of different type of incubators. While studying
University Technology Business Incubators, Mian(1997) attempted to determine effectiveness with three dimensional model: (1) program sustainability and growth; (2) tenant survival and growth; and (3) contribution to the sponsoring university mission. He identified growth of rentable space, growth in tenant’s sale, press coverage and number of incubator visitors as additional measures of effectiveness. Impact of business environment also became a consideration in incubator evaluation when Autio & Klofsten(1998) suggested that degree of fit between the needs of local market and services being offered by incubator is another applicable indicator of performance.

Bhabra-Remedios & Cornelius (2003) noted that economic agenda of sponsors has mostly been used as a measure of incubator evaluation and consequently theoretical considerations of research have remained limited to economic and financial models of incubator performance. They proposed that performance of new ventures, entering and graduating from that incubator, must also be tracked so that a comprehensive performance evaluation model be developed. Interestingly, a contradictory conclusion was made by Hackett & Dilts(2004b), who, in purview of their systematic review of incubation research, concluded that incubation effectiveness studies have already been concentrated on incubatee success as a benchmark. Furthermore, drawing on option driven theory (Hackett & Dilts 2004a), they proposed that in addition to the survival rate of incubatees, incubation effectiveness criteria should also include the ease and cost effective exist for those entrepreneurs who tend to close business.

Section 2: Measuring effectiveness through perceived effectiveness and value to tenants:

Incubators vary in terms of their scope and sponsors. On the basis of missions, policies, services and performance Allen and MeClusky(1990) classified incubators in four discreet groups.
a. For – profit property development incubators
b. Non – profit development corporation incubators
c. Academic incubators

They proposed that incubators of each discrete group offer different level of value to its clients. Furthermore tenants obtain greatest value from the incubators of group ‘d’ which includes those incubators that function as enterprise development programs. Value to tenants was also measured by Mian(1996) in his survey of tenant’s perceptions regarding the usefulness of services of University Technology Business Incubator. Lalkaka (2000) took a further step ahead and suggested that satisfaction of tenants and other beneficiaries should continuously be measured so that timely corrective actions regarding functionality of incubators could be taken. He asserted that benefits obtained by tenants, sponsors and local community were criteria of effectiveness.

United Nation Development Program conducted performance evaluation of two Brazilian incubators (Lalkaka & Shaffer 1999). The variables studied in subject report included (1) role of incubator managements; (2) analysis of financial viability and outreach; (3) cost effectiveness and stakeholder satisfaction; (4) and performance evaluation by incubator tenants and graduates. Abduhet al., (2007b) investigated clients’ satisfaction with business incubator services through a proposed framework. The subject framework calculates satisfaction/dissatisfaction of tenants with incubator services in terms of the mean difference between the importance of the service and the effectiveness of incubator management in providing the respective service, as perceived by the clients. Following the same framework, LilaiXu (2009) studied effectiveness and perceived value of business incubators from the perspective of start-ups in China. The study was aimed at
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providing insights into the perceived value and draw implications for future incubation programs in China.

Rational and significance of the study

Although handful studies are presented on incubation, measuring effectiveness of incubators remains understudied area (Hackett & Dilts 2004b). Likewise in Pakistan, despite the fact that business incubation is an important tool for Government of Pakistan to facilitate women entrepreneurship development, no study whatsoever has been conducted so far on incubation effectiveness, and role of incubators in women entrepreneurship development. Besides this gap, studying effectiveness of incubation in Pakistan becomes more important with the fact that government as well as international donor agencies considers incubation as a prospect strategy to develop businesses, especially women entrepreneurship, in Pakistan.

In this backdrop, purpose of the current study is to provide feed-back on aforementioned government strategy of incubator incubation in Pakistan. It also draws implications for donor agencies who might consider incubation approach of business development in Pakistan. Incubation driven business support strategy has been adopted by number of donor agencies, including United Nations Industrial Development Organization, United Nations Development Fund, USAID, Turkish International Cooperation Agency, GTZ and Gemen Association of Technology etc. in various parts of the world(Scaramuzzi 2002).As for Pakistan, a USAID sponsored program; Competitive Support Funded (CSF) has already suggested adaptation of incubator-incubation strategy. On grounds of a benchmarking study of SME support initiatives undertaken by regional developing countries, CSF proposed Ministry of Finance, Government of Pakistan to initiate preparatory work for taking on board relevant stake holders for adopting incubation approach of enterprise creation and support(Bayhan 2006).This study provides
deliberations to donor agencies to envisage the prospects of incubation services in the field of women entrepreneurship development in Pakistan.

Conceptual framework of the study

As mentioned before, measuring incubator’s effectiveness is a complex phenomenon. Various approaches such as goal approach, resource-based approach, and internal process approach etc. have been presented by scholars/practitioners to measure organization effectiveness. However these traditional approaches don’t encompass all the necessary aspects of effectiveness measurement and thus present a limited view of this phenomenon (Daft 2001). In the light of the shortcomings of above-mentioned approaches, a contingency effectiveness approach called “stakeholder approach” (also called the constituency approach) – acknowledging the presence of various constituencies in organization, and satisfaction of those constituencies as an indicator of organization’s effectiveness/performance – has been presented (Anne 1990). Because of the putative complexity and multidimensionality of effectiveness concept, stakeholder approach has gained enormous popularity among researchers (Kanter & Brinkerhoff 1981). Accordingly, this study incorporates “stakeholders approach” to measure the importance and effectiveness of incubation related facilities/services. Stakeholders approach asserts that all stakeholders should be studied to measure the effectiveness; however, this study has this limitation that it includes only the primary stakeholders (i.e. tenants). In doing so, it invites further researches to study other stakeholders and provide comprehensive feedback on incubation in Pakistan.

Furthermore, within the stakeholder perspective, the construct of this study incorporates the tenants’ (clients) satisfaction in accordance with their perception about the importance/relevance of incubator’s facilities/services for their businesses. Since Women Business Incubation Center
(WBIC) is the only initiative in Pakistan and no study so far has been conducted to see the appropriateness of facilities/services provided by this incubator, it seems of great importance to include the perception of incubates regarding the usefulness/importance of the facilities/services provided by this incubator. The incubator’s model being adopted by the WBIC is largely based on the common facilities/services provided by all the incubators. Since no scientific effort was made to capture the contextual elements of women specific incubator in Pakistan, variance in terms of tenants’ perception regarding the importance/relevance of WBIC’s facilities/services can be expected. It is also pertinent to mention here that continuous feedback from tenants is required to take corrective measures to ensure the effective functioning of incubators (Lalkaka 2000).

Methodology

Study used quantitative method and survey design to measure the importance and effectiveness of women specific business incubation center in Pakistan. Self-administered questionnaire was used to collect data. Since the prime objective of this study was to study the effectiveness of women specific business incubators in Pakistan, only business incubators working exclusively for women were taken for participation. Women Business Incubation Center (WBIC) was the only incubator working exclusively for women in Pakistan. WBIC, at point of research, had 25 tenants. All the 25 registered tenants participated in this survey. Before the survey research’s aim, objectives, and procedure were communicated to participants and a demonstration that how to fill up the questionnaire was given to ensure the accuracy and validity of data.
**Instrument**

As mentioned above, this study incorporates stakeholder approach to measure the effectiveness level of Women Business Incubation Center (WBIC) in delivering the promised facilities and services to its tenants. 34 types of individual facilities/services were identified from the literature provided by the WBIC’s management, stating vision/mission, goals/objectives, and facilities/services offered by the incubator. All the facilities/services were grouped into five general categories namely infrastructural facilities (i.e. office, location, equipment etc.), marketing services (i.e. exploring markets, exhibitions etc.), training programs (i.e. marketing, management, business development skills), networking (i.e. chambers, associations etc.), and consultancy services (i.e. project development, legal/financial/technical services etc.). Complete list of facilities and services containing 34 questions was discussed with and verified by the WBIC’s management. Participants were asked to rate the importance of the listed facilities/services on the four point scale where 1 denotes “not at all important”, 2 denotes “little important”, 3 denotes “moderately important”, and 4 denotes “very important”. Similarly, effectiveness was rated on the same four point scale where 1 denotes “not at all effective”, 2 denotes “little effective”, 3 denotes “moderately effective”, and 4 denotes “very effective”. The similar type of four point rating scale has been used by various researchers in their studies of incubators effectiveness (e.g. see Abduh et al., 2007; Allen & Bazan, 1990; Mian, 1996).

**Data analysis and findings**

Data is analyzed by calculating and comparing the mean averages of tenants’ perceptions regarding the importance of facilities/services for their businesses, and their perception about the effectiveness of WBIC in delivering those facilities/services. Cronbach’s Alpha was used to see the reliability of data. Cronbach’s alpha score of 0.84 showed the high reliability of data for
further analyses. Composite means scores across five categories and individual mean score for individual facilities/services is calculated and presented separately.

**Infrastructural facilities**

Results, in terms of importance of the infrastructural facilities, show that tenants identify all the facilities provided by the incubator as very important (Mean. 3.53) for the success and effectiveness of their businesses as the composite mean score for this specific category is above 3 (see Table. 1). On the whole, among the five categories, tenants rate infrastructural facilities at fourth in terms of its importance for their businesses (See Table. 1). However, within this category, as Table-2 shows, with respect to the specific facilities tenants perceive that secure and hassle free workplace environment is the most important (Mean. 3.70) facility followed by the affordable office space (Mean. 3.65) and prime location/visibility (3.62).

Regarding the perception of tenants about the effectiveness of incubator in delivering the stated facilities, results show that generally tenants believe that incubator has been very effective (Mean. 3.89) in delivering the promised facilities to its tenants, with the highest composite mean score among all five categories (see Table. 1). However, with respect to individual facilities the secure and hassle free work environment is the factor which, according to respondents, incubator has delivered most effectively followed by the office space (Mean. 3.90), equipment (3.90), and shared facilities (Mean. 3.86) (see Table. 2).

It is important to note that the composite mean score of level of effectiveness (Mean. 3.89) of incubator to provide facilities is substantially greater than the mean score of the perception of tenants regarding the importance of those facilities (Mean. 3.53). This difference is consistent (see Table. 1) across all the facilities within this category. However it is necessary to understand that this difference does not show the lesser importance of the facilities for the tenants (as mean
value is greater than 3 on 4 point rating scale) instead this shows the incubator’s management ability to provide those services beyond the expectations of its tenants.

Table 1. Composite Mean Scores Across All Categories

<table>
<thead>
<tr>
<th>Facilities/Services</th>
<th>N</th>
<th>Importance</th>
<th>Effectiveness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infrastructural Facilities</td>
<td>25</td>
<td>3.53</td>
<td>3.89</td>
</tr>
<tr>
<td>Marketing Services</td>
<td>25</td>
<td>3.80</td>
<td>3.60</td>
</tr>
<tr>
<td>Training Programs</td>
<td>25</td>
<td>3.62</td>
<td>3.52</td>
</tr>
<tr>
<td>Networking</td>
<td>25</td>
<td>3.60</td>
<td>3.30</td>
</tr>
<tr>
<td>Consultancy Services</td>
<td>25</td>
<td>3.45</td>
<td>3.20</td>
</tr>
</tbody>
</table>

Table 2. Mean Scores for Importance and Effectiveness of Infrastructural Facilities

<table>
<thead>
<tr>
<th>Facilities</th>
<th>N</th>
<th>Importance</th>
<th>Effectiveness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Affordable office and infrastructural facilities</td>
<td>25</td>
<td>3.65</td>
<td>3.90</td>
</tr>
<tr>
<td>Prime location/Visibility</td>
<td>25</td>
<td>3.62</td>
<td>3.85</td>
</tr>
<tr>
<td>Office equipment</td>
<td>25</td>
<td>3.36</td>
<td>3.90</td>
</tr>
<tr>
<td>Shared office facilities</td>
<td>25</td>
<td>3.35</td>
<td>3.86</td>
</tr>
<tr>
<td>Secure and hassle free workplace environment</td>
<td>25</td>
<td>3.70</td>
<td>3.95</td>
</tr>
<tr>
<td>Composite Mean</td>
<td>25</td>
<td>3.53</td>
<td>3.89</td>
</tr>
</tbody>
</table>

Marketing Services

Table 1 represents the overall perception of tenants regarding the importance of marketing related services for the success of their businesses (Mean. 3.80). Among the five, marketing services is the only category having the highest mean score in terms of its importance for
tenants’ businesses (see Table. 1). However, within the marketing related services category identification of new markets (Mean. 3.85) is the most important service followed by the participation in exhibitions and business fairs (Mean. 3.84), and display centers (3.73) (see Table. 3).

Mean score of 3.60 shows the tenants’ strong agreement with the incubator’s effectiveness in delivering marketing related services to its tenants. However, as Table. 3 shows, in terms of individual services incubator has provided services of display centers (Mean. 3.69) more effectively compared with participation in exhibitions and business fares (Mean. 3.65) and identification of new markets (3.49) for the tenants.

The difference between the composite mean scores of the tenants’ perception regarding importance of marketing services (Mean. 3.80) and effectiveness of incubator (Mean. 3.60) in delivering those services is also evident (see Table. 3). This difference is consistent across all the services within the marketing services category. However, it is pertinent to explain that the low mean score of tenants’ perceived effectiveness than the perceived importance dimension does not reflect incubator’s less ability to provide marketing services effectively (as mean score is above 3 on 4 point scale), instead it shows tenants’ more faith in incubator’s management capabilities to provide the same services even in a much better way than the current state.
Table 3. Mean Scores for Importance and Effectiveness of Marketing Services

<table>
<thead>
<tr>
<th>Marketing Services</th>
<th>N</th>
<th>Importance</th>
<th>Effectiveness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local as well as international market opportunities</td>
<td>25</td>
<td>3.85</td>
<td>3.49</td>
</tr>
<tr>
<td>Display centers</td>
<td>25</td>
<td>3.73</td>
<td>3.65</td>
</tr>
<tr>
<td>Participation in Exhibitions/Business fairs</td>
<td>25</td>
<td>3.84</td>
<td>3.65</td>
</tr>
<tr>
<td>Composite Mean</td>
<td></td>
<td>3.80</td>
<td>3.60</td>
</tr>
</tbody>
</table>

**Training Programs**

Composite means score in Table-4 shows the perception of tenants regarding the importance of training programs (Mean. 3.62) for the benefits of their businesses. Score of above 3 on the rating scale of 4 shows that tenants perceive training programs very useful for their businesses. Within the training category all the five capacity building and skills development related training programs are viewed as providing level of above 3 value on four point scale. However, as Table.4 shows, customized training is viewed as most important for tenants’ business (Mean. 3.79) followed by the marketing skills development (3.73) and product development skills (3.62).

Regarding incubator’s ability to deliver training related services, on the whole tenants perceive their incubator very effective (Mean. 3.52) in delivering training related services to its members. However, customized training services (Mean. 3.72), capacity building skills (Mean. 3.56), and
marketing skills (3.51) are the respective categories where incubator, according to respondents, has delivered most effectively.

Like the previous categories, the difference between the composite mean scores of the tenants’ perception regarding importance of training services (Mean. 3.62) and effectiveness of incubator (Mean. 3.52) in delivering those services is also evident (see Table. 4). However, as Table 4 shows, unlike the previous categories this difference is not consistent across all individual services within this category. For instance, in capacity building skills incubator has been more effective than tenants’ ratings of perceived importance whereas, for rest of the services importance’ score is greater than incubator’s effectiveness. Given the fact that tenants have rated all the incubator’s services above 3 on 4 point scale which mean a greater level of satisfaction with incubation services, the negative difference across various services however shows the tenants higher expectations from incubator to deliver on these services.

Table 4. Mean Scores for Importance and Effectiveness of Training Programs

<table>
<thead>
<tr>
<th>Training Programs</th>
<th>N</th>
<th>Importance</th>
<th>Effectiveness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacity building skills</td>
<td>25</td>
<td>3.45</td>
<td>3.56</td>
</tr>
<tr>
<td>Product development skills</td>
<td>25</td>
<td>3.62</td>
<td>3.45</td>
</tr>
<tr>
<td>Business management skills</td>
<td>25</td>
<td>3.55</td>
<td>3.34</td>
</tr>
<tr>
<td>Marketing skills</td>
<td>25</td>
<td>3.73</td>
<td>3.51</td>
</tr>
<tr>
<td>Customized training services</td>
<td>25</td>
<td>3.79</td>
<td>3.72</td>
</tr>
<tr>
<td>Composite Mean</td>
<td></td>
<td>3.62</td>
<td>3.52</td>
</tr>
</tbody>
</table>

*Networking Services*
Composite means score of tenants’ perception regarding the importance of networking opportunities provided by incubator shows the very importance of such services (Mean. 3.6) in tenants’ eyes (see Table. 5). Latest information regarding sectors, regulations, and exhibitions is viewed very important (Mean. 3.64) by tenants followed by the links with chambers and other business associations (Mean. 3.63).

Incubator has been viewed as very effective in delivering the networking related services (see Table. 5) as tenants rated it above 3 on rating scale of 4. Within the category difference for individual services in terms of importance and effectiveness is consistent. However the higher means score of tenants’ perception about the importance of networking related services than the incubator’s level of effectiveness shows tenants’ augmented expectations from incubator in providing these services with improved excellence.

<table>
<thead>
<tr>
<th>Networking</th>
<th>N</th>
<th>Importance</th>
<th>Effectiveness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Latest information on Sectors, Regulation, and Exhibitions</td>
<td>25</td>
<td>3.64</td>
<td>3.36</td>
</tr>
<tr>
<td>Networking with Chambers and Associations</td>
<td>25</td>
<td>3.63</td>
<td>3.21</td>
</tr>
<tr>
<td>Information/Updates on technological developments</td>
<td>25</td>
<td>3.52</td>
<td>3.35</td>
</tr>
<tr>
<td>Composite Mean</td>
<td></td>
<td>3.60</td>
<td>3.30</td>
</tr>
</tbody>
</table>

*Consultancy Services*
Table 6 represents the perception of tenants regarding the importance of consultancy related services for the success of their businesses (Mean. 3.45). Within this category, according to tenants, consultancy in development of business plan (Mean. 3.85) is the most important service that incubator provides to its members followed by the development of marketing and management strategies (Mean. 3.82), and tax and registration related legal issues (Mean. 3.73).

Mean score of 3.60 shows the tenants’ strong agreement with the incubator’s effectiveness in delivering marketing related services to its tenants. However, as Table. 3 shows, in terms of individual services incubator has provided services of display centers (Mean. 3.69) more effectively compared with participation in exhibitions and business fairs (Mean. 3.65) and identification of new markets (3.49) for the tenants.

The difference between the composite mean scores of the tenants’ perception regarding importance of consultancy services (Mean. 3.45) and effectiveness of incubator (Mean. 3.20) in delivering those services is also evident (see Table. 6). This difference is consistent across all the services within the consultancy services category. However, it is pertinent to mention that the low mean score of tenants’ perceived effectiveness than the importance dimension does not mean that incubator has failed to deliver these services effectively instead the variance lies within the domain of very effective which shows tenants’ higher expectations from incubator in delivering these services more effectively.

Table 6. Mean Scores for Importance and Effectiveness of Consultancy Services

<table>
<thead>
<tr>
<th>Consultancy Services</th>
<th>N</th>
<th>Importance</th>
<th>Effectiveness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project identification</td>
<td>25</td>
<td>3.00</td>
<td>2.82</td>
</tr>
<tr>
<td>Services</td>
<td>N</td>
<td>Rating</td>
<td>Mean</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------</td>
<td>---</td>
<td>--------</td>
<td>------</td>
</tr>
<tr>
<td>Project development</td>
<td>25</td>
<td>3.55</td>
<td>3.00</td>
</tr>
<tr>
<td>Business Plan Development</td>
<td>25</td>
<td>3.85</td>
<td>3.36</td>
</tr>
<tr>
<td>Developing Marketing and Management strategies</td>
<td>25</td>
<td>3.82</td>
<td>3.64</td>
</tr>
<tr>
<td>Designing Brochures/Business Cards/Websites</td>
<td>25</td>
<td>3.64</td>
<td>3.45</td>
</tr>
<tr>
<td>Tax, Company registration, Contract Designing</td>
<td>25</td>
<td>3.73</td>
<td>3.45</td>
</tr>
<tr>
<td>Managing Cash or Raising finance through banks</td>
<td>25</td>
<td>3.46</td>
<td>3.27</td>
</tr>
<tr>
<td>Using Accounting software</td>
<td>25</td>
<td>2.55</td>
<td>2.36</td>
</tr>
<tr>
<td><strong>Composite Mean</strong></td>
<td></td>
<td>3.45</td>
<td>3.20</td>
</tr>
</tbody>
</table>

**Discussion**

Primary aim of this study is to measure the importance and effectiveness of incubation related services for the women entrepreneurs in Pakistan. Stakeholder perspective is used for this study that includes the tenants’ perception, one of the key stakeholders, to understand the nature of importance and effectiveness of incubation related facilities and services.

Since the mean values of all variables exceed 3.0, it shows the importance of all 34 facilities as well as services provided by the incubator for tenants’ businesses. The reasons behind the tenants’ higher rating of importance of incubator’s facilities and services are understandable and generic as almost all the start-ups confront with deficiency of physical resources (i.e. capital, infrastructure etc.) as well as skills and abilities to manage their businesses successfully (Scarborough & Zimmerer 2000; Terpstra & Olson 1993; Van Auken 1999). It is pertinent to mention here that all the female entrepreneurs are well aware of the current challenges of their businesses which are vital for the success of any business. This realization could be the reason of experience which they might have gained over a period of time, or because of the business...
education which they might have received from institution, or because of the training which they might have taken from their business incubator. The finding of this study regarding the tenants’ high perceived importance of incubation related facilities/services is consistent with the work of Abduh et al., (2007a) and Xu (2010) who in their empirical studies, conducted in Australia and China respectively, have found the similar results regarding the higher importance of investigated incubation related facilities/services. This similarity in results across different countries and cultures somehow confirms the universal need of small businesses for incubation related facilities/services. However, the difference in terms of degree of importance is evident in this study. Among the five general categories of facilities and services, marketing related services such as participation in exhibitions/business fairs, and identification of new market opportunities are viewed as the most important services provided by the incubator. Whereas infrastructural related facilities such as affordable office space, shared facilities, and office equipment are rated relatively as least important by the tenants in terms of their importance. The greater focus of tenants on marketing related services than the office related facilities show that women entrepreneurs in Pakistan are more aware of the need of marketing activities for the success of businesses in the current hyper competitive business era.

Regarding the perceived importance of individual facilities/services, tenants have viewed business plan development, identification of new markets, participation in exhibition/fairs, marketing/management strategies, and customized training programs for skills development as the most important services for their start-ups. It is pertinent to note that none of the above-mentioned services belong to infrastructural related facilities but to development related needs of the tenants’ businesses. Compared with office related facilities, tenants’ increased focus on the developmental needs of entrepreneurs and businesses is consistent with the Becker’s (1964) view
that the most decisive factor of modern business’s success is rooted in the human resources, not in the physical resources (Joseph 2009). Similarly, from the above discussion it can easily be concluded that, in tenants’ eyes, the distinguishing features for the success of their businesses relate to the availability/non-availability of developmental related services.

Regarding the effectiveness of incubator, tenants have shown their extended agreement with the incubator’s effectiveness in delivering stated facilities/services. On the whole tenants hold favorable perception regarding the effectiveness of their incubator as the mean score for all the facilities/services is greater than 3 on the rating scale of 4. However, comparing the mean scores of all five categories it is interesting to note that office related facilities is the only category where mean score of effectiveness exceeds the perceived importance of tenants. Possible reasons of this higher score could be incubator’s better ability to facilitate its incubates with state of the art facilities due to the government funding, or the impact of tenants’ relatively perceived less importance of office related facilities on the rating of incubator’s effectiveness. It is worth noting that none of the remaining four categories hold the same scoring as mean scores of incubator’s effectiveness is lower than the mean scores of tenants’ perceived importance for rest of the four categories. This negative difference between perceived importance and perceived effectiveness does not mean that incubator is not capable to manage development related services as the mean scores of both dimensions are high, instead it shows the tenants higher expectations from incubator for the increased level of services, probably by having more competent and professional managers, trainers, and/or consultants. For example marketing related services are undoubtedly critical especially for the survival and growth of however by inducting more
competent and experienced marketing specialists incubation can enhance its effectiveness and can match its tenants’ expectations.

Other than the office related facilities, among the remaining four categories, tenants have shown their least agreement with incubator’s effectiveness in providing them with consultancy related services. However, this negative difference does not make much sense as the mean score of perceived importance of consultancy services is also lowest among the all five categories. The possible reason of tenants’ low rating of consultancy services on both importance and effectiveness dimensions could be the paid nature of consultancy services or the little realization of the role of consultants in business’s success. Networking is another category where tenants see their incubator less effective. They want to be more updated with latest information, and well connected with business related networks outside the incubator. However incubator can exceed its tenants expectations by linking its members with broader and relevant public as well as private networks (Lois, Mark & Malavika 2004).

Conclusion

The role of incubation in the development and sustainable growth of small and medium businesses is vital. This study’s findings show female entrepreneurs are well aware of the contemporary challenges and needs of their businesses. Female entrepreneurs consider incubation facilities/services very important for the success of their businesses. On the whole all the females are satisfied with their incubator in terms of providing them with various incubation related facilities/services. However, the gap between tenants’ perception regarding the importance of incubator’s facilities/services, and the incubator’s effectiveness in delivering on those promised facilities/services highlights a slightly different picture. This gap doesn’t portray the inability of incubator’s management to deliver on those services instead it reflects the higher
expectations of tenants from incubator’s management to enhance their efficiency/effectiveness level since the competition and challenges faced by tenants’ businesses have become more intense and severe.

**Limitations and Future Research**

This study carries various limitations. Since in Pakistan there is only one incubator working specifically for women, small sample size of the study is unavoidable. This small sample size places question mark on the generalizability of the study’s findings. The second limitation deals with the study of incubator’s clients (tenants) only. Other stakeholders such as incubator’s management, suppliers, government etc. could have been studied. However, this limitation highlights an opportunity for future research where more stakeholders can be studied. Comparative studies can be conducted by including other operational incubators in other countries as well as in Pakistan. Ex-tenants of incubators can also be studied to identify the impact of incubation on businesses survival and growth.
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