EXECUTIVE SUMMARY

Performance factors of small Israeli tourism ventures were examined using an integrated model that combines four theoretical approaches, each focusing on a different central facet: environmental milieu, institutional support, entrepreneurial human capital, and the venture’s bundle of services. The current research developed an operational instrument for assessing environmental attractiveness components of tourism ventures and their relationship to performance. A factor analysis, based on this instrument, revealed three environmental factors: tourist-related infrastructure, options for excursions and scenery, including climate. An attractive environment contributed to higher revenues in tourism ventures; however, it did not assure profitability. The results indicate the dual nature of the impact of institutional support upon the tourism venture’s performance. Regardless of the size and age of ventures, those obtaining the advisory type of assistance from the governmental tourism incubator performed less well than those ventures that did not obtain such support. By contrast, those tourism ventures that were financially supported by external sources performed better than those that were not financially supported. The explanation for this curious and seemingly contradictory finding may lie in the different criteria for receiving financial and advisory assistance. Success in persuading external sources to provide financial support would seem to be evidence of the soundness of the venture’s planning and its economic viability. By contrast, insofar as virtually any venture in the area may apply for and obtain advisory assistance from the governmental tourism incubator, with no requirement
to meet financial criteria of any kind, it could be that precisely the weaker ventures are being carried along by this form of assistance.

Among the various entrepreneur’s attributes examined, managerial skills provided the strongest association with the performance measures. The managerial skills were also found to be the most significant variable explaining performance relatively to the variables derived from the other three approaches. These results have implications regarding the nature of the support to be given by a governmental tourism incubator to entrepreneurs operating in the region. Given that lack of managerial skills is one of the main barriers to a venture’s success, particularly in small businesses where the owners have to be involved in all areas of activity, the incubator needs to provide entrepreneurs with tailored regional business and management training tools to promote tourism venture development and success.

The study also reveals that the number of services offered by a tourism venture made only a minor contribution in the revenues regression, which may indicate that providing a bundle of services for the tourist customer does not necessarily guarantee profitability. A noteworthy finding is the similarity in the differential association between the number of services offered and the performance measures, on the one hand, and attractiveness features with performance on the other. In both cases, these factors positively contribute to the revenues regression, but neither contributes to the profitability or income regression. This means that an attractive environment does contribute to higher revenues, in that more tourists choose to visit the tourist attractions; however, this does not assure profitability. Similarly, providing many services to the visitors may also contribute to higher revenues, but does not necessarily assure profitable business outcomes. The current findings indicate that small tourism venture profitability is contingent on human capital, especially the skills of the entrepreneurs running the venture. In accordance with our findings that managerial skills are so crucial for venture success, the main objective of advisory incubators should be to promote managerial competencies. © 2000 Elsevier Science Inc.

INTRODUCTION

The current research literature dealing with factors affecting performance of entrepreneurs has focused primarily on manufacturing firms and only secondarily on service industries. It has paid virtually no attention to the tourism industry.

This lack is particularly notable considering that in recent years tourism has become the world’s largest industry (Lundberg, Krishnamoorthy, and Stavenga 1995; Pearce 1992). The total gross output for travel and tourism in 1993 stood at close to $3.2 trillion, about 6% of the world’s gross national product (GNP). Moreover, tourism is growing at almost twice the rate of world GNP. Worldwide, 204 million people work in the industry (World Travel and Tourism Council (WTTC) 1995). For every $1 million of revenue generated by the industry, 20,000 new jobs are created. In the U.S., tourism is the nation’s third-largest retail industry, after food stores and automotive dealers. In 1989 tourism became the U.S.’s largest export industry, and according to the U.S. Commerce Department, it will increase 75% by the year 2000 (Lundberg et al. 1995). The tourism industry contributes to many economic processes, such as the fostering of regional development, the creation of new employment, the diversification of the national economy, increasing public revenue, improving income levels, and the balance of payments (Hall 1996). Tourism is a fragmented industry with varied activities, such as accommodation, transportation, shopping, and recreational activities (McIntosh, Goeldner, and Brent Ritchie 1995).

The current study attempts to fill the gap in the literature by examining factors which influence the performance of mainly small tourism ventures. The study assesses environmental factors, including those of the particular industry, and the business and personal factors associated with the success of tourism ventures. The success of a ven-
tured depending upon a large number of variables relating to the organization and its environment. Recognition of this complexity has led researchers to incorporate into their studies factors such as personal, organizational, and environmental characteristics, and examine their relationships to the performance of entrepreneurial ventures (Lumpkin and Dess 1996; Sandberg and Hofer 1987, and others). Regarding the performance factors of tourism ventures, four theoretical approaches may be proposed, each of which focuses on a different central facet: 1) the environmental milieu approach, focusing on the attractiveness of the venture’s location, 2) the institutional support approach, 3) the entrepreneurial human capital approach, and 4) the venture features approach, focusing on the venture’s bundle of services.

The integrated model combining these four theoretical perspectives may be generalizable to many ventures in the highly heterogeneous and important economic sector called tourism. First we present the four approaches and their relationship to performance of small tourism ventures. In our examination we test four hypotheses, each related to one of the approaches. We then try to assess the contribution of each of the above factors to venture performance. The study examined the research hypotheses on small tourism ventures located in the Negev, Israel’s southern region, which constitutes about 60% of its total land area.

LITERATURE REVIEW

The Environmental Milieu Approach and Its Applicability to Tourism

The importance of the environment for entrepreneurial performance has been recognized by researchers (Bruno and Tyebjee 1982; Pennings 1982). The location-dependence line of research, which focuses on the focal role of location on various aspects of businesses such as venture creation (Banks 1991; Reynolds, Miller, and Maki 1993; Aydalot 1986) and performance has addressed mainly manufacturing, high-tech, and small businesses. However, in the tourism industry, this line of empirical research is almost non-existent, although much in the way of descriptive statistics regarding the environmental factors impinging on regional tourism development is available. The virtual absence of an empirical examination of location-dependence hypotheses is particularly notable in tourism in view of the fact that the main attraction of many tourism ventures is rooted in environmental resources and factors. Whereas authors like Gartner (1985) use the term “environment” mainly in relation to the business environment, in tourism, it is usually treated in a wider sense, since tourism and the physical and social environment appear to be inseparable. As Fridgen (1984) noted, taking a vacation is a leisure-time activity that involves interaction with the environment and its components. Thus, tourist attractions and popular travel destinations are planned on the basis of unusually pleasing physical, scenic, and geographic components of the environment. The following factors are often mentioned as having an impact on the drawing power of tourist destinations: scenery, history, culture, ethnicity, accessibility, and events (Mill and Morrison 1992).

Scenery is a term broadly encompassing components beyond the physical appearance of the terrain. It relates, among other things, to the climate, geological manifestations in the form of caves and coral reefs, volcanoes, waterfalls, and canyons, as well as the local inhabitants (Smith 1983; Mill and Morrison 1992). In fact, scenery and its components can be described in passive or active terms, depending upon their variety
and the options for tours to be offered by the tourism venture. An environment endowed with many natural resources and man-made attractions is thus an advantage for the tourist venture (McIntosh, Goeldner, and Brent Ritchie 1995). Another environmental factor is the supply of facilities, goods, and services that are likely to encourage visits, such as basic regional infrastructure (water, electricity, etc.), higher level infrastructure (e.g., entertainment centers, casinos, and theaters, means of access, transportation centers) and special features of the local culture such as food and traditions (Ley and Madison 1996; McIntosh, Goeldner, and Brent Richie 1995; Leiper 1990; Al-Wahab and Al-Din 1975; Andersen 1996; Fridgen 1984; Hall 1996; Edington and Smith 1992).

Sites of historical, cultural, and religious interest are also environmental components conducive to tourism. General factors which determine the overall attractiveness of a tourism region, include also price levels, shopping and commercial facilities, natural beauty and climate, sport, recreation and educational facilities, accessibility of the region, attitudes towards tourists, and cultural and social characteristics (Brent Ritchie and Zins 1978). McIntosh, Goeldner, and Brent Ritchie (1995) note that the competitive advantage of a tourism region is expressed in the variety of its tourism resources, which enables it to compete with other tourism ventures that exploit the same or similar resources. An analysis of the tourism resources of Israel’s Eilat region revealed its unique natural resources, an array of geographic attractions, including active and passive recreation facilities, as the salient tourism advantages (Fleisher and Mansfeld 1995). Furthermore, Blakley (1988) has shown that the range of services is the main factor in the growth or decline of most tourism regions.

Although many of the environmental factors most frequently cited as essential for entrepreneurs in general are relevant to tourism entrepreneurs, their impact on performance in the tourism industry is still waiting to be studied empirically. These include venture capital availability, involvement of experienced entrepreneurs, accessibility of suppliers and customers or new markets, favorable government policies and other facilities and supporting services (including transportation), availability of land, a receptive population, availability of reasonably priced labor, and low prices (Bruno and Tyebjee 1982, p. 293; Banks 1991; Mill and Morrison 1992; Smith 1989, p. 136.) In sum, the environmental features of the tourism location are assumed to be important both theoretically and practically for the business success of tourism ventures.

However, quantifying touristic-geographic features of the environment, such as scenery, and attaching relative weights to each of its components is problematic (Smith 1983). Thus, in order to assess their association with tourism venture performance, it is necessary to operationalize these environmental factors. In this study, we try to develop such an operational instrument (see the methodology section), using it to test a general location-dependence hypothesis suggesting that, following the above literature review, different environmental features, such as scenery, climate, a developed tourist infrastructure, recreation facilities and others, are important for tourism venture success.

**H1:** The level of attractiveness of the tourism venture’s location is positively related to the business performance of the venture.

### The Institutional Support Approach and Its Applicability to Tourism

By their actions, governments substantially influence the economic and non-economic opportunities essential to the creation of the conditions that lead to the development of business ventures (Wilken 1979). This is no less true of state intervention in tourism:
Whether the touristic development is encouraged or blocked, depends very much on the policy of the government. At the minimum, the state must cooperate with touristic development. Furthermore, the state often plays an active role in opening up new areas of mass tourism because either governmental expenditures on infrastructures or resources from international agencies are required for the provision of infrastructure (roads, airports) and often the touristic facilities themselves (Dogan 1989, p. 227; see also Swarbrooke 1995; Hall 1996; Lickorish, Jefferson, Boudlender, and Jenkins 1994). Government may provide a general economic framework which actively encourages growth and at the same time removes unnecessary restrictions or burdens (Hall 1996). Of course, state intervention in tourism differs from one country to another, depending on the economic, political, social, cultural, and environmental priorities and constraints.

When state support and protection is given to specific local industries and industrial enterprises that contribute to employment and an improved balance of payments, as in Israel, the performance of entrepreneurial ventures may be profoundly affected (Lerner 1989). Thus, the second approach focuses on institutional support mechanisms for entrepreneurs, and their impact on venture performance.

In tourism, government paternalism towards entrepreneurs may be reflected in various ways: availability of government loans, investment funds, and assistance for entrepreneurs operating in certain regions (Mill and Morrison 1992; Lickorish et al. 1994), establishment of incubators for promoting entrepreneurship through guidance and business advisory services, and infrastructure development (Hall 1996; Lickorish et al. 1994). According to Sarder, Ghosh, and Rosa (1997) there is contradictory evidence regarding the impact of such services from one study to another, from one country to another, and even within countries. In their Bangladesh study, they found that firms assisted by governmental as well as non-governmental support organizations performed significantly better than non-assisted firms.

O’Farell (1986) found that in Ireland, those firms that were supported financially by external sources were larger and attained a higher level of revenues. Lerner (1989), in a study of Israeli ventures that distinguished between sponsored entrepreneurship, which enjoyed more favorable conditions, and non-sponsored entrepreneurship, found meaningful differences among their features (size, avenues for raising capital, recruitment, and ownership). Birley and Westhead (1992), in a comparison of firms in “assisted” and “non-assisted” geographical areas in the U.K., found no significant differences in terms of sales revenues; however, though not at a level of statistical significance, firms in the “assisted” areas were also larger in terms of personnel (see also Levie 1994; White and Reynolds 1994).

In the present study, we examine and compare the impact of two types of institutional support on tourism venture performance: a) the use of external financing; and b) the use of a governmental tourism incubator’s advisory services. This prompted the following hypotheses:

**H2a:** Tourism ventures that benefit from external financing sources show better performance than ventures that are entirely self-financed.

The explanation for this hypothesis is that financial support is usually given to those ventures with the more promising success potential. The relationship assumed is bi-lateral rather than causal.

**H2b:** Tourism ventures availing themselves of institutional business advisory support from tourism incubator programs are less successful than those that do not avail themselves of this support.
The explanation for this hypothesis is based upon the policy of the particular governmental incubator studied, which was launched in order to increase employment in the peripheral Negev area, one of its functions being to promote business performance of ventures undergoing difficulties (The Negev Development Tourism Administration 1992). Thus, the rationale in presenting these two hypotheses separately is the difference in the selection criteria for providing assistance. In contrast to direct financial support, which is provided to start-ups having good growth potential (like the policy of many profit incubators, especially high-tech ones), governmental advisory support is offered to all ventures but is assumed to be utilized more by the weak ventures.

The Entrepreneurial Human Capital Approach and Its Applicability to Tourism

The human capital approach attributes the level of performance of the venture primarily to the education, experience, and skills of the entrepreneurs, as well as to their personal entrepreneurial characteristics. Several studies have examined the impact of an entrepreneurial family background on business success. Whereas one study found no significant relationship between this background and new venture survival (Cooper, Dunkelberg, and Woo 1988), others have found that having entrepreneurial parents was associated with greater sales levels of founders in an emerging industry (Duchesneau and Gartner 1988; Cooper and Gimeno-Gascon 1992, p. 305). The entrepreneurs’ education and its relationship to performance has also been widely examined (see, for example, Robinson and Sexton 1994; Cooper, Gimeno-Gascon, and Woo 1994). Despite certain inconsistent findings regarding the impact of education (Bird 1989; Cooper and Dunkelberg 1987; Ronstadt 1984), in their meta-analysis Cooper and Gimeno-Gascon (1994, p. 305) concluded that most of these studies had indeed found significantly positive relationships between education and performance, that is, formal education was related to entrepreneurial performance, especially in industries which required specialized and advanced training (Bird 1989). Research supports the role of industrial experience in successful venturing (Bird 1995, 1993; Dunkelberg et al. 1987; Vesper 1980). It was also found that industry-specific know-how, and business similarity, which reflects specific experience in similar businesses, contributed to survival and growth (Cooper, Gimeno-Gascon and Woo 1994; Chandler and Hanks 1992). Vesper (1980) indicated that work experience may be more important when it is necessary to rely on inside industrial information and in highly competitive businesses (e.g., restaurants). Entrepreneurial experience has also been found to be conducive to business performance (Ronstadt 1988). Prior experience as an entrepreneur is a good predictor of re-venturing and can contribute to a successful path (Vesper 1980). Other studies concluded that an entrepreneur’s management skills were conducive to business performance and growth (Cooper and Gimeno-Gascon 1994; Ronstadt 1984; Bird 1995). Hunger and Wheelen (1996) have also argued that successful entrepreneurs are characteristically able to employ a host of different skills. Hood and Young (1993) found that financial management, accounting, marketing and sales were meaningful skill areas of successful entrepreneurs. Similarly, Lundberg et al. (1995) saw the role of the tourism project manager in ensuring proper communication and coordinating the activities of the various personnel in the system as an important factor in the venture’s success. Litzinger (1965), in a comparison of the characteristics of managers and entrepreneurs in Arizona’s hotel industry, found that entrepreneurs tended to focus on critical managerial issues and areas that involved innovative and risk-laden activity, in contrast to managers, who tended to deal with more
routine decision making and management of issues that were neither critical nor innovative. Aharoni, Maimon, and Segev (1978) found that managerial skills and personal characteristics such as risk taking and decision making are expressed in and influence business performance.

Regarding the personal attributes of entrepreneurs, Naffziger (1995) claims an emerging consensus that successful entrepreneurs are different from unsuccessful ones, whereas other studies showed inconsistent findings. Thus, three of four studies which examined need for achievement found positive and significant correlations with performance (Cooper and Gimeno-Gascon 1992; Begley and Boyd 1987; Miner 1996; Brockhaus 1980). Regarding the impact of locus of control on performance, research shows mixed or non-significant results (Cooper and Gimeno-Gascon 1992; Begley and Boyd 1985; Duchesneau and Gartner 1988; Brockhaus and Horwitz 1986). Miller (1983) found that entrepreneurial firms generally had the most autonomous leaders.

In light of the absence of empirical examinations of the correlations between these human capital parameters and venture performance in the tourism industry, the following hypotheses are offered.

\[ H3a: \]  The personality characteristics of the entrepreneur, such as achievement orientation, autonomy, and locus of control, are positively related to the tourism venture’s performance.

\[ H3b: \] An entrepreneurial family background, previous experience in the tourism industry, previous entrepreneurial experience, and managerial skills are positively related to the tourism venture’s performance.

The Venture Features Approach and Its Applicability to Tourism: The Venture’s Bundle of Services

In the fourth approach, the emphasis is transferred to the features of the venture. One of the important features which may influence venture performance in the tourism industry is the number of services provided. Tourism as an industry is comprised of a range of businesses that offer various services, such as travel and touring services, restaurants, entertainment, and various attractions, accommodations, souvenirs, etc. (Echtner 1995; Lundberg et al. 1995). Some ventures provide more than one type of services and cater to many tourist demands at the same time. According to Schneider and Bowen (1995), provision of a service bundle rather than a core service constitutes a competitive advantage for a service venture, though it requires greater attention to the coordination of the core service with all the other operations and human resources. “Club Med,” for example, has been a very active proponent of the vacation bundle or package. Others, however, have generally been unable to replicate such a seamless operation in providing a total vacation experience (Sasser, Hart, and Heskett 1991; Schneider and Bowen 1995, p. 193). These findings prompt the following hypothesis.

\[ H4: \] Tourism ventures that offer more services will perform better than those that concentrate on fewer services.

So far, we have seen that a different hypothesis concerning the business performance of tourism ventures can be derived from each approach. Beyond the conceptual differences, they may be perceived as complementing each other. Thus, we propose an integrative model, suggesting that the attractiveness of the venture’s location, the institu-
tional support, the entrepreneur’s characteristics, and the venture’s bundle of services all affect its success, and try to assess the contribution of each of these factors to tourism venture performance (see Figure 1).

Performance Measures of Small Entrepreneurial Ventures
The perception of venture performance as a multi-dimensional concept has emerged only recently (Lumpkin and Dess 1996). Performance is usually measured by indices that reflect the size of the business, generally in terms of revenues and number of employees (Robinson and Sexton 1994; Davidsson 1991; Loscocco and Leicht 1993; Srini-

vasan, Woo, and Cooper 1994; O’Farell 1986). In studies on technological and manufacturing industries, researchers have used various financial measures to examine business success such as revenue volume, net profit, return on investment (ROI) (Kirchhoff 1977), and the ratio revenues/income per worker (Bade 1986; Johannisson 1993; Miller, Wilson, and Adams 1988). Some investigators have used the income of the entrepreneur as a performance measure (Denison and Alexander 1986; Dollinger 1985; Sexton and Robinson 1989; Smith, Bracker, and Miner 1987). These measures of success are also relevant to small ventures, though the uncertainty and lack of stability characterizing these ventures have led some investigators to perceive survival as the prime dimension of success. Kalleberg and Leicht (1991) distinguish between success and survival as two separate aspects of business performance that are determined by different factors. These parameters of business performance are relevant to the tourism industry as well, though in this case the number of tourists (nights of accommodation, visits) constitutes a demand measure that sometimes reflects the revenues of the business (Al-Wahab and Al-Din 1975).
THE CASE: TOURISM VENTURES IN THE ISRAELI NEGEV

The study examined small tourism ventures located in the Negev, Israel’s desert-like southern region, which constitutes about 60% of its total land area. Generally, tourism is a growing industry and one of the largest sources of foreign exchange in Israel. During 1995, Israel with its population of some 5.5 million hosted more than 2.5 million tourists (Israeli Ministry of Tourism, 1996). In spite of the touristic potential of the Negev, given its natural scenic resources, the area may still be viewed as peripheral from the tourism perspective: its tourism infrastructure is minimal even though there has been a significant increase in the number of tourism ventures in recent years, leading to an increase in both supply and demand. With the exception of the luxury hotels and facilities in Eilat and the Dead Sea area, most of the ventures in the Negev are small and have been in operation for only a short time when compared to other tourism regions in Israel, such as the Galilee, the hilly and verdant northern area of the country, and especially when compared to locations abroad.

The Negev regional business incubator assistance program for small tourism ventures was established in 1992 by the government in cooperation with other public entities. Its aim was to provide advice, guidance, and training during the development and growth stages to existing and new tourism ventures in the region. The incubator was modeled after others of its kind in manufacturing, and adapted to the special needs of the tourism industry. It finances 75% of the entrepreneur’s advisory costs, including an examination of the operative plan for establishing the venture, the preparation of marketing and operating plans, and a follow-up.

METHODS

Data Collection

The data for the study were gathered by means of in-depth interviews conducted during 1995 at 53 tourism ventures in Israel’s Negev. The research sample covered 65% of the total population of small tourism ventures in the area. The comprehensive, structured questionnaire was based mainly on that of Hisrich and Brush (1984), with certain changes and additions, mainly for the sake of relevance to the tourism industry. Prior to the main field study the questionnaire was tested in a pilot study by means of face-to-face interviews with five of the respondents to examine its clarity and suitability for the tourism industry. In the actual field research, 18 entrepreneurs were interviewed face-to-face by the second author using the comprehensive structured questionnaire. The rest of the 35 questionnaires were received by mail. The respondents were asked to state their answers on 5-point Likert scales. In order to ensure a high response rate, despite the length and complexity of the questionnaire, preliminary phone calls were made to the owner/manager of each venture. Since the questionnaire included variables on business performance, the respondents were assured of full confidentiality. The indices generated were reviewed for internal consistency (Cronbach’s α) as shown below.

The Research Variables

Performance Variables: Dependent Variables

Revenues were measured as reported by the respondents for the years 1994–1995. Reported Profit for 1995 was measured on a 3-point ordinal scale of 1 = a profit; 2 = neither
a loss nor a profit; 3 = a loss. Income of the entrepreneur was measured on a Likert scale, ranging from 1 = much below the average income in the Israeli market, to 5 = much above the average income in the Israeli market.

**Independent Variables**

1. **Human capital variables.** Demographic variables. **Education** was measured on a 8-point ordinal scale, from 1 = elementary education, to 8 = academic education, Master’s degree or higher.

   **Entrepreneurial family background** was measured by a dichotomous question: 1 = neither of the parents was or had been in business, that is, was not self-employed and/or a business owner. 2 = at least one of the parents was or had been in business (see also Cooper, Gimano-Gascon, and Woo 1994).

   **Previous experience,** consisting of previous entrepreneurial experience and previous experience in tourism (as an employee), was examined by dichotomous questions (Hisrich and Brush 1984): 1 = yes, 2 = no.

   **Personality features.** **Achievement orientation** was measured by three items (Steers and Braunstein 1976); internal consistency showed $\alpha = 0.72$. **Locus of control** was measured by 2 items ($r = 0.27$), one external and the second internal (Rotter 1966, 1975). **Autonomy** and the desire for independence were measured by three items (Steers and Braunstein 1976); a reliability test showed an internal consistency of $\alpha = 0.58$. All the answers were given on a Likert scale, ranging from 1 = never, to 5 = always. In two of the achievement measures the scale ranged from 1 = not important at all, to 5 = very important (Hisrich and Brush 1984). All the above measures had been previously translated and used on an Israeli sample of entrepreneurs (Erez and Edelding 1991).

   **Business skills index:** An index was constructed on the basis of six questions, including acquiring financing, managing personnel, product innovation, ongoing business operation, strategic management, marketing and selling (Hisrich and Brush 1984), with answers on a Likert scale, ranging from 1—poor, to 5—excellent. A reliability coefficient showed an internal consistency of $\alpha = 0.70$.

2. **Venture variables.** **Age of the venture and number of employees** were measured by open questions. **Number of tourism services:** bundles of tourism venture services were examined according to categories of tourism services and their combinations (e.g., accommodation and catering).

   **The attractiveness of the tourism venture’s location.** was examined by a series of 13 questions indicating various environmental factors (Hotel Review 1993). Each of the 13 items was scored by the 53 respondents and 12 professional raters, that is, 65 respondents rated them on a scale ranging from 1 = not a strong feature of the venture, to 5 = a very strong feature of the venture. The professional raters were selected on the basis of their experience in the tourism industry in general and in the Negev in particular, from fields such as economics, marketing, physical planning, tourism consultancy, etc. Each of the 13 attractiveness characteristics received a score composed of the sum of the 65 raters’ scores. An index of the attractiveness of a tourism venture location was constructed on the basis of the responses of the subjects ($\alpha = 0.88$). A rotated factor analysis that was carried out on the 13 features, elicited three environment attractiveness factors. The same three factors appeared in the analyses conducted only with
TABLE 1  Results of Factor Analysis of Attractiveness Location Variables

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor #1</th>
<th>Factor #2</th>
<th>Factor #3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor 1: Tourist-related infrastructure</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Restaurants</td>
<td>0.87</td>
<td>−0.05</td>
<td>0.22</td>
</tr>
<tr>
<td>2. Shopping</td>
<td>0.84</td>
<td>0.21</td>
<td>0.08</td>
</tr>
<tr>
<td>3. Closeness to major tourism destinations</td>
<td>0.72</td>
<td>0.18</td>
<td>0.02</td>
</tr>
<tr>
<td>4. Transportation</td>
<td>0.67</td>
<td>0.22</td>
<td>0.12</td>
</tr>
<tr>
<td>5. Accessibility to tourism information</td>
<td>0.65</td>
<td>0.48</td>
<td>0.10</td>
</tr>
<tr>
<td>6. Places of entertainment</td>
<td>0.64</td>
<td>0.44</td>
<td>−0.04</td>
</tr>
<tr>
<td>Factor 2: Options for excursions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. A range of diverse tourism activities in the region</td>
<td>0.22</td>
<td>0.84</td>
<td>0.23</td>
</tr>
<tr>
<td>8. Options for organized tours in the region</td>
<td>0.25</td>
<td>0.77</td>
<td>0.22</td>
</tr>
<tr>
<td>9. Supply of activities for children</td>
<td>0.17</td>
<td>0.77</td>
<td>0.09</td>
</tr>
<tr>
<td>10. Accessibility to scenic spots</td>
<td>0.0</td>
<td>0.48</td>
<td>0.63</td>
</tr>
<tr>
<td>Factor 3: Scenery</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Scenery</td>
<td>0.14</td>
<td>0.25</td>
<td>0.80</td>
</tr>
<tr>
<td>12. Serenity</td>
<td>0.06</td>
<td>−0.45</td>
<td>0.68</td>
</tr>
<tr>
<td>13. Climate</td>
<td>0.15</td>
<td>0.34</td>
<td>0.61</td>
</tr>
<tr>
<td>Eigenvalue</td>
<td>5.26</td>
<td>1.77</td>
<td>1.5</td>
</tr>
<tr>
<td>% of variance explained</td>
<td>40.5</td>
<td>13.6</td>
<td>11.7</td>
</tr>
<tr>
<td>Alpha Coefficient</td>
<td>0.90</td>
<td>0.82</td>
<td>0.74</td>
</tr>
</tbody>
</table>

(1) the professional raters plus the rest of the respondents, (2) the respondents without the professional raters.

Table 1 reveals the following three factors:

(1) **Tourist-related infrastructure**, including auxiliary services such as restaurants, shopping, transportation, places of entertainment, and tourist centers that offer information services \((\alpha = 0.90)\).

(2) **Options for excursions**, including organized tours, access to scenic spots, a range of tourism activities in the area and a supply of activities for children \((\alpha = 0.82)\).

(3) **Scenery**, including climate \((\alpha = 0.74)\).

4. **Support characteristics.** In classifying ventures as assisted and non-assisted, we made two separate sample splits, according to two types of support:

**Financial support:** The financially assisted group consisted of those ventures that had used institutional and other external sources of finance (e.g., banks, the Ministry of Tourism, the Jewish Agency, local authorities, etc.). Analysis of the responses was carried out on a dichotomous basis for each source individually. The non-assisted group consisted of those ventures that did not use external financial resources at all.

**Advisory support:** The assisted group consisted of those ventures that had used one or more of the advisory services of the incubator, such as preparation of business plans, and/or marketing plans, and support in operating the venture. Respondents were required to give a yes/no answer to each type of assistance. The non-assisted were those ventures that had not used these advisory services at all.

**The Research Population**

The research population consisted of small privately-owned businesses in the tourism industry, located in the south of Israel. Ventures in the Eilat area, such as jeep and camel
tours for experienced hikers, were included. Large hotels in Eilat and the Dead Sea area were excluded because they do not fit the research definition of small businesses.

**Characteristics of the Tourism Ventures**

More than three-quarters of the ventures had up to eight employees; 26.4% employed only one other person; and 11% were one-person businesses. About 40% of the ventures examined were active recreation businesses, offering desert tours, for example; 19% involved auxiliary tourism services and restaurants catering to tourists; 21% were tourist spots and 21% provided tourist accommodation. A good many of the ventures provided a range of services: 51% provided up to three types of services, 28% four to five types of services and activities, and the remainder (21%) offered six or more types of services to the tourist. The most prevalent combinations of services were tours with meals, guides, and sometimes overnight accommodation at a Bedouin-style encampment. The tourism ventures studied had been operating for 8 years or less: 60% had been operating 5 years or less; 21% had been established 6 to 7 years previously, and 19% had been operating for 8 years. Of the ventures studied, 72% obtained financial support (the financially assisted group) and 28% were non-assisted financially (n = 38, n = 15 ventures, respectively). With regard to advisory assistance from the governmental incubator, 38% of the ventures got some support, while 62% obtained none at all (n = 20, n = 33 ventures, respectively).

**Business Performance of the Tourism Ventures**

In 1995 27% of the ventures had revenues of more than one million NIS ($1 = 3.2 New Israeli Shekels) and another 15% sold tourism services valued at half a million to one million shekels. The remaining 60% or so had lower revenues: up to 220,000 shekels were reported by 46% of these ventures in 1994 and 31% in 1995, while in 1995, 28% reported revenues in the range of 220,000 to 550,000 shekels. The rate of growth in revenues from 1994 to 1995 was 57%, on average. Thirty-four percent of the ventures showed a 50% growth in sales from 1994 to 1995; 25% showed more than 50% growth of sales; 32% showed a loss in sales, and 9% were stable in those years. Most of the ventures studied (56.6%) reported an operating profit for the year 1995; 22.6% reported a balance between profit and loss; 20.8% reported an operating loss.

**Characteristics of the Entrepreneurs: Socioeconomic Variables**

Eighty-seven percent of the respondents were males and 13% females. The average age was 41: 51% were 31–40 years old, 25% were 41–50 years old, 17% were 51–62 years old, and only 7% were under the age of 30. One-third of the respondents had parents who had run independent businesses. The educational level of the respondents was high in comparison with the general population in Israel: 62% had academic education and the remaining 38% had secondary education.

**Background and Previous Experience**

For almost half of the respondents, the venture was their first entrepreneurial experience. Of the remainder, 28% had one past entrepreneurial experience, and 25% had
TABLE 2  Descriptive Statistics and Pearson Correlations

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>S.D.</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
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</thead>
<tbody>
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<td>1. Entrepreneur’s income</td>
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<td>1.08</td>
<td>1.00</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Profitability</td>
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<td>0.81</td>
<td>0.22</td>
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<td></td>
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<td></td>
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<tr>
<td>3. Revenues</td>
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<td>1407.71</td>
<td>0.42**</td>
<td>0.28*</td>
<td>1.00*</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
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<td>2.80</td>
<td>1.15</td>
<td>0.33*</td>
<td>0.18</td>
<td>0.29*</td>
<td>1.00</td>
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</tr>
<tr>
<td>5. Options for excursions</td>
<td>3.77</td>
<td>1.02</td>
<td>0.22</td>
<td>0.30*</td>
<td>0.32*</td>
<td>0.53***</td>
<td>1.00</td>
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<tr>
<td>6. Scenery</td>
<td>4.11</td>
<td>0.82</td>
<td>-0.50</td>
<td>0.29*</td>
<td>0.18</td>
<td>0.30*</td>
<td>0.42**</td>
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<td>7. Attractiveness index</td>
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<td>0.27*</td>
<td>0.30*</td>
<td>0.33*</td>
<td>0.90***</td>
<td>0.80***</td>
<td>0.57***</td>
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<tr>
<td>8. Advisory assistance</td>
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<td>0.49</td>
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<td>-0.28*</td>
<td>-0.22</td>
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<td>-0.11</td>
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<td>0.03</td>
<td>0.06</td>
<td>0.14</td>
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<tr>
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<td>0.76</td>
<td>0.38**</td>
<td>0.33*</td>
<td>0.31*</td>
<td>0.27*</td>
<td>0.21</td>
<td>0.27*</td>
<td>0.30*</td>
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<tr>
<td>11. Achievement need</td>
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<td>0.30*</td>
<td>0.06</td>
<td>0.22</td>
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<td>-0.08</td>
<td>0.09</td>
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</tr>
<tr>
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<td>0.10</td>
<td>0.32*</td>
<td>0.16</td>
<td>0.28*</td>
<td>0.26*</td>
<td>0.11</td>
<td>0.30*</td>
<td>-0.35**</td>
</tr>
<tr>
<td>13. External locus of control</td>
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<td>-0.37*</td>
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<td>0.13</td>
<td>0.01</td>
<td>-0.11</td>
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<td>0.32*</td>
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<td>-0.20</td>
<td>-0.26</td>
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<td>0.03</td>
<td>0.24</td>
<td>0.19</td>
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<td>-0.05</td>
<td>0.05</td>
<td>-0.09</td>
<td>-0.15</td>
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<tr>
<td>17. Previous experience in tourism</td>
<td>1.47</td>
<td>0.50</td>
<td>0.10</td>
<td>-0.03</td>
<td>0.06</td>
<td>-0.47***</td>
<td>-0.35*</td>
<td>-0.07</td>
<td>-0.46**</td>
<td>0.19</td>
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<td>18. Number of services</td>
<td>3.78</td>
<td>2.38</td>
<td>0.23</td>
<td>0.19</td>
<td>0.32*</td>
<td>-0.01</td>
<td>0.24</td>
<td>0.24</td>
<td>0.15</td>
<td>-0.06</td>
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</tbody>
</table>

(Continued)

two or more. Half of those with previous entrepreneurial experience had acquired it in
the tourism industry: some had managed a hotel or restaurant (13%), travel and tourism
companies, or field schools; 20% had run businesses in the area of auxiliary tourism
services.

Examination of the Hypotheses

The research hypotheses were first tested by means of Pearson correlation coefficients
between each of the variables appearing in the research model and each of the perfor-
mance variables separately. Then, multivariate examinations were performed by means
of stepwise regression analyses to assess the contribution of each of the independent
variables to explaining the variance of each of the performance variables.

Attractiveness of the Location of the Tourism Venture

The first hypothesis posited that the attractiveness of the location of the tourism venture
is positively related to the venture’s performance. The factor analysis elicited three rele-
ant attractiveness factors of the venture location: tourist-related infrastructure, options
for excursions and scenery. Table 2 shows the Pearson correlation coefficients among
these three factors and the performance measures.

As expected, the three factors of attractiveness, particularly the tourist-related in-
frastucture and excursions, are associated with the venture performance measures. Al-
TABLE 2  Continued

<table>
<thead>
<tr>
<th>Variable</th>
<th>9</th>
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<th>11</th>
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<td>2. Profitability</td>
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<td>3. Revenues</td>
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<tr>
<td>4. Tourist-related infrastructure</td>
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<td>5. Options for excursions</td>
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<tr>
<td>6. Scenery</td>
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<td>7. Attractiveness index</td>
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<td>8. Advisory assistance</td>
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<td>9. External financial assistance</td>
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<tr>
<td>10. Managerial skill index</td>
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<td>1.00</td>
<td></td>
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<td>11. Achievement need</td>
<td>0.13</td>
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<tr>
<td>12. Autonomy</td>
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<td>1.00</td>
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<tr>
<td>13. External locus of control</td>
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<td>0.21</td>
<td>-0.16</td>
<td>0.09</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. Entrepreneurial family background</td>
<td>-0.07</td>
<td>0.05</td>
<td>-0.03</td>
<td>0.27*</td>
<td>0.17</td>
<td>1.00</td>
<td></td>
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<tr>
<td>15. Education level</td>
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<td>-0.31*</td>
<td>-0.37**</td>
<td>0.03</td>
<td>0.08</td>
<td>1.00</td>
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</tr>
<tr>
<td>16. Previous entrepreneurial experience</td>
<td>-0.20</td>
<td>0.39***</td>
<td>-0.10</td>
<td>0.08</td>
<td>0.24</td>
<td>-0.05</td>
<td>-0.14</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17. Previous experience in tourism</td>
<td>-0.12</td>
<td>0.11</td>
<td>0.08</td>
<td>0.24</td>
<td>-0.08</td>
<td>-0.10</td>
<td>0.03</td>
<td>0.09</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>18. Number of services</td>
<td>0.22</td>
<td>0.07</td>
<td>0.12</td>
<td>0.21</td>
<td>0.17</td>
<td>0.22</td>
<td>-0.02</td>
<td>0.13</td>
<td>-0.06</td>
<td>1.00</td>
</tr>
</tbody>
</table>

* P < 0.05; ** P < 0.01; *** P < 0.001.

though the attractiveness index is significantly correlated to all three performance measures, the tourist-related infrastructure is correlated with revenues (r = 0.29) and income (r = 0.33). The factor excursions is correlated to revenues (r = 0.32) and to profitability (r = 0.30). The third factor, scenery, is correlated with profitability (r = 0.29), but not with the other performance measures.

In spite of the significantly positive correlations found by the bi-variate analysis, the multi-variate analyses (Table 3) revealed a minor impact of location attractiveness on the performance measures relative to the other variables.

The stepwise regression analysis of the revenues revealed the significant contribution of the attractiveness index to the explained variance. However, in neither the profitability, nor the income regression analyses was the attractiveness of the venture location index found to make a significant contribution to the explained variance beyond that of the personal variables, mainly the managerial skills. Moreover, it is worth noting that another regression analysis in which the three attractiveness factors were examined separately strengthened this finding: none of the three attractiveness factors contributed significantly to the explained variance. Thus, it might be that the human capital characteristics overshadowed the environmental variables as performance-related factors.

Institutional Support

The second hypothesis posited that tourism ventures financially supported by government and other external financing sources will display better business performance than
those not supported by external sources; by contrast, however, tourism ventures that are not supported by the advisory services of the tourism incubator are expected to perform better than those which are supported.

A t-test analysis (Table 4) compared the means and standard deviations of the performance of ventures that had obtained external financial support with those that had not, and also compared the performance of ventures assisted by the advisory services of the tourism incubator with that of the non-assisted ventures.

In partial accordance with hypothesis 2a, the statistical results indeed reveal that those tourism ventures that are financially supported by external sources, governmental or otherwise, show significantly higher revenues than ventures that are not financially supported. However, receiving external financial assistance is not significantly correlated with either profitability or income (see Table 2), suggesting that revenue growth does not necessarily assure higher profitability or income. Hypothesis 2b, regarding the

<table>
<thead>
<tr>
<th>TABLE 4</th>
<th>Means and Standard Deviations of Performance Measures of Assisted and Non-Assisted Entrepreneurs (t-Test)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial Assistance</td>
<td>Profitability</td>
</tr>
<tr>
<td>Non-assisted:</td>
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</tr>
<tr>
<td>Mean</td>
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</tr>
<tr>
<td>(SD)</td>
<td>(0.83)</td>
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<td>Assisted:</td>
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<tr>
<td>Mean</td>
<td>2.29</td>
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<tr>
<td>(SD)</td>
<td>(0.80)</td>
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<tr>
<td>t</td>
<td>0.97</td>
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<td>Advising Assistance</td>
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<td>Non-assisted:</td>
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<tr>
<td>Mean</td>
<td>2.54</td>
</tr>
<tr>
<td>(SD)</td>
<td>(0.71)</td>
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<tr>
<td>Assisted:</td>
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<tr>
<td>Mean</td>
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<tr>
<td>(SD)</td>
<td>(0.88)</td>
</tr>
<tr>
<td>t</td>
<td>2.12*</td>
</tr>
</tbody>
</table>

* P < 0.05.
advisory support, is also confirmed: it is precisely the non-assisted ventures that achieve the better performance scores. These results are significant for all the three performance measures. Furthermore, there is a negative relationship between receipt of advisory support and venture profitability (Table 2). A possible explanation for the inferior performance of the advisory-assisted ventures is that they are often younger and smaller than the non-assisted ventures. To examine this possibility we conducted a two-way analysis of variance, comparing the performance of the assisted and non-assisted ventures, split by age and size. Although the number of ventures in each of the categories in the two-way analysis of variance was small, the results show that the revenues of the advisory-assisted ventures were lower than those of the non-assisted, regardless of their size or age. By contrast, the two-way analysis of variance also revealed that the differences between the financially assisted and non-assisted ventures remained, regardless of their size and age.

The regression analyses (Table 3) show the minor impact of the advisory-assistance variables on performance relative to that of the entrepreneur’s characteristics. In two of the regression analyses, the advisory-assistance variables followed the personal variables, making only a minor contribution to the explained variance in performance. In the third regression, that of the revenues, they followed both the personal variables as well as the attractiveness variables. These results emphasize the centrality of the entrepreneurs in the performance of the tourism ventures.

**The Entrepreneur’s Human Capital**

Hypothesis 3a posited that the entrepreneur’s personality characteristics will be positively related to the tourism venture’s performance. Hypothesis 3b posited that entrepreneurial family background, education, previous experience in the tourism industry, previous entrepreneurial experience, and managerial skills are positively related to the tourism venture’s performance.

All the regression analyses (Table 3) as well as the Pearson correlations (Table 2) point to the central role of the entrepreneur’s attributes in venture performance, thus supporting the above hypotheses. Both the profitability and the income regression analyses show the great importance of the managerial skills index. Surprisingly, the contribution of education is negatively associated with profitability ($\beta = -0.21; r = -0.33$) (together with managerial skills and advisory assistance explaining 18% of the variance of profitability). The variance of income is also mainly explained by the entrepreneurial family background (socialization within a business family), following managerial skills index (together with advisory assistance they explain 22% of the variance of income).

As shown in Table 2, the findings concerning managerial skills provide the strongest and most systematic relationship among the entrepreneur’s attributes and performance measures: revenues ($r = 0.31$), profitability ($r = 0.33$), and income ($r = 0.38$). These findings indicate that the basic skills included in the index, such as financing skills, marketing ability, innovativeness, strategic planning ability, etc. are critical to the venture’s performance.

In the regression analysis of the revenues internal locus of control (LOC) appeared as the first significant variable. The important feature contributing to performance is the internal LOC and not the external one (this is indicated due to the negative correlation between external LOC and performance shown in Table 2). The results in Table 2 indi-
cate that need for achievement was correlated significantly with income \( (r = 0.30) \) and autonomy with profitability \( (r = 0.32) \).

Even though the role of experience and know-how is central to successful venture creation (Timmons 1985; Cooper and Gimeno Gascon 1992; Chandler and Hanks 1992), surprisingly, in this research population previous entrepreneurial experience and previous employment in tourism were not significantly related to performance. Income was the only performance measure found to be related to entrepreneurial family background. Neither revenue nor profitability were related.

The Venture’s Bundles of Services

The fourth hypothesis posited that tourism ventures which offer more services perform better than those which concentrate on fewer tourism services. Table 2 shows that although those ventures that offer more services to potential tourists show better revenues than those offering less services \( (r = 0.32) \), no significant differences appear in profitability and income. Nor do the multivariate analyses (Table 3) support this hypothesis: the number of services variable had a relatively very minor impact on the revenue regression, and no impact at all on the profitability or the income regressions. This finding may be explained by differences in the financial parameters: offering more and diverse services to customers indeed brought greater revenues, but was not reflected in higher profitability or in higher incomes, because these variables are influenced by many other factors, such as managerial skills.

The discussion below will expand on the general findings regarding the above hypotheses and their interpretation.

DISCUSSION AND CONCLUSION

Drawing on research in other industries on performance factors of entrepreneurial ventures and their attribution to personal, organizational, and environmental factors (for example, Cooper and Gimeno-Gascon 1992; Lerner, Brush, and Hisrich 1997; Lumpkin and Dess 1996), an integrative model combining variables from four theoretical approaches was suggested to explain the performance of tourism ventures.

Overall the examination shows that the main factors associated with all three performance measures are the entrepreneurial human capital attributes, mainly management skills. This finding is consistent with previous research on other industries, demonstrating the focal importance of the entrepreneur’s managerial skills, especially concerning the success of small ventures (Hornaday and Wheatley 1986; Bird 1989, 1995; Hood and Young 1993). Beyond the managerial skills, it was also found that the entrepreneur’s personal characteristics, mainly internal locus of control but also achievement orientation and autonomy, correlate with performance. Although previous studies have shown mixed or non-significant results regarding the impact of locus of control on performance (Cooper and Gimeno-Gascon 1992; Begley and Boyd 1985; Begley 1986; Duchesneau and Gartner 1988; Brockhaus and Horwitz 1986), our findings tend to support a positive relationship of this personal characteristic with performance. The findings which found need for achievement to be related to higher performance broadly corroborate those of many other studies (Cooper and Gimeno-Gascon 1994; Duchesneau and Gartner 1988; Bird 1989, etc.). This corroborates previous findings that
personality features exert a dominant influence on the subsequent success of the entrepreneur's venture (e.g., Miner 1996).

Contrary to expectations and the rich research evidence (for example, Robinson and Sexton 1994; Bowen and Hisrich 1986), neither previous employment in industry, nor former entrepreneurial experience were correlated with performance. Moreover, higher education was even negatively correlated with profitability, contrary to previous studies which found significantly positive relationships between education and performance (Cooper and Gimeno-Gascon 1994; Bird 1989; 1993), especially in high-tech industries. This might suggest that in the tourism industry, neither previous knowledge nor higher education per se assure success. However, the acquisition of business skills, even while running the business, is a requisite for profitability. This may suggest that in tourism the entry barriers are not as high as in other industries which require industry-specific previous experience and a high level of education. Our findings show that entrepreneurial family background contributed significantly to the income variance but not to revenues or profitability. This contrasts with previous findings on emerging industries, that scions of entrepreneurial families produced higher sales revenues (Duchesneau and Gartner 1988; Cooper and Gimeno-Gascon 1994, p. 305).

The conduciveness of certain environments to entrepreneurship hinges on the socio-economic infrastructure as well as on the availability of resources (Pennings 1982).

Our findings indicate the multidimensional nature of the attractiveness of the environmental milieu of tourism ventures, including **tourist-related infrastructure, options for excursions,** and **scenery,** including climate. However, although an attractive environment is a vital component of the product produced by the tourist industry (Al-Wahab and Al-Din 1975; Fridgen 1984; Hall 1996; Ley and Madison 1996; Wall 1996; Smith 1989), our findings show that one cannot rely only on environmental attractiveness as the sole guarantee of financial business success.

Most of the literature on tourist attractions is descriptive, case-specific, and not explanatory in either the general or specific sense (Stear 1981, p. 91). Moreover, as Lew (1987) has observed, “although the importance of tourist attractions in the study of tourism is recognized, tourist researchers have yet to fully come to terms with the nature of attractions as phenomena both in the environment and the mind” (p. 554). The operationalization of measures of attractiveness in the tourism location may add to a deeper understanding of the interface of environment and entrepreneurship in tourism.

The results also reveal that the number of services offered by tourism ventures did not contribute significantly to the performance measure regressions, apart from a minor contribution in the revenues regression. This may indicate that providing a bundle of services for the tourist customer does not necessarily guarantee profitability. Thus, in the relatively young and small-sized tourism ventures studied here it may be assumed that due to early-on costs (lower profits) providing a bundle of services often affected profitability negatively, and was done in anticipation of achieving greater stability in the form of repeat customers in the future.

It is worth noting the similarity in the differential association between the number of services offered and the performance measures on the one hand, and the attractiveness features with performance on the other. In both cases, these factors positively contributed to the revenues regression, but neither contributed to that of profitability or income. This means that an attractive environment does contribute to higher revenues, in that more tourists choose to visit the tourist attractions; however, it does not assure profitability. Similarly, providing many services to the visitors may also contrib-
ute to higher revenues, but does not necessarily assure profitable business outcomes. The current findings indicate that venture profitability is contingent on human capital, especially the skills of the entrepreneurs. Income is also a consequence of decisions which are contingent upon the entrepreneur, and does not necessarily coincide with profitability.

Furthermore, the results indicate the dual nature of the impact of institutional support upon the tourism venture’s performance, confirming the hypotheses regarding the impact of two types of support: 1) the use of external financial sources, and 2) the use of advisory services through governmental incubator programs. As expected, those tourism ventures that are financially supported by external sources perform better than those ventures that are not financially supported by external sources. On the other hand, in the case of advisory support from a governmental tourism incubator, it is precisely the non-assisted ventures that achieve better performance. This may be explained by the differing criteria for receiving the two types of support (see also Sarder, Ghosh, and Rosa 1997). Although the ventures applying for assistance by the incubator are often younger and smaller than the non-assisted ventures, there is no contradiction of the previous findings. Regardless of the size and age of the ventures, those obtaining the advisory type of assistance were still lower performing, while those obtaining the financial type of assistance were the higher performing.

To conclude, the findings lend support to a portion of the research hypotheses, as follows.

Each of the four groups of factors—attraction of the tourism venture’s location, the external financial assistance and advisory support of a government incubator, the entrepreneur’s characteristics, and the number of services offered by the venture—is correlated differentially to the business performance measures. These results confirm the multidimensionality of business performance (Cooper and Gimeno-Gascon 1992; Birley and Westhead 1990) and reinforce the claim that different measures of performance are associated with different combinations of factors.

Limitations
One of the limitations of this study is that it is industry specific and this may limit its generalizability. However, due to the fact that tourism is an industry that includes a broad range of service activities, such as accommodation, transportation, shopping and recreational activities (McIntosh, Goeldner and Ritchie 1995), the findings are applicable to a broad class of industries. Moreover, one of the industry-specific components of the examination, the environmental attractiveness, may be applied in future studies to other service industries as well. However, being industry specific may also be an advantage, in view of the absence of such multidimensional examinations in the research literature on the tourism industry, particularly given the tremendous importance of tourism worldwide.

Another limitation is associated with the central findings of this study regarding the strong relationship between skills and all the three measures of performance: revenues, profitability, and income. We acknowledge that self-report respondents are very likely to think they have strong business skills. It should be recognized that these items do not measure the specific skills and behaviors that directly influence the performance, but reflect the entrepreneurs’ perception of their abilities and skills. Thus, asking respondents to evaluate their skills and their venture’s performance on the same instru-
ment may inflate the correlation obtained between them. This means that caution should be exercised in generalizing conclusions.

However, two justifications for highlighting these results regarding the centrality of entrepreneurial and managerial human capital for the venture performance in tourism ventures may be given. The first lies in the fact that a relationship between skills and performance has already been found in a large number of empirical studies (e.g., Yamarino and Waldman 1993) and in the entrepreneurship literature on other industries (see Cooper, Gimeno-Gascon, and Woo 1994; Hood and Young 1993). The second justification is that the measure of skills is not based upon one item but rather on a multivariate item. As Spector (1987) noted, method variance might well be more of a problem with single items or poorly designed scales, which is not the case here, since we adopted measures of skills that have been tested previously (Hisrich and Brush 1984). Thus, all the six items measuring the entrepreneur’s skills included in the index ($\alpha = 0.70$), had different means (from the highest $X = 4.1$ to the lowest 3.0, on a scale ranging from 1 to 5). All these points may lend reliability to the above finding.

Another limitation is related to the focus on one aspect of the venture’s features: the bundling of the services offered by the tourism venture. Though bundling of services provided is a prominent and important feature of the tourism industry and product, there are many other important venture features which may influence performance that are not dealt with in this paper.

Finally, the small size of the current sample, although representative in the Israeli Negev context, calls for further analysis with bigger samples in order to overcome such problems as conducting factor analysis with 13 items on a small sample, and strengthen our findings. Moreover, due to the self-reported data, further research is clearly required.

Future Research

Many researchers have suggested that future research should be inter-industry in focus, asking whether certain factors apply to entrepreneurship in some industries but not in others (Bruno and Tyebjee 1982:307; see also Cooper and Gimeno-Gascon 1992). Further research should compare the performance factors of tourism ventures with those of ventures in other economic sectors, particularly service industries. Cross-cultural comparisons are also recommended for developing generalizations about the factors affecting performance of entrepreneurial tourism ventures in different countries and in various tourism locations (urban, rural, desert, seashore, eco-tourism, etc.). Due to the small size of this sample with its 53 entrepreneurs, further studies are needed, in order to further elaborate and refine the results, and improve the usefulness of the instrument suggested here for measuring the impact of the environmental attractiveness factors upon venture success.

Practical Implications

On the practical level, the importance of privately owned tourism businesses has become an issue, impinging upon economic development at the regional and national level. In order to increase resident-responsive, community-based tourism development (Echtner 1995), there is a necessity to provide tailored regional business and management training tools for tourism entrepreneurs. In this context, Echtner (1995) indicates that
governments have not given appropriate emphasis to the importance of support to small-scale locally owned tourism ventures, in spite of their clear contribution to long-range regional economic stability. The current research findings clearly highlight management skills as a prerequisite for successfully running tourism ventures. Lack of managerial skills is one of the main barriers to a venture’s success in different industries, all the more so in small businesses, where the owners have to be involved in all areas of activity. In accordance with our findings that managerial skills are so crucial for venture success, the main objective of advisory incubators should be to promote managerial competencies.

REFERENCES


