Entrepreneurs’ Social Skills and New Venture Performance: Mediating Mechanisms and Cultural Generality†

Robert A. Baron*
Lally School of Management & Technology, Rensselaer Polytechnic Institute, Troy, NY 12180-3590

Jintong Tang
Saint Louis University, 3674 Lindell Blvd., DS Hall Room 469A, St. Louis, MO 63108

This research seeks to extend previous findings concerning the relationship between entrepreneurs’ social skills and new venture performance. Two potential mediators of such effects (entrepreneurs’ success in obtaining information and essential resources) were investigated, and data were collected in a culture not included in previous studies (China). Results indicate that several social skills (e.g., social perception, expressiveness) are significantly related to measures of new venture performance and that these effects are indeed mediated by the two proposed mediating variables. Implications of these findings for efforts to understand how micro-level variables influence macro-level measures of new venture performance are discussed.

Keywords: entrepreneurship; social skills; new ventures

A large body of research findings in several fields (e.g., organizational behavior, human resource management) indicates that social skills—skills useful to individuals in interacting with others—exert strong effects on important outcomes in many situations (e.g., Riggio & Throckmorton, 1988; Witt & Ferris, 2003). Specific social skills that have been found to

†The authors wish to express their sincere appreciation to Rebecca A. Henry for her outstanding suggestions concerning many aspects of data analysis, and for her invaluable comments on earlier versions of this manuscript.

*Corresponding author. Tel: 518-276-2864; fax: 518-276-8661.

E-mail address: baronr@rpi.edu
exert significant effects in this respect include social perception (the ability to perceive others accurately), expressiveness (the ability to express feelings and reactions clearly and openly), impression management (skill in making favorable first impressions on others), expressiveness (the ability to express emotions clearly and openly), and social adaptability (proficiency in adapting one’s actions to current social contexts) (e.g., Ferris, Witt, & Hochwarter, 2001; Harris, Kacmar, Zivnuska, & Shaw, 2007; Wayne & Liden, 1995).

In work settings, social skills have been found to influence a wide range of important organizational processes. To mention just a few of these effects, persons high in social skills, compared to persons low in such skills, are more successful as job candidates (e.g., Riggio & Throckmorton, 1988), receive higher performance reviews from supervisors (e.g., Robbins & DeNisi, 1994), attain faster promotions, and receive higher salaries (e.g., Belliveau, O’Reilly, & Wade, 1995). Similarly, individuals high in social skills generally achieve greater success than do persons low in such skills in many different occupations (e.g., medicine, law, sales; e.g., Seibert, Kraimer, & Liden, in press; Wayne, Liden, Graf, & Ferris, 1997), attain better results in negotiations (e.g., Lewicki, Saunders, & Barry, 2005), and often (although not always) achieve higher levels of task or job performance (e.g., Hochwarter, Witt, Treadway, & Ferris, 2006). Social skills also exert strong effects on outcomes in many nonbusiness contexts. For example, persons high in various social skills tend to have wider social contacts than do persons low in social skills (e.g., Diener & Seligman, 2002). Social skills have even been found to influence the outcomes of legal proceedings, with persons high in such skills attaining acquittals more often than persons low in such skills (e.g., Downs & Lyons, 1991).

The breadth of these findings, coupled with additional findings indicating that social skills measured at one point in time significantly predict important outcomes at later times (e.g., job performance ratings; Ferris et al., 2001; Hochwarter et al., 2007), suggests that social skills might also exert significant effects in another important business context—entrepreneurship (Baron & Markman, 2000). Although this suggestion is consistent with the findings of a large body of research on the impact of social skills in other business contexts (e.g., Kacmar, Delery, & Ferris, 1992), it has been investigated in only one published study known to the present authors. In this investigation (Baron & Markman, 2003), entrepreneurs working in two different industries (cosmetics, high tech) completed a widely used and well-validated measure of social skills (e.g., Riggio, 1986). Entrepreneurs’ scores on this measure were then related to one indicator of their financial success—the income these entrepreneurs earned from their new ventures over each of several years. Results indicated that several social skills (social perception, social adaptability, expressiveness) were significantly related to this measure of financial success.

The present research was designed to extend these initial findings in several crucial ways. First, and most importantly, previous research (Baron & Markman, 2003) has not investigated the underlying mechanisms through which entrepreneurs’ social skills influence the success of their new ventures. The present study, in contrast, sought to obtain evidence relevant to this question by examining the potential mediating role of two variables that have been found to be strongly related to new venture success: entrepreneurs’ effectiveness in acquiring useful information and in obtaining essential resources (e.g., Shane, 2003). Understanding the mechanisms through which micro-level variables such as entrepreneurs’
social skills influence macro-level dependent measures of new venture performance has been identified by several researchers as a crucial task for the field of entrepreneurship (e.g., Baum & Locke, 2004). Second, the present research employed broader measures of new venture performance than entrepreneurs’ personal income. Specifically, data were gathered on standard measures of new venture performance such as growth in sales, growth in profits, and growth in number of employees; these measures have been used in many previous studies (e.g., Zahra, Neubaum, & El-Hagrscopy, 2002).

Third, the present study sought to extend the scope of previous research by examining the potential impact of entrepreneurs’ social skills on new venture performance in a culture not studied in previous research (China). China was chosen as the site of the present research for two key reasons. First, entrepreneurship has recently been strongly encouraged in China and is playing an increasingly important role in its economic growth. Second, previous studies have suggested that entrepreneurs’ social skills are quite important in Chinese culture. These studies (e.g., Luo, 2003; Park & Luo, 2001; Peng, 2003) have documented the critical role for firm survival and success in China of the practice of networking, or guanxi. As an emerging market, China is experiencing significant structural turbulence, and new firms frequently encounter problems and uncertainties they cannot handle alone (Tan & Tan, 2004). Thus, it is essential for them to rapidly build ties with larger and more powerful businesses to establish legitimacy and so effectively deal with emerging problems (Pfeffer & Salancik, 1978). Research has further shown that new firms in China must cultivate two sets of networks (Peng, 2003). The first is professional networks with suppliers, buyers, major clients, or customers. These networks help create more stable and reliable outsourcing relationships, strengthen customer loyalty, and reduce buyer switching (Luo, 2003). More importantly, given the extensive involvement of the government in the Chinese economy (Peng & Luo, 2000), new firms must also establish networks with governmental officials and regulators, who can assist them in attenuating market challenges associated with structural uncertainty. In this turbulent and complex context, guanxi networking is an efficient mechanism to facilitate economic exchanges and to overcome administrative interventions by the Chinese government.

In short, there are grounds for suggesting that creating and nurturing guanxi networks is a primary concern of Chinese entrepreneurs who, to promote the success of their new businesses, must build trust and exchange favors within such networks (e.g., Park & Luo, 2001). We suggest that strong social skills can play an important role in entrepreneurs’ success in building, maintaining, and growing these guanxi networks. For this reason, social skills may indeed be especially important for Chinese entrepreneurs. Thus, China offers a notably appropriate context for the present research.

Theory Development: Effects of Specific Social Skills and Two Proposed Mediators

As noted above, a major purpose of the present research was that of gaining insight into the underlying (mediating) mechanisms through which entrepreneurs’ social skills influence the financial performance of their new ventures. Before describing the specific mediators proposed and the rationale for their inclusion in the study, however, it should be noted that
although various social skills are moderately intercorrelated (e.g., Semadar, Robins, & Ferris, 2006), they have been found, in previous research, to involve distinct proficiencies (e.g., Ferris, Davidson, & Perrewé, 2005; Riggio, 1986). Reflecting this basic fact, we first develop hypotheses concerning the possible effects of individual social skills on new venture performance. Then, we present the theoretical rationale for two potential mediators of social skills: entrepreneurs’ effectiveness in obtaining useful information and their effectiveness in obtaining essential resources (e.g., financial resources).

Predictions Concerning the Effects of Specific Social Skills

Hypotheses concerning the impact of specific social skills were developed on the basis of previous findings concerning the impact of these skills (e.g., Pfeffer, 1992; Riggio & Riggio, 2001) and also on the basis of recent research on the impact of political skill. As defined by Ahearn, Ferris, Hochwarter, Douglas, and Ammeter (2004), political skill refers to “the ability to effectively understand others at work and to use such knowledge to influence others to act in ways that enhance one’s personal and/or organizational objectives” (p. 311). Several aspects of political skill appear to be closely related to social skills (e.g., social perception, social adaptability), so the two bodies of evidence may reasonably be viewed as complementary (e.g., Ferris, Treadway, Kolodinsky, Hochwarter, & Kacmar, 2005; Harris et al., 2007). Together, these two related bodies of research suggest that skills related to effectively interacting with others provide important benefits in many different contexts. Furthermore, and perhaps more important, several social skills (and several components of political skill) appear to be directly relevant to activities performed by entrepreneurs—activities that play an important role in the survival and success of their new ventures. This basic reasoning underlies the development of the specific hypotheses presented below.

We begin with social perception (which is closely related to a component of political skill known as social astuteness). Social perception involves skill in perceiving others accurately, and research findings have suggested that social perception (and the closely related component of political skill, social astuteness) predict positive outcomes in organizational contexts, such as favorable performance evaluations by supervisors (e.g., Harris et al., 2007; Hochwarter et al., 2007) and positive ratings by interviewers (e.g., Kacmar, Carlson, & Bratton, 2003). Skill at social perception (i.e., perceiving others accurately) is directly relevant to important activities performed by entrepreneurs, such as selecting excellent partners or employees and conducting successful negotiations. Thus, we propose the following hypothesis:

**Hypothesis 1a:** Entrepreneurs’ skill at social perception (accuracy in perceiving others) is positively related to the financial performance of their new ventures.

Another basic social skill is impression management—the capacity to make a good initial impression on others. Skill at impression management has been found to be strongly linked to positive outcomes in many organizational contexts (e.g., Kacmar et al., 1992; Riggio & Riggio, 2001). Impression management, in turn, has often been viewed as involving two distinct components: ingratiation—efforts to induce high degrees of liking in acceptance in
others—and self-promotion—presenting one’s skills and past accomplishments in a positive light (e.g., Bolino & Turnley, 1999). We suggest that both of these components may be useful to entrepreneurs in their efforts to secure financing from venture capitalists and others and in their efforts to build an initial customer base. Making a favorable first impression on these key persons can strongly influence entrepreneurs’ success. On the basis of this reasoning, we propose the following hypotheses:

Hypothesis 1b: Entrepreneurs’ skill at ingratiation is positively related to the financial performance of their new ventures.

Hypothesis 1c: Entrepreneurs’ skill at self-promotion is positively related to financial performance of their new ventures.

A third aspect of social skill involves the ability to adjust one’s behavior to a wide range of different and rapidly changing situational demands—social adaptability (e.g., Baron & Markman, 2003). Such adaptability, which is also viewed as a component of political skill (e.g., Ferris, Treadway, et al., 2005), may be very useful to entrepreneurs. In founding new ventures, entrepreneurs often find it necessary to operate effectively in a wide range of social situations or contexts and must interact with individuals from widely varied backgrounds. As a result, a high level of social adaptability may constitute an important asset for them and materially contribute to the success of their new ventures. Thus, we propose the following hypothesis:

Hypothesis 1d: Entrepreneurs’ social adaptability (the ability to adapt to a wide range of social situations and behave adaptively in these situations) is positively related to the financial performance of their new ventures.

An additional social skill—expressiveness (the ability to express feelings and reactions clearly and openly)—has been found to be closely related to success at exerting interpersonal influence (e.g., Cialdini, 2000). Given the fact that entrepreneurs must often exert influence over others to, for example, “sell” their ideas to sources of funding or convince potential customers to place an order, we offer the following hypothesis:

Hypothesis 1e: Entrepreneurs’ expressiveness is positively related to the financial performance of their new ventures.

In sum, hypotheses concerning the effects of specific social skills were derived from the extensive literatures on both social skills and the closely related construct of political skills (e.g., Harris et al., 2007). Having presented these basic hypotheses, we next focus on potential mediators of the relationship between entrepreneurs’ social skills and new venture performance.

**Potential Mediators of the Effects of Social Skills**

Research in the field of entrepreneurship suggests that access to information is often a crucial determinant of new venture success (e.g., Sarasvathy, Simon, & Lave, 1998; Shane, 2000). Moreover, existing evidence indicates that access to relevant information is a key
factor in new venture performance throughout the entire entrepreneurial process (e.g., Baron, 2006a). Initially, access to pertinent information plays an important role in opportunity identification (e.g., Baron, 2006b; Shane & Venkataraman, 2000). During later phases of the process, information continues to influence new venture growth because input concerning markets, competition, and changing economic and societal conditions is essential for the formulation and adjustment of effective business strategies (e.g., Ireland, Hitt, & Sirmon, 2003). Although many avenues for acquiring pertinent information exist, growing evidence suggests that entrepreneurs’ social networks often play a key role in this regard. That is, the range and quality of the relationships entrepreneurs form with other persons strongly influences their access to crucial forms of information (e.g., Sedikides & Gregg, 2003; Singh, 2000). Previous research suggests that persons high in social or political skills generally establish social networks that are broader in extent and higher in quality than persons low in such skills (e.g., Ferris, Treadway, et al., 2005). Similarly, additional research suggests that entrepreneurs with wide social networks are more successful at identifying excellent business opportunities than are ones with narrower social networks (e.g., Ozgen & Baron, 2007).

Combining these findings and proposals, it is suggested that information acquisition may be one important mediator of the effects of social skills on new venture growth. Specifically, the following hypothesis is proposed:

**Hypothesis 2:** The effects of entrepreneurs’ social skills on new venture performance are mediated, at least in part, by entrepreneurs’ effectiveness in obtaining useful information.

We also propose that such mediation is more likely to occur for some social skills than for others. Specifically, we suggest that success in obtaining useful information will mediate the effects of social skills that come into play in face-to-face contacts. We reason that these skills contribute to the establishment of high levels of trust in and liking for the persons who demonstrate these skills (e.g., Ferris, Davidson, et al., 2005). High levels of trust and liking on the part of others may then, in turn, provide entrepreneurs with access to a broader array of potentially useful information than is available to persons lower in social skills, who consequently do not generate high trust and liking in others (e.g., Lewicki & Wiethoff, 2000).

On the basis of this reasoning, we suggest that three skills—social adaptability (the ability to adapt one’s behavior to different social situations), social perception (accuracy in perceiving others), and ingratiation (the capacity to induce high levels of liking in others through flattery and other techniques)—are most likely to be mediated by this factor because they all operate in face-to-face encounters. Thus, we propose the following hypotheses:

- **Hypothesis 2a:** Entrepreneurs’ success in obtaining information mediates the effects of social adaptability on new venture performance.
- **Hypothesis 2b:** Entrepreneurs’ success in obtaining information mediates the effects of social perception on new venture performance.
- **Hypothesis 2c:** Entrepreneurs’ success in obtaining information mediates the effects of ingratiation on new venture performance.

Next, we turn to the second proposed mediator, success in obtaining essential resources. In addition to information, new ventures also require other resources to operate successfully.
A high level of social skills can be helpful to entrepreneurs in obtaining such resources for several reasons. First, previous research suggests that individuals high in social skills are often more persuasive and better able to exercise social influence than persons low in social skills (e.g., Cialdini, 2000; Semadar et al., 2006). Thus, a high level of social skills can assist entrepreneurs in obtaining the financial and human resources they need in this manner. Similarly, persons high in social skills are often more effective as negotiators than persons lower in social skills (e.g., Lewicki et al., 2005). Because entrepreneurs must negotiate with many other persons (potential customers, suppliers, venture capitalists), a high level of social skills can assist them in successfully conducting such discussions and obtaining the outcomes they need to successfully operate their new ventures. Consistent with this reasoning, the following hypothesis is proposed:

**Hypothesis 3:** The effects of entrepreneurs’ social skills on new venture performance are mediated, at least in part, by entrepreneurs’ effectiveness in obtaining essential resources.

Once again, however, we propose that such mediation is more likely to occur with respect to specific social skills. Obtaining these resources often involves the process of persuasion—for instance, in persuading venture capitalists and others to provide financial resources, persuading talented employees to join a new venture, and persuading customers to try the new venture’s products or services. Thus, skills directly relevant to this task might be the ones most strongly mediated by this variable. Two social skills—expressiveness and self-promotion—appear to be closely linked to persuasion or influence. Expressiveness is often an essential component in persuasion, and previous findings have indicated that often it is persons who demonstrate enthusiasm (one manifestation of expressiveness) who tend to be the most effective at persuasion (e.g., Cialdini, 2000). Similarly, self-promotion, which involves skill at presenting a positive “image” of oneself and one’s accomplishments to others, is often highly useful in creating the credibility that underlies persuasion in many contexts (e.g., Ferris, Treadway, et al., 2005). On the basis of this reasoning, we offer the following hypotheses:

**Hypothesis 3a:** Success in obtaining essential resources mediates the effects of expressiveness on new venture performance.

**Hypothesis 3b:** Success in obtaining essential resources mediates the effects of self-promotion on new venture performance.

### Method

#### Sample and Procedure

Data were collected from new ventures operating in a wide range of industries in two cities of China. We contacted a large consulting firm in southern China to identify new ventures that were 8 years or younger (Zahra et al., 2002) and contained fewer than 500 employees. A total of 500 such firms were randomly selected, and two rounds of surveys were sent along with self-addressed and stamped return envelopes. Completed surveys were returned to the consulting firm. The two mailings were conducted 1 month apart to increase the
response rate (Greer & Ireland, 1992). Consistent with the framework established by Brislin (1980) for conducting international surveys, the survey was drafted in English and then translated into Chinese by the second author. To ensure linguistic and conceptual equivalence between the two versions, the Chinese version of the survey was back translated into English by an independent researcher. Several rounds of modifications were made to correct any discrepancies by the authors and the survey administrator from the consulting company.

Of the 500 ventures, 129 returned the surveys with complete data, reflecting a response rate of 25.8%. All respondents were members of the founding teams of the new ventures. The 129 firms in the final sample represented 13 different industries, including retail trade, wholesale trade, technology and electronics, telecommunication and Web development, biology and medicine, chemical and rubber products, construction, transportation, and furniture. The average age of the firms in the sample was 6.83 years (SD = 6.31 years). The average number of employees was 123.24 (SD = 196.43). Among the 129 individuals who completed the survey, 84% were male; average age was 37 years.

Results of t-test comparisons of the average size (measured as number of current employees) and age of the responding firms with these same data for the nonresponding firms revealed no statistical differences (p > .10). Similarly, t-test comparisons of the early respondents (i.e., those firms that returned the surveys before being contacted a second time) and the late respondents (i.e., those firms that returned the surveys after having been asked a second time) revealed no statistical differences (p > .10) between these two groups in terms of firm size or age. Together, these analyses suggest that the present sample is representative of the population of new ventures operating in these geographic regions.

Tests for Common Method Bias

Given the nature of the research methodology used, common method bias posed a potential problem. To check for the presence of common method variance, we used Harman’s one-factor (or single-factor) test based on Podsakoff, MacKenzie, Lee, and Podsakoff’s (2003) suggestions. The basic assumption of Harman’s one-factor test is that if a substantial amount of common method variance exists in the data, either a single factor will emerge or one general factor will account for the majority of the covariance among the variables. To test for this potential threat to validity, we entered all the variables in the study into an exploratory factor analysis using the principal axis factoring method. We then examined the results of the unrotated factor solution to determine the number of factors that were necessary to account for the variance in the variables. Both scree plot and Kaiser criterion yielded nine factors with eigenvalues greater than 1. No single factor was dominant (the first factor explained 22.88% of variance). Therefore, it appears that common method variance is not a significant problem in our data.

Podsakoff et al. (2003) have noted that despite its apparent appeal, Harman’s single-factor test is not able to adequately account for measurement error or distinguish between the effects of a method factor on the measures of the construct and the construct itself. Therefore, to empirically explore the extent to which common method variance is of concern in interpreting the findings, we followed the suggestions of Williams, Cote, and Buckley (1989) and estimated a full measurement model, then re-estimated the same model after
adding an uncorrelated method factor. Measurement model quality was determined by examining indicator loadings, factor correlations, and three fit indices, the comparative fit index (CFI), the root mean square error of approximation (RMSEA), and the standardized root mean square residual (SRMR). Vandenberg and Lance (2000) suggested that confidence in good fit emerges when the CFI is greater than .90, the RMSEA is less than .08, and the SRMR is less than .10. The fit statistics (RMSEA = .07, CFI = .82, SRMR = .08) for the full measurement model indicate that the model fits the data acceptably well. Fit statistics after adding an uncorrelated method factor improved only slightly (RMSEA = .07, CFI = .87, SRMR = .07). However, the chi-square difference test between two models indicated a significant difference ($\chi^2_{\text{diff}} [37] = 116.34$, $p < .05$).

To determine the extent of the influence of common method variance, the variance explained by the method factor was calculated by summing the squared loadings. In our case, the total amount of variation because of the method factor was 9%, much less than the amount of method variance (25%) observed by Williams et al. (1989). The results of these analyses suggest that the model tested does benefit from the addition of a method factor. However, the gain in fit is quite small, and, more important, the method factor appears to account for very little variation in the data. Therefore, the results suggest that common method variance is not a pervasive problem in this study.

**Measures**

Data were collected on entrepreneurs’ social skills, effectiveness in acquiring information and essential resources, new venture performance, and several control variables. The measures employed are described below.

**Social skills.** Items designed to measure three social skills (social perception, social adaptability, expressiveness) were taken from the instrument developed by Baron and Markman (2003). All these measures demonstrated high reliability in the previous research and had been successfully cross-validated (see below). However, because reliability was not acceptable for a fourth dimension in the previous study (impression management), new items adapted from a measure developed by Bolino and Turnley (1999) were employed to assess this variable. Specifically, four items from the Bolino and Turnley scale were used to assess self-promotion, and four items were used to assess ingratiation—two basic components of impression management. As noted in more detail below, these items yielded acceptable levels of reliability (\(\alpha = .85\) and .71 for self-promotion and ingratiation, respectively). Overall, the final instrument used to measure social competence assessed five variables: social perception (five items), social adaptability (five items), expressiveness (five items), and two aspects of impression management—self-promotion (four items) and ingratiation (four items). All items used 7-point Likert-type scales.

To determine the factor structure of the final scale, we performed factor analysis using the principal axis method and oblique, direct oblimin factor rotation (Hair, Anderson, Tatham, & Black, 1998). Using the Kaiser criterion (i.e., eigenvalues > 1), five significant factors emerged from the factor analysis. Two items (i.e., “I am very sensitive to criticism from others” and “I
am often concerned about what others think of me”), both pertaining to the expressiveness dimension, had factor loadings greater than .40 on two different factors. Therefore, these two items were removed and factor analysis was conducted following the same procedure specified above. The rotated factor solution is presented in Table 1. As shown in Table 1, five factors emerged with eigenvalues greater than 1. Together, these factors accounted for 55.9% of the total variance. All items loaded highly (greater than .40) on a single factor, and there were no cross-loadings. Examination of Table 1 suggests that the five factors are readily interpretable and represent the variables selected for the current study. As shown in Table 1, internal consistency indices revealed reliability estimates ranging from .71 (social adaptability) to .87 (expressiveness and self-promotion). All values are above the .70 threshold recommended by Nunnally (1978).

We also conducted confirmatory factor analysis to examine the dimensionality of the measure of social skills. The results indicated that the model fit the data very well ($\chi^2 = 288.89$, RMSEA = .06, CFI = .91, SRMR = .07) and suggested that the measure yielded five distinct dimensions of social competence. No problems were found in residuals or standard errors. All parameter estimates were significant, with appropriate standard errors. Because perception, adaptability, expressiveness, self-promotion, and ingratiation were moderately correlated, one additional confirmatory factor analysis was conducted. A measurement model that combined all indicators to form a single general social competence factor fit the data less well ($\chi^2 = 1,365.50$, RMSEA = .21, CFI = .43, SRMR = .16) than did the five-factor model. As a result, the five dimensions of social competence were used in subsequent analyses.

**Effectiveness in acquiring information and resources.** Measures of entrepreneurs’ effectiveness in obtaining information and resources (the two proposed mediators) were based on evidence and suggestions provided by Schultz (2001) and Shane (2003). Effectiveness in obtaining information was measured with three items: (a) “I have successfully acquired professional information needed for the new business, such as research and development information for new products or services,” (b) “I have acquired managerial knowledge needed for operating the new business, such as knowledge concerning resource management, financial management, production management,” and (c) “I have been capable of acquiring marketing information for the new business, such as market trends, competition, and sources of supplies” ($\alpha = .81$). Effectiveness in obtaining essential resources was also measured with three items: (a) “I have acquired supply chain resources for the new business, such as customers, suppliers, and distribution channels,” (b) “I have acquired human resources required by the new business, such as experienced employees and trained professionals,” and (c) “I have acquired financial resources needed for the new business” ($\alpha = .72$). Entrepreneurs indicated the extent to which they agreed with each statement on 7-point scales (strongly disagree to strongly agree).

A factor analysis performed on these six items (using the principal axis method and oblique, direct oblimin rotation) yielded two factors with eigenvalues greater than 1 (2.97, 1.14); together, these two factors explained 53.3% of the total variance. All items loaded highly (greater than .40) on a single factor, and there were no cross-loadings. The intercorrelation of these two factors was .53, thus indicating that the two factors were moderately related.
Table 1
Results of Factor Analysis of Measure of Social Skills

<table>
<thead>
<tr>
<th>Items</th>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
<th>Factor 4</th>
<th>Factor 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social perception</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. I am a good judge of other people.</td>
<td>.18</td>
<td>.73</td>
<td>-.03</td>
<td>.04</td>
<td>.02</td>
</tr>
<tr>
<td>2. I can usually recognize others’ traits accurately by observing their behavior.</td>
<td>.07</td>
<td>.82</td>
<td>.00</td>
<td>.13</td>
<td>-.03</td>
</tr>
<tr>
<td>3. I can usually read others well—tell how they are feeling in a given situation.</td>
<td>-.09</td>
<td>.79</td>
<td>.04</td>
<td>-.01</td>
<td>.05</td>
</tr>
<tr>
<td>4. I can tell why people have acted the way they have in most situations.</td>
<td>-.04</td>
<td>.80</td>
<td>-.01</td>
<td>-.06</td>
<td>-.06</td>
</tr>
<tr>
<td>5. I generally know when it is the right time to ask someone for a favor.</td>
<td>.08</td>
<td>.50</td>
<td>-.01</td>
<td>-.15</td>
<td>.12</td>
</tr>
<tr>
<td>Social adaptability</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. I can easily adjust to being in just about any social situation.</td>
<td>-.01</td>
<td>.34</td>
<td>-.16</td>
<td>-.16</td>
<td>.42</td>
</tr>
<tr>
<td>7. I can be comfortable with all types of people—young or old, people from the same or different backgrounds as myself.</td>
<td>-.04</td>
<td>.36</td>
<td>.08</td>
<td>.09</td>
<td>.49</td>
</tr>
<tr>
<td>8. I can talk to anybody about almost anything.</td>
<td>-.07</td>
<td>.10</td>
<td>.09</td>
<td>-.10</td>
<td>.66</td>
</tr>
<tr>
<td>9. People tell me that I am sensitive and understanding.</td>
<td>.21</td>
<td>.05</td>
<td>.24</td>
<td>.31</td>
<td>.55</td>
</tr>
<tr>
<td>10. I have no problems introducing myself to strangers.</td>
<td>.03</td>
<td>-.09</td>
<td>-.13</td>
<td>-.12</td>
<td>.79</td>
</tr>
<tr>
<td>Expressiveness</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. People can always read my emotions even if I try to cover them up.</td>
<td>.04</td>
<td>.07</td>
<td>.84</td>
<td>-.07</td>
<td>-.00</td>
</tr>
<tr>
<td>12. Whatever emotion I feel on the inside tends to show on the outside.</td>
<td>-.00</td>
<td>-.05</td>
<td>.87</td>
<td>-.06</td>
<td>-.07</td>
</tr>
<tr>
<td>13. Other people can usually tell pretty much how I feel at a given time.</td>
<td>-.04</td>
<td>-.03</td>
<td>.87</td>
<td>-.07</td>
<td>.01</td>
</tr>
<tr>
<td>Self-promotion</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. I talk proudly about my experience or education.</td>
<td>.75</td>
<td>-.17</td>
<td>.11</td>
<td>-.02</td>
<td>.19</td>
</tr>
<tr>
<td>15. I make other people aware of my talents or qualifications.</td>
<td>.86</td>
<td>.10</td>
<td>-.02</td>
<td>.01</td>
<td>.00</td>
</tr>
<tr>
<td>16. I make people aware of my accomplishments.</td>
<td>.87</td>
<td>.02</td>
<td>-.03</td>
<td>-.09</td>
<td>.00</td>
</tr>
<tr>
<td>17. I let others know that I have a reputation for being competent in a particular area.</td>
<td>.77</td>
<td>.14</td>
<td>-.01</td>
<td>-.15</td>
<td>-.21</td>
</tr>
</tbody>
</table>

(continued)
Table 1 (continued)

<table>
<thead>
<tr>
<th>Items</th>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
<th>Factor 4</th>
<th>Factor 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ingratiation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18. I compliment others so they will see me as likable.</td>
<td>.15</td>
<td>−.01</td>
<td>.15</td>
<td>−.71</td>
<td>.02</td>
</tr>
<tr>
<td>19. I do personal favors for others to show them that I am friendly.</td>
<td>.09</td>
<td>−.01</td>
<td>.08</td>
<td>−.80</td>
<td>−.06</td>
</tr>
<tr>
<td>20. I use flattery and favors to make others like me more.</td>
<td>.11</td>
<td>−.08</td>
<td>−.01</td>
<td>−.81</td>
<td>.09</td>
</tr>
<tr>
<td>21. I praise others for their accomplishments so they will consider me a nice person.</td>
<td>−.02</td>
<td>.16</td>
<td>.14</td>
<td>−.68</td>
<td>.10</td>
</tr>
<tr>
<td>Eigenvalue</td>
<td>5.91</td>
<td>3.42</td>
<td>1.92</td>
<td>1.43</td>
<td>1.13</td>
</tr>
<tr>
<td>Percentage of variance explained</td>
<td>26.22</td>
<td>14.25</td>
<td>7.48</td>
<td>5.06</td>
<td>2.88</td>
</tr>
<tr>
<td>Cumulative percentage of variance explained</td>
<td>26.22</td>
<td>40.47</td>
<td>47.95</td>
<td>53.01</td>
<td>55.90</td>
</tr>
<tr>
<td>Coefficient alpha reliability estimates</td>
<td>.87</td>
<td>.82</td>
<td>.87</td>
<td>.85</td>
<td>.71</td>
</tr>
</tbody>
</table>
New venture performance. Firm performance is a complex and multidimensional construct (e.g., Chandler & Hanks, 1993). Therefore, the use of multiple indicators to gauge new venture performance has been recommended by several researchers (Zahra et al., 2002). As noted below, we employed data reported by entrepreneurs but combined these data with data from archival sources in calculating measures of new venture performance.

Sales growth rate was measured in the same manner as in several previous studies (e.g., Amason, Shrader, & Tompson, 2006; Covin, Green, & Slevin, 2006; Covin, Slevin, & Heeley, 1999; Florin, Lubatkin, & Schulze, 2003; Walter, Auer, & Ritter, 2006). Entrepreneurs were asked to report their firms’ sales revenues for 2002 to 2005, and then this information was adjusted on the basis of archival financial data. Because our sample represented many different industries and the growth rates of these industries differ, we calculated the 4-year (2002 to 2005) average growth rate of the firm’s principal industry. Actual archival data for the industry information were collected by Shenzhen Securities Information Co., Ltd (SSIC). SSIC is the oldest professional provider of securities information in China and the sole agent of Securities Times. The average growth rate of the firm’s principal industry was then subtracted from the firm’s growth rate. This adjusted industry-controlled growth rate has been used in several previous studies (Amason et al., 2006; Covin et al., 1999; Covin et al., 2006) and is based on data reported by entrepreneurs, adjusted by archival data concerning growth in specific industries.

Growth rate in profit, a second measure, has been widely used in past research (e.g., Chandler & Hanks, 1993; Wiklund & Shepherd, 2005). The average rate of growth in profits was calculated for the period 2002 to 2005 following the same approach used to measure firm sales growth rate (i.e., it was based on data reported by entrepreneurs but was adjusted according to archival data concerning growth in the industries in which entrepreneurs’ businesses operated).

A third measure, employment growth rate, has been also used in previous research as an indicator of new venture performance (e.g., Rauch, Frese, & Utsch, 2005; Wiklund & Shepherd, 2005). The number of employees reported by entrepreneurs at two different times—when the firm was established and currently—formed the basis for this measure. Prior research has suggested measuring employment growth by absolute (i.e., \( t_2 - t_1 \)) or relative (i.e., \( \frac{t_2 - t_1}{t_1} \)) measures (Davidsson & Wiklund, 2000; Delmar, 1997). In the current study, the absolute and relative growth measures yielded no significant differences in the analytical results. Therefore, the relative measure was included in the analysis as the measure of employment growth rate for the sake of clarity.

Control variables. Several control variables were included. At the individual level, we measured entrepreneurs’ age, gender, and education. At the firm level, we assessed firm size and age. Firm size was measured by the natural log of the number of current employees in the firm. Firm age was calculated as the number of years from founding to the end of 2005. Industry was also included as a control variable; however, as will be described below, this variable was also used to examine the possibility that certain industry characteristics moderate the influence of entrepreneurs’ social skills on new venture performance.
Results

Means, standard deviations, and correlations for all variables are shown in Table 2. Because sales and profits were highly correlated ($r = .74$), these two measures were combined into a single index of new venture growth.

Table 3 reports the results of hierarchical regression analyses in which information and resource acquisition, sales or profits growth rate, and employment growth rate are dependent variables. Hypotheses 1a to 1e predict that entrepreneurs’ social skills will be positively related to the financial performance of their new ventures. As shown in Model 3 of Table 3, three social skills—social perception, expressiveness, and self-promotion—were positively and significantly related to the combined index of growth (i.e., growth in sales and profits). In addition, Model 4 indicates that expressiveness was positively and significantly related to employment growth. Overall, these results provide support for Hypotheses 1a, 1c, and 1e, suggesting that several aspects of entrepreneurs’ social skills are significantly related to the financial performance of their new ventures. No support was found for Hypothesis 1b, relating to ingratiation, or for Hypothesis 1d, relating to social adaptability. The effects of social adaptability were in the predicted direction but did not attain statistical significance. (Social adaptability had the lowest scale reliability of all measured aspects of social skills.)

Mediating Role of Effectiveness in Obtaining Information and Essential Resources

Hypotheses 2 and 3 predict that the effects of entrepreneurs’ social skills on new venture success are mediated by information acquisition and resource acquisition. To test for mediation effects, we adopted the widely used procedures developed by Baron and Kenny (1986). According to the logic of this procedure, mediation is suggested if the following conditions are met: (a) The independent variable is a significant predictor of both the dependent variable and the mediator, (b) the mediator is a significant predictor of the dependent variable, and (c) the effects of the independent variable on the dependent variable are reduced when the mediating variable is added to the regression equation. Full mediation is indicated if the effect of the independent variable is no longer significant when the mediating variable is added, whereas partial mediation is suggested if the effect of the independent variable is reduced but remains significant.

Overall, results of the relevant regression analyses indicated that entrepreneurs’ effectiveness in obtaining information and resources did in fact mediate the influence of their social skills on measures of new venture performance. First, as shown in Model 3 and Model 4 of Table 3, and as described above, several social skills were significantly related to the dependent variables (measures of new venture performance). Furthermore, as shown in Model 1 and Model 2 of Table 3, social skills were significantly related to one or both of the proposed mediators. Specifically, social perception and social adaptability were significantly related to effectiveness in acquiring information ($p < .05$). Similarly, social adaptability, expressiveness, and ingratiation were significantly related to effectiveness in acquiring essential resources ($p < .05, p < .01, p < .05$, respectively). In sum, as required by Step 1 of the Baron and Kenny (1986) procedure, the independent variables (social skills) were significantly related both to the dependent measures and to the proposed mediators.
| Variable                      | $M$  | $SD$ | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   | 11   | 12   | 13   | 14   | 15   |
|-------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1. Entrepreneur age           | 37.46| 7.64 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 2. Entrepreneur gender        | 0.84 | 0.39 | 0.00 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 3. Entrepreneur education     | 3.27 | 1.07 | -0.28** | 0.06 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 4. Industry                   | 1.38 | 0.49 | -0.06 | -0.12 | 0.04 |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 5. Firm size                  | 123.24 | 196.43 | 0.41** | -0.05 | -0.24** | 0.08 |      |      |      |      |      |      |      |      |      |      |      |      |
| 6. Firm age                   | 6.83 | 6.31 | 0.34** | -0.14 | -0.26** | 0.24** | 0.66** |      |      |      |      |      |      |      |      |      |      |      |
| 7. Social perception          | 5.03 | 0.98 | 0.05 | 0.07 | 0.14 | 0.27** | 0.07 | 0.07 |      |      |      |      |      |      |      |      |      |      |
| 8. Social adaptability        | 4.73 | 0.94 | 0.03 | 0.01 | 0.02 | 0.14** | 0.08 | 0.00 | 0.57** |      |      |      |      |      |      |      |      |      |
| 9. Expressiveness             | 3.68 | 1.32 | -0.22** | 0.03 | -0.01 | 0.14 | -0.02 | -0.07 | 0.01 | 0.16 |      |      |      |      |      |      |      |      |
| 10. Self-promotion            | 3.88 | 1.30 | -0.05 | 0.05 | 0.03 | -0.03 | -0.04 | 0.01 | 0.28** | 0.25** | 0.29** |      |      |      |      |      |      |
| 11. Ingratiation              | 3.61 | 1.33 | 0.03 | 0.11 | -0.02 | 0.04 | 0.05 | 0.01 | 0.20* | 0.21** | 0.41** | 0.51** |      |      |      |      |      |
| 12. Information acquisition  | 4.61 | 1.24 | 0.03 | 0.07 | -0.02 | 0.06 | 0.09 | 0.08 | 0.28** | 0.33** | 0.10 | 0.17* | 0.28** |      |      |      |      |
| 13. Resource acquisition      | 4.11 | 1.19 | 0.08 | 0.04 | -0.09 | 0.06 | 0.21* | 0.15 | 0.11 | 0.19* | 0.10 | 0.09 | 0.24** | 0.45** |      |      |      |
| 14. Sales growth rate         | 0.41 | 0.75 | -0.11 | 0.07 | 0.11 | -0.12 | -0.06 | -0.11 | 0.27** | 0.09 | 0.27** | 0.01 | 0.16 | 0.22* | 0.18 |      |      |
| 15. Profits growth rate       | 0.44 | 1.78 | -0.03 | 0.03 | 0.18 | -0.13 | -0.10 | -0.20 | 0.36** | 0.17 | 0.25* | 0.01 | 0.16 | 0.27* | 0.03 | 0.74** |      |
| 16. Employment growth rate    | 7.36 | 12.85 | 0.11 | 0.02 | 0.24** | -0.02 | 0.48** | 0.29** | 0.17 | 0.21* | 0.23* | 0.06 | 0.22* | 0.18 | 0.15 | 0.13 | 0.14 |

*Note:* Gender: 0 = female, 1 = male.

*p < .05. **p < .01.
## Table 3
Results of Regression Analysis Predicting Effectiveness in Information or Resource Acquisition and New Venture Performance

<table>
<thead>
<tr>
<th>Variables</th>
<th>Model 1: Information Acquisition</th>
<th>Model 2: Resource Acquisition</th>
<th>Model 3: Sales or Profits Growth Rate&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Model 4: Employment Growth Rate&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Model 5: Sales or Profits Growth Rate&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Model 6: Employment Growth Rate&lt;sup&gt;a&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entrepreneur age</td>
<td>.00</td>
<td>−.03</td>
<td>.11</td>
<td>−.10</td>
<td>.14</td>
<td>.09</td>
</tr>
<tr>
<td>Entrepreneur gender</td>
<td>.04</td>
<td>.00</td>
<td>−.12</td>
<td>.00</td>
<td>−.14</td>
<td>.01</td>
</tr>
<tr>
<td>Entrepreneur education</td>
<td>−.02</td>
<td>−.05</td>
<td>.16</td>
<td>.02</td>
<td>.14</td>
<td>.01</td>
</tr>
<tr>
<td>Industry</td>
<td>.01</td>
<td>.04</td>
<td>−.03</td>
<td>.02</td>
<td>−.04</td>
<td>.02</td>
</tr>
<tr>
<td>Firm size&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.10</td>
<td>.19&lt;sup&gt;*&lt;/sup&gt;</td>
<td>.02</td>
<td>.45&lt;sup&gt;***&lt;/sup&gt;</td>
<td>−.01</td>
<td>.46&lt;sup&gt;***&lt;/sup&gt;</td>
</tr>
<tr>
<td>Firm age</td>
<td>−.13</td>
<td>−.16</td>
<td>−.13</td>
<td>−.33&lt;sup&gt;**&lt;/sup&gt;</td>
<td>−.16</td>
<td>−.36&lt;sup&gt;**&lt;/sup&gt;</td>
</tr>
<tr>
<td>Social perception</td>
<td>.19&lt;sup&gt;*&lt;/sup&gt;</td>
<td>.05</td>
<td>.53&lt;sup&gt;***&lt;/sup&gt;</td>
<td>.06</td>
<td>.43&lt;sup&gt;*&lt;/sup&gt;</td>
<td>.12</td>
</tr>
<tr>
<td>Social adaptability</td>
<td>.24&lt;sup&gt;*&lt;/sup&gt;</td>
<td>.27&lt;sup&gt;*&lt;/sup&gt;</td>
<td>.18</td>
<td>.06</td>
<td>.42&lt;sup&gt;*&lt;/sup&gt;</td>
<td>.10</td>
</tr>
<tr>
<td>Expressiveness</td>
<td>.03</td>
<td>.30&lt;sup&gt;**&lt;/sup&gt;</td>
<td>.33&lt;sup&gt;**&lt;/sup&gt;</td>
<td>.25&lt;sup&gt;*&lt;/sup&gt;</td>
<td>.22&lt;sup&gt;*&lt;/sup&gt;</td>
<td>.15</td>
</tr>
<tr>
<td>Self-promotion</td>
<td>.02</td>
<td>.05</td>
<td>.21&lt;sup&gt;*&lt;/sup&gt;</td>
<td>−.15</td>
<td>.22&lt;sup&gt;*&lt;/sup&gt;</td>
<td>.15</td>
</tr>
<tr>
<td>Ingratiation</td>
<td>.14</td>
<td>.23&lt;sup&gt;*&lt;/sup&gt;</td>
<td>.02</td>
<td>−.12</td>
<td>.02</td>
<td>.09</td>
</tr>
<tr>
<td>Information acquisition</td>
<td>.23&lt;sup&gt;*&lt;/sup&gt;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resource acquisition</td>
<td>.23&lt;sup&gt;*&lt;/sup&gt;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>( R^2 )</td>
<td>.21</td>
<td>.19</td>
<td>.34</td>
<td>.21</td>
<td>.37</td>
<td>.24</td>
</tr>
<tr>
<td>Adjusted ( R^2 )</td>
<td>.14</td>
<td>.11</td>
<td>.22</td>
<td>.13</td>
<td>.24</td>
<td>.15</td>
</tr>
<tr>
<td>( \Delta R )</td>
<td>.19</td>
<td>.14</td>
<td>.26</td>
<td>.06</td>
<td>.04</td>
<td>.03</td>
</tr>
<tr>
<td>( \Delta F )</td>
<td>5.24&lt;sup&gt;***&lt;/sup&gt;</td>
<td>3.98&lt;sup&gt;**&lt;/sup&gt;</td>
<td>4.63&lt;sup&gt;**&lt;/sup&gt;</td>
<td>1.67</td>
<td>3.18&lt;sup&gt;*&lt;/sup&gt;</td>
<td>3.48&lt;sup&gt;*&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

**Note:** Standardized coefficients (\( \beta \)) are displayed in the table.

<sup>a</sup> Logarithm.

\( *p < .05. **p < .01. ***p < .001. \)
The second step in the Baron and Kenny (1986) procedures requires that the proposed mediators be significantly related to the dependent variables. As shown in Model 5 and Model 6 of Table 3, this requirement, too, was met. Effectiveness in obtaining information was significantly related to combined growth rate ($\beta = .23, p < .05$) and also to employment growth rate ($\beta = .18, p < .05$). Similarly, effectiveness at obtaining resources was significantly related to combined growth rate ($\beta = .20, p < .05$) and also to employment growth rate ($\beta = .32, p < .01$). Thus, the requirements of Step 2 in the Baron and Kenny procedure were fulfilled.

Finally, when social skills and the proposed mediators were both included in the regression equation, results offered support for mediation. As shown in Model 5 and Model 6 of Table 3, the effects of several social skills were reduced or, in some cases, eliminated when the proposed mediators were included in the regression equations. Specifically, the effects of social perception on the combined measure of growth were reduced by inclusion of effectiveness in obtaining information, thus suggesting partial mediation by this variable (the $\beta$ for social perception was reduced from .53, $p < .001$, to .43, $p < .05$). Thus, support was obtained for Hypothesis 2b. Similarly, the effects of expressiveness on sales or profits growth rate were reduced when the second proposed mediator—effectiveness in acquiring resources—was added to the regression equation (the $\beta$ for expressiveness was reduced from .33, $p < .01$, to .22, $p < .05$). Thus, support was obtained for Hypothesis 3a. In addition, and providing further support for Hypothesis 3a, the effects of expressiveness on employment growth were eliminated when effectiveness in obtaining essential resources was added to the regression equation ($\beta$ reduced from .25, $p < .05$, to .15, $p > .05$). Thus, full mediation was indicated for this measure of new venture growth.

In sum, the criteria proposed by Baron and Kenny (1986) were met for Hypotheses 2b and 3a. In addition to the above results, Sobel tests were conducted to examine the statistical significance of the indirect effects of social perception and expressiveness on sales or profits growth rate and employment growth rate (Baron & Kenny, 1986; MacKinnon & Dwyer, 1993; Sobel, 1982). Sobel (1982) tests calculate the magnitude of the unstandardized indirect effect and its associated standard error. The ratio of the indirect effect over its standard error is referred to as the Sobel statistic, which is compared to a $z$ distribution to determine the statistical significance of the indirect effect. Table 4 provides Sobel statistics associated with the indirect effects of social perception and expressiveness on new venture performance. Supporting Hypothesis 2b, the Sobel tests indicated that the indirect effect of social perception on sales or profits growth rate ($z = 2.76, p < .01$) was in the anticipated direction and statistically significant. Similarly, the indirect effects of expressiveness on sales or profits growth rate ($z = 2.89, p < .01$) and employment growth rate ($z = 1.83, p < .05$) were significant, providing further evidence for Hypothesis 3a.

A Potential Industry-Level Moderator of the Effects of Social Skills on New Venture Performance

One additional finding of the present research is also of interest because it further clarifies the role of entrepreneurs’ social skills in new venture performance. Although the present research was not designed to assess potential moderators of the effects of entrepreneurs’
Table 4

Summary of Mediation Effects

<table>
<thead>
<tr>
<th>Description of Indirect Path</th>
<th>Full or Partial Mediation</th>
<th>Sobel Statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Social perception → information acquisition → sales or profit growth rate (Hypothesis 2b)</td>
<td>Partial</td>
<td>2.76**</td>
</tr>
<tr>
<td>2. Expressiveness → resource acquisition → sales or profit growth rate (Hypothesis 3a)</td>
<td>Partial</td>
<td>2.89**</td>
</tr>
<tr>
<td>3. Expressiveness → resource acquisition → employment growth rate (Hypothesis 3a)</td>
<td>Full</td>
<td>1.83*</td>
</tr>
</tbody>
</table>

*p < .05. **p < .01.

social skills on new venture performance, data pertaining to one such variable were collected. These data relate to the specific industries in which new ventures operate and to the fact that in some industries entrepreneurs directly interact with a large number of persons outside their companies, whereas in other industries they interact with a smaller number of external persons. Interacting with a large number of external persons—especially ones the entrepreneurs do not already know well—provides many opportunities for entrepreneurs to actually use their social skills. Thus, it was tentatively predicted that the impact of entrepreneurs’ social skills would be moderated by this factor, being stronger in industries in which entrepreneurs, as part of their daily activities, interact with many external persons than in industries in which they interact with a smaller number of such persons. To assess this possibility, industries in which the new ventures in the present sample operated were coded as 1 (entrepreneurs have contact with a relatively small number of persons outside their companies) or 2 (entrepreneurs have contact with a relatively large number of such persons). Industries in the first category included technology and electronics, Web development, chemical products, rubber products, and appliance manufacture. Entrepreneurs operating new ventures in these industries do not typically have contact with large numbers of persons outside their companies. Industries in the second category included retail trade, wholesale trade, food and drink preparation or delivery, health care, and clothing manufacture. Entrepreneurs operating new ventures in these industries do frequently have contact with persons outside their companies—for instance, individual customers and physicians, buyers for a large number of retail outlets, and so on. Assignment of industries to each of these categories was made by the authors and was based on careful review of entrepreneurs’ descriptions concerning the activities they actually perform in running their new ventures.

A moderated hierarchical regression analysis performed on these data offered support for moderation effects. Specifically, the interaction term for industry type and social perception ($\beta = .38, p < .05$) was significant for new venture growth. Similarly, the interaction term for industry type and expressiveness was significant (again in the predicted direction) for employment growth ($\beta = .25, p < .05$). That these effects were in the expected direction is indicated by the fact that correlations between social skills and measures of new venture performance were larger in industries that required entrepreneurs to interact with many other persons than in industries in which entrepreneurs interacted with fewer persons ($r = .61$ vs.
Hierarchical $F$ tests further confirmed that the predictive power of the full model was significantly increased by inclusion of the interaction terms; this was true for the combined measure of growth (sales and profits; $\Delta F = 2.07, p < .05, \Delta R^2 = .11$) and also for employment growth ($\Delta F = 2.15, p < .05, \Delta R^2 = .06$).

In sum, the present findings provide some evidence that the greater the extent to which entrepreneurs actually employ their social skills in face-to-face contacts with persons outside their companies the stronger the effects of these skills on the new venture performance are. Given the post hoc nature of these findings, however, they should be viewed with considerable caution.

**Discussion**

The results of the present study confirm previous findings indicating that entrepreneurs’ social skills play a significant role in the success of their new ventures (Baron & Markman, 2003). Consistent with Hypotheses 1a to 1e, several social skills—social perception, expressiveness, and self-promotion (one aspect of impression management)—were significantly related to financial measures of new venture performance. Given that the present research was conducted with Chinese rather than North American entrepreneurs and in industries different from the ones included in previous research and given that it gathered broader and more informative measures of new venture performance (Baron & Markman, 2003), these findings suggest that entrepreneurs’ social skills exert relatively robust effects with respect to new venture performance. This conclusion is consistent with the large body of evidence indicating that social and political skills influence a wide range of outcomes and processes both in organizations (e.g., Ferris, Davidson, et al., 2005; Ferris, Treadway, et al., 2005) and in many nonbusiness contexts (e.g., the decisions of judges and juries concerning defendants; e.g., Downs & Lyons, 1991). The present results extend previous findings concerning the broad and general impact of social skills (and the closely related construct of political skill; Ferris, Treadway, et al., 2005) by indicating that these skills influence important outcomes in new ventures as well as in large, well-established organizations.

Of greater importance, the present findings also contribute to current knowledge concerning the effects of entrepreneurs’ social skills by providing information on the mechanisms through which these skills influence new venture performance. Specifically, the results of this research indicate that social skills produce their effects, at least in part, through two mediating variables—entrepreneurs’ effectiveness in acquiring information and essential resources. Overall, the present findings point to a process in which entrepreneurs’ social skills influence their effectiveness in obtaining crucial resources, and these resources, in turn, influence new venture performance. As recently noted by several researchers (e.g., Baron, in press; Baum & Locke, 2004; Baum, Locke, & Smith, 2001; Zhao, Seibert, & Hills, 2005), understanding the processes through which micro-level factors (i.e., variables relating to the characteristics, skills, abilities, interests, motives, and cognitions of entrepreneurs) influence new venture performance is a key question for the field of entrepreneurship (e.g., Ciavarella, Bucholtz, Riordan, Gatewood, & Stokes, 2004; Zhao et al., 2005). The present findings contribute to efforts to address this question with respect to the impact of one micro-level variable: entrepreneurs’ social skills.
Results also offer support for several predictions concerning the potential role of the two mediating variables with respect to specific social skills. Consistent with Hypothesis 2b, the effects of skill at social perception were mediated by entrepreneurs’ success in obtaining information. Similarly, there was support for Hypothesis 3a, which predicted that the effects of expressiveness would be mediated by entrepreneurs’ success in securing essential resources. Because social adaptability and ingratiation were not significantly related to the measures of new venture performance, it was not possible to test Hypotheses 2a and 2c or Hypothesis 3b. Overall, however, findings do provide evidence for predictions suggesting that the effects of specific social skills are in fact mediated by different intervening processes.

Limitations and Implications for Future Research

Before concluding, important limitations of the present research should be noted. First, the measures of social skills were based on self-reports by entrepreneurs. These measures have been validated in previous research in which individuals who knew entrepreneurs very well (family members, partners, etc.) rated them on the items used here. The ratings provided by these persons correlated highly with self-ratings by entrepreneurs, thus providing evidence for the validity of this self-report measure of self skills (Baron & Markman, 2003). However, in the absence of additional confirming evidence, the validity of this instrument remains somewhat uncertain. The fact that the present findings largely mirror those obtained in the past research suggests that that this measure may indeed be valid for diverse groups of entrepreneurs. However, this is an important issue that should be carefully examined in future research.

Second, because the present data were cross-sectional in nature, the issue of causality remains somewhat uncertain. Did social skills produce greater success, or, conversely, did success enhance social skills? It could be argued that success in operating a new venture might contribute to entrepreneurs’ social skills in several ways—for instance, by enhancing their confidence and self-efficacy. Confident, self-assured individuals do indeed often make better impressions on others than do those who are lower on these dimensions. However, several points argue against this interpretation. First, several recent studies on the effects of social and political skills have employed longitudinal designs in which data on social (or political) skills were collected at one point in time and data on various dependent measures were collected at a later time (e.g., Hochwarter et al., 2007). In these studies, social skills have been found to be predictive of positive outcomes at later times. For instance, in one well-known study, Wayne and Liden (1995) collected data on subordinates’ impression management behavior and then, 6 months later, measured supervisors’ ratings of the subordinates’ performance. Impression management behavior was indeed a significant predictor of these later supervisor evaluations. Similar results have been found in several recent studies focused on other social skills (e.g., Ferris, Treadway, et al., 2005), so it appears that in many business contexts social skills do indeed predict—and presumably contribute to—a wide range of positive outcomes. Research on the effects of social skills in the legal system has yielded similar findings. Specifically, individuals high in social skills have been found to receive more favorable outcomes (fewer guilty verdicts, lighter sentences and fines) than persons lower in
social skills at the end of trials (e.g., Downs & Lyons, 1991). Clearly, in such research, social skills influenced the outcomes individuals experienced rather than vice versa. Together, these findings suggest that in the domain of entrepreneurship, too, social skills may generate, rather than be the result of, new venture success.

In addition, and closely related to the preceding point, existing evidence indicates that social skills are quite stable over time (e.g., Bond & DePaulo, 2006; Riggio, 1986; Treadway, Ferris, Duke, Adams, & Thatcher, 2007). In one sense, this is hardly surprising. Although social and political skills are indeed skills, and hence are open to modification through training or other interventions, they have been practiced by individuals for decades, and across countless social relationships, by the time such skills are measured in adulthood. The average age of the entrepreneurs in the present study was 37.46 years, so these individuals had developed their current social skills over several decades of life experience. Because these entrepreneurs were not exposed to any systematic efforts to alter their social skills (e.g., Nitezel, Speltz, McCauley, & Bernstein, 1998), it seems reasonable to suggest that their social skills would be quite stable by the time of the study and, therefore, were highly similar at the time they founded their new ventures and the time at which these skills were measured in the present research. In the absence of direct confirming data, however, this suggestion must be carefully confirmed in further research.

Second, two of the social skills found to exert significant effects on new venture performance in the present research (social perception, self-promotion) are ones that would not necessarily be enhanced by business success. With respect to social perception, it seems possible that highly successful individuals tend to reduce their attention to others because it is they (the successful entrepreneurs) who command attention from the people around them rather than vice versa. Thus, success might actually tend to reduce rather than enhance skill at social perception. Similarly, self-promotion is a tactic of impression management individuals tend to use when they wish to magnify their past accomplishments. Successful entrepreneurs might experience less need to engage in this tactic because their actual success produces positive impressions in others.

Together, these points offer support for the suggestion that entrepreneurs’ social skills contribute to the success of their new ventures rather than vice versa. However, only further research employing longitudinal procedures can fully resolve this issue.

Despite these limitations, the present results appear to offer several useful contributions. First, they confirm and extend previous findings suggesting that entrepreneurs’ social skills are significantly related to the financial performance of new ventures. Particularly, because our research was conducted in China, our findings suggest that entrepreneurs’ social skills may enhance new venture performance because social skills play an important role in entrepreneurs’ success in building, maintaining, and growing guanxi networks. Future research is needed to further explore how social skills influence guanxi networks—both the professional networks and the networks with government officials and regulators. Second, and of central importance, they shed new light on the mechanisms that underlie such effects—the processes through which entrepreneurs’ social skills influence the success of their new ventures. Third, they help indicate the boundaries of such effects, suggesting that entrepreneurs’ social skills are more important in certain industries—ones in which entrepreneurs have many opportunities to actually use these skills—than in others, which provide fewer opportunities for the
actual use of social skills. Finally, the present findings offer practical implications for entrepreneurs and entrepreneurial training. Because social skills can be enhanced through specific forms of training (e.g., Gresham & Elliott, 1993), such interventions (e.g., provided in courses and workshops) may well assist current and nascent entrepreneurs in their efforts to launch and run new ventures.

To conclude, the findings of this research suggest that in the complex process of conceiving, launching, and running new ventures, entrepreneurs’ social skills—their ability to get along well with others—truly matter, just as such skills matter in many other contexts. As a result, entrepreneurs who possess or enhance these skills may enjoy a considerable advantage over those who do not in their efforts to convert their dreams, ideas, and visions into functioning, profitable companies.

References


Biographical Notes

**Robert A. Baron** is the Wellington Professor of Management at Rensselaer Polytechnic Institute. He has held faculty appointments at Purdue, Minnesota, Texas, Washington, Princeton, and Oxford and has served as a program director, NSF. He is a fellow of APA and APS, serves on the boards of several journals, and holds three U.S. patents.

**Jintong Tang** is an assistant professor at Saint Louis University. Her research interests include alertness, opportunity recognition, entrepreneurial orientation, and innovation.