## Is Individualism a Predictor of Social Capital in Business Incubators?

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This paper examines whether entrepreneurs' individualism is related to their perceptions of social capital within a business incubator of which their company is a tenant. Social capital is a resource derived from the content and structure of social relations among incubator tenants. Questionnaire data from managers of tenant companies of five incubators established by the State Privatization Office of the Turkish Republic were analyzed with regression. Individualism had a positive relationship with perceptions of structural social capital and cognitive social capital, but was not related to perceptions of relational social capital.

### INTRODUCTION

Business incubators are collectives of small companies in their start-up phase. By providing an environment where different resources such as office space, talent, technical know-how, and financial capital are combined, incubators function to accelerate the growth of their tenant companies and to enhance the tenants' prospects for long-term success (Allen & Rahman, 1985; Peters, Rice, & Sundararajan, 2004). An important resource that tenants might realize from incubator membership is social capital derived from the structure and content of social relations among the tenants (Bollingtoft & Ulhoi, 2005). The literature generally focuses on three types of social capital—structural social capital, relational social capital, and cognitive social capital. With respect to tenant companies in an incubator, structural social capital relates to the existence of social ties among the companies; relational social capital addresses the affective nature of the social relations among the companies; and cognitive social capital concerns the extent to which the companies share a common language and perspective (Bolino, Turnley, & Bloodgood, 2002; Nahapiet & Ghoshal, 1998). Social capital fosters an environment that facilitates the exchange, acquisition, and assimilation of relevant business information (Anderson, 2008; Inkpen & Tsang, 2005). It has been shown to be an important factor in explaining success in areas such as product innovation (Subramaniam & Youndt, 2005) and organizational performance (Acquaah, 2007).

The networking required for effective development and utilization of social capital within an incubator is a social process that is influenced by individual characteristics of the entrepreneurs who head the incubator's tenant companies. The purpose of the present study is to examine whether entrepreneurs' individualism is related to their perceptions of structural social capital, relational social capital, and cognitive social capital within their incubator. Individualism is the extent to which a person considers his or her personal interests to be more important than the interests of a group to which he or she belongs

(Wagner & Moch, 1986). Entrepreneurs as a group have typically been characterized as individualistic in nature (McGrath, MacMillan, & Scheinberg, 1992; Nicholson & Anderson, 2005), although Longenecker, McKinney, and Moore (1988) noted that not all entrepreneurs fit this description.

Some research indicates that individualistic people exhibit less cooperation within a group. For example, Wagner (1995) found that individualists cooperate less in groups than do collectivists. Moorman and Blakely (1995) reported that individualistic people are less likely to perform discretionary yet helpful acts that promote the effective functioning of the group. Kirkman and Shapiro (2001) found that individualism had a negative relationship with employee preference for teamwork. Since social capital within an incubator is dependent upon entrepreneurs' efforts to form and cultivate social relations with other tenants, these findings suggest that entrepreneurs' individualism will have a negative relationship with their perceptions of social capital within the incubator.

On the other hand, there is evidence, at least at a macro level of analysis, that individualism can have a positive relationship with social capital. Allik and Realo (2004) observed a strong positive relationship between individualism and social capital both across the 50 U.S. states and across 42 countries. An explanation for this phenomenon is that cooperation within a group is attractive to individualistic people if they believe that working with others will lead to personal benefits that cannot be obtained by working alone (Allik & Realo, 2004; Wagner, 1995). Consistent with this idea, Dodd and Anderson (2007) proposed that self-interest may motivate entrepreneurs to exert the effort required to network and build social capital. The theory and evidence presented in this paragraph suggest that entrepreneurs' individualism will have a positive relationship with their perceptions of social capital within the incubator.

On the whole, theory and empirical evidence regarding the nature of the relationship between individualism and group-oriented behaviors such as forming and cultivating social ties are inconclusive and do not provide a sufficient basis for formulating a hypothesis in the present study. Therefore, the study addressed the following research question: Is the individualism of entrepreneurs who have placed their company in an incubator related to their perceptions of structural social capital, relational social capital, and cognitive social capital within the incubator? We used entrepreneurs' perceptions of the three types of social capital as the criterion variables because an incubator's entrepreneurs are in the best position to assess the extent to which their company has been able to realize social capital from incubator membership and because of the practical difficulties of measuring social capital in an objective way.

### **METHOD**

## **Procedures and Respondents**

Data were gathered with questionnaires completed by managers of companies that were tenants in one of five incubators located in various cities in Turkey. The incubators are stand-alone facilities and part of a project launched by the State Privatization Office of the Turkish Republic. The purpose of the incubators is to help former public servants who have become unemployed due to the state's privatization initiatives to develop their own businesses. The incubators are composed primarily of small craft companies with the exception of one incubator that has a significant number of computer software companies.

Management of each incubator distributed the questionnaires to the incubator's tenant companies. A total of 135 companies received questionnaires. Respondents, who were anonymous, returned their questionnaires in a sealed envelope to incubator management, who forwarded the envelopes to us.

Data from 53 respondents could be used in the study, which is a 39% response rate. The ratios of number of respondents per number of questionnaires distributed in each incubator were: Incubator A - 19/45, Incubator B - 12/25, Incubator C - 11/20, Incubator D - 6/25, and Incubator E - 5/20. Most of the respondents were male (85%) and an owner of their company (91%). Owners are appropriate respondents for the study because social capital during a start-up company's early development is nearly identical to that of the company's founders (Hite & Hesterly, 2001; Maurer & Ebers, 2006). The average company had about 8 employees.

## **Measures of Primary Variables**

Each of the four variables of primary interest—individualism, structural social capital, relational social capital, and cognitive social capital—was measured with multiple questionnaire items. Each item had a 6-point Likert scale (1 = strongly disagree, 6 = strongly agree). A respondent's item scores for a given measure were summed and averaged.

Individualism was measured with the three items that Maznevski and DiStefano (1995) developed to assess the relative importance a person places on self-interests as compared to shared pursuits. Exemplar items are "It is natural to put your own interests ahead of others" and "Society works best when each person serves his/her own interests." Each social capital variable was measured with four items that we developed to address concepts that scholars (Bolino et al., 2002; Nahapiet & Ghoshal, 1998) have associated with that specific form of social capital. Exemplar items from the structural social capital measure are "I interact with neighboring companies/tenants in the incubator on a frequent basis" and "I actively seek to network with neighboring companies/tenants in the incubator at work." Items from the relational social capital scale include "I feel a strong sense of community with neighboring companies/tenants in the incubator" and "My company and neighboring companies/tenants in the incubator strongly identify with each other." Exemplar items from the cognitive social capital scale are "Neighboring companies/tenants in the incubator and I share a common language when performing our jobs" and "I am of similar mind with neighboring companies/tenants in the incubator when it comes to interpreting the events that affect the incubator."

Items were translated from English to Turkish when constructing the questionnaire. Two business people and an academician who were fluent in English evaluated the items to ensure the translation was valid. The items were also back-translated into English by an academician to check that no loss of meaning occurred in the translation.

#### **Control Variables**

The respondent's gender (male = 0, female = 1), the respondent's position in the company (0 = nonowner manager, 1 = owner), and the number of employees in the respondent's company were included as control variables in the data analysis because they may influence the direction or strength of the relationships between individualism and the social capital variables.

## **RESULTS**

## **Descriptive Statistics**

Table 1 displays means, standard deviations, Pearson correlations, and alpha internal reliability coefficients for the study's variables. The social capital variables had high correlations with each other (range = .65 to .78), supporting Nahapiet and Ghoshal's (1998) conclusion that the three dimensions of social capital are highly interrelated. Alpha coefficients met or exceeded the .70 floor recommended by Nunnally and Bernstein (1994), except that the alpha for the individualism measure (.69) was marginally below this cutoff.

#### **Regression Analysis**

Each of the three social capital variables was regressed on individualism and the three control variables. Table 2 presents the results of the regression analysis. Of primary importance are the standardized regression coefficients displayed for individualism, which represent the strength of the relationship between individualism and a given social capital variable after holding the control variables constant. Individualism had a positive and significant (p < .01) unique relationship with structural social capital and a positive and marginal (p < .10) unique relationship with cognitive social capital. Individualism did not have a significant unique relationship with relational social capital.

TABLE 1
MEANS, STANDARD DEVIATIONS, CORRELATIONS, AND RELIABILITIES

Variable	M	SD	1	2	3	4	5	6	7
1. Gender	_	_	_						
2. Position in company	_	_	23	_					
3. Number of company employees	8.06	14.90	.03	03	_				
4. Individualism	3.88	1.27	09	.13	.06	(.69)	_		
5. Structural social capital	3.86	1.03	30	.07	.10	.38	(.82)	_	
6. Relational social capital	4.03	1.04	24	.14	.07	.15	.78	(.83)	_
7. Cognitive social capital	4.02	.92	24	.10	.12	.28	.71	.65	(.70)

*Note.* Alpha internal reliability coefficients are on the diagonal. Correlations  $\geq$  .28 are significant at p < .05.

TABLE 2 SUMMARY OF MULTIPLE REGRESSION ANALYSIS

	I	Dependent variable				
Independent variable	Structural social capital	Relational social capital	Cognitive social capital			
Gender	28**	22	22			
Position in company	04	.07	.02			
Number of company employees	.09	.08	.12			
Individualism	.35***	.12	.26*			
$R^2$	.23**	.09	.14			

*Note.* Standardized regression coefficients ( $\beta$ s) are shown for the independent variables. \* p < .10. \*\*\* p < .05. \*\*\* p < .01.

### **DISCUSSION**

The results indicate that entrepreneurs' individualism has a positive relationship with their perceptions of structural social capital and cognitive social capital within a business incubator in which they have placed their fledgling company. Thus it seems that individualistic entrepreneurs are more likely to form social ties and to develop a common perspective with other incubator tenants. Given the nature of individualistic entrepreneurs, their efforts to network with other incubator tenants are probably motivated primarily by concerns about furthering their own personal interests rather than the interests of the other tenants. However, the other tenants will still benefit from these efforts since increased structural and

cognitive social capital will enhance the exchange and acquisition of relevant business information within the incubator.

The finding that individualism was not associated with relational social capital suggests that while individualistic entrepreneurs may exert more effort to form social ties and to develop a common perspective with other tenants, their affective attachment to the other tenants does not increase accordingly. Individualistic entrepreneurs, whose networking activities within the incubator are driven by self-interest, do not seem to develop a particular sense of community with other tenants. In this regard, the increased social ties associated with individualistic entrepreneurs will not be as strong as they might otherwise, which may restrict the total amount of social capital that can be generated within the incubator.

Future research should investigate whether the present results extend to business incubators beyond the five Turkish institutions that provided our respondents. For example, Turkey has a relatively collectivistic national culture (Hofstede, Hofstede, & Minkov, 2010) and relationships that emerged here between individualism and social capital may be different for incubators in countries such as the U.S. that, on the whole, are more individualistic. Future research should also examine the extent to which entrepreneurs' individualism is related to the social capital they are able to realize from linkages with external parties that are associated with the incubator, such as academicians, potential investors, and consultants.

Our results must be assessed in the context of several limitations of the study. The alpha reliability coefficients of the individualism (.69) and cognitive social capital (.70) measures were relatively low, a condition that tends to suppress measures of association (e.g., regression coefficients, correlations) between variables. Also, all of the study's variables were measured with a single questionnaire, which may have led to the common method variance bias that tends to inflate measures of association between variables. The fact that the correlation between individualism and relational social capital was not statistically significant provides limited evidence that common method variance bias was not a substantial problem in the study. Finally, there may be unmeasured predictors of social capital within incubators that, had they been included in the study as control variables, would have influenced the nature of the relationships between individualism and the three types of social capital.

While acknowledging these limitations, we believe our study makes a meaningful contribution by providing some of the first evidence that entrepreneurs' individualism can be a predictor of social capital within incubators.

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