

Who Becomes a Small Scale Entrepreneur in a Post-Socialist Environment: On the Differences between Entrepreneurs and Managers in East Germany*

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It is argued that personality orientations play a role in the emergence of entrepreneurs, particularly in an ex-socialist country. Managers (n= 75) and entrepreneurs (n=102) are compared in East Germany and it is found that there

are clear differences between them. A discriminant analysis is able to correctly classify 79 percent to the two groups based on variables related to autonomy, innovativeness, competitive aggressiveness, and achievement orientation.

Small and medium-sized enterprises hold an important place in the modern economy. They constitute about 95 percent of all European enterprises and provide 60 percent of all jobs (Gleichmann 1990). They are also assumed to be more adaptive and innovative than larger companies. They are of particular importance in East Germany and in general in East Europe. First, it was difficult to develop entrepreneurship in East Europe (Frese

1995) and second, hope to reduce unemployment is mainly centered on the development of a small-scale enterprise sector. Moreover, small-scale enterprises have been shown to be the most promising and successful of all enterprises in East Germany (Deutsche Bundesbank 1993).

In this study we investigated the differences between entrepreneurs and managers in East Germany in order to know more about who becomes a small-scale entrepreneur in a post-socialist environment. We did this by using personality orientations that made up an entrepreneurial personality. We conceptualize personality orientations to mean propensities to use certain behaviors for the work task, given that the environment allows the expression of these orientations.

Personality has frequently been studied in entrepreneurship research (see overviews by Brockhaus and Horwitz 1986; Gartner 1989; Shaver and Scott 1991). However, there has also been a number of criticisms of the idea that personality is important for entrepreneurship research. Gartner (1988, 1989)

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argued that studying behavior is more fruitful than studying personality traits. Personality researchers have of course countered that behavior is inextricably related to personality traits (Epstein and O'Brien 1985).

This study is based on the premise that there may be some value in differentiating between the decision to become an entrepreneur and the success of an entrepreneur. This distinction has proven to be useful in the debate on personality in leadership research. Early research relied on a pure personality-based approach to explain leadership success (see reviews by Bass 1990; Kirkpatrick and Locke 1991). Later this was criticized by Stogdill (1948) who argued that traits are not important for leadership.

The differentiation between leader emergence and leader effectiveness has further clarified the role of personality traits. Leader emergence is more heavily related to personality issues than leadership effectiveness (Kenny and Zaccaro 1983; Lord, DeVader, and Alliger 1986). While there are clear differences between leaders and entrepreneurs, it is reasonable to compare leadership research and entrepreneurship research. Both involve the study of leadership, of management, of working in a risky and competitive situation, of a high degree of responsibility, and of a far-reaching career decision. We think that similar to leadership, entrepreneur emergence is more strongly related to personality factors (Herron and Robinson 1993; Begley and Boyd 1987) than entrepreneurial success. Thus, we think that personality is one factor in the decision to become an entrepreneur, but is not necessarily a factor in the success of an entrepreneur. Obviously, these are two different criteria that are often not kept clearly apart in entrepreneurship research. In this study we are only interested in personality as one determinate of becoming an entrepreneur.

Moreover, the relationship between personality traits and behavior is stronger in situations that do not con-

strain the person—so-called weak situations (Adler 1996). This is of particular importance for our study because the situation in East Germany was “weak” with regard to the decision to become an entrepreneur. We studied the differences between small-scale entrepreneurs and managers in East Germany (formerly the socialistic German Democratic Republic, which was characterized by a radical and revolutionary transformation from bureaucratic socialism to capitalism). We define a small-scale entrepreneur as anyone who has founded a business. In East Germany, there were few role models and there little knowledge of what it meant to be an entrepreneur because under socialism there were only very few private business owners.

With the personality approach one should not use a smorgasbord of personality variables (such as the big five, for example, McCrae and Costa 1987; or the 16PF omnibus personality inventory, for example, Brandstätter 1988 or Klandt 1984; 1990). Rather, the personality orientations that are hypothesized to be related to entrepreneurial emergence should be related to a kind of job analysis. Entrepreneurs have to take moderate risks, seek feedback regarding results, and attain objectives. They have to be personally innovative and they have to plan for the future. Studies of personality differences between entrepreneurs and non-entrepreneurs have been legion (Brockhaus and Nord 1979; Genderton and Bowman 1985; Carland and Carland 1989; Bonnett and Furnham 1991). However approaches that have used omnibus personality scales and correlated them with entrepreneurship are of limited use, because these approaches are not intimately related to entrepreneurial tasks.

A better approach relates entrepreneurship emergence to an entrepreneurial orientation (Lumpkin and Dess 1996) or to an entrepreneurial disposition (Grant 1996). Grant (1996) argues that an entrepreneurial disposition like proactive personality is intuitively related to entrepreneurship because it is related to the entrepreneur's tasks. In the following,

this study examines personality orientations instead of personality traits because the personality orientations considered are all related to work and the tasks of entrepreneurs.

The Setting of the Study

The study was done in East Germany in 1993. East Germany was economically unified with West Germany in July 1990. From 1990 onwards, people were free to become entrepreneurs. Lechner and Pfeiffer (1993) characterized the East German economy as having conflicting trends. On the one hand, there were many opportunities in the beginning of the market economy. On the other hand, the psychological environment was not conducive to becoming an entrepreneur. For an East German, becoming a small-scale entrepreneur was a far reaching and quite risky decision. Psychologically, the risk of failing is higher if there is less knowledge about what an entrepreneur does and if one has unclear role conceptualizations. Since there were practically no small-scale entrepreneurs prior to 1990 in East Germany, there were no role models and there was little public knowledge of entrepreneurs. As a result, entrepreneurs in East Germany are real pioneers in the sense of Schumpeter (1935).

Personality Orientations to Be Studied

Three theoretical sources offer useful descriptions of personal orientations of entrepreneurs. The oldest source is Schumpeter (1935), who describes the demands of entrepreneurship in terms of foresight, innovation, and aggressive dominance (also Holderegger 1988). Difficulties are seen as challenges to be solved through creativity and unconventional decisions. Entrepreneurs accept the positive and negative consequences of their choices (for example risks, responsibilities, and long hours of work). According to Schumpeter, the entrepreneur does not have to be a great thinker; in contrast, he or she solves problems from a pragmatic point of view. Schumpeter's theory is particularly

interesting for studies in East Europe because he argued that entrepreneurship will appear in situations of change and crisis—very much like the conditions in East Europe (and which are also “weak” situations because they make it possible for one to choose options).

A second approach relates to entrepreneurial orientation (Lumpkin and Dess 1996). This is the orientation of a firm and not the orientation of an individual, and as such it describes the necessities that the job of an entrepreneur entails. With this approach, Lumpkin and Dess' (1996) differentiate between autonomy, innovativeness, risk taking, proactiveness, and competitive aggressiveness. They argued: “All of these factors ... may be present when a firm engages in new entry” (p.137). Obviously, there are similarities here to Schumpeter's concepts.

A third approach is the one taken by McClelland (1986; 1987; McClelland and Burnham 1995), who argued that entrepreneurs are characterized by needs for achievement and power. There is a certain overlap here with Schumpeter's aggressive dominance (1935) and Lumpkin and Dess' (1996) competitive aggressiveness. However, the need for achievement is not explicitly mentioned by Lumpkin and Dess (1996). Based on this literature, five personality orientations were used in this study: *autonomy, innovativeness, proactiveness, competitive aggressiveness, and achievement orientation*. Each of these are discussed briefly below.

Three psychological constructs related to autonomy are important to this study:

(1) *Higher order need strength*. This implies the wish to self-actualize. This can be done in an area in which one is not constrained by other people's values and commands (Hackman and Lawler 1971).

(2) *Control rejection* (the reverse of control aspirations). This implies that one does not want to exercise control because one is afraid of negative consequences and the responsibility that goes along with control (Frese 1984;

and Frese et al. 1994). As autonomy implies that one wants to be in control, control rejection should be low in small-scale entrepreneurs.

(3) *Self-efficacy*. This is defined as "people's judgments of their capabilities of action required to attain designated types of performances" (Bandura 1986, p. 391). Thus, self-efficacy means that one is sure that one can achieve a certain course of action (Gist and Mitchell 1992).

Innovativeness means to have an interest in innovation (Patchen 1965) and to be interested in changing things at the work place (Frese and Plüddemann 1993). Both interests imply the willingness to go beyond one's routines and to try out new approaches. Interest in innovation has also been shown to be related to the number of suggestions submitted in companies (Patchen 1965).

Proactiveness refers to a high degree of initiative. Frese et al. (1997) have shown that East German entrepreneurs show a higher degree of initiative than other groups in the population. Proactiveness can also be expressed in action styles, including goal orientation, planfulness (attention to planning), and action orientation. Entrepreneurs have a stronger goal orientation (Frese, Stewart, and Hannover 1987), and they take their goals more seriously than other groups. Taking quick action to implement one's goals was studied by Kuhl (1992) under the heading of action orientation. The factor that seems to be most important here is whether one stays active in spite of setbacks (action orientation after failure). Taking time for detailed and long-term planning is necessary for the entrepreneur (Frese, Stewart, and Hannover 1987).

The entrepreneurial orientation *competitive aggressiveness* includes a sort of Machiavellian attitude, that is, from a moral point of view, one is reckless and ruthless in the pursuit of one's goals. This is also related to Schumpeter's concept of aggressive dominance.

The last personality orientation is *achievement orientation*. The need for achievement means that "one does something better ... for the intrinsic satisfaction of doing something better" (McClelland 1987, p. 228). It also implies that one fights for one's achievements.

Entrepreneurs and Managers

We expect entrepreneurs to differ as a group from others. Managers form the most interesting comparison group. More likely than not, entrepreneurs had been managers before they started their enterprise. The work of both entrepreneurs and managers is characterized by a high degree of complexity and shares duties such as leading employees and delegating tasks. In addition, they both have a high degree of responsibility and autonomy in their work. However, according to Lunkin and Dess, Schumpeter, and McClelland, only people with entrepreneurial characteristics will become small-scale entrepreneurs and they will be different from managers. Managers are employees who do not show as much proactiveness, autonomy, innovativeness, competitive aggressiveness, and need for achievement as entrepreneurs do. They are also less ruthless in the pursuit of their goals. Managers are given tasks of managing and controlling, but they are not the ones who actually bring forward completely new approaches or changes in organizations as do entrepreneurs. This distinction is quite similar to the distinction between managers and leaders in the new leadership literature (Bass 1990).

Thus our hypothesis is: *Entrepreneurs are higher than managers in autonomy, innovativeness, proactiveness, competitive aggressiveness, and achievement orientation.*

Methods

Samples

The sample of East German entrepreneurs was drawn from Jena/Thüringen metropolitan area in 1993. The participants were chosen by going through a

list provided by the Jena/Thüringen Chamber of Commerce. In addition, we also asked entrepreneurs to participate who had not been on the list but who had offices or shops in Jena.

The participants were chosen on the basis of three criteria: (1) that the enterprises were founded between 1990 and 1992; (2) that the enterprises employed between one and fifty employees; and (3) that the participants were owners and founders of their respective enterprise. Out of 160 entrepreneurs asked, 102 (64 percent) participated in the study.

The sample of managers was part of a larger longitudinal, representative, and random study of the city of Dresden in East Germany (see Frese et al. 1996 for details). This sample is representative of the general population of Dresden (Frese et al. 1996). From this relatively large sample, managers of all ranks were selected. The selection comprised first line supervisors as well as heads of com-

panies ($n = 75$). Although the Dresden study was not done to compare managers with small-scale entrepreneurs, since it was longitudinal, we were able to include special scales at one point in time to do this comparison. Moreover, Jena and Dresden are comparable cities with a similar sociological make-up. Both are university cities, relatively modern, and both attract high technology firms. Thus, this study has a very suitable comparative group of managers. In addition, since a random sample of the population of Dresden was used, we have a non-selected group of managers to compare with the entrepreneurs.

Statistical Procedures

To compare the entrepreneurs with the managers, an overall multivariate analysis of covariance (MANCOVA) was calculated. Afterwards ANCOVAs were used. Four variables were added to control for potential confounding factors: age, gender, formal education, and occu-

Table 1
Reliabilities (Cronbach's Alphas), Range, and Number of Items of Personality Measures

Scale	Reliabilities		Item Range	Number of Items
	Entrepreneurs	Managers		
Autonomy				
Higher order need strength	.90	.87	1-7	6
Control rejection	.73	.90	1-5	9
Self-efficacy	.72	.69	1-5	6
Innovativeness				
Readiness to change at work	.63	.72	1-5	4
Interest in innovation at work	.35	.61	1-5	4
Proactiveness				
Planfulness	.55	.67	1-5	6
Action orientation after failure	.66	.66	1-2	9
Goal orientation	.67	.61	1-5	4
Competitive Aggressiveness				
Machiavellism	.71	.74	1-5	8
Achievement Orientation				
Need for achievement	.83	.85	1-6	7

pational education (Brockhaus and Horwitz 1986). A discriminant analysis was also performed (the *n* is reduced to 154 there due to missing data).

Operationalization of Variables

All of the variables were based on Likert-type scales. Most scales used a five-point answering system for each item, and the scale value was divided by the number of items. The scale characteristics (including Cronbach's Alphas) are displayed in Table 1.

"Higher order need strength" measures how important it is to reach higher targets and self-realization (Hackman and Lawler 1971). "Control rejection" registers to what extent a person likes to hand over control in order to decrease his or her responsibilities at work (Frese 1984). "Self-efficacy" was developed as a general expectation of self-efficiency (Bandura 1986) and measures the subjective perception of one's capability to do the job well (Speier and Frese 1997). The scale "interest in innovation at work" measures the readiness to devel-

Table 2
Mean differences between entrepreneurs and Managers (Analysis of Covariance)

Variables	Entrepreneurs			Managers			F-Value
	Mean	<i>n</i>	Standard Deviation	Mean	<i>n</i>	Standard Deviation	
Autonomy							
Higher order need strength	6.06	100	.58	5.75	75	.69	7.21**
Control rejection	1.55	101	.48	1.86	75	.59	14.79**
Self-efficacy	4.01	101	.47	3.58	75	.49	23.10***
Innovativeness							
Readiness to change at work	3.98	98	.60	3.80	74	.62	6.93*
Interest in innovation at work	4.04	97	.81	3.61	70	.92	7.56**
Proactiveness							
Planfulness	3.56	95	.82	3.65	75	.66	n.s.
Action orientation after failure	1.70	102	.21	1.65	75	.22	n.s.
Goal orientation	3.73	93	.84	3.67	75	.66	n.s.
Competitive Aggressiveness							
Machiavellism	2.63	97	.60	2.35	73	.60	4.67*
Achievement Orientation							
Need for achievement	4.93	102	.61	4.11	75	.72	58.78***

Note: Covariates were: professional training, formal education, gender, and age. Means equal observed means.

**p* < .05

***p* < .01

****p* < .001

op and to implement new and eventually better methods of work (Patchen 1965). "Readiness to change at the workplace" describes the eagerness to achieve change and development in one's occupation (Frese and Plüddemann 1994). "Goal orientation" measures the degree to which one takes one's goals seriously and of having far reaching goals (Frese, Stewart, and Hannover 1987). "Planfulness" measures the propensity to use long-term and detailed planning (Frese, Stewart, and Hannover 1987). "Action orientation after failure" reflects the extent to which one acts immediately without hesitating or ruminating after making a blunder (Kuhl 1992). "Machiavellism" measures how willing one is to reach one's goals with little regard to morality (Henning and Six 1977; Christie and Geis 1970). "Need for achievement" describes a person's willingness and power to carry through tasks (Modick 1977). We also had one item each to measure professional training, education, gender, and age, respectively.

As shown in Table 1, the reliabilities are all at the lower bound of what is typically expected because we have reduced the scales to as few items as possible. However, they are still adequate, as we assume with Nunnally (1978) that .50 to .60 are the lower bounds of reliabilities for an early stage of research. Although "interest in innovation" is clearly not reliable enough for the entrepreneurs, it is still included because it is a well-established scale

with good validity (Patchen 1965). However, any results with this scale should be interpreted with caution.

Results

The overall multivariate analysis of covariance (MANCOVA) shows a significant difference between small-scale entrepreneurs and managers ($F(10,110) = 6.24; p < .001$; effect size = .36), with a significant influence from the covariates ($F(40, 434) = 1.68; p = .007$). The covariates gender, formal education, and occupational education were tested with Kruskal-Wallis and the covariate age with an ANOVA for differences between managers and entrepreneurs. We found no significant difference in these control variables between the two groups.

Univariate mean differences were computed with analysis of covariance (ANCOVA) with the covariates being vocational education, formal education, gender, and age. Results are presented in Table 2. Most variables distinguished between entrepreneurs and managers fairly well.

As predicted, entrepreneurs were significantly stronger in their orientation towards higher order need strength, lower in control rejection, higher in self-efficacy, higher in readiness to change at work, higher in interest for innovation at work, higher in Machiavellism, and higher in need for achievement than managers. None of the measures for proactiveness revealed any significant difference between managers and entrepreneurs.

Table 3
Classification Results when the 11 Scales Were Used as Discriminating Variables

Actual Classification			Predicted Classification		Percent Correctly Classified
Group	<i>n</i>	Percent of Sample	Managers	Entrepreneurs	
Managers	67	42.86	54	13	80.6
Entrepreneurs	87	57.14	18	69	79.3

Note: The percentage of total cases correctly classified was 79.9 percent. The *n* is 154 due to missing data.

One method to find out whether a number of variables differentiates two groups is to use discriminant analysis. The two groups studied here can be differentiated quite well with our set of variables (Wilks' Lambda is .64; the canonical correlation coefficient is .60 for the discriminant function). More than seventy-nine percent of the subjects were correctly assigned to their own group (see Table 3).¹

Discussion

It was our intention to translate Schumpeter's (1935) suggestions about entrepreneurial characteristics, McClelland's (1986) about achievement orientation, and Lumpkin and Dess' (1996) about entrepreneurial orientation into psychological constructs and to test how well this multifactorial conceptualization distinguished between managers and entrepreneurs. The comparison was made between small-scale entrepreneurs (business founders) and managers in East Germany. The set of variables produced a correct classification for over 79 percent of our sample. Moreover, most of the variables showed significant differences between managers and entrepreneurs. In the ANCOVAs, nearly all differences were in the expected direction. Most of these differences (seven out of 10) were statistically significant. The differences between entrepreneurs and managers were highest for need for achievement, self-efficacy, and control rejection.

The only area in which we did not find significant differences between entrepreneurs and managers was proactiveness. One explanation is that proactiveness was not well operationalized by

the three variables planfulness, action orientation, and goal orientation.

The variables related to autonomy showed strong effects in the expected direction. Autonomy seems to be a very important factor for becoming an entrepreneur, and the importance of autonomy for the emergence of entrepreneurs might be stronger in a post-socialist country. In the former bureaucratic socialist system, there was little chance for people to act independently in most areas of life. People with a high need for autonomy were probably the first to become small-scale entrepreneurs after the system changed.

As expected, entrepreneurs were more interested in innovation than were managers. (However, the alpha was quite low in this variable). Seeking new opportunities is essential for becoming an entrepreneur. In comparison, managers might be more interested in maintaining the status quo. The emergence of entrepreneurs and an interest in changing things in a rapidly evolving society are probably related.

By comparing entrepreneurs to managers, we have used a conservative (and risky) procedure, because one would assume that managers resemble entrepreneurs more than the general population does. By choosing managers, we intended to have a difficult comparison group, because managers often have to show some intrapreneurial qualities as well (Hisrich 1990).² Our results agree with other research. For East Europe, Green et al. (1996) have shown that Russian entrepreneurs are significantly higher in need for achievement, in intrinsic work motivation (similar to our higher order need strength), and in economic locus of control with regard to power-

¹ One can argue that the group differences between managers and entrepreneurs are an effect of firm size or an effect of the life span of the enterprise. Because of this, we conducted two separate MANCOVAs, splitting the entrepreneurs at the median for firm size and for the life span of the enterprise. Neither firm size nor life span of enterprise showed significant differences in the personality orientations we studied.

² As a matter of fact, this is also correct for our data. The differences from the normal population, excluding managers, are by and large higher.

ful others (there is some similarity to self-efficacy here) than other groups. Similarly, a study in Canada (Duxbury, Haines, and Riding 1996) found significant or nearly significant differences between entrepreneurial investors and non-investors in need for achievement, need for autonomy, need for dominance, and work involvement. Thus, there is a certain convergence of results which is encouraging, particularly in the areas of autonomy and achievement motivation.

A potential conceptual problem of our study is that we have equated small enterprise founders and entrepreneurs. Carland et al. (1984), in following Schumpeter, criticized equating the self-employed with entrepreneurs—one can be entrepreneurial without being self-employed and self-employed without being entrepreneurial. However, one should keep in mind that equating self-employment and entrepreneurship makes it harder to find significant differences between owners and managers. Our sample covers the whole range of owners' characteristics, which enhances the statistical variance in this group. Therefore, the results are unexpectedly clear. Another problem is the low reliabilities of the scales. This was due to our decision to use a minimum of items. Low reliabilities usually make it more difficult to find significant results (Schaie and Herzog 1985).

We do not pretend that we can draw causal conclusions from our study. While the results support the idea that managers are different from entrepreneurs and that this may be due to personality orientations contributing to the choice of becoming an entrepreneur, we cannot rule out alternative causal hypotheses (for example, that entrepreneurs

changed after embarking on their enterprise to become different from managers). However, additional analyses give little support for such an alternative hypothesis because the life span of the firm did not make a difference.³

Another issue worth noting is the unique situation in East Germany. After the collapse of bureaucratic socialism, some factors favored founding one's own business and other factors discouraged it. Since demand for all products was high, it was easy to find a market niche. There was a good chance of success for any type of enterprise and little risk of a wrong market orientation. On the other hand, self-employment was and is considered something exotic in East Germany. Through socialist idealism, people had been taught that entrepreneurs were the enemies of the people. Thus, not only was there little positive sentiment for entrepreneurs, more importantly, there were no positive role models to follow. In such a situation, one would suppose that only a certain type of personality would be the first to start his or her own business. Our results suggest that personality is important for founding a business. There are two reasons for this: First, when making the decision to become a small-scale entrepreneur, one does not have a good grasp of the situation and one does not have feedback from the environment. Moreover, one has to overcome a variety of problems. It takes a particular kind of person to deal with this. Second, East Germany provided a weak situation. In contrast to West German business founders, for example, East German founders have no experience, little knowledge, and no role models for entrepreneurship. Moreover, there was no family tradition of becoming an entre-

³ We made further data analyses, which are not reported here. The results of this analysis show that there are no significant differences between entrepreneurs who were interviewed immediately after they founded their businesses and those whom we interviewed in a later stage. This would seem to suggest that the experience of running a business one has founded does not have a significant effect on one's personality in the ways measured.

preneur nor any ready-made structure received from the family as is more frequently the case in West Germany. Thus, founding a business seems primarily a question of having the personality to recognize and make use of the opportunities under one's own initiative. This suggests that studying personality orientation can be particularly valuable in understanding entrepreneurship in a country in transition from a socialist to a market economy. However, if true, this would imply that one will not be able to replicate the results of this study in Western countries or even in East Germany after a few years; at least the results will be less conclusive. It is also necessary to emphasize that we do not suggest that one can predict the success of East German entrepreneurs with the variables used here. Nevertheless, the concepts of Schumpeter (1935), Lumpkin and Dess (1996), and McClelland (1986) have proven remarkably successful in explaining the emergence of entrepreneurs in East Germany.

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