

Psychological Success Factors of Small and
.....
Micro Business Owners in Southern Africa:
.....
A Longitudinal Approach

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**PSYCHOLOGICAL SUCCESS FACTORS OF SMALL
AND MICRO BUSINESS OWNERS IN SOUTHERN
AFRICA: A LONGITUDINAL APPROACH**

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TO MY SON BEN

The greatest 'result' of my time in
Zimbabwe

AND

TO MY FATHER

Who taught me to pursue my dreams

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PREFACE

The research for this dissertation was conducted within the project ‘Psychological Success Factors of Small Business Owners in Zimbabwe: The Role of Goals and Strategies’¹. Under the supervision of Prof. Dr. Michael Frese² and Prof. Dr. Christian Friedrich³, the project started in May 1998 and ended in December 2002. While entrepreneurship in Zimbabwe was the main research focus, smaller studies were carried out in South Africa and Namibia.

SMALL BUSINESSES IN ZIMBABWE

An entrepreneur is “[...] the revolutionary of the economy — and the involuntary pioneer of social and political revolution⁴”.

Zimbabwe became independent from the former colonial power Great Britain in 1980. Since then, indigenous entrepreneurship increased tremendously. Entrepreneurs who started out small with the vision of leading Zimbabwe into the next millennium facilitated the country’s economic as well as social prosperity. Zimbabwe’s probably best known representative of this new generation of entrepreneurs is Strive Masiyiwa, the founder of Econet Wireless Telecommunications⁵. In 1993, Econet Wireless was one of many small start-ups in Harare. After four years of legal battles with the Zimbabwean government, in 1998 Strive Masiyiwa’s persistence secured the first private-owned GSM mobile telephone network license in Zimbabwe⁶. In 2000, Econet moved their headquarters to South Africa and are presently (2003) the third largest Pan-African telecommunications provider⁷. Econet Wireless operates in 15

¹ Funded by the German Research Community (Deutsche Forschungsgemeinschaft, project no.: FR 638/13-2).

² Justus-Liebig-University, Giessen, Germany; Visiting Professor at the London Business School, United Kingdom.

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⁴ Schumpeter, J. A. (1934). *Theorie der wirtschaftlichen Entwicklung (Theory of economic development)*. (4th ed.). Berlin, Germany: Duncker & Humblot, p.130.

⁵ <http://www.econetwireless.com/>

⁶ Wachira, N. (2001, 15 March 2001). *One man's fight to wire Africa*, [online article]. Wired News. Available: <http://www.wired.com/news/business/0,1367,41407,00.html> [2003, June].

⁷ Staff Reporter. (2002, 21 February 2002). *Econet names new boss for Zimbabwe*, [newspaper article]. Financial Gazette, Zimbabwe. Available: <http://www.africaonline.com/site/Articles/1,3,45786.jsp> [2003, June].

countries in Africa, Europe, and the East Asian Pacific Region. The achievements of entrepreneurs like Strive Masiyiwa do not only foster economic development directly through the advancement of innovative technologies and the attraction of foreign investments; successful entrepreneurs also model the path and encourage others to follow. Many small business owners I interviewed explicitly named Strive Masiyiwa (as well as Nigel Chanakira from Kingdom Securities and Kingdom Financial Holdings, Harare⁸) as their role model, as a person who influenced their decision to become and/ or remain a business owners.

Almost simultaneously to my first research sojourn in 1998, Zimbabwe headed into an economic depression which continues to this date (2003). While Zimbabwe was previously considered one of the most promising African economies, the inflation rate compared to the previous year had reached 70% by the end of 1999⁹ and is currently (2003) estimated at 450%. At the same time, the annual GDP growth of 2.4% in 1997 became negative in the year 2000 (-4.9%) as well as in 2001 (-8.4%)¹⁰. In 1997, the economic recession was sparked off by the government's announcement of a new land designation policy and unbudgeted pension payments to the veterans of the liberation war in the 1960ies and 1970ies. A further reason for the economic decline was Zimbabwe's deployment of troops in the Democratic Republic of Congo in 1998. According to local economists, the political events in both 1997 and 1998 led almost instantaneously to a sharp devaluation of the Zimbabwe Dollar¹¹. While in 1995 the official exchange rate of the US\$ compared to the local currency was below US\$1:Z\$10¹², it amounted to US\$1:Z\$12 by 1997, to US\$1:Z\$21 by 1998, and to US\$1:Z\$55 in 2001¹³, the time I last visited Zimbabwe. Throughout this period, the parallel foreign exchange market flourished and expressed a more realistic value of the Z\$ than the fixed bank rates. In 2003, the parallel market's exchange rate to the US\$ is approximately US\$1:Z\$2,500 (official rate: 1:824)¹⁴.

The recent economic developments have severe implications for the Zimbabwean population. "Everything is in short supply but hope."¹⁵ Since 1998, prices have increased

⁸ <http://www.kingdom.co.zw/>

⁹ Robertson, J. (2003, 2003). *Robertson Economic Information Services*, [public domain]. Available: <http://www.economic.co.zw/> [2003, June].

¹⁰ The Development Data Group. (2001, April 2003). *World development indicators database*, [public domain]. The World Bank. Available: <http://devdata.worldbank.org/external/CPProfile.asp?CCODE=ZWE&PTYPE=CP> [2003, June].

¹¹ Robertson, 2003.

¹² Robertson, 2003.

¹³ Directorate of Intelligence. (2002, 19 March 2003). *The world factbook*, [public domain]. Central Intelligence Agency (CIA). Available: <http://www.cia.gov/cia/publications/factbook/geos/zi.html> [2003, June].

¹⁴ Shaw, A. (2003, 29 June 2003). *Rich elite prosper in Zimbabwe's economic crisis*, [newspaper article]. Associated Press. Available: <http://www.zwnews.com/print.cfm?ArticleID=7101> [2003, June].

¹⁵ Mbaga, 2003.

steadily while the average consumer has had little or no increase in income¹⁶. For example, a tube of toothpaste was Z\$1,000 in the year 2001 whereas the average worker's monthly wage was only about 5,000Z\$. The price of petrol was about Z\$74 per liter in 2002. In 2003, the price went up to Z\$450 per liter. Yet, petrol is actually not available because the country can no longer pay for its imported fuel supplies¹⁷. Consequently, the black market, where a liter of petrol costs Z\$2,000, is booming¹⁸. Maize meal, the basis for the staple Zimbabwean diet Sadza, is also unobtainable in the shops. On the black market it costs Z\$3,000 per 10kg bag — 30 times as much as it used to cost¹⁹. For small business owners, the economic decline is devastating. Importing businesses are obliged to apply to the Reserve Bank of Zimbabwe for foreign exchange allocations. However, there are no foreign currency reserves at the Reserve Bank and allocations are scarcely available. Companies as well as the Zimbabwean banking system are forced to source foreign currency on the parallel market. Thus, imported supplies (e.g., hair care products for hairdressers) are no longer available or unaffordable. Exporting businesses (e.g., in the mining industry) are no better off as they have to share large proportions of their foreign currency income with the Reserve Bank and cannot retain their foreign currency based profits. Due to constant petrol shortage, goods cannot be transported, employees cannot get to work, and people are forced to sleep in their cars and queue for days — unless they can afford the parallel market prices. Government imposed price controls, for instance on bread, force bakers to sell their products below production costs, while at the same time government threatens to take over the companies should they stop producing. Albeit, Zimbabweans make a plan: A raisin or two turn normal bread into special bread — which is not price controlled. Or family members who live abroad smuggle some hair care products when they visit. Zimbabwean entrepreneurs have become experts at improvising.

This brief outline of the currently difficult Zimbabwean situation emphasizes the courage and dedication necessary in order to secure a livelihood as an entrepreneur in Zimbabwe. I am grateful to have met so many admirable business owners, most of whom never lost their spirit nor their sense of humor²⁰. I want to thank all study participants for their time and effort that made this dissertation possible. I hope to return some of the generosity I experienced by contributing to the body of evidence on entrepreneurial performance and, thereby, helping to

¹⁶ Robertson, 2003.

¹⁷ Mbaga, 2003.

¹⁸ Mbaga, 2003.

¹⁹ Mbaga, 2003.

²⁰ "A guy goes shopping with a wheelbarrow full of Zimbabwe Dollars. On the way to the shop, he is mugged — the muggers overturn the barrow, tip out the cash and make off with the wheelbarrow." (Mbaga, 2003).

promote a healthy and functioning small business sector at some point in time in the future when conditions have improved.

THIS DISSERTATION

The overall subject of psychological success factors contributing to entrepreneurial performance is addressed in three studies that are by and large independent empirical approaches to the main topic (Chapters 2-4). Therefore, the chapters of this dissertation can be read independently from each other and are autonomous in so far as they contain separate theoretical introductions as well as separate reference sections.

After a brief introductory overview on the main theoretical concepts of this dissertation (Chapter 1), Chapter 2 presents a cross-sectional analysis of individual-level entrepreneurial orientation in Zimbabwean and South African business owners as well as the concept's relationship with entrepreneurial performance. The causal relationship between entrepreneurial orientation and business performance is examined longitudinally in Chapter 3. Furthermore, Chapter 3 accounts for the owners' action strategy characteristics and analyzes mediator and moderator effects. The third study (Chapter 4) is also longitudinal and attends to the employment creation by Zimbabwean enterprises in the formal and the informal business sector, the distinction of formal and informal owners through personal characteristics and abilities, and the likelihood of business formalization throughout the business lifecycle. Finally, Chapter 5 will address methodological issues of measuring psychological determinants of business performance in the entrepreneurial process and summarize the results of the studies presented in the Chapters 2 to 4.

For research transparency, the appendix contains the complete measurement instruments, a sample description of all participants at T1 and T2, a manual of scales that entails all scales composed for T1 and T2, interrater reliabilities for all T1 and T2 variables, and a detailed description of the psychological entrepreneurial orientation concept's measurement including exemplary answers of the participants. Additionally, the appendix also contains a summary of this dissertation translated into German.

Giessen, June 2003

Stefanie I. Krauss

CHAPTER 1

Introduction

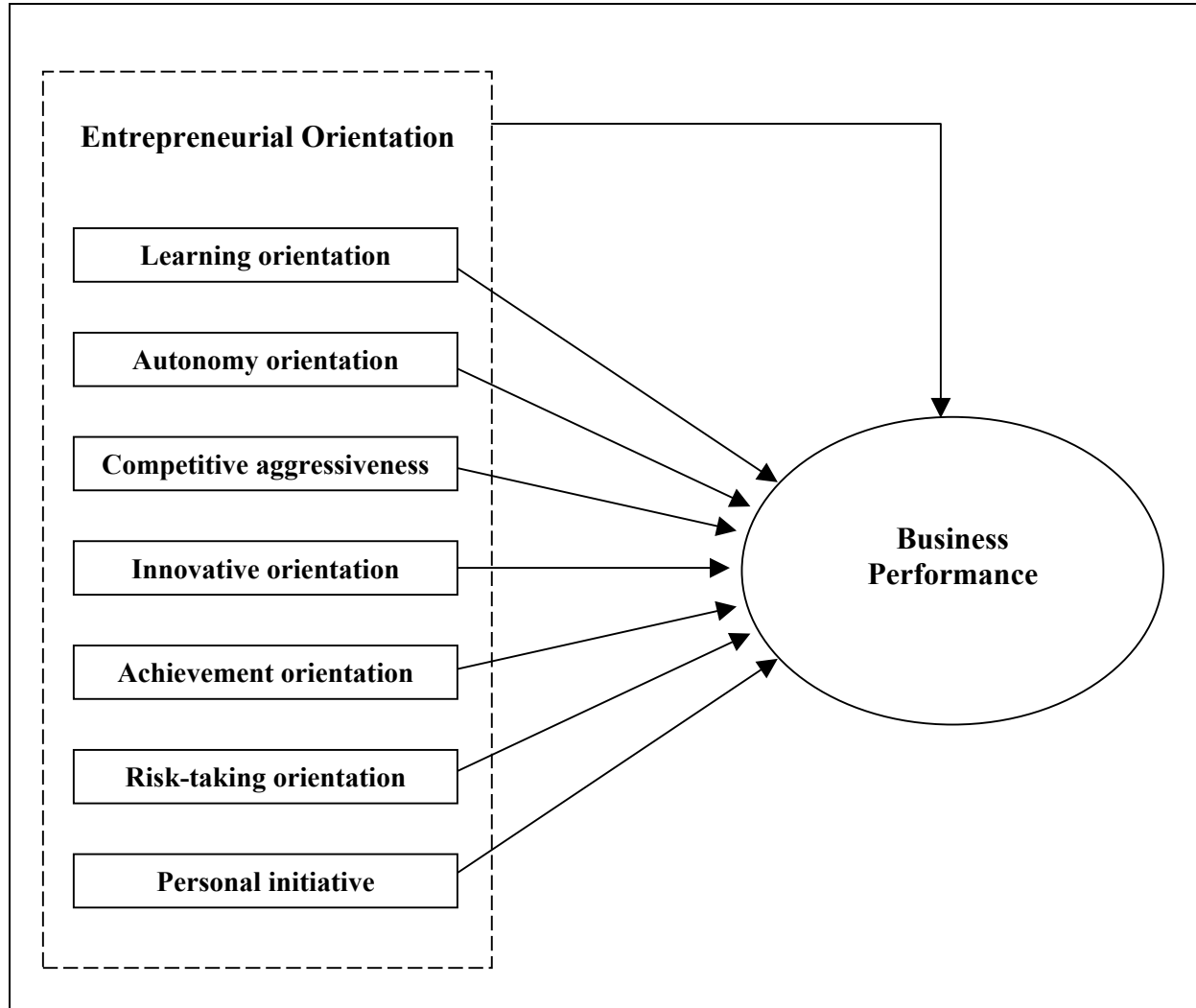
The sector of small and micro businesses is of utmost importance for societal economic development and growth (e.g., Birch, 1987; Kirzner, 1997). Promoting a healthy small and micro business sector is a viable strategy to increase economic development (e.g., Seibel, 1989), industrialization (Kiggundu, 1988), and upward social mobility for individuals (Koo, 1976). However, little evidence is available on what intrapersonal, psychological determinants facilitate entrepreneurial performance. Therefore, the identification of psychological success factors is the primary goal of this dissertation. In pursuing this goal we, first, contribute longitudinal empirical data to the evidence base of entrepreneurship research. Second, our work is a first step towards the design of evidence based entrepreneurship programs that will not only benefit the individual but also contribute to sustainable economic development. Below, the psychological concepts employed to investigate entrepreneurial performance will be described. An in-depth discussion of the concepts and their influence on performance will be presented in the Chapters 2, 3, and 4 respectively.

1.1 ENTREPRENEURIAL ORIENTATION

The Chapters 2 and 3 of this dissertation address the relationship between individual level entrepreneurial orientation (EO) and entrepreneurial performance. As a starting point for a psychological approach to EO, we drew on the Austrian economists' understanding of the entrepreneur (Kirzner, 1997; Schumpeter, 1934) and on Lumpkin's and Dess' (1996) concept of EO which consists of autonomy orientation, competitive aggressiveness, innovative orientation, risk-taking orientation, and proactiveness (cf. also Covin & Slevin, 1991; Miller, 1983). In order to account for the whole spectrum of the entrepreneurial task as described by Schumpeter (1934), we added learning- and achievement orientation. Figure 1.1 illustrates our

model of the entrepreneurial orientations and their relationships with success.

Figure 1.1:
Entrepreneurial Orientation and Business Performance.



Individual EO entails psychological orientations of the owner that relate to the owners' daily tasks and actions, and fit with the contextual requirements. In applying an orientations approach, we, therefore, examine person variables that are more proximal to the entrepreneurial task and behavior (cf. Kanfer, 1992) than, for example, traits. Orientations are different from traits. While traits are dispositional and relatively stable over time and situations (McCrae, Costa, Ostendorf, Angleitner, & co-authors, 2000), orientations are culturally-conditioned and influenced by the situational context (Thomas & Mueller, 2000). Much like the attitude concept, orientations include affective (e.g., enjoying risky situations), conative (e.g., acting in a risky way), and cognitive (e.g., risk analysis) components (Eagly & Chaiken,

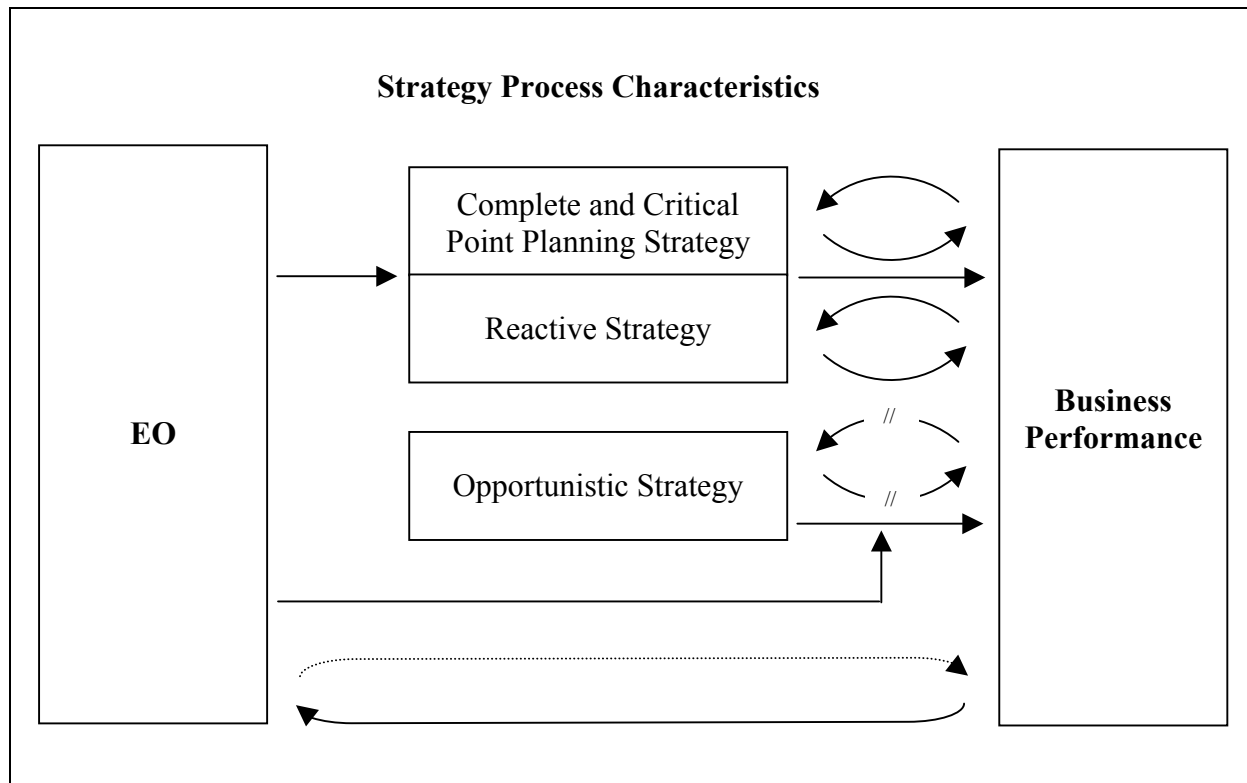
1993). The orientations concept can be distinguished from other person concepts (e.g., traits and attitudes) on the dimension of specificity (Frese & Fay, 2001; cf. also Ajzen & Fishbein, 1977). While traits are rather unspecific and stable personality characteristics (e.g., conscientiousness) and attitudes are highly specific, alterable evaluative preferences (e.g., towards employee participation in decision making), orientations are of medium specificity (e.g., learning orientation). Since our research interest is the prediction of business performance, medium specificity is required to cover the entrepreneurial task across situations and work areas.

The individual approach to entrepreneurship has been widely criticized as unspecific and of little explanatory value for entrepreneurial behavior (e.g., Gartner, 1989; Low & MacMillan, 1988). However, proximal (Kanfer, 1992) entrepreneurial orientations of medium specificity should be more predictive of entrepreneurial performance than formerly employed distal traits of low specificity and attitudes that are too specific to apply to the whole spectrum of the entrepreneurial challenge (cf. Korunka, Frank, Lueger, & Mugler, 2003; Rauch & Frese, 2000).

1.2 STRATEGY PROCESS CHARACTERISTICS

Chapter 3 takes up the previous chapter's results on EO and extends the theoretical research framework to individual strategy process characteristics of the business owners. Reciprocal determinisms (Bandura, 1978) and up/downward spirals (cf. Lindsley, Brass, & Thomas, 1995) between EO/ strategy process characteristics and business performance are investigated longitudinally. Thus, we assume causal effects from individual variables on business performance as well as reverse effects from performance on individual variables. In addition, we examine mediator and moderator effects of EO and strategy process characteristics on entrepreneurial performance (Figure 1.2).

Psychological action theory defines an action strategy as a sequence of means to achieve a goal which must be individually regulated in order to be effective (Frese & Zapf, 1994; Hacker, 1986; Miller, Galanter, & Pribram, 1960). Frese, van Gelderen, and Ombach (2000) distinguished four types of strategy process characteristics: Complete planning, critical-point planning, opportunistic, and reactive strategy process characteristics.

Figure 1.2:**A Model of Reciprocal Determination between Entrepreneurial Orientation/ Strategy Process Characteristics and Business Performance.**

Note. // indicates insignificant relationships.
The dotted arrow indicates a mediated relationship.

Individuals using complete planning strategy process characteristics have a strong goal orientation, engage in extensive long-term, top-down planning activities, have a broad knowledge base, are highly proactive, and show relatively little situational responsiveness (Frese, et al., 2000). Inherent to complete planning is a comprehensive mental model of the task process and a detailed signal knowledge (Frese & Zapf, 1994; Hacker, 1986) that enables one to anticipate future problems and opportunities (cf. Kirzner, 1997). Therefore, complete planning individuals do not only scan the environment for opportunities that fit their goals and long-term plan, they also develop back-up plans for projected worst case scenarios (Frese et al., 2000). However, situational responsiveness in the form of goal adaptation is rather low. Being goal oriented and long-term planning means to commit personal (time and energy) as well as financial investments. Such high investments lead to a reluctance to change the goal and/or basic structures of a plan which might backfire in situations where adaptation to external/environmental change would be necessary. Nonetheless, complete planning strategy characteristics structure the situation proactively, generate knowledge, and allow one to interpret the situation adequately.

When using a strategy characterized by critical point planning, individuals merely plan out the most immediate and most important issues for the accomplishment of their goals (Zempel, 1994, 2003). They only engage in further planning, when the first, critical hurdles are taken. Thus, critical point planning is an iterative, localized form of planning (Sonntag, 1998) where persons ‘cross the bridge when they come to it’. Compared to complete planning, critical point planners are similarly goal oriented while their planning is less long-term, their knowledge base is less sophisticated, and they are less proactive (Frese et al., 2000). As a result, they are less restricted in their situational responsiveness and they act more parsimoniously in terms of personal and financial investments than the individuals employing complete planning strategy characteristics.

The most salient and distinguishing aspect of opportunistic strategy process characteristics is the proactive scanning for opportunities in the environment that is followed by immediate action. While an opportunistic strategy is highly active in the sense of searching for and recognizing opportunities, proactiveness is low in areas like long-term pre-planning, back-up planning, and actively influencing the environment. Individuals using an opportunistic strategy only engage in rudimentary short-term planning, they easily abandon a goal if better opportunities arise, they have a moderate to narrow knowledge base, and they are highly responsive to the situation (Frese et al., 2000). The advantages of an opportunistic strategy lie in the exploitation of all available opportunities, in economical planning, and in flexible responsiveness to market demands. However, the downside is that individuals using an opportunistic strategy dissipate their energies, might lose sight of their goals, do not follow through on a strategy, and might not put enough time and effort into long-term business development.

In contrast to the three process characteristics described so far, reactive strategy characteristics do not take a proactive stance. Individuals employing reactive strategy characteristics do not attempt to influence their circumstances but are driven by the situation. The person is not goal oriented, does not plan ahead, endues a limited knowledge base, is not proactive, and is mainly directed by situational demands (Frese et al., 2000). Employing a reactive strategy could, for example, mean to merely copy competitors’ products or to only introduce change if requested by outside influence (e.g., small business support organizations, customers, or suppliers).

Psychological strategy process characteristics are independent of the strategy content. They are action templates (van Gelderen, Frese, & Thurik, 2000) that are applied in various situations and help the human mind to overcome its limited processing capacity (Frese & Zapf, 1994; Kahneman, 1973). Therefore, any strategy content can be implemented employ-

ing any one type of strategy characteristic. If the strategy content was, for example, to diversify the product range, a complete planning strategy would entail an in-depth analysis of the enterprise's core competencies and resources, of the market and of marketing possibilities, of competitors' activities, of machinery and supplies availabilities, and of long-term financing. Depending on the business circumstances, a critical point planning strategy would focus on the most pressing issue; for instance, sourcing low priced raw materials. With an opportunistic strategy, on the other hand, one would rather snap at any chance of diversification. A product that seems attractive would be introduced without analyzing the market or machinery would be bought immediately if on offer at a good price without beforehand assuring a viable source for the raw materials. Finally, employing a reactive strategy one would wait and only embark on new products if they had been introduced successfully by competitors or if customers specifically ask for them.

1.3 INFORMAL AND FORMAL BUSINESSES

While Chapter 2 and Chapter 3 investigate psychological performance constructs in the African entrepreneurial context, Chapter 4 shifts the perspective to issues that are more specific for entrepreneurship in developing economies. Small businesses in developing countries are distinguished into formal (registered) and informal (unregistered) sector operations. Chapter 4 examines the casual effect of operating in the in/formal sector on the creation of employment. Furthermore, owners of informal and formal businesses are empirically distinguished using the variables years of education, business practice knowledge, risk-taking, and uncertainty avoidance (Chapter 4).

In most developing countries, the informal sector is vibrant and contributes to the development of local markets and the improvement of the national economy by keeping and circulating money in the system (Shinder, 1997). Many even believe that the informal sector can not only provide low-cost, labor-intensive, competitive goods and services, but that informal businesses can also grow and create employment equal to their formal counterparts (e.g., ILO, 1972). Hosier (1987) labeled this opinion the evolutionist position.

Contradictory to the evolutionist position, the involutionist position (Hosier 1987) represents a more pessimistic outlook on the informal sector. Involutionists argue that the informal sector is a subordinate, pre-capitalist form of production which will always be dominated and eventually destroyed by formal, capitalist operations. Promoting informal activities

is not considered an option for the reduction of unemployment or the promotion of national economic growth. Involutionist reasoning even concludes that “[...] supporting informal sector activities can serve only to intensify the exploitation of labor and the extension of poverty” (Hosier, 1987, p.388).

The evolutionist and the involutionist position are certainly polarized outlooks on the informal sector’s potential (cf. Portes, 1994 for an in-depth discussion). Since it has been shown that there are formal businesses emerging out of the informal sector (Neshamba, 1997), we believe that operating informally can be a first step that allows one to get a ‘foot in the door’ and participate in the local economic life. The next step would be to transform informal activities into formal ones in order to overcome the informal sector’s restrictions.

1.4 RESEARCH OBJECTIVES

The purpose of this dissertation is to investigate psychological success factors of small and micro business owners in an Africa sample. However, our research is not specific to the African context. In fact, the reason for studying psychological success factors of entrepreneurship in Africa was methodological: The variance in the type of business, in business size, and in reasons for business ownership is high in African samples. Many start a business to survive or because they cannot find employment. On the other hand, many also start a firm for reasons similar to those in more developed countries (wanting to be independent, having a more fulfilled work life, earning a better income). Samples with a wider variance make it possible to find stronger correlations (Cohen & Cohen, 1983). Therefore, chances to statistically show general laws are better in African than in Western (often variance restricted) samples.

In the following, we will, first, develop an individual based psychological concept of EO, which has previously been discussed primarily from a firm level perspective (e.g., Covin & Slevin, 1991; Lumpkin & Dess, 1996). Second, we will investigate causal psychological determinants of entrepreneurial business performance with a longitudinal design. Longitudinal analyses are rare in entrepreneurship research (Rauch & Frese, 2000) and individual-level EO has, to our knowledge, not yet been investigated longitudinally. Third, we will examine reciprocal determinisms (Bandura, 1978) between EO/ strategy process characteristics and business performance (cf. van Gelderen, et al., 2000): Business performance is not only the criterion variable but also causes owners to self-regulate their individual EO and strategy process characteristics in response to the performance of their business. In the field of psy-

chology, the importance of reciprocal determinisms and self-regulating processes is widely acknowledged (e.g., Bandura, 1997; Carver & Scheier, 1998; Frese & Zapf, 1994; Hacker, 1986; Locke & Latham, 2002). In entrepreneurship research, however, reciprocal determinisms have not yet been integrated. Fourth, we advance the understanding of entrepreneurial business performance by taking account of individual EO as well as of individual strategy process characteristics, which are closer to actual entrepreneurial behavior than EO. In doing so, we take up Kanfer's heuristic framework of proximity to behavior (Kanfer, 1992) and apply it to entrepreneurship research. Fifth, we contribute quantitative longitudinal data to the field of in/formal sector performance in developing countries, which has hitherto mainly been approached qualitatively. Finally, we advance a psychological perspective on small business performance by focusing on the individual who is at the core of the entrepreneurial process, the owner.

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CHAPTER 2

Entrepreneurial Orientation: A Psychological Model of Success Among Southern African Small Business Owners

The purpose of this study is to develop an individual based psychological concept of Entrepreneurial Orientation (EO) and to clarify the relationship between business owners' EO and business performance in a Southern African environment. EO has previously been discussed primarily from a firm level perspective (e.g., Covin & Slevin, 1991; Lumpkin & Dess, 1996). It was used to characterize businesses in their early years, and was found to be important for business success. In contrast, we introduce psychological orientation research to the field of entrepreneurship and approach EO as an inter-individual difference variable. Therefore, our focus is on the business owners and on whether those who have highly entrepreneurial orientations are more successful than their less entrepreneurially oriented counterparts. Thus, we investigated the general relationship between individual-level EO and performance of Southern African small business owners.

2.1 A PSYCHOLOGICAL CONCEPT OF ENTREPRENEURIAL ORIENTATION (EO)

The entrepreneur as an economic actor and a driving force for economic development was first emphasized by Austrian economists (Kirzner, 1997; Schumpeter, 1934). Josef Schumpeter (1934) employed an individual-level approach to entrepreneurship and viewed entrepreneurs as “revolutionaries of the economy” (p.130) whose economic function is the “realization of new combinations in the course of which they are the active element” (p.111; cf. also Kirzner, 1997).

The current firm-level understanding of EO was originally developed with the psychological claim to distinguish between managers and business owners; yet it was abandoned in a still quasi-psychological stage before EO-success relationships were even investigated.

Miller (1983) changed the psychological and individual concepts (innovation, risk-taking, and proactiveness; Kets de Vries, 1977) into firm concepts: "The emphasis has been on the innovative abilities of this individual, and generally it is the entrepreneur as actor who has been the focus of the research. This paper shifts the emphasis somewhat, looking at the entrepreneurial activity of the firm" (Miller, 1983, p.770). Covin and Slevin (1991) then established EO as a pure firm level concept and talked about "organizational-level behaviors" (p.10). Since Covin and Slevin (1991) used individual responses as measures of EO, Lumpkin and Dess (1996) defined EO as "the processes, practices, and decision making activities that lead to new entry... Thus, it involves the intentions and actions of key players..." (p.136). Hence, they emphasize individuals who determine of a firm's activities. For small businesses this is almost solely the chief executive (Miller & Toulouse, 1986): The owner.

Economists have been skeptical about psychological concepts and measures. However, economists often also use individual oriented measurement concepts. The widely used EO survey measure by Covin and Slevin (1986) focuses on risk taking, innovation, and proactiveness and is an adaptation of Miller's and Friesen's (1982) and Khandwalla's (1976/77) work. The measure is based on self-reports by individuals, mostly owners and managing directors (Zahra, Jennings, & Kuratko, 1999). While not emphasized explicitly, the measure is in fact a psychological assessment of individual EO. An objective measure of firm level entrepreneurial behavior would have to include a) the actual observation of behavior, b) observation on multiple levels of the organizational hierarchy, c) aggregation of the individual data on the organization level, and d) a test whether various company representatives agree on the firm level (cf. Klein & Kozlowski, 2000). These criteria had not been fulfilled and, therefore, EO was really used as an individual level concept of the firms' owners and top-managers. How important the individual is for firm level EO becomes apparent when, for example, Wiklund (1999) argues for excluding firms from his longitudinal study where the managing director was replaced ("it seems perilous to attribute outcomes of a firm to an individual no longer working there", p.41).

The original psychological nature of the concept is obvious. However, to our knowledge it has not been used as an explicit psychological concept within the last 15 years — except for the Entrepreneurial Attitude Orientation Scale by Robinson, Stimpson, Huefner, and Hunt (1991). On the firm level, however, EO research accumulated a considerable body of evidence on the relationship between EO and business performance (e.g., Covin & Slevin, 1989; Lumpkin & Dess, 1996; Miller, 1983; Venkatraman, 1989; Wiklund, 1998; Wiklund, 1999; Zahra, 1991).

Our approach differs from the current understanding of EO in two respects: First, we take up the psychological roots of EO and develop them into a fully psychological orientations concept in the Southern African context. Second, rather than distinguishing business owners from managers or the general population (cf. also Carland, Hoy, Boulton, and Carland, 1984; Kirzner, 1997), we are interested in the relationship of EO and business performance as suggested by Lumpkin and Dess (1996). Thus, we differentiate between firm success and firm emergence: Empirical research (Begley & Boyd, 1987; Utsch, Rauch, Rothfuss, and Frese, 1999) as well as meta-analytic results (Stewart & Roth, 2001) found evidence that some components of EO (autonomy, innovativeness, competitive aggressiveness, achievement orientation, and risk-taking) are higher in samples of business founders than in samples of managers. While this suggests that EO plays a role for the decision to become a business owner it does not show that EO is relevant for small business performance.

Our psychological perspective on EO stresses the importance of the owner/manager founders¹ of a firm. Founders determine a firm's strategies, culture (Schein, 1983), vision, and goals. At an early stage in the firm's development, founders select the first employees and prearrange to a large extent whether or not the firm will perform successfully (Frese, van Gelderen, & Ombach, 2000). The critical function of the owner probably depends on the firm size. As the firm grows in size, the impact of the owner is reduced and other organizational decision makers and the organizational structure become more influential. Hence, our research focuses on the smaller end of the size scale (up to 50 employees) where the owner is of critical importance.

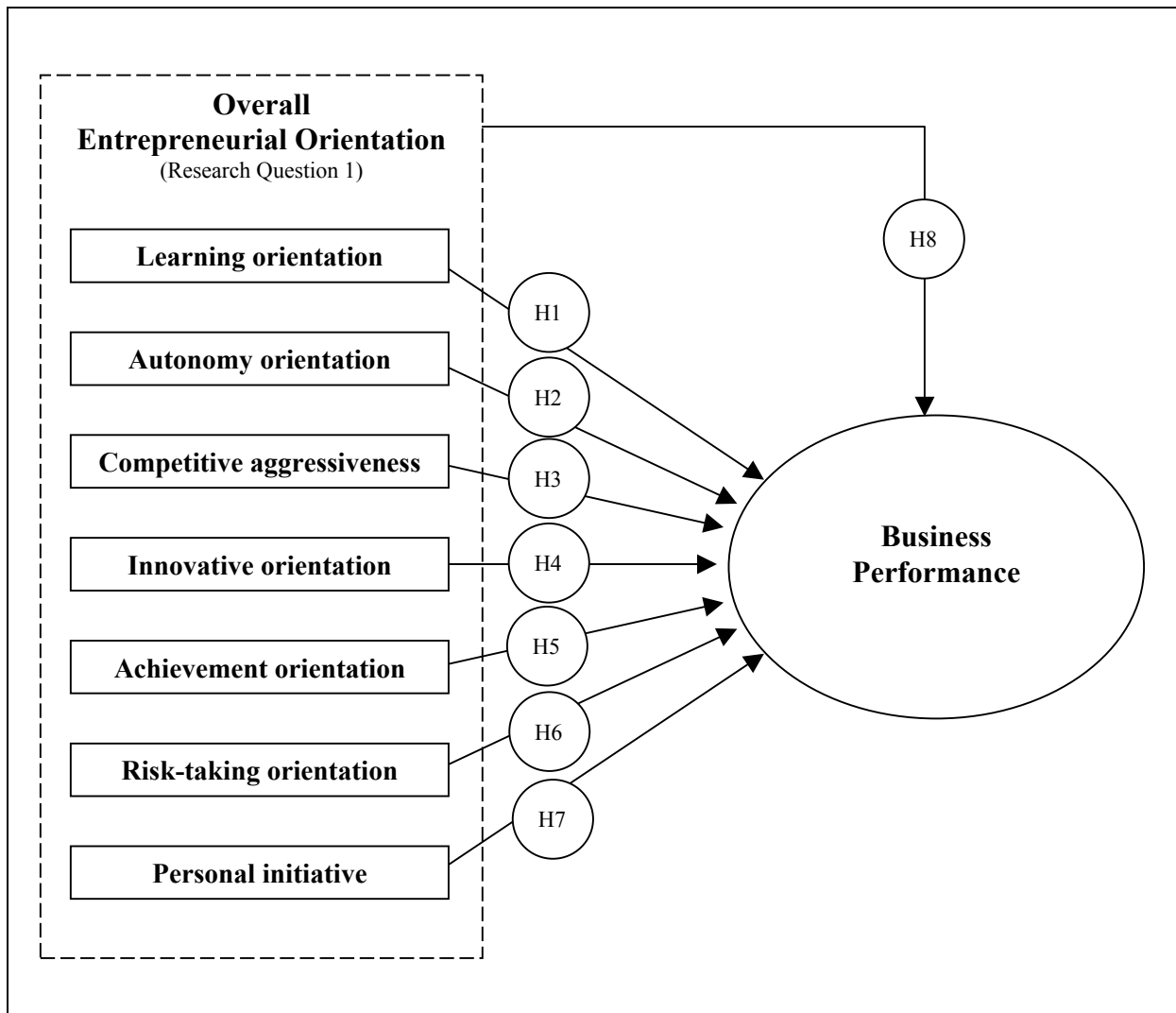
Furthermore, our EO concept is based on the individual level. It entails psychological orientations of the owner that relate to the owners' daily tasks and actions, and fit with the environmental requirements. In applying an orientations approach, we, therefore, examine person variables that are more proximal to the entrepreneurial task and behavior (cf. Kanfer, 1992) than, for example, traits. Orientations are different from traits. While traits are dispositional and stable over time and situations (McCrae, Costa, Ostendorf, Angleitner, & co-authors, 2000), orientations are culturally-conditioned and influenced by the environment (Thomas & Mueller, 2000). Much like the attitude concept, orientations include affective (e.g., enjoying risky situations), conative (e.g., acting in a risky way), and cognitive (e.g., risk analysis) components (Eagly & Chaiken, 1993). The orientations concept can be distinguished from other person concepts (e.g., traits and attitudes) on the dimension of specificity (Frese &

¹ All in one person; for simplification referred to as owners in the following.

Fay, 2001; cf. also Ajzen & Fishbein, 1977). While traits are rather unspecific and stable personality characteristics (e.g., conscientiousness) and attitudes are highly specific, alterable evaluative preferences (e.g., dis/approval of employee participation in decision making), orientations are of medium specificity (e.g., learning orientation). Since our research interest is the prediction of business performance, medium specificity is required to cover the entrepreneurial task across situations and work areas.

The individual approach to entrepreneurship has been widely criticized as unspecific and of little explanatory value for entrepreneurial behavior (e.g., Gartner, 1989; Low & MacMillan, 1988). However, proximal (Kanfer, 1992) entrepreneurial orientations of medium specificity should be more predictive of entrepreneurial performance than formerly employed distal traits of low specificity and attitudes that are too specific to apply to the whole spectrum of the entrepreneurial challenge (cf. Korunka, Frank, Lueger, & Mugler, 2003; Rauch & Frese, 2000).

As a starting point for a psychological approach to EO, we drew on Austrian understanding of the entrepreneur (Kirzner, 1997; Schumpeter, 1934) and on Lumpkin's and Dess' (1996) concept of EO which consists of autonomy orientation, competitive aggressiveness, innovative orientation, risk-taking orientation, and proactiveness (cf. also Covin & Slevin, 1991; Miller, 1983). In order to account for the whole spectrum of the entrepreneurial task as described by Schumpeter (1934), we added learning- and achievement orientation. Figure 2.1 illustrates our model of the entrepreneurial orientations and their relationships with success. In the following we shall discuss each dimension of EO and argue why they should be related to business performance.

Figure 2.1:**A Model of The Relationship Between Entrepreneurial Orientation and Business Performance.****2.1.1 LEARNING ORIENTATION**

We added learning orientation because the entrepreneurial realization of new combinations (e.g. introducing a work process that is new to the industry) is inevitably linked with an extension of one's knowledge base in order to overcome the error sources of an unexplored field (Kirzner, 1997; Schumpeter, 1934). Learning from positive as well as negative experiences is essential for successful entrepreneurial behavior (Minniti & Bygrave, 2001). Learning implies the development of more adequate mental models which is crucial to making successful decisions. Learning orientation is concerned with one's stance toward learning from experience. The positive influence of a learning culture in organizations has been emphasized repeatedly (e.g., Argyris, 1992). Recent research found that companies with cultures that fos-

ter individual learning from mistakes perform better than companies without such cultures (Van Dyck, Frese, & Sonnentag, 2003). We expect that the owner's learning orientation is also related to business success in small firms (cf. Minniti & Bygrave, 2001). There are many tasks for which business owners do not receive explicit training (e.g., leadership, book-keeping, marketing and advertising, developing a business plan) before going into business — particularly so in Africa. Therefore, they depend on learning from experiences and must develop their knowledge base independently in order to succeed.

Hypothesis 1: The owners' learning orientation is positively related to business performance.

2.1.2 ACHIEVEMENT ORIENTATION

We added achievement orientation because an entrepreneurial business owner's main objective is to achieve the realization of "new combinations" (Schumpeter, 1934, p.116). Individuals with a high need for achievement perform better with non-routine tasks and take responsibility for their performance. They seek feedback, compare themselves with others, set themselves challenging goals, and constantly try to improve their performance (McClelland, 1961). A business owner's daily tasks include taking on challenges (e.g., acquiring a new customer) as well as setting high goals for oneself (e.g., starting to export their goods) as well as for others (e.g., sales rates for employees). High, specific, and challenging goals lead to higher performance (Locke & Latham, 1990). Owners with a strong achievement orientation are more growth oriented, enjoy challenging tasks and goals, and are more likely to succeed. Accordingly, individual level achievement orientation of the business owner was found related to customer satisfaction (Haber & Lerner, 1999) and to firm success (Koop, de Reu, & Frese, 2000; Rauch & Frese, 2000; Spencer & Spencer, 1993).

Hypothesis 2: The owners' achievement orientation is positively related to business performance.

2.1.3 AUTONOMY ORIENTATION

Entrepreneurial business owners are driven by the vision to establish their own realm (Schumpeter, 1934). Lumpkin and Dess (1996) describe autonomy as "the ability and will to be self-directed in the pursuit of opportunities" (p.140). This rather broad concept implies both ability and orientation. We restrict the meaning of autonomy orientation to the desire to express one's individuality in the workplace, to disliking superiors' orders, and the refusal of

being just a cog in an organizational machine. Autonomy orientation implies that owners value their own decision-making and do not like to receive orders. Such a position helps to succeed as clear, decisive, and self-contained decision making is an important facet of small scale business owners' tasks. Moreover, highly autonomy oriented business owners are likely to also be highly motivated into realizing their own ideas and visions for their business. Although emphasized by Lumpkin and Dess (1996), autonomy orientation has seldom been studied empirically — except for Utsch et al. (1999) who found a higher autonomy orientation in German business owners than in German managers.

Hypothesis 3: The owners' autonomy orientation is positively related to business performance.

2.1.4 COMPETITIVE AGGRESSIVENESS

Entrepreneurial business owners want to assert themselves, enjoy competition, and strive for victory (Schumpeter, 1934; Kirzner, 1997). Competitive aggressiveness is a dimension with two opposing poles of having an "undo-the-competitors" or having a "live-and-let-live" orientation (Covin & Covin, 1990, p.36). Highly competitive aggressive owners attempt to keep competitors from entering the same market and try to outperform rivals. This helps to secure a higher market share and should, thereby, lead to success. EO literature agrees that a competitive aggressive orientation is one of the basic characteristics of successful entrepreneurial activity (e.g., Covin & Slevin, 1991; Lumpkin & Dess, 1996; Venkatraman, 1989). To our knowledge, competitive aggressiveness has not been studied from an individual level perspective.

Hypothesis 4: The owners' competitive aggressiveness is positively related to business performance.

2.1.5 INNOVATIVE ORIENTATION

Entrepreneurial business owners enjoy shaping their environment and kick off processes of 'creative destruction' which unbalance market structures and allow new players to enter the market (Schumpeter, 1934). Thus, innovation is essential to entrepreneurial performance (Wiklund, 1998). When defining innovation, some authors emphasize the creative aspect of the individual (e.g., Amabile, 1988), some the supporting climate that leads to new products, services, or technological processes (Lumpkin & Dess, 1996), and others emphasize the production of new ideas and their implementation (West & Farr, 1990). In our context, an

innovative orientation implies that one has a positive mind-set toward new ideas with regard to products, services, administration, or technological processes. New ideas are not necessarily absolute novelties, but should be new for the relevant group, market, and environment (West & Farr, 1990). While, for example, empowered work teams are rather common in Western firms, they are quite unusual in African societies where patriarchic structures, power distance (Kiggundu, 1988) and traditionalism (Gebert, 1992; Inkeles & Smith, 1974) are generally higher. Such teams would, therefore, be innovative in the African context.

Hypothesis 5: The owners' innovative orientation is positively related to business performance.

2.1.6 RISK-TAKING ORIENTATION

Being entrepreneurial and venturing into new fields unavoidably involves errors and a certain degree of risk (Schumpeter, 1934) and speculation (Kirzner, 1997). According to Chell, Haworth, and Brearly (1991), entrepreneurial risk-taking is "pursuing a business idea when the probability of succeeding is low" (p.42). Amongst others, Lumpkin and Dess (1996) assume a relationship of risk-taking with success. Up to this point, there is little and inconsistent empirical evidence for that relationship. Rauch and Frese (2000) found a minor, negative average correlation between risk-taking and entrepreneurial success in their quantitative overview of six empirical studies. Successful owners probably take calculated risks (Begley & Boyd, 1987; Timmons, Smollen, & Dingee, 1985). While taking calculated risks reduces the probability of failure, a generally positive stance towards risk-taking is mandatory in an environment where risks are inevitable: Putting one's livelihood on the line and venturing into a new business is the first risk of many more to come in the course of business ownership. A positive orientation towards risk-taking should help the owner to take on unavoidable (and often sought for) challenges and risks.

Hypothesis 6: The owners' risk-taking orientation is positively related to business performance.

2.1.7 PERSONAL INITIATIVE

Personal initiative a (A) proactive, (B) self-starting, and (C) persistent orientation that attempts to shape environmental conditions (Frese, Kring, Soose, & Zempel, 1996). The proactive component is a well established part of the standard firm-level EO measures (Covin & Slevin, 1986; Covin & Slevin, 1989; Miller, 1983; Miller & Friesen, 1983; Venkatraman,

1989). Having a proactive stance implies action orientation in the anticipation of future problems, needs, or changes. However, in order to be entrepreneurial and realize ‘new combinations’ business owners must also persevere in spite of obstacles and be independent of external encouragement (Schumpeter, 1934). Persistence in particular, has not been emphasized by entrepreneurship and proactiveness literature (an exception are Spencer and Spencer, 1993). Persistence is crucial as it means that owners will continually tackle problems in various ways until a satisfactory solution is found. Therefore, we deduce personal initiative is a useful extension of proactiveness in the entrepreneurial context.

Examples of personal initiative include taking action independently from competitors (e.g., introducing an incentive system for the employees) or attempting to influence the business environment (e.g., on local community politics level). Personal initiative of the person in charge enables the business to perform better than comparable firms. Personal initiative has been shown to be related to entrepreneurial success in the U. S. (proactive personality, Crant, 1995), in Austria (Korunka et al., 2003), and in Uganda (Koop et al., 2000). Hence, we assume that personal initiative is correlated to business performance in Southern Africa as well.

Hypothesis 7: The owners’ personal initiative is positively related to business performance.

2.1.8 OVERALL ENTREPRENEURIAL ORIENTATION

The above Hypotheses one to seven address the relationships between seven entrepreneurial orientations (learning-, achievement-, and autonomy orientation, competitive aggressiveness, innovative- and risk-taking orientation, and proactiveness) and business performance. In the following, we will address the notion of a single-factor EO construct:

The dimensions of EO are intuitively interrelated. Highly achievement oriented individuals are more interested in attempting to learn from past errors (McClelland, 1987a), in working autonomously, in being competitive, in approaching challenges innovatively and with personal initiative, and in taking calculated risks. Learning- and achievement orientation imply seeking feedback and learning from experience, as well as showing self-starting, proactive, and persistent personal initiative in attempting to learn and achieve. Autonomy-, innovative-, achievement orientation, and personal initiative are related to an action-oriented realization of opportunities which often implies to take a certain amount of risks. Accordingly, a large proportion of entrepreneurship studies assume EO to be a unitary concept (e.g., Covin & Slevin, 1986; Covin & Slevin, 1989; Dess, Lumpkin, & Covin, 1997; Wiklund, 1999).

However, the notion of a single-factor EO concept has not been examined empirically. Therefore, we want to investigate if EO is indeed an underlying construct that embodies the following components learning- and autonomy orientation, competitive aggressiveness, innovative-, achievement-, and risk-taking orientation, as well as personal initiative

Research Question 1: Do the dimensions of EO form a single-factor overall EO construct?

Should this be the case, we want to investigate the relationship between individual level EO and business success. In Uganda, business owners high on EO had been shown to be more frequently successful (28%) than business owners low on EO (12%; Koop et al., 2000).

Hypothesis 8: The owners' EO is positively related to business performance.

2.2 STUDYING SMALL SCALE BUSINESS OWNERS IN SOUTHERN AFRICA

The choice of a study site should be motivated by theoretical, methodological, and practical reasons. We chose to carry out our study in the African countries of Zimbabwe and South Africa for the following three reasons: First, the knowledge on determinants of entrepreneurial success is of higher practical importance in Africa than in more developed countries. Micro and small enterprises provide a source of income for roughly 25% of all people of working age in Third World countries (Mead & Liedholm, 1998). In 1996, more than 60% of Zimbabwe's employable population were officially unemployed and 300,000 school-leavers entered the job market, while there were only 50,000 vacancies available in the formal sector (Bloch & Robertson, 1996). Furthermore, Africa has been in economic decline over the past decades. One of the best strategies of increasing economic development and growth is to develop the small business sector (Birch, 1987). However, most African states had opposite strategies after independence. Governments took over the role of an economic manager (Kiggundu, 1988) and fostered large-scale government-owned industries while little was done to promote small businesses. On the other hand, state-owned enterprises left major gaps in the output of goods, services, and jobs. Small enterprises can fill these gaps and react quickly to changing demand. They are more flexible, can react more quickly to crises, and can reactivate themselves quicker than the large, state-owned enterprises (Gray, Cooley, Lutabingwa, Mutai-Kaimenyi, & Oyugi, 1996). Thus, furthering the micro enterprise sector can reduce government dependency and compensate for the colonial legacy. Moreover, small and micro

businesses have the capacity to provide a large number of jobs with relatively low capital expenditure; through the development of micro and small scale enterprises a new middle class can emerge (Koo, 1976).

Second, there are methodological reasons for studying psychological factors of entrepreneurship in Africa. The variance in the type of business, in business size, and in reasons for business ownership is high in Africa. Many start a business to survive or because they cannot find employment (42% in our study). However, many also start a firm for reasons similar to those in more developed countries (wanting to be independent, having a more fulfilled work life, earning a better income). Samples with a wider variance make it possible to find stronger correlations (Cohen and Cohen, 1983). Therefore, chances to show general laws are better in African than in Western (often variance restricted) samples.

Third, our study site allows to examine whether results from studies in the US and Europe generalize to other cultures. Our research in Africa was not primarily done for cross-cultural purposes (we intend to find general laws of EO-success relationships). However, one cannot rule out cultural influences and the generalizability of Western findings with other cultures deserves study.

2.3 METHOD

2.3.1 SAMPLE

The overall sample size consisted of N=248 indigenous Zimbabwean (n=122) and South African (n=126) owner/manager/founders (all in one person) of firms with at least one employee (Table 2.1). Small businesses in developing countries can be distinguished into formal (registered) and informal (unregistered) sector operations (cf. Chapter 4). Both sectors were represented in our sample (Table 2.1). All participants had to be operating for more than one year. Thereby, we excluded owners who just bridged a period of unemployment and obtained valid reports on actual experiences and performance. Both the Zimbabwean and the South African sub-sample were drawn between September 1998 and April 1999.

Small scale businesses in Southern Africa are usually clustered in industrial areas. In the city, the industrial areas (called home industries or industrial hives) are mainly located near high density housing areas. In rural areas, businesses are concentrated in so called growth points. Most of these businesses are not registered, do not appear in any listing, and do not have telephone lines. Therefore, we used a random walk procedure for participant re-

cruitment: The interviewers called on the business sites in person and carried out an interview on the spot or made a later appointment if the owner was preoccupied. Businesses typically found in such areas include scrap metal merchants, garages, furniture manufacturers, bottle stores, grocery stalls, tailors, welders, soap manufacturers, amongst others who produce for their immediate local markets. To include up-market businesses and those located in urban office buildings (e.g., commodity brokers, travel agencies, advertising agencies, and telecommunication companies), we consulted business directories and made appointments. We attempted to sample the listed businesses at random. However, addresses and phone numbers were often not up to date.

Table 2.1:
Sample Description.

	Zimbabwe			South Africa			Overall N=248
	Overall n=122	In- formal n=43	Formal n=79	Overall n=126	In- formal n=48 ^a	Formal n=77 ^a	
The Owner							
Gender male	82.8 %	83.7 %	82.2 %	85.7 %	81.3 %	89.6 %	84.3 %
Average owners' age	38	35	39	44	41	45	41
The Business							
Year of establishment (average) ^b	1993	1994	1993	1993	1994	1992	1993
Starting capital (average US\$)	17,066	3,723	24,328	5,226	794	8,021	11,051
Starting capital <1000 US\$	35.2 %	44.2 %	30.4 %	63.5	70.8	59.7	49.6
Industry^c							
Manufacturing	47.5 %	72.1 %	34.2 %	55.6 %	41.7 %	63.6 %	51.6 %
Construction	4.1 %	.0 %	6.3 %	.8 %	.0 %	1.3 %	2.4 %
Trade	31.1 %	18.6 %	38.0 %	24.6 %	33.3 %	19.5 %	27.8 %
Gastronomy	1.6 %	.0 %	2.5 %	2.4 %	4.2 %	1.3 %	2.0 %
Service	35.2 %	27.9 %	39.2 %	28.6 %	22.9 %	32.5 %	31.9 %
Other	6.6 %	.0 %	10.1 %	3.2 %	8.3 %	.0 %	4.8 %
Employment							
Number of employees	8.44	3.81	10.96	5.20	2.77	6.73	6.8
Micro-businesses ^d	77.9 %	97.7 %	67.1 %	88.1 %	97.9 %	81.8 %	83.1 %

Note. ^a1 missing data. ^bYears of establishment ranged from 1971 to 1998 in Zimbabwe and from 1951 to 1998 in South Africa. ^cMultiple answers were possible. ^d1-10 employees (ILO, 1972).

In Zimbabwe, we included the two major ethnic groups (Shona and Ndebele). The overall Zimbabwean sample size was $n=122$ ($n=98$ Shona — the ethnic majority in Zimbabwe, $n=21$ Ndebele, and $n=3$ of other African origin). We carried out interviews in the mainly urban regions of Harare, Mashonaland (homeland of the Shona; 82%) and Bulawayo, Matabeleland (homeland of the Ndebele; 18%). Participants received the equivalent of five US Dollars as a sign of gratitude and compensation for their time. The refusal rate of 30% was low for a study of such length (interviews of approximately 1½-2 hours).

In South Africa, all interviews were carried out in and around Cape Town, Cape Province. We included the major local ethnic groups (Xhosa, Zulu, and mixed ethnic background). The South African sample size was $n=126$ ($n=36$ Xhosa, $n=2$ Zulu, $n=71$ mixed ethnic background, and $n=17$ of other African origin). Participants were given a pen with the 'University of Giessen' logo as a sign of gratitude. The refusal rate in South Africa was also quite low (44%).

2.3.2 PROCEDURE

We used identical, structured interviews in both countries. Where appropriate, the interviewers used prompts to clarify participants' answers. The answers were written down during the interview and subsequently typed. It was not possible to use verbatim transcripts of tape recordings because the noise level at most business sites was too loud.

Four out of five interviewers were German graduate and postgraduate students of work psychology. Additionally, a local interviewer was employed in order to help in cases where the participant could not speak English (an official language in Zimbabwe as well as in South Africa). Depending on their psychological knowledge base, interviewers were thoroughly trained (minimum of two days) in the interview method, the coding scheme, and basic theoretical features. The latter was necessary to enable them to assess complex psychological states such as, e.g., achievement orientation and personal initiative. Throughout the study, the interviewers received feedback on their interviewing skills in feedback interviews were an additional interviewer was present who also journalized the interview.

Each interview was rated by two independent raters, one of them being the interviewer. Ratings were done on the basis of typed protocols and an elaborate coding scheme that provided explicit rating anchors.² Throughout the study, close supervision and consultative meetings minimized rating biases.

² See appendix for the complete interview and coding scheme.

After the interview, the participants filled out a questionnaire that contained orientation variables (e.g. risk-taking). Additionally, we asked the participants for permission to administer a questionnaire on their success to a third person. Confidentiality was explicitly assured to the participant as well as to the third person.

Directly after the interview, the interviewers also filled out a questionnaire meant to capture their views at a point in time when the impressions of the participants and their businesses were still vivid. We call this the interviewer evaluation form.

2.3.3 OPERATIONALIZATION

Table 2.2 presents the variables, their source (interview, questionnaire, or interviewer evaluation), the number of items, the number of valid interview responses, Cronbach's alpha (if the scale contained more than two variables), intercorrelations (if only two variables made up a scale), interrater reliabilities, range, Ms, and SDs of the variables. As reliability measures we used intraclass coefficients for factual (ICC [1,1]) and Likert (ICC [1,2]) items (Shrout & Fleiss, 1978).

For intraclass coefficients of the interviewer evaluations, we added data from a Namibian study (Frese et al., 2002) where the same interviewer evaluation questionnaire was used (Frese, Brantjes, & Hoorn, 2001). This was necessary because interviewer evaluations reflect personal impressions and the present sample did not provide enough cases where both raters were present during the interview. Thus, the interviewer evaluation intraclass coefficients are based on N=74 Zimbabwean (n=10), South African (n=18), and Namibian (n=46) double ratings.

For all composed scales, we examined statistical reliability in the overall sample as well as in both country sub-samples. Cronbach's alphas were all above .70 (except for number of barrier overcome in Zimbabwe: $\alpha=.68$). Where only 2 items went into a scale, all correlations were significant on a $p<.01$ level (except for achievement orientation in Zimbabwe and risk-taking orientation in South Africa where p was $<.05$).

Table 2.2:
Characteristics of the Variables and Scales.

	Source ^a	k items	n	α^b	r ^c	ICC ^d	Range	M	SD
Business performance									
Business growth ^e		3	223	.77	—	—	-1.23—5.32	.00	.83
Sales growth	I	1	222	—	—	.99	-85—1100	46.31	140.47
Customers growth	I	1	223	—	—	1.00	-85—1000	31.27	90.72
Profit growth	I	1	222	—	—	.98	-100—700	27.98	78.33
Number of employees	I	1	246	—	—	1.00	1—50	6.13	9.23
External success evaluation	Q	2	229	—	.80**	—	1—5	3.44	1.29
Entrepreneurial orientation									
Entrepreneurial orientation ^e		7	248	.81	—	—	.93—4.22	2.72	.68
Learning orientation		2	248	—	.43**	—	1—5	3.22	1.00
Learning orientation	I	1	168	—	—	.77	1—5	3.30	.90
Learning orientation	E	1	248	—	—	.84	1—5	3.24	1.17
Autonomy orientation		2	248	—	.57**	—	1—5	3.77	1.11
Autonomy orientation	I	1	247	—	—	.94	1—5	3.78	1.32
Autonomy orientation	E	1	248	—	—	.87	1—5	3.78	1.17
Competitive aggressiveness		2	248	—	.52**	—	1—5	2.83	1.13
Attitude to competitors	I	1	241	—	—	.93	1—5	2.76	1.38
Competitive aggressiveness	E	1	248	—	—	.84	1—5	2.91	1.19
Innovative orientation		2	248	—	.52**	—	1—5	2.50	1.06
Innovative orientation	I	2	217	—	.39**	.91	1—5	2.27	1.15
Innovative orientation	E	1	248	—	—	.90	1—5	2.76	1.28
Achievement orientation		2	248	—	.49**	—	1—5	3.87	.92
Growth goal orientation	Q	2	223	—	.45**	—	1—5	4.31	.91
Achievement orientation	E	1	248	—	—	.93	1—5	3.50	1.18
Risk-taking orientation		2	239	—	.22**	—	1—5	2.85	.89
Risk-taking orientation	Q	2	239	—	.41**	—	1—5	2.98	1.25
Risk-taking orientation	E	1	248	—	—	.81	1—5	2.73	1.02
Personal initiative ^e		3	248	.82	—	—	-1.95—1.74	-.02	.78
Number of barriers	I	4	233	.82	—	.97	.50—6	2.88	1.09
Activeness	I	4	235	.80	—	.92	1—5	3.09	.93
Personal initiative	E	1	248	—	—	.87	1—5	3.31	1.18
Controls									
Year of establishment	I	1	248	—	—	1.00	1951—1998	1993	5.34
Industry									
Manufacturing textiles	I	1	248	—	—	.94	1—2	—	—
Manufacturing wood	I	1	248	—	—	.96	1—2	—	—
Manufacturing metal	I	1	248	—	—	.89	1—2	—	—
Manufacturing other	I	1	248	—	—	.95	1—2	—	—
Construction	I	1	248	—	—	.91	1—2	—	—
Trade/retail	I	1	248	—	—	.96	1—2	—	—
Trade/gastronomy	I	1	248	—	—	.72	1—2	—	—
Service	I	1	248	—	—	.98	1—2	—	—
Other	I	1	248	—	—	.87	1—2	—	—
Starting capital (in US\$)	I	1	248	—	—	.77	0—926400	11051	62756
Country ^f	I	1	248	—	—	—	0—1	—	—
In/formal ^g	I	1	247	—	—	.95	1—2	—	—

Note. ^a I=interview measure, Q=questionnaire measure, E=interviewer evaluation. ^b Cronbach's Alpha. ^c Correlation between two variables that make a scale. Alpha was only calculated for scales with more than two items. ^d Intraclass coefficients. ^e z-standardized data. ^f 0=Zimbabwe, 1=South Africa; ^g 1=informal, 2=formal. **p<.01.

Business Performance. In order to get a differentiated picture (cf. Murphy, Trailer, & Hill, 1996) from multiple sources we used business performance measures that are related to business size (number of employees) and to business growth (growth scale consisting of growth in sales, customers, and profits) as well as an outside opinion (external success evaluation). The business growth scale included interview items (percentages) on profit, customers, and sales growth compared to the previous year (example: "Compared to last year, has the number of your customers increased or decreased or did it stay the same? By what percentage has it in/decreased?"). There were missing data (Table 2.2) because some participants refused to provide business data which is a common problem in African research settings (Daniels, 1999). To reduce missing data we allowed one out of three possible missing values to be mean substituted (Roth, 1994). All growth items were z-standardized before scale composition. The number of employees was a single item interview measure. For the external success evaluation we asked a third person, who was familiar with the business, how successful the owners were in comparison to direct competitors. It was not always possible to find a suitable external person or to get the owners' permission to ask a third person. Therefore, missing data occurred (Table 2.2). The country sub-samples varied in who filled in the external success evaluation. In South Africa, industrial centers (hives) employ hive managers who observe all business activities in their hive. Although hive managers are not directly involved in the businesses, they allocate stands, they make contacts with support organizations, they organize hive meetings, and they generally overlook the hive. Hence, they have a good insight in how the businesses are performing. Therefore, we relied primarily on hive managers' external success evaluations in South Africa (84%). In Zimbabwe, we were forced to mainly ask employees (52%) and neighboring owners (14%) because hive managers are not available. Thus, we will report results on this dependent variable separately for both countries. We decided not to collapse the success variables into an overall success scale because we think they capture different aspects of success that are not necessarily interrelated (Meyer & Gupta, 1994).

Entrepreneurial Orientation. We used a three step procedure to measure EO. The first step was to measure each component with different methods in the sense of multiplism (Cook, 1985) or multiple operationism (Webb, Campbell, Schwartz, & Sechrest, 1966). Learning- and autonomy orientation, competitive aggressiveness, and innovative orientation were measured in both the interview and in the interviewer evaluation. The interview measure of learning orientation was the question: 'If you could start your business again as you did in

the year ..., what would you do differently?' The answers were rated subsequently. The sample size for this variable was reduced because a rating was only possible if the participants actually wanted to do something differently (Table 2.2). For Autonomy orientation we asked: 'What would happen if somebody would pay you good money to take over your firm and would make you the manager of the firm. You would have the same income as now. Would you accept it? Why?' The interview measure for competitive aggressiveness was based on questionnaire items by Covin and Covin (1990) and was also rated subsequently. ('What is your relationship to your competitors? — Do you want to beat them or are you nice to them? Do you attempt to push them out of your way or do you think of your competitors more in terms of the saying 'live and let live'?') The transformation of the questionnaire (Covin & Covin, 1990) measure into an interview measure was necessary because African participants were reluctant to fill out questionnaires in pilot studies (cf. Chapter 5). Also, there were difficulties in understanding some questionnaire items (which could be explained during the interview). The interview measures of innovative orientation were ratings of how innovative the owners' business ideas and competitive edges were. Since not all owners reported ideas or a competitive edge, missing data occurred (Table 2.2). All interview ratings were done on 5-point Likert scales. Achievement- and risk-taking orientation were measured with questionnaires and the interviewer evaluation. The achievement orientation questionnaire was a self-developed growth goal orientation measure (sample item: 'If I earn enough money for my family, that is good enough.' 'I want my business to grow as much as possible. '; 4-point forced choice questionnaire scale). The measure had missing data (Table 2.2) because the questionnaire was only introduced one month into the data collection period. Risk-taking was measured with a questionnaire by Gomez-Mejia and Balkin (1989; adapted to the entrepreneurial context by Norton & Moore, 1998). Since some participants felt unable to make statements on their risk taking orientation, missing data occurred for this variable (Table 2.2). As Interview measurement of personal initiative we used the overcoming barriers method by Frese et al. (1996). The procedure is similar to the situational interview method (Latham & Saari, 1984) and had been shown to have good construct validity (Fay & Frese, 2001; Frese, Fay, Hilburger, Leng, & Tag, 1997). The interviewer presented four critical incidents relevant to the situation of the business owners, and asked the participants to come up with feasible solutions. Whenever participants gave a solution, new barriers ('Please imagine this doesn't work') were introduced until participants could not come up with further ideas or had overcome five barriers (the initial problem being the first barrier). Participants who overcame five barriers were then asked if they could think of any additional solutions. The second interview

measure was an interviewer rating (5-point Likert scale) of how actively the barriers had been approached. The sample sizes for the interview based personal initiative variables were reduced (Table 2.2) because some participants felt uncomfortable with the procedure of constantly introducing new barriers. Additionally, we used an interviewer evaluation measures of personal initiative.

In the second step of scale composition, we combined each of the multiple measures into single measures of learning- and autonomy orientation, competitive aggressiveness, innovative-, achievement-, and risk-taking orientation, and personal initiative. In the third step, all seven EO components were combined into a single-factor EO construct (cf. the confirmatory factor analysis described in the results on Research Question 1).

Alternatively, we could, for example, have used parts of the Entrepreneurial Attitude Orientation scale (Robinson et al., 1991) or other questionnaire measures. However, such questionnaires are often long (e.g., Robinson et al., 1991: 75 items) and not administrable in our research setting because of complex wording (cf. Covin & Slevin, 1986) and participants' fatigue when being confronted with lengthy paper work (cf. Chapter 5).

Control variables. To control for potential artifacts, the variables year of establishment, the type of industry (dummy variables), starting capital (in US\$), country (Zimbabwe or South Africa), and in/formal (officially registered or unregistered business) were included in the first step of the hierarchical regression analyses.

2.3.4 STATISTICAL ANALYSES

For most calculations, we treated the two country sub-samples as one. We tested the correlations between the dependent (performance) and the independent (EO) variables in both sub-samples for significant differences. Differences were only found for one of the success measures, the external success evaluation. This is not surprising, as the external success evaluation was the only one where the Zimbabwean and the South African study design differed (see description above). Therefore, we did not combine the two samples for analyses where the external success evaluation was the dependent variable.

In order to gain a more favorable N to variables ratio for regression analyses, we only included control variables that correlated with the respective dependent variable (cf. Table 2.3).

2.4 RESULTS

Table 2.3 presents intercorrelations of all variables. The business performance variables were business growth, number of employees and external success evaluation. Due to differences in the measurement, the performance variable external success evaluation was processed separately for Zimbabwe and South Africa (see above). Three out of four intercorrelations of the performance variables were not significant. This suggests that our performance measures represent different aspects of business success (Murphy et al., 1996). Only the Southern African correlation between the number of employees and the external success evaluation was significant (Table 2.3).

Correlations between EO and performance variables resulted in a differentiated picture. Learning orientation correlated significantly with all performance measures except for the external success evaluation in Zimbabwe. Autonomy orientation correlated only with the external success evaluation in South Africa. Competitive aggressiveness had no significant correlation with business growth but correlated significantly with the number of employees and the external success evaluation in South Africa. Innovative orientation only correlated significantly with the Southern African external success evaluation. Achievement orientation correlated significantly with all performance measures. Risk-taking orientation correlated significantly with business growth and with the external success evaluation in South Africa but not with the number of employees nor with the external success evaluation in Zimbabwe. Personal initiative correlated highly with all performance measures — except for the external success evaluation in Zimbabwe. Correlations with the country variable show that Zimbabwean business owners were more likely to be successful (number of employees) and to show higher EO than their South African counterparts. Furthermore, owners of formal businesses had more successful enterprises (number of employees and external success evaluation South Africa) and had higher degrees of EO than their informal counterparts. Yet, neither country nor belonging to the in/formal sector had any significant relationship with business growth.

Table 2.3:
Intercorrelations.

Variables and Scales	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1. Business growth	—																
2. Number of employees	-.01	—															
3. External success evaluation ^a	.04	.19	—														
4. External success evaluation ^b	.13	.37**	—	—													
5. Entrepreneurial Orientation	.22**	.23**	.15	.63**	—												
6. Learning orientation	.15*	.20**	.09	.47**	.78**	—											
7. Autonomy orientation	.13	.12	.09	.36**	.68**	.42**	—										
8. Competitive aggressiveness	.06	.13*	-.08	.41**	.57**	.34**	.26**	—									
9. Innovative orientation	.10	.09	.15	.41**	.65**	.45**	.28**	.18**	—								
10. Achievement orientation	.28**	.25**	.21*	.52**	.77**	.57**	.50**	.33**	.35**	—							
11. Risk-taking orientation	.19**	.09	.11	.39**	.63**	.43**	.34**	.18**	.41**	.40**	—						
12. Personal initiative	.19**	.29**	.14	.64**	.81**	.63**	.46**	.40**	.51**	.66**	.40**	—					
13. Year of establishment	.16*	-.04	-.10	.02	.22**	.17**	.23**	.13*	.11	.18**	.11	.11	—				
14. Industry: Manufacturing textiles	-.08	.13*	-.13	.02	-.14*	-.14*	-.04	-.14*	-.08	-.10	-.03	-.15*	-.00	—			
15. Industry: Manufacturing wood	.04	-.09	-.05	.17	-.02	-.03	-.01	.05	-.12	-.06	.12	-.06	-.07	-.13*	—		
16. Industry: Manufacturing metal	.09	-.06	-.03	.10	-.01	-.05	.00	-.07	.11	-.02	.01	.00	.05	-.14*	-.03	—	
17. Industry: Manufacturing other	.02	.02	.06	.12	.18**	.18**	.06	.02	.21**	.13*	.03	.21**	-.10	-.17**	-.17**	-.07	—
18. Industry: Construction	-.01	.28*	.04	.13	.07	.08	.00	-.01	-.02	.10	.06	.13*	-.01	-.06	-.07	-.06	.16*
19. Industry: Trade (retail)	-.08	-.06	-.14	-.03	.00	-.01	-.03	.09	-.02	.00	-.02	-.05	.07	-.17**	-.18**	-.10	-.18*
20. Industry: Trade (gastronomy)	-.06	-.02	-.06	.07	-.03	.04	-.02	-.09	-.04	.01	.02	-.04	.01	-.06	-.06	-.05	-.06
21. Industry: Service	.01	.00	.06	-.19*	.06	.06	.04	-.05	.12	.03	-.05	.14*	.02	-.12	-.26**	-.07	-.14*
22. Industry: Other	-.04	.08	.06	-.12	-.05	-.09	-.01	-.03	-.07	.07	-.05	-.05	-.06	-.09	-.04	-.08	-.04
23. Starting capital (US\$)	.01	.13*	.09	.19*	.04	.12	-.08	.06	-.02	.09	-.08	.09	.05	-.04	-.06	-.05	.03
24. Country ^c	-.06	-.15*	—	—	-.29**	-.31**	-.21**	-.23**	.09	-.32**	-.12	-.31**	-.05	.18**	.04	.06	-.18
25. In/formal ^d	.06	.28**	.02	.37**	.33**	.29**	.11	.15*	.26**	.28**	.18**	.38**	-.14*	-.07	-.09	-.03	.06

Variables and Scales	18	19	20	21	22	23	24	25
18. Industry: Construction	—							
19. Industry: Trade (retail)	-.04	—						
20. Industry: Trade (gastronomy)	-.02	-.09	—					
21. Industry: Service	-.11	-.19**	-.04	—				
22. Industry: Other	.09	-.06	-.03	-.07	—			
23. Starting capital (US\$)	.12	-.04	-.02	.06	-.01	—		
24. Country ^c	-.11	-.07	.03	-.07	-.08	-.10	—	
25. In/formal ^d	.12	.03	-.01	.11	.02	.11	-.03	—

Note. n ranged from 211 to 294. ^a Zimbabwe (n ranged from 92 to 109).

^b South Africa (n ranged from 115 to 120).

^c 0=Zimbabwe, 1=South Africa. ^d 1=informal, 2= formal. *p<.05. **p<.01.

The Tables 2.4 to 2.7 describe the results of the hierarchical regression analyses of EO and its components on the performance measures business growth (Table 2.4), number of employees (Table 2.5), and the external success evaluation in Zimbabwe (Table 2.6) as well as in South Africa (Table 2.7).

Hypotheses 1 to 7 state that the components of EO are positively related to business performance. With business growth as performance measure, the hypotheses were marginally supported for learning orientation (Table 2.4, column 1) and significantly supported for achievement orientation, risk-taking orientation, and personal initiative (Table 2.4, columns 5-7). The explained variance in the dependent variable number of employees was significantly increased by achievement orientation and personal initiative (Table 2.5, columns 5&7). Only achievement orientation enhanced the explained variance in the Zimbabwean external success evaluation significantly (Table 2.6, column 5). Finally, all components of EO explained significant additional variance in the South African external success evaluation (Table 2.7, columns 1-7). Therefore we conclude that Hypotheses 2 to 4 (autonomy orientation, competitive aggressiveness, and innovative orientation) are supported for the Southern African external success evaluation only. Hypotheses 1 (learning orientation) and 6 (risk-taking orientation) are supported for business growth and for the external success evaluation in South Africa. Hypothesis 7 (personal initiative) is supported for business growth, number of employees, and external success evaluation in South Africa. And lastly, Hypothesis 5 (achievement orientation) is fully supported for all dependent performance measures.

To examine whether the components of EO explained different fractions of the variance in business performance, we conducted hierarchical regression analyses where all entrepreneurial orientations were entered in the second step. However, multicollinearity was an issue and the beta weights could not be interpreted. ΔR^2 was not significant for the performance measures number of employees and external success evaluation in Zimbabwe. For the dependent variables business growth ($\Delta R^2=.08$, $p<.05$) and external success evaluation in South Africa ($\Delta R^2=.31$, $p<.01$), the additional explained variance was significant.

Table 2.4:
Hierarchical Regression Analyses of EO and Its Components on Business Growth.

	Business growth							
	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8
	β	β	β	β	β	β	β	β
Step1: Controls								
Year of establishment	.13*	.13 [†]	.15*	.15*	.12 [†]	.14*	.13*	.12 [†]
Step 2: EO								
Learning orientation	.13 [†]							
Autonomy orientation		.10						
Competitive aggressiveness			.04					
Innovative orientation				.09				
Achievement orientation					.26**			
Risk-taking orientation						.18*		
Personal initiative							.17*	
Overall EO								.19**
R²	.04	.03	.03	.03	.09	.05	.05	.05
ΔR^2	.02 [†]	.01	.00	.01	.07**	.03*	.03*	.04**

Note. Controls were only included if they had been shown to correlate with business growth. n=248. [†]p<.10. *p<.05. **p<.01.

Table 2.5:
Hierarchical Regression Analyses of EO and Its Components on the Number of Employees.

	Number of employees							
	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8
	β	β	β	β	β	β	β	β
Step1: Controls								
Year of establishment	.20**	.19**	.20**	.20**	.19**	.19**	.20**	.20**
Industry: Manufacturing textile	.24**	.24**	.24**	.24**	.23**	.25**	.23**	.24**
Industry: Construction	.06	.07	.06	.07	.06	.06	.06	.07
Starting capital (US\$)	-.12 [†]	-.12*	-.12*	-.15*	-.10	-.14*	-.09	-.10 [†]
Country ^a	.23**	.24**	.24**	.24**	.22**	.25**	.19**	.21*
Step 2: EO								
Learning orientation	.10							
Autonomy orientation		.08						
Competitive aggressiveness			.09					
Innovative orientation				.06				
Achievement orientation					.14*			
Risk-taking orientation						.03		
Personal initiative							.19**	
Overall EO								.14*
R²	.20	.20	.20	.19	.21	.19	.22	.21
ΔR^2	.01	.01	.01	.00	.02*	.00	.03**	.02*

Note. Controls were only included if they had been shown to correlate with the number of employees. n=248. ^a 0=Zimbabwe, 1=South Africa. ^b 1=informal, 2= formal. [†]p<.10. *p<.05. **p<.01.

Table 2.6:
Hierarchical Regression Analyses of EO and Its Components on the External Success Evaluation in Zimbabwe.

	External Success Evaluation (Zimbabwe)								
	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8	
	β	β	β	β	β	β	β	β	
EO									
Learning orientation	.09								
Autonomy orientation		.09							
Competitive aggressiveness			-.08						
Innovative orientation				.15					
Achievement orientation					.21*				
Risk-taking orientation						.11			
Personal initiative							.14		
Overall EO								.15	
	ΔR^2	.01	.01	.01	.02	.04*	.01	.02	.02

Note. Controls were only included if they had been shown to correlate with the external success evaluation in Zimbabwe. n=122. *p<.05.

Table 2.7:
Hierarchical Regression Analyses of EO and Its Components on the External Success Evaluation in South Africa.

	External Success Evaluation (South Africa)								
	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8	
	β	β	β	β	β	β	β	β	
Step1: Controls									
Industry: Manufacturing wood	.05	.08	.05	.06	.05	.03	.00	.03	
Industry: Service	-.19*	-.20*	-.17*	-.20*	-.17*	-.14 [†]	-.19*	-.16*	
Starting capital (US\$)	.04	.12	.09	.07	.09	.14 [†]	.08	.07	
In/formal ^a	.28**	.32**	.31**	.33**	.29**	.36**	.19*	.24**	
Step 2: EO									
Learning orientation	.37**								
Autonomy orientation		.31**							
Competitive aggressiveness			.31**						
Innovative orientation				.36**					
Achievement orientation					.44**				
Risk-taking orientation						.35**			
Personal initiative							.56**		
Overall EO								.54**	
	R^2	.33	.30	.30	.33	.40	.58	.48	.48
	ΔR^2	.12**	.09**	.09**	.13**	.19**	.31**	.27**	.27**

Note. Controls were only included if they had been shown to correlate with the external success evaluation in South Africa. n=126. ^a 1=informal, 2= formal. [†]p<.10. *p<.05. **p<.01.

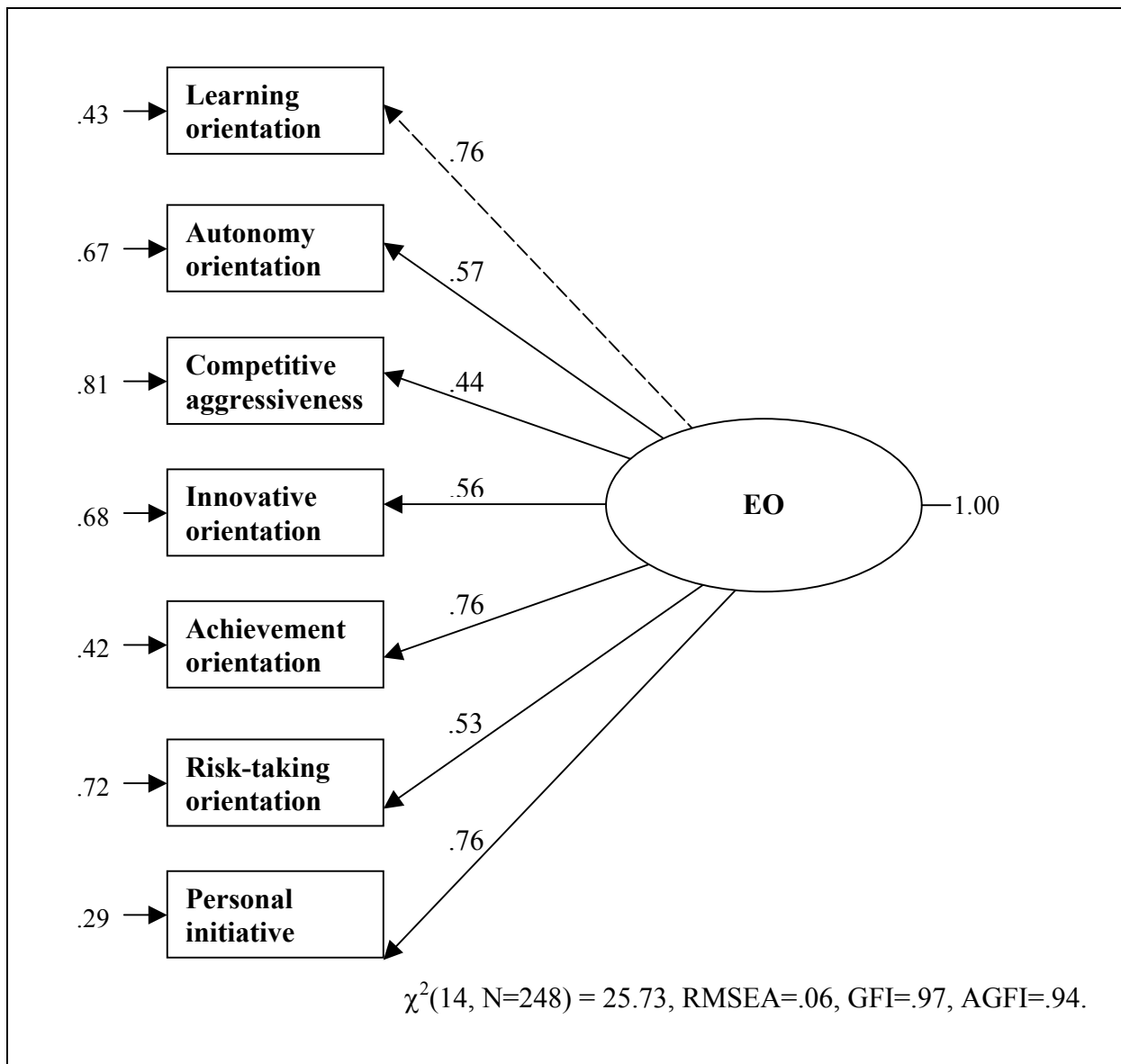
Confirmatory factor analyses with LISREL 8.3 were employed to investigate Research Question 1 (Do the dimensions of EO form a single-factor overall EO construct?). In addition to the Chi-square test, we used the fit indices root-mean-square-error-of-approximation (RMSEA, Brown & Cudeck, 1993), the goodness-of-fit-index (GFI), and the adjusted-goodness-of-fit-index (AGFI, Jöreskog & Sorböm, 1989). For the RMSEA, a value below .08 is a sign of reasonable model fit (MacCallum, 1998); for GFI and AGFI, values above .90 indicate acceptable fit of the model (Schumaker & Lomax, 1996).

Confirmatory factor analysis of the EO components showed a one factor model (Figure 2.2) to fit well ($\chi^2[14, N=248] = 25.73$, RMSEA=.06, GFI=.97, AGFI=.94). The model fit was considerably better than the independence model ($\chi^2[21, N=248] = 580.36$) where each manifest variable was represented by an independent latent variable. Hence, Research Question 1 is affirmed. The highest loading appeared for personal initiative and the lowest one for competitive aggressiveness.

Additionally, we examined the model in Zimbabwe, South Africa, the formal, and the informal sub-samples. A further break-down into, for example, the South African formal and informal sub-samples was not possible, because the sample size would have become unacceptably small for LISREL to produce interpretable result. For Zimbabwe, CFA resulted in a single-factor construct that includes all EO components — except competitive aggressiveness ($\chi^2[14, N=122] = 20.50$, RMSEA=.06, GFI=.95, AGFI=.91). For South Africa, the resulting a single-factor includes all EO components ($\chi^2[14, N=126] = 21.25$, RMSEA=.06, GFI=.95, AGFI=.91). Likewise, CFA found a single-factor containing all EO components in the formal sub-sample ($\chi^2[14, N=156] = 24.13$, RMSEA=.07, GFI=.96, AGFI=.92). For the informal sub-sample, the single-factor includes all EO dimensions except competitive aggressiveness and innovative orientation ($\lambda=.35$) and risk-taking orientation ($\lambda=.32$) have weaker loadings on overall EO ($\chi^2[14, N=91] = 17.07$, RMSEA=.05, GFI=.95, AGFI=.90).

Therefore, we think that the notion of EO as a single-factor construct is in principle supported. However, the inclusion of competitive aggressiveness in EO varies across nations (Zimbabwe/ South Africa) and business sectors (in/formal), while the structure of all other EO components emerges across nations and business sectors.

Figure 2.2:
Confirmatory Factor Analysis of Entrepreneurial Orientation.



Note. Dashed arrow indicates fixed loading.

Hypothesis 8 states that the owners' EO is positively related to business performance. EO entered in step two contributed 4% of explained variance in business growth, 2% in the number of employees, and 27% in the external success evaluation in South Africa (Tables 2.4-2.7, 8th columns). Explained variance in the external success evaluation in Zimbabwe (2%) was not significant. Thus, Hypothesis 8 is for the most part supported.

2.5 DISCUSSION

This study provides insight into the relationship between owners' individual entrepreneurial orientations and business performance in Southern African. Shifting perspective from the firm level to a psychological construct and using EO from an individual difference point of view was useful, not only because individual-level EO was shown to be related to business performance:

First, our data provides evidence for the positive relationships between EO and its components and business performance. The most important single EO dimensions for performance are the business owners' achievement orientation, personal initiative, and risk-taking orientation.

Our results confirm firm-level findings on the importance of risk-taking orientation and personal initiative at the measurement level of the individual business owner (e.g., Venkatraman, 1989). Moreover, individual-level personal initiative was shown to be positively related to business success in Europe (Korunka et al., 2003), in East Africa (Koop et al., 2000), and now in Southern Africa. Hence, the body of evidence suggests that the relationship between personal initiative and business performance is valid across cultures and economic environments. The strong correlation of the owner's achievement orientation with business success is interesting since it had not been included in the currently prevalent (firm level) EO constructs (e.g., Covin & Slevin, 1989; Lumpkin & Dess, 1996; Miller, 1983; Venkatraman, 1989).

Surprisingly, the beta weights of learning orientation, autonomy orientation, competitive aggressiveness, and innovative orientation were marginal or not significant. This result might be due to cultural differences of our sample compared to Western samples. Since Zimbabwe and South Africa are highly collective societies (Global Leadership and Organizational Behavior Effectiveness Research Program: Hanges, House, Dickson, Dorfman, & co-authors, 2003; Hofstede, 1980), autonomy orientation and competitive aggressiveness could be generally lower and restricted in variance. Restricted variance is unfavorable for the detection of significant correlations (Cohen & Cohen, 1983). Assertiveness is also low in both countries (Hangs et al., 2003) and could affect the learning orientation, competitive aggressiveness, and innovative orientation. Similarly, the degree of innovativeness is lower in Africa than in the West (Gray et al., 1996; Kiggundu, 1988) whereas the degree of traditionalism is relatively high (Gebert, 1992; Inkeles & Smith, 1974). Traditionalism hinders deviation from customs and promotes imitation because one sticks to the way things are generally done in one's society. Thus, the low relationships of learning orientation, autonomy orientation, com-

petitive aggressiveness, and innovative orientation with business performance might be caused by (A) low social acceptance of the orientations and (B) restricted variance in the orientations variables.

Second, we established a psychological EO concept that complies with the Schumpeterian understanding of entrepreneurship and complements the current comprehension of EO (autonomy orientation, competitive aggressiveness, innovative- and risk-taking orientation, and personal initiative) by learning and achievement orientation (Schumpeter, 1934). The introduction of learning orientation to EO was theory driven. While learning orientation was one of the weaker predictors of business performance in our Southern African setting, we believe that further elaboration in other cultural settings could lead to a more elaborate understanding of the relationship (see above). The theory driven reintroduction of achievement orientation to EO was supported by the highly positive results on the construct's performance relationships. Achievement orientation appears to have previously been ignored because researchers have (at least in their theoretical reasoning) not investigated individual-level EO; even though achievement orientation had been found to contribute to both individual entrepreneurial performance (McClelland, 1987b) and national economic development (McClelland & Winter, 1971). Extending proactiveness to personal initiative (which also entails approaching business issues in a persistent and self-starting manner) was in line with Austrian economists' understanding of entrepreneurship (Kirzner, 1997; Schumpeter, 1934) and was fruitful for the prediction of small business performance.

Third, we examined the notion of a single-factor EO construct. Habitually, EO had often been used as a unitary concept in EO literature and research (e.g., Covin & Slevin, 1986; Covin & Slevin, 1989; Dess, Lumpkin, & Covin, 1997; Wiklund, 1999). Empirically, however, this had not been addressed previously. Confirmatory factor analyses supported the idea of a single-factor EO construct that consists of learning- and autonomy orientation, competitive aggressiveness (in South Africa and the formal sector), innovative-, achievement-, and risk-taking orientation, and personal initiative. However, competitive aggressiveness was not part of EO in neither Zimbabwe nor in the informal sector. This suggests that EO is influenced by culture and/ or the business environment (cf. Thomas & Mueller, 2000). The concept of EO and its components was developed in Western cultures and for Western business communities. Both, South Africa as well as the formal sub-sample operate on business standards that are comparable to the business conduct in Western economies (cf. Thomas & Bendixen, 2000). In Zimbabwe and in the informal sector, however, business conduct is less similar to Western standards. The Zimbabwean economy

continues to deteriorate since 1997. In 1999, the year of our data collection, the inflation rate reached 70% compared to the previous year and the value of the local currency, the Zimbabwe\$, decreased substantially (Robertson, 2003). The hostile economic circumstances might have influenced the competitive aggressiveness of business owners. Anecdotal evidence suggests that under the given economic circumstances, many participants in our sample view their competitors more as potential cooperators than as rivals. Business owners often mentioned that they would not act too aggressively towards their competitors because they might need the competitors' help in the future. They would, for example, subcontract orders they could not fulfill due to supply shortages to competitors and, thus, not cause inconvenience to the (hopefully returning) customers. In other instances they would turn to competitors for tools that they needed for an order they would not be able to fulfill otherwise. A similar argument holds in the informal sector. In the informal sector, business owners are not protected by the law, cannot access financial support, cannot advertise freely, and are not able to develop stable relationships with suppliers or customers (Jansson & Sedaca, 2000, Mambula, 2002; cf. also Chapter 4). Cooperative relationships with ones' competitors might be necessary in the informal sector in order to remain in business. Thus, we think that competitive aggressiveness is not part of EO in Zimbabwe and the informal sector because it is not adequate for the respective business environment. In all path diagrams, competitive aggressiveness had the lowest loadings while personal initiative invariably showed the highest loadings. Second and third most important components of the single-factor EO are achievement- and learning orientation — both variables were hitherto not considered for the EO construct. Then follow autonomy-, innovative-, and risk-taking orientation.

Fourth, regarding the relationship between overall EO and business performance, our approach has produced similar results to firm level studies in Western countries such as the US (e.g., Covin & Slevin, 1986) and Sweden (Wiklund, 1998). Hence, we have evidence for as a generalizable construct across levels of investigation, cultures, and economic development.

2.5.1 STRENGTHS AND LIMITATIONS

First, measuring small business performance is difficult (Daniels, 1999; Wiklund, 1998). In line with multiple operationism (Webb et al., 1966; cf. also Cook, 1985), we used three, partly interdependent success constructs that reflect different aspects of what constitutes business success. However, we used no truly objective measure of success such as an

exact profit rate. Particularly (but not only) in Africa, it is difficult to ascertain exact and valid profit measures in micro- and small scale businesses (Daniels, 1999). Many businesses are interested in keeping their profit rate low for tax reasons. Other owners hesitate to disclose sensitive performance data. African business owners, specifically, often do not know their exact profit rate because they do not practice any standard book-keeping (e.g., Shinder, 1997). However, we think that the multiplicity of our measures is probably a good way to overcome the problems associated with measuring success (cf. Meyer & Gupta, 1994).

Second, the performance measure external success evaluation must be discussed separately for both countries as we could not get the same data sources in Zimbabwe (mostly employees and neighboring owners) as in South Africa (predominantly hive managers). In the Zimbabwean sample, only achievement orientation explained a significant portion of the variance in the external success evaluation. However, the South African results are the more meaningful ones: Hive managers have no personal interest in describing the businesses as more or less successful than they actually are, which could be suspected with the Zimbabwean sources. EO and its components explained highly significant portions of variance in the hive managers' success evaluation, who had no knowledge of our hypotheses or the theoretical background of our study (no percept-percept problem).

Third, while the explained variance was consistently high and significant for the dependent business performance measure 'external success evaluation' in South Africa, it did not exceed 7% for business growth and number of employees. Compared to the commonly found relationships in industrial- and organizational psychology, these are satisfactory results (cf. also Meyer, Finn, Eyde, Kay, Moreland, Dies, Eisman, Kubiszyn, & Reed, 2001). EO cannot be expected to account for all the variance in business performance. Other relevant influence factors within the owner (e.g., skills and abilities) as well as within and outside the business (e.g., employee commitment, organization structure, interest rates, currency fluctuation) are likely to influence business performance. Therefore, we believe our findings are not only statistically significant but also a meaningful contribution to entrepreneurship research.

Fourth, the interviewers' full knowledge of the theory and their involvement in the measurement of independent and dependent variables is a potential limitation. We were very concerned about this issue. The interviewers were trained to separate their judgments of the EO dimensions from their knowledge of business success. We also tried to use multiple sources for the measurement of both business performance and the EO dimensions (cf. Cook, 1985; Webb et al. 1966). For EO, however, this was not always possible because we had to keep the number of questionnaires to a minimum. Therefore, most EO measures are based on

the interview as main source. Both the interviewer evaluation and the subsequent interview rating are prone to be influenced by the interview as such. Yet, this was not true where questionnaire measures were employed (achievement and risk-taking orientation) because the interviewers were not aware of the questionnaire answers when they filled out the evaluation forms. Thus, two independent sources were used. Furthermore, there was still a certain independence between the interviewer evaluations and ratings of the interview content. While the interviewer evaluation form reflected the interviewers' overall impression the interview, ratings were judgments based on particular statements by the participants. Even more important, all interview measures used for computations were calculated on the basis of two independent ratings (only one of the raters was present during the interview) with good interrater reliabilities. We especially value the results from the South African sub-sample on the relationship between EO and the external success evaluation by the hive managers. Hive managers could not have been influenced by our hypotheses, theories, or the interview itself. Furthermore, the two interview based success measures (business growth and number of employees) were not influenced by the interviewers. The interviewers merely wrote down figures given by the participants; no judgments were required.

Fifth, our operationalization of the EO components differs from previous operationalizations. This is mainly due to the sample's reluctance to fill in questionnaires (see above). Hence, we developed interview measures for learning-, autonomy, and innovative orientation and a short questionnaire measure for achievement/growth goal orientation which we administered during the interview. All measures during the interview allowed for participants' enquiries whenever understanding problems occurred and reduced the participants' fatigue (cf. Chapter 5). For personal initiative, we enlarged the concept of proactiveness by persistence and measured it with the validated overcoming barriers method (Frese et al., 1997). These modifications do not prohibit the comparison of our findings with results from other studies. A content based interpretation and comparison is indeed reasonable. Moreover, a different yet also interview based operationalization of EO components was used in an Ugandan study (Koop et al., 2000) and lead to similar results: Among highly entrepreneurial oriented (learning, innovative-, achievement orientation and personal initiative) business owners were significantly more successful ones than among business owners low on EO. While this is not a true validation of our measurement, it does indicate a robustness of the findings using different measures.

Sixth, as our study is a cross-sectional one, no causal conclusions can be drawn. Thus, all statistical relationships could be due to reverse causation. We think that probably both

causal paths are operative: From EO and its components to success and as well as from success to EO. The relationship between EO and business performance is, in addition, likely to be influenced by third variables. For example, business process variables and environmental variables could play a role.

Finally, our sample consisted of small businesses with one up to fifty employees. This implies that our results cannot be generalized to one-person enterprises which constitute the majority of the African small businesses sector (Mead & Liedholm, 1998).

2.5.2 PRACTICAL IMPLICATIONS AND CONCLUSION

Our findings indicate that EO and its components are valuable predictors for business success. The individual approach offers a promising starting point for further theoretical development and practical application in the form of selection and training instruments. If our findings hold in longitudinal studies, high-potential business owners could be identified (e.g., for the allocation of capital). This is especially interesting for developing countries where collateral securities are virtually nonexistent while local business development is of utmost importance for the overall economic development and the creation of employment (Chapter 4). Furthermore, the results on the strong performance relationships of the EO components achievement orientation and personal initiative open up new perspectives on training for micro- and small business owners: Psychological training methods can enhance individual achievement orientation (Miron & McClelland, 1979) as well as personal initiative (Frese, Garman, Garmeister, Halemba, & co-authors, 2002).

Finally, our findings show that an individual level EO conceptualization is useful for the prediction of small business performance and deserves further (re-)consideration, investigation, and development by the entrepreneurship research community.

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CHAPTER 3

Entrepreneurial Orientation, Psychological Strategy Process Characteristics, and Business Performance: A Longitudinal Analysis among Zimbabwean Small Business Owners

This chapter presents results of a longitudinal field study on micro and small scale business owners in Zimbabwe, Southern Africa. We focus on reciprocal determinisms (Bandura, 1978) between business owners' entrepreneurial orientation (EO) and action strategy process characteristics on the one hand, and business performance on the other hand. The components of EO are personal orientations that relate to the daily tasks of a business owner (Chapter 2). Strategy process characteristics, in contrast, are action templates (van Gelderen, Frese, & Thurik, 2000) that determine the manner in which entrepreneurial activities are carried out. Thus, strategy process characteristics are more proximal to actual entrepreneurial behavior than EO (cf. Kanfer, 1992). Our psychological perspective on the entrepreneurial process contributes to entrepreneurship research in four ways:

First, the longitudinal study design allows for causal analyses of business performance determinants. Longitudinal analyses are rare in entrepreneurship research (Rauch & Frese, 2000) and individual-level EO has, to our knowledge, not yet been investigated longitudinally.

Second, we investigate reciprocal determinisms (Bandura, 1978) between EO/ strategy process characteristics and business performance (cf. van Gelderen, et al., 2000): Business performance is not only the criterion variable but should also cause intra-individual self-regulation. Owners regulate their individual EO and strategy process characteristics in response to the performance of their business. In the field of psychology, the existence of reciprocal determinisms and self-regulating processes is widely acknowledged (e.g., Bandura, 1997; Carver & Scheier, 1998; Frese & Zapf, 1994; Hacker, 1986; Locke & Latham, 2002). In entrepreneurship research, however, reciprocal determinisms have not yet been integrated into the theoretical framework (except for being implicit to the line of arguments brought

forward by van Gelderen et al., 2000).

Third, we advance the understanding of entrepreneurial business performance by taking account of individual EO as well as of individual strategy process characteristics, which are closer to actual entrepreneurial behavior than EO. In doing so, we take up Kanfer's heuristic framework of proximity to behavior (Kanfer, 1992) and apply it to entrepreneurship research.

Finally, our psychological approach emphasizes the importance of the founder/owner/managers¹ in small enterprises where subordinate decision makers and the organizational structure are less important than in medium sized and large businesses (cf. Miller & Toulouse, 1986). The owners are usually the main actors in their business. They make all important decisions, they overlook the finances, they manage human resources, and they maintain customer relationships. Founders, in particular, determine strategies, culture, and business goals at an early stage of the business development and set the course for future success (Frese, van Gelderen, & Ombach, 2000; Schein, 1983).

3.1 THE THEORETICAL MODEL

Our theoretical model of entrepreneurial business performance (Figure 3.1) is based on two fundamental ideas: First, we propose reciprocal determinisms between EO/ strategy process characteristics and business performance (cf. Bandura, 1978). Thus, we assume causal effects from individual variables on business performance as well as reverse effects from performance on individual variables. Second, the model accounts for the proximity to entrepreneurial behavior of the investigated constructs EO and strategy process characteristics (Figure 3.2; cf. Kanfer, 1992).

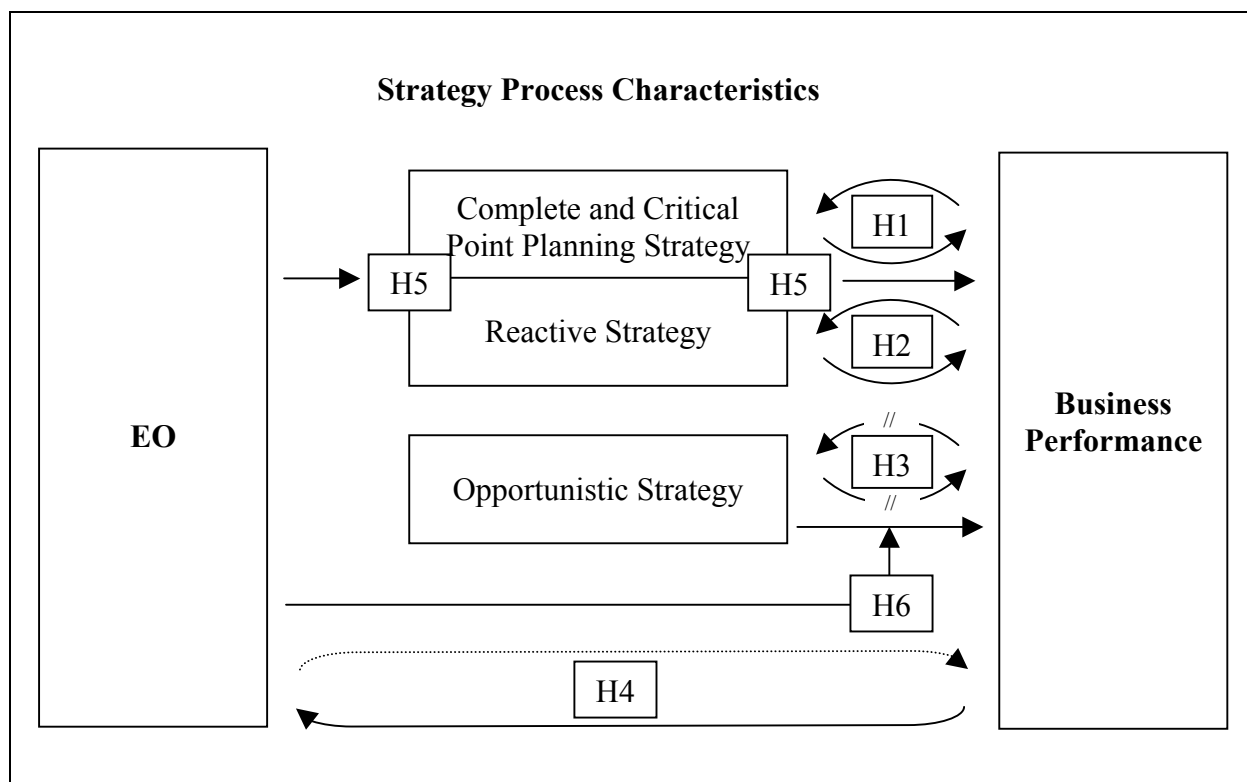
A comprehensive psychological approach to entrepreneurial performance must incorporate self-regulatory processes. Self-regulation refers to reciprocal determinisms (Bandura, 1978) where intra-individual factors influence actions and extra-individual action outcomes operate as feedback signals that cause intra-individual regulation processes (cf. Carver & Scheier 1982; Frese & Zapf, 1994; Hacker, 1986; Locke & Latham, 2002). Applied to the entrepreneurial context, self-regulation entails that the business owners' EO and strategy process characteristics influence business performance; performance, in turn, impacts on the owners' EO and strategy process characteristics. Hence, we assume reciprocally determined

¹ All in one person; for simplification referred to as owners in the following.

causal relationships between EO and complete planning/ critical point planning/ reactive strategy process characteristics of the owner on the one hand and business performance on the other hand (Figure 3.1, H1, H2, and H4). Opportunistic strategy process characteristics, however, are not expected to impact on performance, nor should performance influence opportunistic strategy process characteristics (Figure 3.1, H3).

Figure 3.1:

A Model of Reciprocal Determination between Entrepreneurial Orientation/ Strategy Process Characteristics and Business Performance.



Note. // indicates insignificant relationships.
The dotted arrow indicates a mediated relationship.

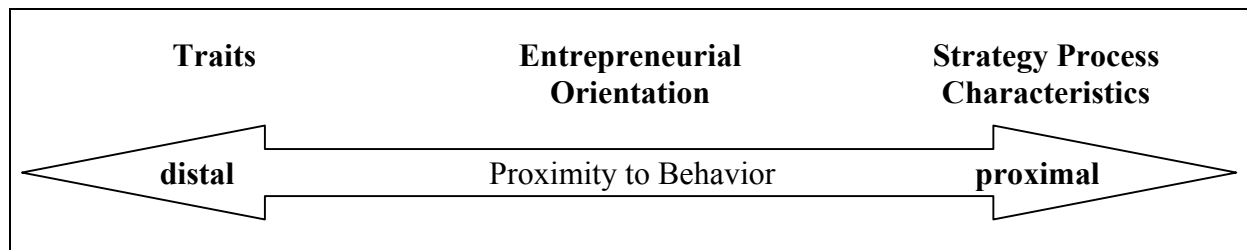
The effects of the owners' EO and strategy process characteristics on business performance should be rather instantaneous. The owners are the key actors in the entrepreneurial process. Their personal orientations and strategy process characteristics determine the day-to-day management of the business, which impacts immediately on short-term business outcomes. Therefore, causal effects from the owners' EO and strategy process characteristics on business performance should be contemporaneous. Contemporaneous causality means that the effects occur some time between the first and the second measurement time (Dwyer, 1983). The reverse effects from business performance on EO and strategy process characteristics, however, occur within a longer time lag. Self-regulation of EO and strategy process charac-

teristics depends on the interpretation of feedback cues provided by the outcome variable business performance. Feedback cues often “[...] take some time to accumulate to the point where they can be clearly interpreted” (Carver & Scheier, 1998, p.42). Thus, causal effects from business performance on EO and strategy characteristics should be lagged rather than contemporaneous.

Kanfer (1992) proposes “a heuristic framework of motivation constructs and exemplar motivation theories” (p.4) where she organizes person constructs along the dimension of proximity to behavior — from distal to proximal. Figure 3.2 illustrates the proximity to behavior of the constructs discussed in this chapter. As a reference point, Figure 3.2 also contains traits, which are most distal to behavior.

Figure 3.2:

The Proximity to Behavior of Entrepreneurial Orientation and Strategy Process Characteristics (cf. Kanfer, 1992).



Constructs distal to behavior (e.g., traits) have weaker relationships with performance than constructs that are more proximal to behavior (e.g., EO). Many distal construct have no direct relationship to performance at all but influence performance via constructs that are more proximal to behavior (Kanfer, 1992). Following Kanfer’s (1992) line of argument, we assume the more proximal planning and reactive strategy process characteristics to mediate the causal path from EO to business performance (Figure 3.1, H5). Furthermore, the more distal, albeit more stable person construct EO should moderate the relationship between opportunistic strategy process characteristics and business performance (Figure 3.1, H6). In the following, we will set forth our theoretical arguments in detail and develop our hypotheses referring to proximity to behavior (Figure 3.2) and the proposed performance model shown in Figure 3.1.

3.1.1 PSYCHOLOGICAL STRATEGY PROCESS CHARACTERISTICS

Psychological strategy research focuses on the strategy process, on how strategy contents are developed and implemented (Olson & Bokor, 1995). Strategy characteristics are

general action templates that are employed after a rudimentary analysis of the situation (cf. Bem, 1983; Frese, Stuart, & Hannover, 1987). Frese et al., (2000) distinguished four types of strategy process characteristics: Complete planning, critical-point planning, opportunistic, and reactive strategy process characteristics².

Complete planning strategy characteristics imply a strong goal orientation, extensive long-term and top-down planning, a broad knowledge base, high proactiveness, as well as a relatively low situational responsiveness (Frese et al., 2000). Also inherent to complete planning strategy characteristics are a comprehensive mental model of the task process and a detailed signal knowledge (Frese & Zapf, 1994; Hacker, 1986) that enables one to anticipate future problems and opportunities (cf. Kirzner, 1997). Individuals who employ complete planning strategy characteristics do not only scan the environment for opportunities that fit their goals and long-term plan, they also develop back-up plans for projected worst case scenarios (Frese et al., 2000). However, situational responsiveness in the form of goal adaptation is relatively low. Being goal oriented and long-term planning means to commit personal (time and energy) as well as financial investments. Such investments lead to a reluctance to change the goal and/ or basic structures of a plan. The resulting low responsiveness might backfire in situations where goal adaptation in response to external environmental change would be necessary. Nonetheless, complete planning structures the situation proactively, generates knowledge, and allows one to interpret the situation adequately.

When using a strategy characterized by critical point planning, individuals merely plan out the most immediate and most crucial issues for the accomplishment of their goals (Zempel, 1994, 2003). They only engage in further planning, when the first, critical hurdles are taken. Thus, critical point planning is an iterative, localized form of planning (Sonntag, 1998) where persons 'cross the bridge when they come to it'. Compared to complete planning, critical point planning strategy characteristics imply similar goal orientation while the planning is less long-term, the knowledge base is less sophisticated, and proactiveness is lower (Frese et al., 2000). As a result, critical point planning strategy characteristics allow for higher situational responsiveness and are more parsimonious in terms of personal and financial investments than complete planning strategy characteristics.

Scanning the environment proactively for opportunities and acting immediately upon them are the most salient and distinguishing aspects of opportunistic strategy characteristics. While an opportunistic strategy is proactive in the sense of searching for and recognizing op-

² For increased readability strategy process characteristics are referred to as strategy characteristics in the following.

portunities, proactiveness is low in areas like long-term pre-planning, back-up planning, and actively influencing the environment. Individuals using an opportunistic strategy only engage in rudimentary short-term planning, they easily abandon a goal if better opportunities arise, they have a moderate to narrow knowledge base, and they are highly responsive to the situation (Frese et al., 2000). The advantages of an opportunistic strategy lie in the exploitation of all available opportunities, in economical planning, and in flexible responsiveness to market demands. However, the downside is that individuals using an opportunistic strategy dissipate their energies, might lose sight of their goals, do not follow through on a strategy, and might not put enough time and effort into long-term business development.

In contrast to the three characteristics described above, reactive strategy characteristics do not imply a proactive stance. Individuals employing reactive strategies do not attempt to influence their circumstances but are driven by the situation. The person is not goal oriented, does not plan ahead, possesses a limited knowledge base, and is mainly directed by situational demands (Frese et al., 2000). Employing a reactive strategy could, for example, mean to merely copy competitors' products or to only introduce change if it is inevitable or suggested/requested by influential others (e.g., small business support organizations, customers, suppliers).

Psychological strategy characteristics are independent of the strategy content. They are action templates (van Gelderen et al., 2000) that are applied in various situations and help the human mind to overcome its limited processing capacity (Frese & Zapf, 1994; Kahneman, 1973). Therefore, strategy content can be implemented employing any one type of the above strategy characteristics. If the strategy content was, for example, to diversify the product range, a complete planning strategy would entail an in-depth analysis of the enterprise's core competencies and resources, of the market and of marketing possibilities, of competitors' activities, of machinery and supplies availabilities, as well as of long-term financing. A business owner whose strategy is characterized by critical point planning would focus on the most critical and immediate aspects for the goal attainment (e.g., market research and financing). With opportunistic strategy characteristics, the owner would snap at any chance of diversification. A product that seems attractive would be introduced without analyzing the market; machinery would be bought immediately if on offer at a good price without beforehand assuring a viable source for raw materials. Finally, employing reactive strategy characteristics, the owner would wait and only embark on new products if they had been introduced successfully by competitors or if customers specifically ask for them.

3.1.2 STRATEGY PROCESS CHARACTERISTICS AND BUSINESS PERFORMANCE

Psychological action theory suggests that, independent of the strategy content, active strategies have a positive impact on performance while reactive/ inactive strategies are detrimental for business performance (cf. Frese & Zapf, 1994). By employing a proactive strategy (complete, critical point, and opportunistic strategy characteristics) one inevitably accumulates positive as well as negative experiences and learns about various perspectives on the strategy content. As a result, more information is integrated into the cognitive representation and one reaches a deeper understanding of the situation as a whole (cf. Kirzner, 1997). Identifying important feedback cues becomes easier and realistic goal setting, effective problem solving, as well as successful decision making is facilitated.

Scanning a wide variety of potentially important aspects of the business environment (e.g., customers, suppliers, competitors) fosters competitive strategy adjustment (Beal, 2000). Consequently, CEOs of small to medium sized companies are more successful if they scan their environment proactively (Daft, Soemunen, & Parks, 1988). However, scanning the environment and recognizing opportunities does not automatically lead to success. Opportunities must be developed (Ardichvili, Cardozo, & Ray, 2003) and action steps must be planned in advance. If preplanning has been neglected, the individual must catch up on planning during the action itself. Especially in complex or problem situations, this means an additional burden for the (limited) human cognitive processing capacity (Frese, Krauss, & Friedrich, in preparation; Frese & Zapf, 1994). Moreover, thorough planning includes back-up plans on the basis of anticipated throwbacks. Therefore, planning helps business owners to deal with insecurities inherent to their tasks and to make maximal use of available resources (Rauch & Frese, 1998). Planning is also useful for the realization of goals (Gollwitzer & Brandstätter, 1997) because it helps to stay focused on the important goals and their subordinate targets. Finally, the efforts of a thorough plan is a manifestation of goal commitment which strengthens the relationship between goals and performance (Locke & Latham, 2002). In line with the above arguments, a longitudinal Dutch study by van Gelderen et al. (2000) found empirical evidence that complete/ critical point planning strategy characteristics, which entail both proactiveness and planning, are positively related with business success.

Psychological action theory defines an action strategy as a sequence of means to achieve a goal which must be individually regulated in order to be effective (Frese & Zapf, 1994; Hacker, 1986; Miller, Galanter, & Pribram, 1960). Thus, strategy characteristics are not static. Theoretically, there are two distinguishable influence paths from business performance to complete/ critical point planning strategy characteristic: (A) The more successful business

owner are, the more will their business expand (in e.g., turnover, customers, employees, suppliers) and require sounder and more responsible managerial decisions. Hence, the business owners must 'rise to the challenge' and employ more long-term oriented and more planning business strategies. When an expanding business demands a more planning managerial approach, individuals are capable of increasing their planning strategy characteristics even when planning had not been integrated in their previous action template. (B) Positive experiences lead to an increase in those strategy characteristics that had previously been successful. Success is a salient feedback cue that provides information on useful and appropriate business practices (cf. Bandura, 1969). Extra-individual feedback signals lead to intra-individual self-regulation that results in an adjustment of the strategy characteristics (cf. Frese & Zapf, 1994; Hacker, 1986). Thus, business owners regulated their action templates in response to (A) situational requirements and (B) performance feedback cues. Accordingly, van Gelderen et al. (2000) found Dutch owners who successfully employed critical point planning strategy characteristics to adopt complete planning strategy characteristics in the long run. Therefore, we expect business success and complete/ critical point planning strategy characteristics to be reciprocally determined (Bandura, 1978) and to follow the dynamics of an upward spiral (cf. Lindsley, Brass, & Thomas, 1995): Planning (complete and critical point) strategy characteristics improve business performance and business performance increases the use of planning strategy characteristics (Figure 3.1, H1).

Hypothesis 1: Complete/ critical point planning strategy characteristics and business performance are reciprocally determined. Complete/ critical point planning strategy characteristics of the owners have a positive influence on business performance and high business performance increases the owners' complete/ critical point planning strategy characteristics.

Reactive strategy characteristics entail neither planning, nor proactiveness, nor goal commitment. The lack of planning means that business owners cannot anticipate future trends in their trade, develop insufficient cognitive representations of the situation, cannot interpret feedback cues adequately, and cannot transfer their experiences into ready-made responses to problematic situations (Frese & Zapf, 1994). Individuals employing a reactive strategy have to start the decision making process from scratch every time they face a new decision or problem. Time and again, a multiplicity of available information must be integrated into the cognitive representation. The extensive need for information integration then results in cognitive overload and poorer decision making (Hacker, 1986; Hockey, 1996). Furthermore, reactive strategy characteristics imply passive adaptations that do not attempt to shape the envi-

ronment. The owners do not scan their environment for opportunities but react passively to general trends, copy what others do, or adopt strategy contents that the environment imposes upon them. Thus, others will already have taken the lead before reactive owners initiate the necessary steps (cf. Liebermann & Montgomery, 1998). Finally, the goals of reactive owners are not self-developed and less intrinsic. Therefore, the owners develop only weak goal commitment which is detrimental to business performance (cf. Locke & Latham, 2002). In correspondence with the above arguments, research suggests that owners employing a reactive strategy are late movers who miss out on market opportunities (Liebermann & Montgomery, 1998). Reactive strategy characteristics were negatively related with business success in North America (Doty, Glick, & Huber, 1993), as well as for Dutch (van Gelderen et al., 2000) and Namibian (Frese et al., 2002) small business owners.

As for complete and critical point planning strategy characteristics, we also assume reciprocal determinism (Bandura 1978) for the relationship between reactive strategy characteristics and business performance (Figure 3.1, H2): Low business performance poses an immediate threat to the owner. Threatening experiences elicit emotional (stress, anxiety) cognitive (narrowed attention, decreased information processing capacity, perpetuation of action strategies), and behavioral (performance decrease when action templates are inappropriate) consequences for the individual (Staw, Sandelands, & Dutton, 1981; cf. also Frese & Zapf, 1994). Hence, the business owners' experience of failure results in personal distress (emotional). The emotional effects cause the owner to process information in an emergency mode (cognitive) where additional cognitive strain is minimized. Averting danger turns into the primary task and the owner becomes less likely to engage in planning, proactive actions nor to venture into unknown areas (behavior). Reactive strategy characteristics, which have caused lower performance in the first place, are intensified, performance decreases further and a rigidity cycle (cf. Staw et al., 1981) or downward spiral (cf. Lindsley et al., 1995) is ignited. Accordingly, van Gelderen et al. (2000) found the relationship between reactive strategy characteristics and business performance to match a downward spiral in their Dutch sample.

Hypothesis 2: Reactive strategy characteristics and business performance are reciprocally determined. Reactive strategy characteristics of the owners have a negative influence on business performance and low business performance increases the owners reactive strategy characteristics.

Opportunistic strategy characteristics are defined by high proactiveness, low planning, and low goal orientation. The consequences of opportunistic strategy characteristics for business performance are ambivalent: On the one hand, business benefits from the owners' alert-

ness to opportunities (high proactiveness) that can be realized flexibly (low planning, low goal commitment) because hardly any resources had been invested into long-term planning (Frese et al., 2000). On the other hand, business suffers from opportunistic strategy characteristics because upcoming opportunities are not developed comprehensively (Ardichvili et al., 2003) and goals are easily abandoned (low goal commitment), especially when difficulties arise (low back-up planning). Moreover, interfering opportunities can distract the owners' attention and result in goal conflict. Conflicting goals cause incompatible action tendencies and have a negative impact on success (Locke, Smith, Erez, Chah, & Schafer, 1994). Empirical findings reflect the ambivalence of the above arguments: Opportunistic business conduct was associated with lower goal orientation and long-term business success in Nigeria (Wilfert, 1992) while it had no effect on success in The Netherlands (van Gelderen et al., 2000). We assume that the advantages (opportunity alertness, flexibility) and disadvantages (lack of planning, conflicting goals) of opportunistic strategy characteristics result in an insignificant effect on business performance (Figure 3.1, H3).

The reverse effect of business performance on opportunistic strategy characteristics should also be inexistent (Figure 3.1, H3): First, opportunistic strategy characteristics do not contribute to success. Therefore, performance related feedback cues do neither reinforce nor weaken opportunistic strategy characteristics. Second, a successful, expanding business demands self-regulation towards more planning, not more opportunistic strategy characteristics (cf. Hypothesis 1). Third, in the case of low performance, failure poses a threat that restricts the information processing capacities (Staw et al. 1981; cf. also Frese & Zapf, 1994). Thus, unsuccessful business owners will perceive less opportunities and their strategy characteristics will become more rigid (Staw et al., 1981), not more opportunistic (cf. Hypothesis 2). The three arguments above appear to suggest that business owners should generally have low opportunistic strategy characteristics. Yet, empirical data shows that opportunistic strategy characteristics are frequently found in small business owners (Frese et al., 2002; van Gelderen et al., 2000). The explanation for this seeming contradiction lies in the low planning activities of business owners who employ opportunistic strategy characteristics from the business start-up. Since the very beginning of the business development, these owners employ strategy characteristics that do not entail systematic planning. Therefore, the owners cannot develop a sophisticated cognitive representation of their business environment and do not learn about important feedback signals (Hacker, 1986). Consequently, owners with opportunistic strategy characteristics cannot interpret the feedback provided by business performance adequately and cannot regulate their strategy characteristics accordingly.

Hypothesis 3: Opportunistic strategy characteristics of the owners have no influence on business performance and business performance has no influence on the owners' opportunistic strategy characteristics.

3.1.3 THE PSYCHOLOGICAL CONCEPT OF ENTREPRENEURIAL ORIENTATION (EO)

Our psychological concept of EO is based on the individual level and entails owners' orientations that relate to their daily tasks and fit with the situational requirements in Zimbabwe (cf. Chapter 2). Compared to dispositional traits (McCrae, Costa, Ostendorf, Angleitner, & co-authors, 2000), EO is culturally-conditioned and influenced by the situation (Chapter 2; Kemelgor, 2002; Thomas & Mueller, 2000). Apart from being non-genetic, orientations differ from traits in their proximity to behavior (cf. Figure 3.2). Orientations are more proximal to the entrepreneurial task (e.g., innovative orientation) and, therefore, more closely related to entrepreneurial performance than distal traits (e.g., conscientiousness) (cf. Kanfer, 1992). Finally, orientations can be distinguished from other person concepts (e.g., traits and attitudes) on the dimension of specificity (Frese & Fay, 2001; cf. also Aijzen & Fishbein, 1977). Traits are rather unspecific, general personality characteristics (e.g., conscientiousness). Attitudes, in comparison, represent the opposite pole of the specificity dimension and are highly specific, evaluative preferences (e.g., dis/approval of employee participation in decision making). Orientations, however, are of medium specificity (e.g., learning orientation). The more specific a person construct is, the more accurate is the prediction of performance effects (Tett, Steele, & Beauregard, 2003). However, since our research interest is the prediction of small business performance, medium specificity is required in order to embrace the entrepreneurial task across a number of situations and domains within the work setting. Hence, entrepreneurial orientations of medium specificity and medium proximity to behavior are more predictive of business performance than distal traits of low specificity or highly specific attitudes (cf. Chapter 2).

In line with the literature (e.g., Chapter 2; Covin & Slevin, 1991; Lumpkin and Dess 1996; Miller, 1983; Schumpeter, 1934), we define EO as a composite of the underlying dimensions learning orientation, autonomy orientation, innovative orientation, achievement orientation, risk-taking orientation, and personal initiative. Entrepreneurial orientations are culturally-conditioned and influenced by social norms (Kemelgor, 2002; Thomas & Mueller, 2000). Hence, EO in our Zimbabwean sample differs from EO in Western environments (e.g., Covin & Slevin, 1991; Lumpkin & Dess 1996) and does not include competitive aggressiveness (Chapter 2). In the following, we will argue why EO and its components should help

owners to run their businesses successfully.

3.1.4 EO AND BUSINESS PERFORMANCE

Highly learning oriented individuals translate positive as well as negative experiences into feedback information on improvement potentials. Learning from experiences is essential for successful entrepreneurial undertakings (Minniti & Bygrave, 2001), especially in Africa where only few business owners receive vocational training on the tasks related with business ownership (e.g., leadership or marketing). Individuals with a high achievement orientation seek feedback, compare themselves with others, set themselves challenging goals, and try to constantly improve their performance (McClelland, 1961). They perform better with non-routine tasks such as entrepreneurial functions and prefer to take responsibility for their performance. Achievement orientation of the business owner was shown to be related to firm success (Chapter 2; McClelland, 1987; Rauch & Frese, 2000; Spencer & Spencer, 1993). Autonomy orientation is the desire to express one's individuality in the workplace and a distaste for superiors' orders (Lumpkin & Dess, 1996). Autonomy oriented owners value their ability to make decisions and dislike being told what to do. Moreover, autonomy orientation is a motivator for realizing own visions and, ultimately, for entrepreneurial success. An innovative orientation implies a positive stance towards new ideas with regard to products, services, administration, or technological processes. Innovations are not necessarily absolute novelties, but should be new to the relevant group, market, or environment (West & Farr, 1990). Since Schumpeter (1934) researchers agree that innovation is essential to entrepreneurial performance (Wiklund, 1998). Acting on conjecture and risk-taking orientation are implicit to the entrepreneurial task (Kirzner, 1997; Schumpeter, 1934). Starting a business is the first risk of many more to come. The owners' risk-taking orientation was shown to correlate with business performance (Chapter 2). Finally, personal initiative is the tendency to approach business in a proactive, self-starting and persistent way that attempts to change environmental conditions (Frese, Fay, Hilburger, Leng, & Tag, 1997; Frese, Kring, Soose, & Zempel, 1996). Personal initiative had positive relationships with entrepreneurial success in the US (proactive personality, Crant, 1995), in Austria (Korunka, Frank, Lueger, & Mugler, 2003), and in Southern Africa (Chapter 2).

In Chapter 2, we established a unitary construct of EO that was significantly related to business performance. With a comparable composite measure, Koop, de Reu, and Frese (2000) found that Ugandan business owners who were high on EO were more frequently successful than owners low on EO. Similar results also emerged in studies where a composite

firm-level EO measure (proactiveness, innovation, risk-taking; Miller, 1983) was employed (e.g., Becherer & Maurer, 1999; Wiklund, 1999). Previous cross-sectional findings and the above arguments suggest a positive causal effect of the unitary EO construct on business performance.

Furthermore, the relationship between EO and business performance should be characterized by reciprocal determinism (Figure 3.1, H4). Contrary to traits, orientations are non-dispositional concepts and allow for personal development. We assume similar self-regulating processes as described by Carver's and Scheier's (1981) control theory: Business performance ignites a feedback loop. When the feedback information is incongruent to the owners' personal EO, they will regulate their EO to reduce the discrepancy (cf. Carver & Scheier, 1981; Festinger, 1976). Low performance should affect EO negatively while high performance leads to an increase in EO. Orientations are anchored at the affective, the conative, and the cognitive level (Eagly & Chaiken, 1993). All three levels of innovation orientation, for instance, are affected by increased business performance subsequent to the introduction of a new product: The owner will experience more positive emotions towards innovation (affective), will feel a stronger need to continue innovating (conative), and will be more aware of the benefits of innovation (cognitive). Thus, we propose an EO-performance spiral (cf. Lindsley et al., 1995) where EO affects business performance and the external factor business success evokes the self-regulation of the owner's internal EO (Figure 3.1, H4).

Hypothesis 4: EO and business performance are reciprocally determined. The owners' EO has a positive influence on business performance and high business performance increases the owners' EO.

3.1.5 EO, STRATEGY PROCESS CHARACTERISTICS, AND BUSINESS PERFORMANCE

High EO should increase entrepreneurial performance and business success. However, orientations of medium proximity to behavior cannot affect business performance directly. Business performance is necessarily rooted in the actions of the business owner (Lumpkin & Dess, 1996). In order to influence business performance, EO requires mediating influence factors that are more proximal to behavior: Strategy process characteristics (Figure 3.2). Business owners high on EO are likely to employ active strategy characteristics that allow to manifest their orientations (cf. McCrae et al., 2000). With the success related planning and critical point planning strategy characteristics, owners will then be able to increase the performance of their business. Business owners low on EO should be prone to employing reactive strategy characteristics which results in decreased business performance. Hence, we as-

sume that the success-related complete planning, critical point planning and reactive strategy characteristics mediate the relationship between EO and business performance (Figure 3.1, H5).

Hypothesis 5: The relationship between EO and business performance is mediated by complete/ critical point planning and reactive strategy characteristics.

We do not assume a direct relationship between opportunistic strategy characteristics and business performance. However, we think EO and opportunistic strategy characteristics influence business performance in interaction. For example, an opportunistic strategy implies that opportunities are recognized but not planningly developed. In combination with high EO where owners seek personal challenges, are willing to take risks, and are eager to venture into unknown areas, opportunistic strategy characteristics will be a disadvantage: The owners take on too many, too challenging, and too risky opportunities without planning for drawbacks and future developments. The owners will soon suffer from work (and cognitive) overload, lose the overview, and will not be able to cope with either single business opportunity adequately. As a result, business performance decreases. Owners low on EO, in contrast, should benefit from opportunistic strategy characteristics. Their lack of EO keeps them from dissipating their energies and they are more likely to implement a project before jumping onto another opportunity. As illustrated in Figure 3.1, EO is less proximal to behavior than strategy process characteristics. This implies not only that EO cannot impact on performance directly (see above), but also that EO is more deeply embedded in the person of the owner (cf. McCrae et al., 2000). Therefore, EO should be the moderator that influences the impact of opportunistic strategy characteristics on business performance (Figure 3.1, H6).

Hypothesis 6: The relationship between opportunistic strategy characteristics and business performance is moderated by EO.

3.2 STUDYING SMALL SCALE ENTERPRISES IN ZIMBABWE

We chose our Zimbabwe study site for practical, methodological, and theoretical reasons: First, a prospering small business sector facilitates sustainable growth in developing countries: It creates employment (Chapter 4; Livingstone, 1996; Mead, 1994; Mead & Liedholm, 1998), fosters industrialization (Kiggundu, 1988), and supports upward social mobility

(Koo, 1976). With our research, we want to contribute to the fragmentary knowledge on influence factors of small business performance in Africa. Second, samples of African business owners provide a wider variance than Western samples. Business entry barriers are comparatively low in Africa and many start a business because they have no other source of income (cf. Chapter 4). At the same time, there are also enterprises that are on par with Western businesses regarding proficiency, professionalism, and entrepreneurial motives. Samples with a wider variance allow for stronger correlations (Cohen and Cohen, 1983). Therefore, African samples are favorable to finding general laws that might not become salient in Western samples. Third, the Zimbabwean study site allows to examine the generalizability of US-American and European results on EO and strategy process characteristics with other cultures and economic environments.

3.3 METHOD

3.3.1 SAMPLE

We applied a behavioral definition of entrepreneurs (Gartner, 1989) and sampled business owners who had started their enterprise themselves and were responsible for the day-to-day management (Rauch & Frese, 2000). The longitudinal sample consisted of N=97 Black Zimbabwean participants (Table 3.1) who had at least one and up to fifty employees at the first measurement time (T1).

The T1 sample (N=122) was drawn between September 1998 and April 1999 (cf. Chapter 2). Many businesses in Zimbabwe do not appear in any listing, nor do they have telephone lines. Therefore, we used a random walk procedure for participant recruitment: The interviewers called on the business site in person and carried out an interview on the spot or made a later appointment if the owner was preoccupied. Typical businesses sampled with the random walk procedure included mechanics, scrap metal merchants, furniture manufacturers, bottle stores, tailors, welders, hairdressers, and others who provide for the immediate local market. To include up-market businesses and those located in urban office buildings (e.g., commodity brokers, travel agencies, advertising agencies, and telecommunication companies), we consulted business directories and contacted listed businesses at random. The T1 response rate was 70%.

One year after the first data collection, the second measurement wave (T2) was carried out from May 2000 to April 2001. The T2 data collection period was relatively long as we

found many businesses had relocated. We had to apply extensive search strategies that entailed seeking information from former neighbors, from competitors, from relatives, etc. The lack of phone lines regularly hampered the data collection as we often had to revisit several times before we could meet with the owner. Of the N=122 owners interviewed at T1 we re-interviewed N=104 participants. The remaining 18 could either not be found (n=11), rejected to participate again (n=4), or had passed away (n=3). Out of the 104 re-interviewed participants, seven had given up their business. Therefore, the resulting T2 sample size was N=97 (Table 3.1). The re-interviewed participants were not significantly different from those who had dropped out in any of the variables investigated in this study.

Table 3.1:
Sample Description.

	N=97
The Owner	
Male	83%
Female	17%
Owners' age (average) T1	38
The Business	
Year of establishment (average) ^a	1992
Starting capital in US\$	19,286
Industry ^b	
Manufacturing	50
Construction	8
Trade	44
Gastronomy	2
Service	42
Other	4
Employment	
Average number of employees T1	8.36
Micro-businesses ^c	77%
Small scale businesses ^d	23%
Average number of employees T2	10.51
Micro-businesses ^c	78%
Small scale businesses ^d	17%
Medium sized businesses ^e	5%

Note. ^a Years of establishment ranged from 1971 to 1998. ^b Multiple answers were possible. ^c 1-10 employees (ILO, 1972). ^d 11-50 employees (ILO, 1972). ^e 5 Businesses had grown bigger than 50 and up to 130 employees.

3.3.2 PROCEDURE

The main measurement instrument was a structured interview throughout which confidentiality was repeatedly assured. Where appropriate, interviewers used prompts to clarify participants' answers. Interview answers were written down as verbatim as possible and typed subsequently. It was not possible to use tape recordings as the noise level was too high at most business sites. We used recordings sporadically at random for quality assurance of the interviews and written protocols. The interviews were carried out by the author, by German graduate students, and by local interviewers (who were especially helpful in cases where the participants could not speak English well).

Depending on their prior knowledge, interviewers were thoroughly trained in a two to 10 days course. The training contents included interviewing techniques, taking notes for the protocols, the handling of questionnaires, the rating of participants' answers. After performing role-plays, interviewers practiced in vivo accompanied by an experienced interviewer.

Each interview was rated by two raters, one of them always being the interviewer. Ratings were done on the basis of typed protocols and an elaborate coding scheme that provided rating anchors³. Throughout the study, close supervision and consultative meetings minimized rating biases. Ratings were either 5-point Likert assessments (e.g. opportunistic strategy characteristics low/ high), factual (e.g., number of employees), or nominal (e.g., the business was self-established or not).

In addition to the interview, the participants filled out a questionnaire on growth goal orientation and risk-taking orientation.

Directly after the interview, when the impressions of the owners and their businesses were still vivid, the interviewers filled out the interviewer evaluation form. The interviewer evaluation was a questionnaire that captured the interviewers' personal impressions of the participants and their businesses.

3.3.3 OPERATIONALIZATION

Table 3.2 presents the types of measurement, the number of items, the number of valid longitudinal cases, Cronbach's alphas for scales that contained more than two variables, correlations where two items went into a scale, inter-rater reliabilities, range, means and standard deviations for each variable. We minimized the number of items within each scale to keep the interview and questionnaire length manageable; this led to reduced alphas (Cortina, 1993). Following Nunnally's (1978) suggestion for scales developed within a new field, we applied a

³ See appendix for the complete interview and coding scheme.

.60 cut-off point for alphas. As inter-rater consistency measures, we used intraclass coefficients for factual, nominal (ICC [1,1]), and Likert (ICC [1,2]) items (Shrout & Fleiss, 1978). For intraclass coefficients of the interviewer evaluations, the Zimbabwean study did not provide enough double ratings where both raters were present during the interview. The presence of both raters would have been necessary since interviewer evaluations reflect personal impressions. Therefore, we added data from a South African (Chapter 2) and a Namibian study (Frese et al., 2002) that had employed the same interviewer evaluation questionnaire in order to get an adequate N of cases. Thus, the interviewer evaluation intraclass coefficients at T1 as well as at T2 are based on N=74 Zimbabwean (n=10, T1), South African (n=18), and Namibian (n=46) double ratings.

Table 3.2:
Characteristics of Variables and Scales.

	Source ^a	k items	n	α^b	r^c	ICC ^d	Range	M	SD
Business performance									
Number of employees T1	I	1	97	—	—	1.00	1—45	8.36	9.85
Business growth ^e T1		3	77	.74	—	—	-1.69—3.33	.01	.81
Sales growth	I	1	76	—	—	.99	-85—1100	77.02	201.55
Customers growth	I	1	77	—	—	1.00	-70—400	37.56	63.57
Profit growth	I	1	76	—	—	.99	-100—250	35.17	52.60
Number of employees T2	I	1	96	—	—	.93	0—130	10.51	18.92
Business growth ^e T2		3	94	.86	—	—	-2.02—4.62	.01	.89
Sales growth	I	1	94	—	—	.85	-100—400	22.18	67.79
Customers growth	I	1	94	—	—	.97	-100—100	11.05	44.40
Profit growth	I	1	94	—	—	1.00	-100—400	10.15	63.44
Strategy characteristics									
Complete planning strategy T1	I	2	97	—	.68**	.90	1—5	1.82	1.10
Critical point planning strategy T1	I	2	97	—	.53**	.79	1—5	2.44	1.00
Reactive strategy T1	I	2	97	—	.73**	.86	1—5	2.31	1.31
Opportunistic strategy T1	I	2	97	—	.25**	.78	1—5	2.80	.81
Complete planning strategy T2	I	2	97	—	.71**	.87	1—5	1.85	1.11
Critical point planning strategy T2	I	2	97	—	.46**	.72	1—5	2.28	.85
Reactive strategy T2	I	2	97	—	.79**	.93	1—5	2.55	1.39
Opportunistic strategy T2	I	2	97	—	.56**	.80	1—5	2.66	.89
Entrepreneurial orientation									
Entrepreneurial orientation ^e T1		6	97	.80	—	—	-1.52—1.41	.01	.68
Learning orientation T1		2	97	—	.40**	—	1—5	3.50	1.00
Learning orientation	I	1	69	—	—	.75	1—5	3.42	.97
Learning orientation	E	1	97	—	—	.84	1—5	3.57	1.16
Autonomy orientation T1		2	97	—	.27**	—	1—5	4.04	.94
Autonomy orientation	I	1	97	—	—	.93	1—5	4.05	1.23
Autonomy orientation	E	1	97	—	—	.87	1—5	4.03	1.12
Innovative orientation T1		2	97	—	.52**	—	1—5	2.28	1.15
Innovative orientation	I	2	97	—	.22*	.90	1—5	1.89	1.20
Innovative orientation	E	1	97	—	—	.90	1—5	2.66	1.43

(Table 3.2 continued)

	Source ^a	k items	n	α^b	r^c	ICC ^d	Range	M	SD
Achievement orientation T1		2	97	—	.25*	—	1—5	4.13	.82
Growth goal orientation	Q	2	76	—	.35**	—	1—5	4.56	.74
Achievement orientation	E	1	97	—	—	.93	1—5	3.87	1.05
Risk-taking orientation T1		2	96	—	.25*	—	1—5	2.98	.89
Risk-taking orientation	Q	2	96	—	.35**	—	1—5	3.11	1.19
Risk-taking orientation	E	1	97	—	—	.81	1—5	2.87	1.06
Personal initiative^e T1		3	84	.81	—	—	-2.08—1.70	-.02	.78
Number of barriers	I	4	84	.67	—	.98	1—6	3.46	.91
Activeness	I	4	84	.68	—	.89	1—5	3.47	.78
Personal initiative	E	1	97	—	—	.87	1—5	3.24	1.31
Entrepreneurial Orientation^e T2		6	97	.81	—	—	-1.65—1.42	.02	.70
Learning orientation T2		2	97	—	.68**	—	1—5	3.36	.99
Learning orientation	I	1	81	—	—	.81	1—5	3.43	1.06
Learning orientation	E	1	97	—	—	.84	1—5	3.33	1.04
Autonomy orientation T2		2	97	—	.85**	—	1—5	3.94	1.23
Autonomy orientation	I	1	96	—	—	.93	1—5	3.91	1.40
Autonomy orientation	E	1	97	—	—	.87	1—5	3.95	1.17
Innovative orientation T2		2	97	—	.68**	—	1—5	2.21	.88
Innovative orientation	I	2	90	—	.49**	.73	1—5	2.29	.98
Innovative orientation	E	1	97	—	—	.90	1—5	2.18	.93
Achievement orientation T2		2	97	—	.35**	—	1—5	3.96	.73
Growth goal orientation	Q	2	96	—	.42**	—	1—5	4.46	.81
Achievement orientation	E	1	97	—	—	.93	1—5	3.46	.98
Risk-taking orientation T2		2	97	—	.40**	—	1—5	3.11	.96
Risk-taking orientation	Q	4	90	.79	—	—	1—5	3.05	1.18
Risk-taking orientation	E	1	97	—	—	.81	1—5	3.11	1.04
Personal initiative^e T2		3	97	.77	—	—	-1.30—2.20	.11	.86
Number of barriers	I	4	97	.72	—	.94	1.50—6	3.18	.99
Activeness	I	4	97	.72	—	.86	1—5	3.16	.82
Personal initiative	E	1	97	—	—	.87	1—5	2.95	1.18
Controls									
Year of establishment	I	1	97	—	—	1.00	1971—1997	1993	4.49
Industry: Manufacturing textiles	I	1	97	—	—	.96	1—2	—	—
Industry: Manufacturing wood	I	1	97	—	—	.98	1—2	—	—
Industry: Manufacturing metal	I	1	97	—	—	.94	1—2	—	—
Industry: Manufacturing other	I	1	97	—	—	.97	1—2	—	—
Industry: Construction	I	1	97	—	—	.95	1—2	—	—
Industry: Trade/retail	I	1	97	—	—	1.00	1—2	—	—
Industry: Trade/gastronomy	I	1	97	—	—	.80	1—2	—	—
Industry: Service	I	1	97	—	—	.99	1—2	—	—
Industry: Other	I	1	97	—	—	1.00	1—2	—	—
Starting capital (in US\$)	I	1	97	—	—	.76	0—397200	9464	43031

Note. ^a I = interview measure, Q = questionnaire measure, E = interviewer evaluation. ^b Cronbach's Alpha.

^c Correlation between two variables that make a scale. Alpha was only calculated for scales with more than two items. ^d Intraclass coefficients. ^e z-standardized data. * $p < .05$. ** $p < .01$.

Business Performance. Our business performance measures are self-reported interview data (e.g., Dess & Robinson, 1984; Sapienza, Smith, & Gannon, 1988). For self-reported performance data, interview measures are superior to questionnaires because they allow for the clarification of discrepancies between the appearance of the business and the participants' answers. During the interview, we could inquire whether, for instance, employees were really

paid workers or rather unpaid relatives helping out temporarily. In order to get a differentiated picture (cf. Murphy, Trailer, & Hill, 1996) we used business performance measures that are related to business size (number of employees) and to business growth (growth scale consisting of growth in sales, customers, and profits). The number of employees at T1 and T2 was a single item interview measure. A paired sample t-test for mean differences at T1 and T2 was not significant ($t=1.51$). However, businesses did grow. Five percent of the participants expanded their businesses beyond 50 employees (Table 3.1), which means they were no longer small scale but medium sized (ILO, 1972). The business growth scales included interview items where we asked participants to indicate percentages of increase, decrease, or stagnation in profit, customers, and sales compared to the previous year (cf. Becherer & Maurer, 1999; Dess & Robinson, 1984, Sapienza et al., 1988). Missing data occurred (Table 3.2), as some participants refused to indicate economic growth, even when only asked for percentage changes. The growth variables were lower at T2 than at T1 (Table 3.2). Hence, paired sample t-tests were significant for all variables going into the growth scale (from $t=-2.27$, $p<.05$ to $t=-3.33$, $p<.01$). This is probably due to the deterioration of the Zimbabwean economy between measurements (cf. Preface). Our growth measure was, nonetheless, useful as all participants were subject to the same worsening conditions and there is variance (Table 3.2). Since the number of employees and the growth measure of business performance depict different performance aspects that are not inevitably interrelated, we treated them separately and did not collapse them into one overall business performance scale (Meyer & Gupta, 1994).

Strategy Process Characteristics. The process characteristics complete planning, critical point planning, reactive, and opportunistic strategy characteristics at T1 and T2 were measured with an in-depth interview-based analysis of how business owners want to reach their goals. We first asked participants to rank common business goal areas developed in prior studies (e.g. new marketing strategy, expanding, making more profit). Then we asked participants to describe the two most important goal areas in detail and to exactly tell us what their objectives in these areas were. This led to a description of operational subgoals. The next step was to ask the participants how they wanted to go about achieving each of the subgoals and what they had already accomplished. We used prompts extensively (e.g., What do you mean by? Can you give me an example? Can you give me an example for ...?). A general prompt was to repeat what the participant had said. We carefully avoided leading words like ‘plan’ or ‘active’ which could have influenced the answers. The strategy section of the interview took up to 40 minutes.

The interviewer and an independent second rater subsequently assesses the strategy characteristics of the two super-ordinate goal areas. Thus, we have two double ratings for each type of strategy characteristics. We employed a coding scheme with 5-point Likert scales and rating anchors. The anchor for high complete planning strategy characteristics was: 'Everything is planned out in detail, all necessary steps including some substeps are described.' Critical point planning strategy characteristics: 'One important/ crucial point is described in detail, everything else is left vague; however high goal orientation, keeps goal in mind.' Reactive strategy characteristics: 'Goes from one issue/ problem to the other; does not produce changes, but waits for them to happen and then reacts, no goal orientation.' Opportunistic strategy characteristics: 'Does not plan in advance, but actively looks for business chances and exploits them; easily deviates from goals'. As illustrated in Table 3.2, the strategy characteristics show adequate inter-rater reliabilities (from ICC=.78 to ICC=.93). Paired-sample t-tests found no significant differences between the means of the strategy characteristics at T1 and T2.

The measurement of the strategy characteristics in each goal area was ipsative because we instructed the interviewers to continue asking until they felt they had revealed a most descriptive pattern of strategy characteristics. This procedure contributed, on the one hand, to the strength of our strategy process characteristics measures: The interviewers made discretionary decisions on when they had obtained enough information about the participants strategies in order to rate the four types of strategy characteristics. On the other hand, the ipsative interviewing technique implied that high ratings on one process characteristic meant that the other three were rated lower. Accordingly, negative correlations between reactive strategy and the other strategies occurred (Table 3.3; cf. Baron, 1996). This limited our options of data analyses. Both regression analysis and factor analysis use product moment correlation that "[...] requires that the variables being correlated are statistically independent, which is manifestly not the case with ipsative data" (Closs, 1996, p.43). Consequently, we calculated all regression analyses separately for each of the strategy characteristics. Furthermore, we did not employ factor analysis to discriminate strategy process characteristics from EO as "[...] ipsative data typically produce bipolar factors, which contrast scales from two different normative factors. It seems that these factors reflect the forced-choice format, where choosing one scale, inevitably means ignoring another" (Baron, 1996, p.51; cf. also Cornwell & Dunlap, 1994).

Alternatively, we could have used questionnaires to measure the strategy characteristics. However, questionnaires using Likert items can only lead to the exact information that

the items address. For strategy characteristics of business owners, this would not have been appropriate. The measure must be flexible enough to account for the individual strategy content (what exactly does the owner want to reach with what particular strategy) and the specific circumstances of each business (e.g., the line of business). Questionnaires using open questions are problematic because the answers are often not detailed enough to rate strategy characteristics and the interviewer has no possibility to ask further questions. The latter is a serious issue for our Zimbabwean participants, most of whom speak English well but are not as proficient in the literary language (cf. Chapters 2 and 4).

Entrepreneurial Orientation. The operationalization of EO matches the procedure described in Chapter 2 and involved three steps. First, we measured each component of EO with different methods (multiple operationism; Webb, Campbell, Schwartz, & Sechrest, 1966). Learning-, autonomy-, and innovative orientation were measured with both the interview and the interviewer evaluation (5-point Likert ratings). The interview measure of learning orientation was based on the question if the owners would do anything differently if they would start their business again that day. If yes, we asked what they would do differently. The answers were rated subsequently. The sample size for this variable was reduced because a rating was only possible if the participants actually wanted to do something differently (Table 3.2). For Autonomy orientation (interview) we asked (and rated subsequently), what would happen if somebody would pay the participants good money to take over their firm and would make them manager of the firm. If they had no loss in income, would they accept it and why? The interview measure of innovative orientation were ratings on how innovative the owners' business ideas and competitive edges were. Since some owners did not have an in idea or competitive edge, missing data occurred (Table 3.2). Achievement- and risk-taking orientation were measured with questionnaires and the interviewer evaluation (5-point Likert rating). The achievement orientation questionnaire was a self-developed growth goal orientation measure (sample item: "If I earn enough money for my family, that is good enough." "I want my business to grow as much as possible."; 4-point forced choice scale). The measure has missing data at T1 (Table 3.2) because the questionnaire was only introduced one month into the data collection period. The risk-taking questionnaire was a 5-point Likert scale by Gomez-Mejia and Balkin (1989; adapted to the entrepreneurial context by Norton & Moore, 1998). Since some participants felt unable to make statements on their risk taking orientation, missing data occurred for this variable (Table 3.2). As Interview measurement of personal initiative we used the overcoming barriers method by Frese et al. (1996). The interviewer presented

four problem situations that are relevant to the situation of Zimbabwean business owners (e.g., ‘Pretend for a moment that you are out of money and that you cannot buy the necessary supplies. What do you do?’), and asked the participants to develop feasible solutions. Whenever participants gave a solution, new barriers (‘Please imagine this doesn't work’) were introduced until participants could not come up with further ideas or had overcome five barriers. Participants who overcame five barriers were then asked if they could think of any additional solutions. The number of barriers overcome were a first measure for personal initiative. A second interview based measure was an interviewer rating (5-point Likert) of how actively the barriers were overcome. This two-part interview measure of personal initiative was shown to have good validity (Frese et al., 1997). The sample size for the interview based personal initiative variables were reduced to $n=84$ at T1 (Table 3.2) because some participants felt uncomfortable with the procedure of constantly introducing new barriers. This was not a problem at T2. In addition to the interview measures, we used the 5-point Likert interviewer evaluation measures of personal initiative.

In a second step we combined each of the multiple EO measures into single scales of learning orientation, autonomy orientation, innovative orientation, achievement orientation, risk-taking orientation, and personal initiative. Paired-sample *t*-tests for mean differences between T1 and T2 were only significant for achievement orientation ($t=2.00$, $p<.05$, higher at T1; cf. Table 3.2).

In a third step, all six EO dimensions were *z*-standardized and combined into a unitary EO construct ($\alpha=.80$ at T1 and $\alpha=.81$ at T2; cf. Chapter 2).

Control variables. As suggested by Murphy et al. (1996), we controlled for the year of business establishment and for the industries (dichotomized variables). We did not include business size (cf. Murphy et al., 1996) because the size variable number of employees is one of our dependent variables. We further added the control variable starting capital in US\$ as a proxy for the start-up business size.

3.3.4 STATISTICAL ANALYSES

The effects of the owners' strategy characteristics and EO on business performance were expected to occur within the one year between the first and the second measurement. Thus, we employed contemporaneous hierarchical regression analyses (Dwyer, 1983). The reverse effects from business performance on the owners' strategy characteristics and EO, however, were expected to be less immediate. Therefore, the reverse effects were tested with

lagged hierarchical regressions. All hierarchical regressions were controlled for the respective dependent variables at T1.

In order to gain a more favorable N to variables ratio for regression analyses, we only included control variables that correlated with the respective dependent variable.

3.4 RESULTS

Correlations between number of employees and business growth (Table 3.3) were not significant. This indicates that our two performance measures represent different aspects of business performance (Meyer & Gupta, 1994). While the number of employees was very stable over time ($r=.72, p<.01$), there was no significant correlation between business growth at T1 and at T2. This suggests that the fluctuations businesses undergo regarding growth are more short-term than fluctuations in the number of employees: Taking on or laying off employees does not occur immediately after the business situation has changed for the better or worse.

Complete planning, critical point planning, and opportunistic strategy characteristics showed medium stability, while reactive strategy characteristics and EO were very stable over time. At both times, cross-sectional correlations with business performance were significantly positive for EO, significantly negative for reactive strategy, and not significant for opportunistic strategy characteristics. Complete planning strategy characteristic correlated marginally with number of employees at T1 and significantly with both number of employees and business growth at T2. Critical point planning strategy characteristics were only correlated with business growth at T1 and had a marginal relationship with the number of employees at T2.

At T1 as well as at T2, complete planning strategy characteristics correlated positively with critical point planning and EO, negatively with reactive strategy characteristics, and had no relationship with opportunistic strategy characteristics. Critical point planning strategy characteristics had negative relationships with reactive strategy characteristics and positive relationships with EO at both measurement times; with opportunistic strategy characteristics, critical point planning was marginally (T1) and significantly (T2) related. At both measurement times, reactive strategy characteristics had significant negative correlations with both opportunistic strategy characteristics and EO. Lastly, opportunistic strategy characteristics and EO were positively correlated at both T1 and T2. The high negative correlations between reactive strategy characteristics and other three strategy characteristics occurred due to the

ipsative interviewing technique described above.

Two control variables (industry: construction, starting capital) correlated significantly with the dependent variable number of employees T2, one (industry: other) correlated marginally with business growth T2. Four controls (industry: manufacturing textile, manufacturing wood, construction, and trade/ retail) correlated with the dependent T2 strategy characteristics and EO variables.

Table 3.3:
Intercorrelations.

Variables and Scales		1	2	3	4	5	6	7	8	9	10	11	12	13	14
Perfor- mance	1. Number of employees T1	—													
	2. Business growth T1	.06	—												
	3. Number of employees T2	.72**	.12	—											
	4. Business growth T2	-.02	.14	.05	—										
Strategy characteristics	5. Complete planning strategy T1	.17 [†]	-.05	.11	.03	—									
	6. Critical Point planning strategy T1	.15	.33**	.25*	.28**	.33**	—								
	7. Reactive strategy T1	-.22*	-.30**	-.21*	-.15	-.62**	-.78**	—							
	8. Opportunistic strategy T1	.05	.11	-.09	.06	-.11	.20 [†]	-.41**	—						
	9. Complete planning strategy T2	.50**	.11	.48**	.29**	.32**	.36**	-.41**	.09	—					
	10. Critical Point planning strategy T2	.10	.00	.18 [†]	.06	.19 [†]	.21*	-.36**	.18 [†]	.33**	—				
	11. Reactive strategy T2	-.32**	-.03	-.33**	-.22*	-.29**	-.33**	.51**	-.29**	-.69**	-.65**	—			
	12. Opportunistic strategy T2	-.09	.00	-.08	.07	.13	.09	-.28**	.29**	.06	.34**	-.62**	—		
EO	13. Entrepreneurial orientation T1	.27**	.26**	.25**	.17	.56**	.47**	-.69**	.31**	.44**	.28**	-.52**	.39**	—	
	14. Entrepreneurial orientation T2	.35**	.02	.36**	.26*	.38**	.34**	-.50**	.29**	.62**	.50**	-.76**	.48**	.62**	—
Controls	15. Year of establishment	.00	.20 [†]	.01	.13	.06	.13	-.26*	.22*	-.03	.10	-.02	-.09	.14	.03
	16. Industry: Manufacturing textile	-.01	-.17	-.05	.04	-.19 [†]	-.17	.22*	-.15	-.14	-.14	.16	-.07	-.05	-.24*
	17. Industry: Manufacturing wood	-.20 [†]	.04	-.17	-.08	-.01	-.06	.13	-.12	-.18 [†]	-.22*	.28**	-.24*	-.08	-.32**
	18. Industry: Manufacturing metal	-.09	.00	-.09	-.02	-.02	.09	-.10	.16	-.10	-.06	.00	.08	-.17 [†]	-.05
	19. Industry: Manufacturing other	.03	-.10	.12	.01	.10	.11	-.08	-.03	.06	.05	-.09	.16	.10	.10
	20. Industry: Construction	.42**	-.06	.46**	-.11	-.04	.08	-.06	.02	.24*	.03	-.15	-.06	.12	.11
	21. Industry: Trade/retail	-.10	.00	-.07	.09	-.14	-.02	.05	.09	-.03	.34**	-.19 [†]	.17 [†]	.02	.24*
	22. Industry: Trade/gastronomy	-.04	-.07	-.05	.14	.09	-.05	-.10	.12	-.08	.00	.00	.13	.12	.06
	23. Industry: Service	.10	.13	.05	.05	.18 [†]	-.05	-.12	.08	.01	-.05	-.01	.03	.16	.17
	24. Industry: Other	.06	-.07	-.03	.19 [†]	-.06	.07	-.02	-.02	.06	-.04	-.04	.04	-.07	.06
	25. Starting capital (in US\$)	.14	-.02	.27**	-.13	-.05	-.05	.02	.08	-.01	-.09	.04	-.06	-.06	.04

(Table 3.3 continued)

Variables and Scales		15	16	17	18	19	20	21	22	23	24	25
Controls	16. Industry: Manufacturing textile	.04	—									
	17. Industry: Manufacturing wood	.08	.00	—								
	18. Industry: Manufacturing metal	.11	-.10	-.04	—							
	19. Industry: Manufacturing other	-.26**	-.15	-.22*	-.01	—						
	20. Industry: Construction	.01	-.07	-.10	-.08	.22*	—					
	21. Industry: Trade/retail	-.05	-.10	-.21*	-.08	-.19 [†]	-.06	—				
	22. Industry: Trade/gastronomy	.07	-.03	-.04	-.04	-.05	-.02	-.07	—			
	23. Industry: Service	.03	-.12	-.30**	-.10	-.17	-.17	-.15	.14	—		
	24. Industry: Other	.04	-.07	-.11	-.09	-.03	.13	-.08	-.03	-.09	—	
	25. Starting capital (in US\$)	.05	-.06	-.09	-.06	.00	.16	-.08	-.02	.11	-.02	—

Note. N ranged from 74 to 97. [†]p<.10. *p<.05. **p<.01.

To test Hypotheses 1-6, we applied contemporaneous and lagged hierarchical regression analyses. All regression analyses controlled for the dependent variable at T1 and the control variables that had been shown to correlate with the respective dependent variable (cf. Table 3.3).

The Hypotheses 1-4 assumed reciprocal determinisms between strategy characteristics/ EO and business performance. The Tables 3.4a and 3.4b show the results on the contemporaneous effects of strategy characteristics and EO on business performance while Table 3.5 presents the reverse lagged effects of business performance on strategy characteristics and EO.

Complete planning strategy characteristics significantly increased the explained variance in the number of employees by two percent and in business growth by seven percent (Tables 3.4a & 3.4b, columns 2). In turn, complete planning strategy characteristics were influenced significantly by the number of employees ($\Delta R^2=.13$), yet not by business growth (Table 3.5, columns 1&2). Critical point planning strategy characteristics had a marginal impact on the number of employees ($\Delta R^2=.02$) but was not influential on business growth (Tables 3.4a & 3.4b, columns 3). The reverse relationship on critical point planning strategy characteristics was not significant for either of the performance variables (Table 3.5, columns 3&4). Therefore, Hypothesis 1 on the reciprocal determinisms between complete/ critical point planning strategy characteristics was largely supported for complete planning strategy characteristics, yet rejected for critical point planning strategy characteristics.

Hypothesis 2 presumed that reactive strategy characteristics have a negative influence on business performance and low business performance increases reactive strategy characteristics. Our data showed that the influence from reactive strategy characteristics on business growth was marginally negative ($\Delta R^2=.05$) but insignificant on the number of employees (Table 3.4a & 3.4b, columns 4). A significant reverse effect appeared from the number of employees on reactive strategy characteristics ($\Delta R^2=.04$) while business growth had no impact (Table 3.5, columns 5&6). Hence, we found partial support for Hypothesis 2.

Opportunistic strategy characteristic had no influence on either business performance measure (Table 3.4a & Table 3.4b, columns 5) and business performance had no influence on opportunistic strategy characteristics (Table 3.5, columns 7&8). Thus, Hypothesis 3 (no causal relationship between opportunistic strategy characteristics and business performance in either direction) was confirmed.

Finally, EO had a marginal positive impact on the number of employees ($\Delta R^2=.02$) and a significant positive impact on business growth (Table 3.4a & 3.4b, columns 6). Re-

versely, EO was significantly affected by number of employees ($\Delta R^2=.03$) and by business growth ($\Delta R^2=.03$, Table 3.5, column 9&10). Hence, our data supported Hypothesis 4 (EO and business performance are reciprocally determined).

Table 3.4a:

Predicting the Number of Employees from Strategy Characteristics and EO.
(contemporaneous hierarchical regression analyses, controlling for criterion variable T1)

	Number of Employees T2					
	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
	β	β	β	β	β	β
Controls						
Industry: Construction	.18*	.17*	.18*	.18*	.18*	.19*
Starting capital (in US\$)	.16*	.17*	.17*	.17	.16*	.16*
Criterion Variable T1						
Number of employees	.62**	.53**	.60**	.58**	.62**	.57**
Predictor Variables T2						
Complete planning strategy		.17*				
Critical point planning strategy			.13 [†]			
Reactive strategy				-.12		
Opportunistic strategy					.00	
EO						.14 [†]
R²	.57	.59	.59	.58	.57	.59
^aΔR²		.02*	.02 [†]	.01	.00	.02 [†]

Note. Controls were only included if they had been shown to correlate with the dependent variable. ^aDF=91.
[†]p<.10. *p<.05. **p<.01.

Table 3.4b:

Predicting Business Growth from Strategy Characteristics and EO.
(contemporaneous hierarchical regression analyses, controlling for criterion variable T1)

	Business Growth T2					
	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
	β	β	β	β	β	β
Controls						
Industry: Other	.21 [†]	.18	.21 [†]	.19 [†]	.20 [†]	.19
Criterion Variable T1						
Business growth	.15	.12	.15	.14	.15	.14
Predictor Variables T2						
Complete planning strategy		.26*				
Critical point planning strategy			.07			
Reactive strategy				-.21 [†]		
Opportunistic strategy					.06	
EO						.25*
R²	.06	.13	.06	.10	.06	.12
^aΔR²		.07*	.00	.05 [†]	.00	.06*

Note. Controls were only included if they had been shown to correlate with the dependent variable. ^aDF=70 due missing data in the dependent variable (cf. Table 3.2). [†]p<.10. *p<.05.

Table 3.5:

Predicting Strategy Characteristics and EO from Business Performance.
(lagged hierarchical regression analyses, controlling for criterion variables T1)

	Complete Planning Strategy T2		Critical Point Planning Strategy T2		Reactive Strategy T2		Opportunistic Strategy T2		EO T2	
	Column 1 β	Column 2 β	Column 3 β	Column 4 β	Column 5 β	Column 6 β	Column 7 β	Column 8 β	Column 9 β	Column 10 β
Control Variables										
Industry: Manufacturing textile									-.20**	-.23**
Industry: Manufacturing wood	-.10	-.16	-.12	-.13	.14*	.17 [†]	-.22*	-.18	-.21**	-.23**
Industry: Construction	.07	.25*	.33**	.32**						
Industry: Trade/retail					-.20*	-.18 [†]	.09	.11	.18*	.16 [†]
Criterion Variables T1										
Complete planning strategy	.26**	.34**								
Critical point planning strategy			.20*	.23*						
Reactive strategy					.46**	.54**				
Opportunistic strategy							.26**	.26*		
EO									.55**	.64**
Predictor Variables T1										
Number of employees	.41**		.08		-.22*		-.14		.18*	
Business growth		.15		-.07		.13		-.03		.17*
R²	.32	.22	.19	.19	.38	.35	.15	.14	.56	.56
ΔR²	.13**	.02	.01	.00	.04*	.02	.02	.00	.03*	.03*

Note. Controls were only included if they had been shown to correlate with the dependent variable. [†]p<.10. *p<.05. **p<.01.

Table 3.6 illustrates the results for the mediator Hypothesis 5 (The relationship between EO and business performance is mediated by complete planning, critical point planning, and reactive strategy characteristics). Reactive strategy characteristics had no influence on the number of employees (Table 3.4a, column 4) and critical point planning strategy characteristics had no influence on business growth (Table 3.4b, column 3). Therefore, the respective mediations were discarded (Baron & Kenny, 1986). Entering complete planning strategy characteristics into the equation before EO reduced the β of EO to insignificance for both number of employees (Table 3.6, columns 1&2) and business growth (Table 3.6, columns 4&5). The same effect was found for the mediator critical point planning strategy characteristics and the dependent variable number of employees (Table 3.6, columns 1&3) as well as for the mediator reactive strategy characteristics and the dependent variable business growth (Table 3.6, columns 4&5). Since all tested mediations were full mediations that eliminated the influence of EO completely, Hypothesis 5 was supported (except for the discarded mediators reactive, critical point planning strategy characteristics on the relationship between EO and number of employee, business growth respectively).

Table 3.6:

The Mediator Effects of Complete Planning, Critical Point Planning, and Reactive Strategy Characteristics on the Relationship between EO and Business Performance.
(contemporaneous hierarchical regression analyses, controlling for criterion variables T1)

	Number of Employees T2			Business Growth T2		
	Column 1 β	Column 2 β	Column 3 β	Column 4 β	Column 5 β	Column 6 β
Controls						
Industry: Construction	.19*	.18*	.18*			
Industry: Other				.19	.18	.19
Starting capital (in US\$)	.16*	.17*	.17*			
Criterion Variables T1						
Number of employees	.57**	.53**	.58**			
Business growth				.14	.13	.14
Mediator Variables T2						
Complete planning strategy		.13			.18	
Critical point planning strategy			.09			
Reactive strategy						-.06
Predictor Variable T2						
EO	.14 [†]	.07	.09	.25*	.14	.20
R²	.58	.59	.59	.12	.14	.12
ΔR^2	.02 [†]	.00	.01	.06*	.01	.02

Note. Controls were only included if they had been shown to correlate with the dependent variable. [†]p<.10.
*p<.05. **p<.01.

Lastly, we tested for EO to moderate the relationship between opportunistic strategy characteristics and business performance (Hypothesis 6). No significant interaction was found for the dependent performance variable number of employees (Table 3.7, columns 1&2). However, EO moderated the relationship between opportunistic strategy and business growth ($\Delta R^2=.10$; Table 3.7, columns 3&4). Therefore, Hypothesis 6 was supported for the dependent variable business growth. In-depth inspection of the moderator effect (Figure 3.3) revealed that an opportunistic strategy was counterproductive for highly entrepreneurial owners, while owners low on EO benefited from opportunistic strategy characteristics. Low EO helped them to focus their energies and not jump onto the next opportunity before the previous had been fully developed and exploited.

Table 3.7:

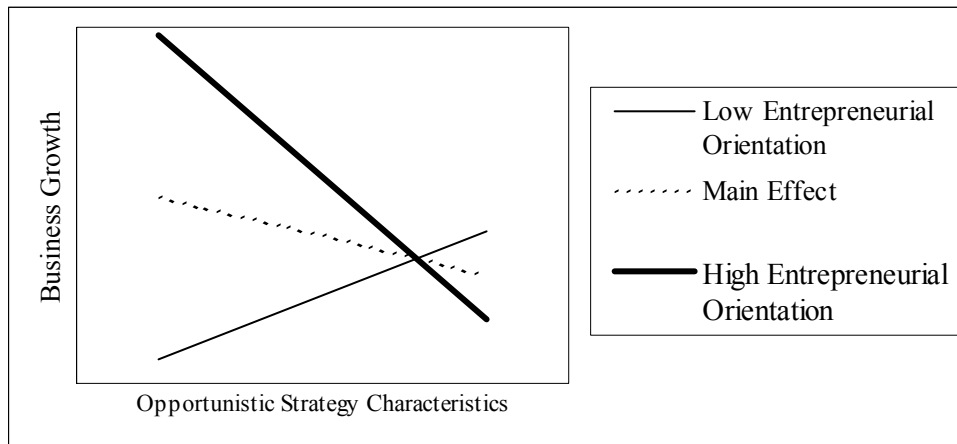
The Moderator Effect of EO on the Relationship between Opportunistic Strategy Characteristics and Business Performance.
(contemporaneous hierarchical regression analyses, controlling for criterion variables T1)

	Number of Employees		Business growth	
	Column 1 β	Column 2 β	Column 3 β	Column 4 β
Controls				
Industry: Construction	.19*	.19*		
Industry: Other			.19	.19 [†]
Starting capital (in US\$)	.19*	.15*		
Criterion Variables T1				
Number of employees	.54**	.54**		
Business Growth			.14	.16
Predictor Variables T2				
Opportunistic strategy	-.11	-.12	-.07	.12
Moderator Analysis T2				
EO	.20*	.17 [†]	.28*	.19
EO X Opportunistic strategy		-.10		-.34**
	R²	.59	.60	.12
	ΔR^2		.01	.10**

Note. Controls were only included if they had been shown to correlate with the dependent variable. [†]p<.10. *p<.05. **p<.01.

Figure 3.3:

The Moderator Effect of Entrepreneurial Orientation on the Relationship between Opportunistic Strategy and Business Growth.



3.5 DISCUSSION

This Chapter presents findings from a longitudinal field study on small business performance in Zimbabwe. Our results contribute to entrepreneurship research by (A) applying the framework of proximity to behavior for the prediction of entrepreneurial performance from individual psychological determinants (Kanfer, 1992), (B) providing causal evidence on reciprocal determinisms between business owners' EO/ strategy process characteristics and business performance (cf. Bandura, 1978; Lindsley et al., 1995), and (C) examine findings from Western samples in a different cultural and economic environment (cf. Doty et al., 1993; Frese et al., 2000; Frese et al., 2002; van Gelderen et al., 2000). First, we found direct contemporaneous effects of the owners' strategy characteristics and EO on business performance. Therefore, the impact of our psychological predictors on changes in business performance is relatively immediate and must have occurred within one year — some time between the first and the second measurement (Dwyer, 1983). Highly structured, proactive, and goal committed complete planning strategy characteristics unequivocally resulted in positive changes in the business' number of employees as well as in its growth. This confirms previous findings in a culturally and economically different environment (van Gelderen et al., 2000) and suggests ubiquitous importance of complete planning strategy characteristics in the entrepreneurial process. Critical point planning strategies, influenced change in the number of employees marginally, but had no significant relationship with business growth. Critical point planning strategy characteristics cover fewer business aspects, are less long-term, and less strictly top-

down organized than complete planning strategy characteristics (Frese et al. 2000). Thus, owners who employ critical point planning strategy characteristics develop a less sophisticated mental representation of the entrepreneurial task as well as of feedback signals in the environment than owners using complete planning strategy characteristics (cf. Frese & Zapf, 1994; Hacker, 1986). Therefore, critical point planning strategy characteristics facilitate a positive business performance development, yet not to the same extent as complete planning strategy characteristics. Van Gelderen et al. (2000) argued that critical point strategy process characteristics are most useful in early phase of the business development: "In this phase, the founder is bombarded with the need to make quick decisions under a high degree of uncertainty. Thus the most economic form of planning – the critical point strategy – is the most effective one in this phase (p.175)." Our participants had on average been operating their business five to six years when we first interviewed them. In this later stage of the business development, critical point planning strategy characteristics might not reach far enough and owners should preferably adopt more complete planning strategy characteristics. Reactive strategy characteristics imply the passive adaptation to external demands and were expected to obstruct business performance (cf. Doty et al., 1993; Frese et al., 2000; Frese et al., 2002). All beta weights of reactive strategy characteristics on performance were negative. However, only the negative impact on business growth was (marginally) significant. An explanation could be that copying a successful business idea (that someone else had planned out systematically) keeps business performance from decreasing dramatically within our time lag of one year. Yet in the longer run, reactive strategy characteristics should lead to considerably lower success than any of the other three strategy process characteristics and, eventually, result in failure. Opportunistic strategy characteristics had, expectedly, no direct effect on either of our performance measures (cf. Locke et al., 1994; van Gelderen et al, 2000). On the one hand, business owners benefit from opportunistic strategy characteristics in so far as they proactively recognize and tackle many opportunities. On the other hand, the little planning entailed in opportunistic strategy characteristics is a disadvantage. Low planning means that the identified opportunities are not developed adequately (cf. Ardichvili et al., 2003). The owners juggle a multiplicity of rudimentarily developed opportunities without focusing on any one sufficiently to turn them into success. Thus, the combination of high proactiveness and little planning activities does neither promote nor obstruct entrepreneurial task accomplishment. We also found the presumed influence of individual EO on business performance (cf. Chapter 2). The composite of learning orientation, autonomy orientation, innovative orientation, achievement orientation, risk-taking orientation, and personal initiative was a good predictor

for success. The owners' orientations seem to be more predictive for entrepreneurial performance than less specific trait approaches (cf. Gartner, 1989; Low & MacMillan, 1988) that are distal to actual behavior (Kanfer, 1992). Our construct of EO represents Austrian economists' understanding of entrepreneurship (cf. Schumpeter, 1934). Austrian economists related entrepreneurship to the introduction of entrepreneurial discoveries that promote the development of economies and markets (Kirzner, 1997; Schumpeter, 1934). Individual entrepreneurial success, however, was not explicitly emphasized by Austrian economists. Our data, thus, extends the importance of entrepreneurially oriented actors on individual level small business performance.

Second, we established reverse lagged effects: The effect of business performance on psychological variables (strategy characteristics and EO) is less immediate than the contemporaneous impact of psychological variables on business performance because it requires the adequate interpretation of feedback information (Carver & Scheier, 1998). Before feedback information can lead to self-regulation, it must accumulate and be interpreted — both of which takes time. From T1 to T2, an increase in the number of employees led to more complete planning and less reactive strategy characteristics (cf. van Gelderen et al, 2000). Hence, a growth in the number of employees constitutes a situation that demands strategy characteristics that are more complete planning and less reactive on the part of the owner. Highly successful owners become more complete planning and little successful owners become more reactive. The latter effect is due to the cognitive consequences of stressful threatening experiences such as low business performance. The owners react with less long term planning (cf. Frese & Zapf, 1994), narrowed attention, and lowered cognitive processing capacities (Staw et al. 1981). As a result, feedback cues are overlooked or misinterpreted, owners make the wrong decisions, and business performance decreases even further. Critical point planning characteristics were not influenced by either of the performance variables. As described above, critical point planning strategy characteristics should be most important in the business start-up phase where economic planning and quick decisions are important (van Gelderen et al., 2000). Our participants, however, are at a stage of business development where enterprise expansion demands concurrent consideration of the whole spectrum of business aspects, not just the most critical and pressing issues. Opportunistic strategy characteristics were not influenced by neither of the performance measures. The feedback information provided by business performance does not suggest to adopt more or less opportunistic strategy characteristics. Highly successful owners become more complete planning and unsuccessful owners become more rigid and reactive (cf. Staw et al., 1981).

The effects of business performance on strategy characteristics were only significant from the performance measure number of employees, not from business growth. Thus, the change in strategy characteristics was caused by a growing workforce, not by a thriving business as such (additional growth in customers, profits, sales). When the owner of a grocery store, for example, opens a second branch and hires new employees to run the shop, the situation becomes more complex and requires more planning strategy characteristics (Frese & Zapf, 1994). When the owner, for comparison, sells double the amount of groceries in the old shop, the situation does not necessarily become more complex and strategy characteristics need not inevitably become more planning. EO, however, was significantly influenced by both the number of employees and business growth. In whatever form business success became manifest, owners regulated their orientations accordingly. The influence of business growth on EO ($\beta=.17$, $p<.05$) was similar to the influence on complete planning strategy characteristics ($\beta=.15$, n.s.; cf. Table 3.5). Differences in the effect of business growth on EO and on strategy characteristics should, therefore, not be interpreted.

Third, we found reciprocal determinisms between our psychological variables and business performance that suggest upward spirals (Lindsley et al., 1995). The effect of business performance on complete planning strategy characteristics and EO roughly matches the one from complete planning strategy characteristics and EO on performance. Owners high on planning strategy characteristics and/or EO are not only more successful than others; their business success also increases those psychological variables (complete planning strategy characteristics and EO) that contributed to success in the first place. Hence, we found reciprocal determinisms that suggest upward spiral processes. For planning strategy characteristics, similar results were found in a Dutch sample by van Gelderen et al. (2000). Therefore, reciprocal determination of planning strategy characteristics and performance can be generalized independent of the cultural and economic environment. For EO, reciprocal determinism had not been studied before. The reasons why reciprocity between EO and performance had not been investigated lie in entrepreneurship research itself: (A) When individual EO is investigated, it is often conceptualized as a dispositional trait concept which can not explain entrepreneurial performance (cf. Kanfer, 1992). (B) Reciprocal determinism can only be detected by longitudinal analyses. However, only few studies in the area of entrepreneurship research are designed longitudinally (Rauch & Frese, 2000).

We also expected reciprocal determinism between reactive strategy characteristics and business performance (van Gelderen et al., 2000). Reactive strategy characteristics influenced change in the performance measure business growth (marginal) negatively and, in turn, the

performance measure number of employees had an effect on reactive strategy characteristics. Hence, we did not find truly reciprocal determinism where the same performance measure that was influenced by reactive strategy characteristics influenced the strategy characteristics reversely. Yet, all effects point to a downward spiral (Lindsley et al., 1995). Reactive strategy characteristics cause a decrease in business performance (business growth); low performance (number of employees) then leads to emotional distress, cognitive rigidity, and non-proactive behavior which decreases performance even further (Staw et al., 1981). For critical point planning strategy characteristics, our data indicates no reciprocal determination. Critical point planning strategy characteristics influenced the number of employees marginally and the reverse effects from business performance were not significant. The results on the critical point planning strategy characteristics in our sample of long standing business owners tie in with findings in samples of nascent entrepreneurs by van Gelderen et al. (2000). In their sample of nascent business owners, van Gelderen et al. (2000) showed that critical point planning strategy characteristics were only in the early phase of the business development related with business success. In a later phase, owners who had successfully practiced critical point planning strategy characteristics earlier, adopted complete planning strategy characteristics. As in the present study, critical point planning strategy characteristics were not influenced by business success in an advanced phase of business development (van Gelderen, 2000). Hence, our Zimbabwean entrepreneurs were probably in a phase of their business development where critical point planning strategy characteristics are less appropriate than in earlier phases. Businesses in an advanced phase of development probably demanded more complete planning than critical point planning strategy characteristics.

Fourth, complete planning, critical point planning, and reactive strategy characteristics mediated the relationship between EO and business performance. Any performance is necessarily anchored in appropriate action strategies of the key actor, the owner. Hence, EO influences business performance only via the manner of implementation, the strategy characteristics. Business owners high on EO are likely to employ planning strategy characteristics and the planning strategy characteristics then lead to positive changes in the success of the business. Business owners low on EO, in contrast, are prone to adopt reactive strategy characteristics which will result in decreasing business performance.

Finally, the relationship between opportunistic strategy characteristics and business growth was moderated by EO: For highly entrepreneurial oriented owners, opportunistic strategy characteristics result in decreased business growth. Entrepreneurial owners are eager to learn, want to be autonomous, strive for innovation and achievement, are willing to take risks,

and enjoy their own initiative. With an opportunistic, highly proactive yet unstructured action strategy, owners high on EO take on too many, too diverse, and too challenging projects that they don't follow through — and ultimately fail. Their less entrepreneurial oriented counterparts, however, can benefit from opportunistic strategy characteristics. They anticipate and realize business opportunities while their low EO keeps them from dissipating their energies. Thus, business owners low on EO who employ opportunistic strategy characteristics are more likely to actually seize and develop an opportunity before they get distracted and jump onto the next passing opportunity.

3.5.1 STRENGTHS AND LIMITATIONS

The significant contemporaneous effects of strategy characteristics and EO on success were stronger for the dependent variable business growth than for the number of employees. At the same time, previous (T1) business performance only influenced the number of employees (cf. Table 3.4a), not business growth (cf. Table 3.4b). This indicates that our longitudinal time frame of one year was adequate to detect changes in business growth (profit, sales, customers). In order to detect changes in the number of employees, however, a time gap of more than one year would possibly have been more favorable: Even when business increases, taking on more employees is a big step for small business owners which could easily backfire. The increased workload might be short-lived. Therefore, enlarging the workforce is probably not an immediate reaction on business success. Owners might try to cope without hiring additional employees until they are certain that the business has permanently improved. Similarly, owners might not lay off employees unless they are certain that the business situation will not pick up again.

A further issue is the ipsative interview procedure for the strategy characteristics. The interviewers kept asking for more details on the participants strategy characteristics until they felt they had enough information to give the owners a high rating on one of the four strategy process characteristics. An advantage of the ipsative measurement is that the interviewers compare strategy characteristics consciously during the interview. This is reasonable in interview field-research because it mimics the practical situation where one has to make decisions between alternative characteristics (cf. Baron, 1996). The owners' descriptions of their strategies never completely corresponded with our operationalization of, for example, complete planning strategy characteristics. A strategy might be mainly characterized by complete planning, but there are virtually always some strategy aspects that also involve critical point planning, opportunistic, or even reactive strategy characteristics. Reversely, owners who mainly

employ reactive strategy characteristics occasionally also engage in planning. Thus, it was important for our research to clearly identify the most prevalent type of strategy characteristics in order to find significant causalities between strategy characteristics and business performance. However, the disadvantage is that our measurement of complete planning, critical point planning, reactive, and opportunistic strategy characteristics are not statistically independent. Consequently, correlations between the non-planning and non-proactive reactive strategy characteristics and the other three types of strategy characteristics were highly negative (cf. Table 3.3; Closs, 1996).

3.5.2 IMPLICATIONS FOR FUTURE RESEARCH

The present study examined reciprocal determinisms between strategy characteristics/ EO and success in a sample of business owners who had established their enterprise on average five to six years prior to the first measurement time (cf. Table 3.1). Thus, the reciprocal determinisms described above represent the entrepreneurial process in an advanced stage of the business development. In order to fully understand reciprocal determinisms in the entrepreneurial process, future research should investigate nascent entrepreneurs in their starting phase and accompany them throughout the business life cycle. Initial EO should influence the type of strategy characteristics an owner adopts; the initial strategy characteristics will impact on early business performance; performance, in turn, should subsequently affect strategy characteristics and EO. In the middle-term, reciprocal determinisms should become stronger and upward/ downward spirals should emerge. In the long run, however, ceiling effects, which limit the spiral process, are likely to occur and reciprocal determinisms should become weaker (Lindsley et al., 1995).

3.5.3 CONCLUSION

Our longitudinal approach enabled us to investigate reciprocal determinisms in the entrepreneurial processes that emphasize the importance of the individual, the person of the business owner. We, first, established reciprocal determination between the owners' strategy characteristics and EO on the one hand, and business performance on the other hand: Complete planning strategy characteristics and EO increase business success. In turn, business success strengthens the owners' complete planning strategy characteristics and EO. Thus, we found positive reciprocal determinisms that suggests the existence of upward spirals. For reactive strategy characteristics, however, the reciprocal determinism is negative. Reactive strategy characteristics lead to lower business performance and low performance then increases the owners' reactive strategy characteristics even further. Moreover, the causal effects

involving strategy characteristics appear across cultures and economic environments (van Gelderen et al., 2000). Second, EO does not influence business performance directly. The relationship is mediated by complete planning, critical point planning, and by reactive strategy characteristics that are more proximal to actual entrepreneurial behavior than EO (cf. Kanfer, 1992). Third, opportunistic strategy characteristics have no direct impact on business performance. However, the relationship is moderated by EO: For business owners low on EO, opportunistic strategy characteristics have a positive impact on business performance. Highly entrepreneurial owners, on the other hand, are better advised to structure their strategies and approach business more planningly.

Furthermore, the impact of complete planning strategy characteristics on business performance was the strongest and the most consistent influence across performance measures. Thus, entrepreneurship support programs should concentrate on enhancing the complete planning strategy characteristics of small business owners. Psychological training methods can help business owners to improve their planning abilities, to strengthen their goal commitment, and to increase as well as focus their proactiveness. As the influence of complete planning strategy characteristics on performance was contemporaneous, the impact of increased complete planning strategy characteristics on business performance should be relatively immediate. In the longer run, business success will, in turn, foster the development of higher EO as well as more complete planning strategy characteristics. Moreover, our findings indicate that entrepreneurship programs should not try to increase business owners' EO without also addressing their strategy characteristics. An increase in EO could be fatal for owners who employ opportunistic strategy characteristics because for them, high EO leads to a decrease in business performance.

Last but not least, we want to call attention to the imperative of longitudinal research designs and the necessity of behavior proximal research constructs in order to investigate individual influence factors of entrepreneurial performance.

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CHAPTER 4

A Longitudinal Analysis of Employment Development in Zimbabwean Informal and Formal Sector Small Enterprises and a Sector-Specific Classification of Their Owners

Promoting a healthy small and micro business sector is a viable strategy to increase economic development and growth (e.g., Seibel, 1989), industrialization (Kiggundu, 1988), and upward social mobility for individuals (Koo, 1976). Micro and small enterprises provide employment for 27% of the Zimbabwean population between the ages of 15 and 64 (Mead & Liedholm, 1998). However, there is a wide spectrum of small businesses and they probably differ in the usefulness for societal development in general and for the creation of employment in particular. Even though African small and micro businesses do create employment (Livingstone, 1996), only 25% of the micro enterprises grow at all and only one percent of the micro enterprises that start out small (less than five employees), eventually grow to a size of more than 10 employees (Mead, 1994). In a later publication, Mead and Liedholm (1998) established that enterprises with 10 - 50 employees constitute only two percent of the enterprises in Zimbabwe.

Small businesses in developing countries are distinguished into formal (registered) and informal (unregistered) sector operations. This longitudinal field study in the Southern African country of Zimbabwe aims, first, to empirically examine the relationship between in/formal business operation and employment development, second, to identify differences between owners of informal and formal businesses, and, third, to look at the timeframe of the transition from the informal into the formal sector relative to the establishment of the business. Thus, we contribute quantitative longitudinal data to the field of in/formal sector performance in developing countries, which has hitherto mainly been approached qualitatively. Moreover, we develop a new perspective on business formalization by focusing on the individual who is at the core of the formalization process, the owner.

4.1 INFORMAL AND FORMAL SECTOR: CONCEPTUAL ISSUES

To this date, there is no universally accepted definition of how an enterprise can be classified as formal or informal (cf. Hosier, 1987; Macharia, 1997; Mason, 1991, Portes, 1994). Hart (1973), one of the first authors to stress the informal sector's potential for individual income generation, described it as economic activities among the poor. The ILO (1972) defines informal businesses as having low entry barriers, relying on indigenous resources, being family owned, operating on a small scale, being labor intensive and using adapted technology, using skills acquired outside the formal school system, and operating in unregulated competitive markets. Even though widely used in the development and aid community, such restrictive categorizations were heavily criticized because they cannot account for the heterogeneity of informal businesses (e.g., Lachaud, 1994; Macharia, 1997; Mason, 1991). For example, an unregistered architect or the owner of a flourishing, yet not registered security agency with 60 employees, would not be classified as informal using the above definition. Furthermore, the ILO's as well as Hart's definition reach beyond describing informal businesses, they judge their performance beforehand and predefine them as small scale operations (ILO, 1972) among the poor (Hart, 1973). Such definitions are of limited use as they employ potential consequences of operating in the informal sector (being small, being poor) to define it (cf. Portes, 1994).

In line with recent literature (e.g., Harrison, 2000, Hosier, 1987; Jansson & Sedaca, 2000; Neshamba, 1997), we assume business registration to be crucial for an expansion of business activities beyond subsistence level (see further explanations below). Therefore, we employ a clear-cut and pragmatic distinction between unregistered informal and registered formal businesses.

The majority of Zimbabwean small businesses operate in the informal sector which secures the livelihood of 30-50% of the sub-Saharan workforce (Lachaud, 1990). A comparative study in five Southern African countries found that only 15% of the adult population were employed in the formal sector (Daniels, 1998). The Zimbabwean employment situation is similarly devastating (cf. Macharia, 1997; van Dijk, 1992). In the 1990ies, more than 60% of the employable population was unemployed and each year 300,000 school-leavers entered the job market, while there were only 50,000 vacancies in the formal sector (Bloch & Robertson, 1996). Note that these numbers represent the situation before Zimbabwe's economy headed into a serious and still deteriorating depression since 1998. More than ever, (self-) employment in the informal sector provides often the only feasible opportunity to generate an

income (cf. Hart, 1979; ILO, 1972) and the informal sector has expanded rapidly throughout the 1990ies (Macharia, 1997).

Today, plenty of informal micro-enterprises like welders, carpenters, and vendors provide for the immediate local markets in Zimbabwe's high density areas. But the spectrum of informal businesses is much wider and also includes artisans who cater for tourists at the roadsides through to computer specialists who design web-sites in the central business districts of the capital Harare and other cities.

4.1.1 CONTRADICTIONARY VIEWS ON THE INFORMAL SECTOR

In most developing countries, the informal sector is vibrant and contributes to the development of local markets and the improvement of the national economy by keeping and circulating money in the system (Shinder, 1997). Many even believe that the informal sector can not only provide low-cost, labor-intensive, competitive goods and services, but that informal businesses can also grow and create employment equal to their formal counterparts (e.g., ILO, 1972). Hosier (1987) labeled this opinion the evolutionist position.

Contradictory to the evolutionist position, the involutionist position represents a more pessimistic outlook on the informal sector. Involutionists argue that the informal sector is a "subordinate", "pre-capitalist" form of production which will always be dominated and ultimately destroyed by formal, capitalist operations (Hosier 1987, p.387). Promoting informal activities is not considered an option for the reduction of unemployment or the promotion of national economic growth. Involutionist reasoning even concludes that "[...] supporting informal sector activities can serve only to intensify the exploitation of labor and the extension of poverty" (Hosier, 1987, p.388).

The evolutionist and the involutionist position are certainly polarized outlooks on the informal sector's potential (cf. Portes, 1994 for an in-depth discussion). Since it has been shown that there are formal businesses emerging out of the informal sector (Neshamba, 1997), we believe that operating informally can be a first step that allows one to get a 'foot in the door' and participate in the local economic life. The next step would be to transform informal activities into formal ones in order to overcome the informal sector's restrictions.

4.1.2 ADVANTAGES OF THE INFORMAL SECTOR

Informal enterprises are neither registered for tax, nor for commercial listings, labor and social security contributions, or for permits and licenses (e.g., Jansson & Sedaca, 2000; Mason, 1991). Thus, they are not protected by the law, cannot access most financial support

programs, cannot advertise freely, are not able to develop stable relationships with suppliers or customers, and cannot claim back value added tax or sales tax (Jansson & Sedaca, 2000, Mambula, 2002). These consequences of operating on the fringes of legality hamper the growth of informal businesses (e.g., Harrison, 2000, Hosier, 1987; Shinder, 1997; Neshamba, 1997).

Regardless of the informal sector's limitations, there seems to be little motivation to become formal for many Zimbabwean business owners. Taxation and legal regulations are often considered prohibitive. Moreover, the business registration process itself is difficult, tiresome, takes time (up to years), and is expensive (Daniels, 1994; Jansson & Sedaca, 2000; Kapoor, Maguwara, & Chidavaenzi, 1997) — all of which taps scarce resources, especially in the starting phase of a business. Hence, the path from the informal into the formal sector is a difficult one (Hosier, 1987) and only few informal businesses eventually reach a formal status (Daniels, 1994). Particularly for very small and young enterprises, formalization might even be counterproductive. Anecdotal evidence suggests that many owners feel they need a trial period to test business viability before they formalize and commit themselves to paying the relatively high fees and to complying with the regulations. Accordingly, McPherson and Liedholm (1996) found the business size to be a determinant of business registration in Niger and Swaziland. Furthermore, many business owners are unaware that registering for sales tax is only required when gross revenues from services exceed Z\$60,000 and gross revenues from sales exceed Z\$250,000 per annum (in the year 2000). Others indeed want to stay in the informal sector (Hosier, 1987) and cannot see any advantage in becoming formal. Especially when the purpose of self-employment is poverty alleviation, the owners often do not have the motivation nor the managerial skills (Kapoor et al., 1997; Mason, 1991) to enlarge their business to an extent where being formal is of an advantage. Credit accessibility is also no longer an argument to becoming formal since many NGOs and development agencies carry out micro credit schemes specifically designed for informal small businesses (e.g., Lachaud, 1990; Machaira, 1997). Finally, Zimbabwean entrepreneurs often argue that they do not want to support a government which does not act in their interest. They frequently stress the fact that they would pay taxes if they could expect any of their contribution to flow back into small business support (e.g., providing infrastructure or training) and if the legislation was business friendlier (e.g., labor legislation). As a result, many small business owners prefer to remain in the informal sector.

4.1.3 ADVANTAGES OF THE FORMAL SECTOR

While at first glance business formalization entails disadvantages (e.g., taxes, social security contributions) and bureaucratic hurdles (permits, licenses) there are definite advantages: First, the practice of adequate book-keeping contributes to the strengths of formal businesses. While book-keeping is an essential prerequisite for the formal sector, it is practiced by hardly anyone in the informal sector -- out of inability or because they do not want authorities to find out about the extent of their activities (Mason, 1991; Shinder, 1997). Besides book-keeping being required by authorities and banks, it provides valuable feedback that allows the owners to monitor their business performance and to intervene if necessary.

Second, formal businesses have easier access to assistance (in form of information and education, of money, and of legal protection) from small business support groups, chambers of commerce, and other governmental and non-governmental associations (Jansson & Sedaca, 2000; Seibel, 1989; van Dijk, 1992). Entrepreneurship is a relatively new concept for Zimbabweans due to the country's colonialist (van Dijk, 1992) and more recent socialist past. Therefore, information on business conduct and best practice is crucial for business owners. Anecdotal evidence for the importance of assistance is the widespread belief among Zimbabwean business owners that increased production automatically leads to increased profits. The fact that one must find or create a market for one's products is often neglected.

This leads to the third advantage of the formal sector: Advertising. While informal businesses are forced to keep a low profile, formal businesses can advertise freely (Jansson & Sedaca, 2000). Thus, they can make themselves known to potential customers without having to fear prosecution.

Fourth, formal businesses are more likely to establish stable relationships with their business partners (Jansson & Sedaca, 2000) that are characterized by mutual confidence and trust. Customers perceive formal businesses as more reliable, value the image of higher professionalism and quality, can rely on guarantees and warranties, and have the security of a binding contract. Likewise, suppliers grant formal businesses preferential treatment over informal businesses, are more eager to engage in long-term commitments, and rate their creditworthiness higher than those of their informal counterparts.

Lastly, formal businesses do not bear the final costs of sales tax or value added tax (VAT). They are able to charge sales tax/VAT on the supplies that they make and recover sales tax/VAT on purchases that they have made. Informal, unregistered businesses however, must bear the full costs of sales tax/VAT when purchasing goods or services and cannot pro-rate it accordingly when selling goods or services. Therefore, sales tax/VAT, which is de-

signed as a consumer expenditure, burdens informal but not formal businesses.

Book-keeping, access to information, the possibility to advertise, the confidence of business partners, and a cost saving sales tax/VAT practice are important for the expansion of business activities. Expansion again leads to an increasing workload and thereby to the need to increase the workforce.

In summary, we reason that operating in the informal sector is appropriate on a subsistence level for some businesses and their owners whose objective is survival and income generation for themselves and their immediate dependents (Shinder, 1997). The typical informal business cannot expand beyond sustaining the owner and very few employees (Mason, 1991) because business “[...] registration is a de facto necessity in order to expand activities beyond a very limited scale” (Jansson & Sedaca, 2000, p.4). Therefore, we assume in line with recent literature (e.g., Harrison, 2000; Jansson & Sedaca, 2000; Shinder, 1997) that formal businesses are more likely to expand and create employment than informal ones. Hence, the first step of our longitudinal analysis is to examine the relationship between operating in the in/formal business sector and employment development.

Hypothesis 1: Operating in the formal sector influences employment creation positively.

4.1.4 DISTINGUISHING FORMAL FROM INFORMAL BUSINESS OWNERS

As a second step, we want to identify those (presumably growth oriented) business owners who accomplish the transition into the formal sector. Economic development in Third World countries partly relies on promoting the entrepreneurial potential. Numerous governmental as well as non-governmental development organizations employ small businesses support programs. However, these programs often produce poor results (e.g., Mambula, 2002) and most organizations choose the beneficiaries of their aid schemes on an intuitive basis. We aim to provide a test battery that helps identify high potential business owners who will formalize their business, grow, and create employment.

While there is firm-level evidence that business formalization is determined by the location (favorable: urban), the industry (unfavorable: selling food, wood and metal production) and the size of businesses (McPherson & Liedholm, 1996), our approach focuses on the business owner. In small businesses, the owner makes all the important decisions, one of which would be to overcome the informal stage. Ultimately, it is the owner who must initiate and carry through with the formalization process. Based on the literature and on our own studies

in Africa (cf. Frese, 2000), we chose the individual-level variables years of education, business practice knowledge, risk-taking, and uncertainty avoidance to distinguish informal from formal business owners:

YEARS OF EDUCATION. Years of education refers to the time spent in the educational system. Only in school do most Zimbabweans become familiar with formal English (Harrison, 2000). Although in urban areas nearly everyone has a good understanding of social English, children grow up speaking their indigenous vernaculars and English is a second language to them (Harrison, 2000). However, English is Zimbabwe's official language and laws, regulations, and contracts are issued in English. Thus, proficiency in the English language is a prerequisite to negotiate contracts, to interpret regulations adequately, and to operate successfully in the formal sector.

Furthermore, advanced arithmetics and basic knowledge on the economic system and on economic regulations are part of most secondary school curricula. Therefore, the students are more likely to understand the procedures in the formal sector as well as the advantages of business formalization. Likewise, individuals who plan to become self-employed on a larger scale probably seize the opportunities of an educational system that provides knowledge for the tasks ahead as a business owner.

We assume that a better formal education is not only related to small business expansion (Mead & Liedholm, 1998) but also helps the business owners to operate in the formal sector. The average formal business owner is, therefore, expected to have stayed longer in the educational system than the average informal owner.

BUSINESS PRACTICE KNOWLEDGE. Business practice knowledge is a working knowledge on rules, regulations, and standards (e.g., tax, labor regulations, or accounting) that one must follow in the respective legal environment. While business know-how is generally rather low among Zimbabwean business owners (Kapoor et al., 1997), informal owners in particular often lack even rudimentary understanding of business conduct (cf. Mason, 1991). However, business practice knowledge is crucial in order to run a formal enterprise. The owner must be familiar with the basics of accounting and of legal business issues. Owners of informal businesses certainly also benefit from business practice knowledge but do not necessarily need it. For example, knowing how to calculate profit is useful for any type of business. However, knowledge on which expenses are tax deductible, are of no relevance for a business that is not registered for tax in the first place.

We expect the relationship between business practice knowledge and running a formal business to be reciprocal: Business owners acquire business practice knowledge before formalizing their enterprise. On the other hand the owners learn about business practices while operating in the formal sector. Whatever causality might apply, we expect owners who operate in the formal sector to have a better business practice knowledge than their average informal counterparts.

RISK-TAKING. Risk-taking is defined as "pursuing a business idea when the probability of succeeding is low" (Chell, Haworth, and Brearly, 1991, p. 42). Not so long ago, running an informal business was a risky undertaking. Informal businesses used to be exposed to constant pressure by the authorities and regular systematic raids. In recent years, however, the poverty alleviation mechanisms of the informal sector were recognized (Hugon, 1990). Even though government agencies still mostly fail to actively support the informal sector (Machaira, 1997), authorities started to tolerate it (Hosier, 1987) and shut-downs or even arrests have become very unusual.

In the present uncertain Zimbabwean economic climate, it is the operation of a formal business that means a higher risk. By formalizing their business the owners take on responsibilities that could easily backfire when sales are low. The same legal framework that could enable the business to grow might cause its bankruptcy. In Zimbabwe it is, for example, not possible to lay off any employees without ministerial approval (van Dijk, 1992). An informal enterprise, by comparison, can be run in 'emergency mode' when the business situation becomes difficult: Workers can be made redundant at very short notice, workers can get paid less or not on time, the business can be run from home or from the side of the street, and there are no obligations concerning labor and social security contributions. All of the above emergency measures are not an option for a formal business.

Therefore, we argue that business owners who are not willing to take a risk will remain in the informal sector while those with a higher risk-taking propensity formalize their enterprise.

UNCERTAINTY AVOIDANCE. Uncertainty avoidance refers to the appliance of customary norms, rules, standards and procedures that are anchored in the society's tradition in order to reduce ambiguity and the unpredictability of future events (Hanges, House, Dickson, Dorfman, & co-authors, 2003). Highly uncertainty avoiding individuals try to lessen ambiguities by abiding by traditional norms and rules. The concept of uncertainty avoidance is

originally based on the individual psychological personality characteristic of tolerance for ambiguity (e.g., Kirton, 1981; Schere, 1982). Later on, the concept was adapted to the workplace environment and developed into a society and group level construct (Hanges et al., 2003; Hofstede, 1991). We take up the workplace specific construct, re-introduce it as an individual level concept, and apply it to the individual business owner.

Both informal as well as formal businesses are exposed to unpredictable future events and ambiguities. In the informal sector, ambiguity is inherent to the ad-hoc approach to business where long-term prospects and contracts are rare. In the formal sector, ambiguity is more related to a stronger dependency on the erratic development of Zimbabwe's national economy and to changing market demands. Whatever the nature of the ambiguities, uncertainty avoidance refers to whether one deals with ambiguity in accordance with the society's traditional norms (uncertainty avoiding) or in a non-traditional way (not uncertainty avoiding).

In the Zimbabwean small business context, highly uncertainty avoiding individuals should prefer to operate in the informal sector where traditional norms and rules are still applicable and valued (cf. Lachaud, 1990). For example, should informal owners not be able to pay their workforce, they can dismiss them without having to conform to government labor regulations. At the same time they can demand support from their extended family because kinship obligation is of utmost importance in the Zimbabwean culture (Bozongwana, 1983; Mutswairo, Chiwome, Mberi, Masasire, & Furusa, 1996). Relatives will help out, even with delayed or no payment at all. An individual low on uncertainty avoidance is more likely to operate in the formal sector and comply with the standards of formal business conduct.

Risk-taking and uncertainty avoidance are related but not identical concepts. Risk-taking always has a probability of success/failure attached to it (Chell et al., 1991), whereas uncertainty avoidance refers to the reduction of ambiguity by controlling uncertainties. Highly uncertainty avoiding individuals might, paradoxically, even become more risk-taking in order to reduce uncertainties (Hofstede, 1991). An example would be an owner who starts a risky price war in order to seek a decision in a highly competitive market. In doing so, the owner reduces ambiguity but takes the risk of his business perishing instead of leaving the competition behind.

Hypothesis 2: Formal business owners can be distinguished from their informal counterparts by the owner's years of education (formal: high), business practice knowledge (formal: high), risk-taking (formal: high), and uncertainty avoidance (formal: low).

4.1.5 THE TRANSITION FROM THE INFORMAL INTO THE FORMAL SECTOR

As a third research issue, we look at the timeframe for transitions from the informal into the formal business sector. Business owners can either formalize their enterprise before starting their enterprise (by registering or buying a shelf-company), simultaneously at start-up, or after they have operated in the informal sector for a period.

Neshamba (1997) found that the majority (72%) of his (also Zimbabwean) sample of formal businesses had started out informally. We are interested in when during the development of a business this transition takes place. As discussed earlier, operating in the formal sector requires a fundamentally different outlook and skills than operating in the informal sector. Furthermore, businesses that operate informally for some time will have developed informal business routines and will have established a culture of informality (cf. Schein, 1983). Therefore, graduating into the formal sector means fundamental organizational change, which organizational change literature considers to be difficult (e.g., Cummings & Worley, 1997). A successful transition into the formal sector demands adaptability and willingness to change from all stakeholders: The owner, the employees, the business partners. Fundamental change that affects all areas of the enterprise (e.g., employees, book-keeping, contracting, etc.) such as formalization will become harder the longer a business had been operating in the informal sector. Finally, growth oriented business owners should realize the limitations of the informal sector almost immediately and try to formalize as soon as possible. Therefore, we expect formalization to take place in the early stages of business development rather than later.

Hypothesis 3: Owners who carry through with the formalization of their business do so at an early stage of business development.

4.2 METHOD

4.2.1 SAMPLE

At the time of the first interview (T1), the sample consisted of 122 Black indigenous owner/manager/founders¹ of businesses in Zimbabwe who had at least one employee. There is a qualitative difference between one-person enterprises and owners who have at least one employee: The step towards having employees implies a change in responsibility, in one's self-perception and identity as a business person, in the psychological investment into one's ca-

¹ All in one person; for simplification referred to as owners in the following.

reer, and in the necessity of managerial skills (Frese, 2000). Furthermore, we selected only businesses that operated for more than one year in order to ensure that our participants had adequate experiences in their trade to complete our interview and questionnaires. Finally, all our participants were Black because in the course of African indigenization it is especially interesting to understand Black businesses, who are still underrepresented in the Zimbabwean formal sector (Kapoor et al., 1997; van Dijk, 1992).

Indigenous businesses in Zimbabwe are usually clustered in certain areas. In the city, industrial areas (called home industries) are mainly located near high density housing areas. In rural areas, businesses are concentrated in so-called growth points. Most businesses in home industries and growth points are not registered, do not appear in any listing, nor do they have telephone lines. Therefore, we used a random walk procedure for participant recruitment: The interviewers called on the business sites in person and carried out an interview on the spot, asked for an appointment, or came back later if the owner was preoccupied. Businesses typically found in the industrial areas include scrap metal merchants, furniture manufacturers, bottle stores, tailors, welders, mechanics, and others who provide for their immediate local markets. To include up-market businesses and those located in urban office buildings (e.g., commodity brokers, travel agencies, advertising agencies, and telecommunication companies), we consulted business directories and made appointments. We contacted listed businesses at random and identified Black owners by their family names. Unfortunately, addresses and phone numbers were often incomplete or not up to date.

The T1 sample was drawn between September 1998 and April 1999. The refusal rate of 30% was low. Participants received the equivalent of five US\$ as a sign of gratitude and as compensation for their time. We included the two major ethnic groups, Shona (approximately 77% of Zimbabwe's population) and Ndebele (approximately 18% of Zimbabwe's population). Shona as well as Ndebele mainly reside in their regional homelands Mashonaland and Matabeleland respectively. The overall sample size was N=122 (n=98 Shona -- the ethnic majority in Zimbabwe, n=21 Ndebele, and n=3 of other African origin).

The data collection for T2 was carried out between May 2000 and April 2001. The time frame for the second phase of data collection was relatively long because many participants had relocated their businesses. We had to apply extensive search strategies that entailed seeking information from former neighbors, from competitors, from relatives, etc. The lack of phone lines, especially in the informal sector, also hampered the second wave of interviews because we often had to revisit several times before we could meet the owner for an interview.

Of the N=122 owners interviewed at T1 we revisited 104 participants. The remaining 18 could either not be found (n=11), rejected to participate again (n=4), or had passed away (n=3). Out of the 104 T2 participants, seven had given up their business. Therefore, the resulting sample size for T2 was N=97. For the variables that had been measured at T1, there was no difference (T-tests) between those who participated again and those who dropped out of the sample.

Table 4.1 provides in-depth information on the sample characteristics. At T1 as well as at T2, formal businesses employed significantly more people than informal ones (Mann-Whitney-U tests, $p < .01$).

Table 4.1:
Sample Description.

	T1			T2		
	Overall N=122	Informal n=43	Formal n=79	Overall N=97	Informal n=36	Formal n=61
The Owner						
Male	101	36	65	81	32	49
Female	21	7	14	16	4	12
Owners' age (average)	38	35	39	39	35	42
The Business						
Year of business establishment (average) ^a	1993	1994	1993	1992	1992	1993
Starting capital in US\$ (average)	17,066	3,723	24,328	19,286	4,725	26,189
Industry^b						
Manufacturing	58	31	27	50	28	22
Construction	5	0	5	8	2	6
Trade	38	8	30	44	14	30
Gastronomy	2	0	2	2	0	2
Service	43	12	31	42	8	34
Other	8	0	8	4	2	2
Employment						
Average number of employees	8.44	3.81	10.96	10.51 ^g	2.94 ^g	14.85
Micro-businesses ^c	95	42	53	75	35	40
Small scale businesses ^d	27	1	26	16	0	16
Medium sized businesses ^e	—	—	—	5	0	5
Province^f						
Mashonaland	94	37	57	74	31	43
Matabeleland	20	6	14	18	5	13

Note. ^a Years of establishment ranged from 1971 to 1998. ^b Multiple answers were possible. ^c 1-10 employees (ILO, 1972). ^d 11-50 employees (ILO, 1972). ^e 5 Businesses had grown bigger than 50 and up to 130 employees. ^f 8 missing data at T1, 5 missing data at T2. ^g 1 missing data.

4.2.2 PROCEDURE

Main measurement instrument was a structured interview. Confidentiality was repeatedly assured throughout the interviews. Where appropriate, interviewers used prompts to clarify participants' answers. Interview answers were written down and typed subsequently. It was not possible to use verbatim transcripts of tape recordings because the noise level was too high at most business sites. We used recordings sporadically at random to ensure the quality of the interviews and written protocols. The interviewers took down the participants' statements as verbatim as possible. The interviews were carried out by German graduate and post-graduate students of psychology, and by local interviewers (who were especially helpful with participants who felt uncomfortable speaking English).

All interviewers were thoroughly trained in interviewing techniques, and in coding the participants' answers. After performing in role-play settings, the interviewers practiced in vivo, accompanied by an experienced interviewer.

Each interview was rated by two raters, one of them always being the interviewer. Ratings were done on the basis of typed protocols and an elaborate coding scheme.² Ratings were either factual (e.g., number of employees) or nominal (e.g., in/formal).

Additionally, participants filled out a questionnaire that contained items concerning risk-taking and uncertainty avoidance as well as the business practice knowledge questionnaire after the interview was completed.

4.2.3 OPERATIONALIZATION

Table 4.2 presents the types of measurements, the number of items, the number of valid longitudinal cases, Cronbach's alphas, interrater reliabilities, the range, Ms, and SDs of the variables. We used intraclass coefficients (ICC [1,1]) as reliability measures for factual items (Shrout & Fleiss, 1978).

² See appendix for the complete interview and coding scheme.

Table 4.2:
Characteristics of Variables and Scales.

	Source ^a	k items	N	α ^b	ICC ^c	Range	M	SD
Business sector								
In/formal 1998/99 T1	I	1	97	—	1.00	1—2	—	—
In/formal 2000/01 T2	I	1	97	—	.98	1—2	—	—
Number of employees								
Number of employees 1997/98 ^d T1	I	1	96	—	1.00	0—102.50	7.73	13.75
Number of employees 2000/01 T2	I	1	96	—	.87	0—130	10.51	18.92
Independent variables								
Years of education T1	I	1	97	—	1.00	4—19	11.74	3.23
Business practice knowledge T2	Q	11	85	.75	—	.27—1.00	.81	.20
Risk-taking T2	Q	4	96	.80	—	1—5	3.08	1.18
Uncertainty avoidance T2	Q	6	91	.70	—	1—7	5.17	1.18

Note. ^aI = interview measure, Q = questionnaire measure. ^bCronbach's Alpha. ^cIntraclass coefficients.

^dRetrospective interview data.

In/formal in 1998/99 (T1) and in 2000/01 (T2) were interview measures. A business was classified as being formal when it was officially registered and enrolled with the tax department. Likewise, the **number of employees** 1997/98 (retrospective measure at T1) and 2000/01 (T2) were single item interview measures. We choose a time gap of two years to investigate employment creation because the majority of our sample was very small (78% had only 1-10 employees at T1). Thus, taking on one more person is a big step that probably takes longer than the time gap between our two measurement times (cf. Chapter 3). **Years of education** also was a single interview item measured at T1. **Business practice knowledge** was a multiple choice questionnaire ($\alpha=.75$) measured at T2 (Table 4.3). The questionnaire was developed for the Zimbabwean context in close cooperation with Eric Bloch, a Zimbabwean Chartered Accountant, and David Harrison from our local research partner Human Resources (Pvt.) Ltd. The sample size for the business practice knowledge questionnaire was $n=85$ (Table 4.2) because some participants did not want to fill in yet another questionnaire after they had already completed the questionnaire on risk-taking and uncertainty avoidance (cf. Chapter 2, 3, and 5).

Table 4.3:
The Business Practice Knowledge Questionnaire.

Items	
1	Profit is determined by: *a) Business income minus expenses. b) Business income minus wages. c) Business income minus advertising costs.
2	Market research is important for: *a) Determining whether or not your products or services will sell. b) Recruiting employees. c) Keeping within the law.
3	Which is the best method of checking on business progress? *a) Inspecting the business accounts. b) Number of customers. c) Volume of sales.
4	Why is advertising important? *a) The public learns about your product. b) You can be proud of your business. c) It helps you get loans.
5	Business discounts given to friends and family: *a) Need to be recorded. b) Do not need to be recorded.
6	When business is bad: a) All businesses may reduce wages to employees. *b) No businesses may reduce wages to employees without the agreement of employees or application to the Labor Relations Board. c) Only unregistered businesses may reduce wages.
7	If you make an offer to sell a product or service and this offer is accepted by the other party: *a) You are legally bound to provide the product or service as agreed. b) You can change the terms if you feel it necessary.
8	Which of the following is a business expense? a) Donations to charity. *b) Repairs to plumbing on the business premises. c) Payment for tax advice. d) Paying for a party to which customers are invited.
9	A manufacturer must: *a) Replace or repair goods proven to be faulty when purchased. b) Does not need to compensate – it is the buyer's risk.
10	Collateral for a loan is required: *a) To protect the interests of the lender. b) To keep certain people from entering business.
11	Which of the following is a business expense? a) Proprietor pays for a haircut. b) Proprietor buys lunch. *c) Proprietor pays for an advertisement of the business.

Note. *Correct answer.

Risk-taking was measured at T2 with a questionnaire of four items by Gomez-Mejia and Balkin (1989; adapted to the entrepreneurial context by Norton & Moore, 1998, $\alpha=.80$). Finally, **uncertainty avoidance** was measured with the organizational uncertainty avoidance values questionnaire by Hanges et al. (2003) that was adapted to the individual entrepreneurial context ($\alpha=.70$; T2).

4.2.4 STATISTICAL ANALYSES

We used lagged hierarchical regression analyses (Cohen & Cohen, 1983) for the clarification of causal relationships between operating in the informal sector at T1 and employment creation by T2. For the prediction of business owners who formalize their business, we

employed discriminant function analysis (Klecka, 1980).

4.3 RESULTS

Table 4.4 shows the intercorrelations of all variables. The correlation between the in/formal variables at T1 and T2 indicated high stability over time ($r=.86$, $p<.01$). Closer analysis showed that seven of the forty-three informal businesses at T1 (16%) had become formal at T2. The stability of the number of employees variables was also rather high ($r=.55$, $p<.01$). The intercorrelations of the independent variables that were hypothesized to predict business formalization (years of education, business practice knowledge, risk-taking, and uncertainty avoidance) were all significant (from $r=-.33$ to $r=-.42$, $p<.01$) — except for the correlation between risk-taking and business practice knowledge, which was only marginally significant ($r=.20$, $p<.10$).

The correlations between the number of employees variables (T1 and T2) and the in/formal variables (T1 and T2) were significant (from $r=.27$ to $r=.33$, $p<.01$), which is a first indicator in favor of Hypothesis 1 (Operating in the formal sector influences employment creation positively). Moreover, the independent variables years of education, business practice knowledge, risk-taking, and uncertainty avoidance (negative) were significantly correlated with the in/formal variables at T1 and T2 ($r=-.31$ to $r=.50$, $p<.01$) — a first indicator in favor of Hypothesis 2 (Formal business owners can be distinguished from their informal counterparts by the variables of the owner's years of education, business practice knowledge, risk-taking, and uncertainty avoidance).

Table 4.4:
Intercorrelations.

	1	2	3	4	5	6	7
1. In/formal 1998/99 ^a T1	—						
2. In/formal 2000/01 ^a T2	.86**	—					
3. Number of employees 1997/98 T1	.31**	.27**	—				
4. Number of employees 2000/01 T2	.33**	.31**	.55**	—			
5. Years of education T1	.50**	.45**	.15	.23*	—		
6. Business practice knowledge T2	.31**	.36**	.20 [†]	.30**	.39**	—	
7. Risk-taking T2	.39**	.37**	.21*	.30**	.40**	.20 [†]	—
8. Uncertainty avoidance T2	-.33**	-.31**	-.06	-.19 [†]	-.42**	-.33**	-.38**

Note. n ranged from 77 to 97. ^a Informal = 1, formal = 2. [†] $p<.10$. * $p<.05$. ** $p<.01$.

Table 4.5 displays the hierarchical regression analyses of in/formal 1998/99 on the number of employees 2000/01, controlling for the number of employees 1997/98. Being formal at T1 contributed significantly to the overall explained variance in number of employees at T2 ($\Delta R^2=.03$; $\beta=.18$, $p<.05$) when the number of employees in 1997/98 was controlled for. Hence, our data supports Hypothesis 1: Operating in the formal sector influences employment creation positively.

Table 4.5:
Hierarchical Regression Analysis of In/formal Business on the Number of Employees.

	Number of employees 2000/01 T2	
	β	β
Criterion variable T1 - 1 year		
Number of employees 1997/98	.55**	.50**
Predictor variable T1		
In/formal 1998/99 ^a		.18*
	R^2	.33
	ΔR^2	.03*

Note. ^a Informal = 1, formal = 2. * $p<.05$. ** $p<.01$.

For the discriminant function analysis, the T2 sample was divided into four sub-groups: The constant informal group (participants who were informal at T1 and T2, $n=29$), the informalization group (participants who were formal at T1 and informal at T2, $n=7$), the formalization group (participants who were informal at T1 and formal at T2, $n=7$), and the constant formal group (participants who were formal at both times, $n=54$). Discriminant function analysis does not assume equal sample sizes while the maximum number of independent variables should exceed the lowest group size by two (Klecka, 1980). With the lowest group size being seven and a number of independent variables of four, the assumption was fulfilled. Mann-Whitney-U tests were carried out to test for differences between the groups in the number of employees 1997/98 and 2000/01. Significant results were only found between the constant informal and the constant formal group: Constant formal businesses had significantly more employees in 1997/98 and in 2000/01 ($p<.01$).

Table 4.6 shows the four groups' means and standard deviations in the predictor variables. The groups constant informal, informalization, and formalization were similar in the variables years of education, and risk-taking while the group constant formal scored higher on

the respective variables. Additionally, the groups that had some contact with the formal sector (informalization, formalization, constant formal) scored higher on business practice knowledge than the constant informal group. Finally, on uncertainty avoidance the constant informal group was similar to the formalization group while the constant formal group was similar to the informalization group. For a closer examination of the mean differences the Scheffé test for multiple mean comparison was employed. The differences between the groups constant informal and constant formal were significant in all independent variables; namely years of education (constant formal higher, $p < .01$), business practice knowledge (constant formal higher, $p < .01$), risk-taking (constant formal higher, $p < .01$), and uncertainty avoidance (constant formal lower, $p < .01$). The means of the groups informalization and constant formal differed significantly in years of education (constant formal higher, $p < .05$) and risk-taking (constant formal higher, $p < .05$). All other mean comparisons were not significant.

Table 4.6:

Means and Standard Deviations of Discriminating Variables as a Function of Formalization.

Discriminating variables	T2 sample sub-groups							
	Constant informal n=29		Informal- ization n=7		Formali- zation n=7		Constant formal n=54	
	M	SD	M	SD	M	SD	M	SD
Years of education	9.64	2.43	9.67	2.07	10.29	3.04	13.04	3.26
Business practice knowledge	.71	.21	.85	.24	.86	.27	.87	.15
Risk-taking	2.5	.93	2.17	.86	2.82	1.02	3.50	1.27
Uncertainty avoidance	5.77	.81	5.03	1.74	5.45	.97	4.90	1.17

Note. Test of equality of group means (Wilks' Lambda) was significant on a $p < .05$ level for business questionnaire and uncertainty avoidance and on a $p < .01$ level for risk-taking and years of education.

Table 4.7 contains the function structure matrix. Wilks' Lambda for the functions 1 to 3 was significant on the $p < .01$ level.

Table 4.7:**Correlations Between Discriminating Variables and Discriminant Functions.
(Function Structure Matrix)**

Discriminating variables	Function 1	Function 2	Function 3
Years of education	.84	.12	-.29
Business practice knowledge	.65	.32	.32
Risk-taking	.49	-.71	.44
Uncertainty avoidance	-.48	.50	.55

Overall, the independent variables predicted 71.1% of the group memberships correctly: 72.4% of the constant informal group, 28.6% of informalization group, 0% of the formalization group, and 85.2% of the constant formal group (Table 4.8). Furthermore, even when participants changed from informal to formal or vice versa, the independent variables were powerful predictors for their ultimate group membership at T2: Only 28.6% of the informalization participants were classified in one of the formal at T2 groups (formalization, constant formal) and only 28.6% of the formalization participants were classified in one of the informal at T2 groups (constant informal, informalization). Therefore, we conclude that Hypothesis 2 (Formal business owners can be distinguished from their informal counterparts by the owner's years of education, business practice knowledge, risk-taking, and uncertainty avoidance) was largely supported.

Table 4.8:**Classification Analysis for Business Formalization.**

Actual group membership	n	Predicted group membership							
		Constant informal		Informal-ization		Formali-ization		Constant formal	
		n	%	n	%	n	%	n	%
Constant informal	29	21	72.4	0	0	0	0	8	27.6
Informalization	7	3	42.9	2	28.6	0	0	2	28.6
Formalization	7	2	28.6	0	0	0	0	5	71.4
Constant formal	54	8	14.8	0	0	0	0	46	85.2

Note. Overall percentage of correctly classified cases = 71.1%.

Finally, we analyzed at what point in time businesses became formal (Hypothesis 3: Owners who carry through the formalization of their business do so at an early stage of business development). Twenty-seven of the 59 formal businesses at T2 were so called shelf-

companies and had been registered before the actual operation was embarked upon (Table 4.9). Another 21 businesses were registered simultaneously to the business establishment and six were registered within one year after the start of the enterprise. After the one-year-time-frame where 91.5% had registered, business registrations became much less frequent and only one business was registered more than five years after its establishment. Hence, Hypothesis 3 was confirmed because business registration became unlikely if it had not taken place within the first year of business operation.

Table 4.9:

Date of Business Formalization in Relation to The Date of Business Establishment.

	Frequency T2 n=59 ^a	Cumulative percentage T2
Business registration ...		
... before business establishment	27	45.8
... simultaneously to business establishment	21	81.4
... within 1 year after business establishment	6	91.5
... 2 years after business establishment	1	93.2
... 3 years after business establishment	2	96.6
... 4 years after business establishment	1	98.3
... 14 years after business establishment	1	100.0

Note. $\chi^2=84.92$, $p<.01$. ^a 2 missing data.

4.4 DISCUSSION

This study provides empirical evidence for the causal relationship between operating a business in the formal sector and employment creation in an African country. Formal businesses employed more people than informal businesses at T1 as well as at T2. Moreover, being formal had a significant positive effect on the number of employees when the previous number of employees was controlled for in a regression analysis. Hence, we found confirmation for our hypothesis that operating in the formal sector influences employment creation positively. Formal businesses do not only tend to be bigger in size (cf. McPherson & Liedholm, 1996), they also create more employment than comparable businesses in the informal sector.

Furthermore, we developed a reliable battery of individual level indicators that allowed us to classify 85% of the actual constant formal group and 72% of the actual constant

informal group correctly. Owners of formal businesses had a better education and better business knowledge, were more risk-taking, and less uncertainty avoiding. Overall, 71% of our participants were correctly classified into four groups of in/formal businesses.

However, in the actual informalization group, two out of seven participants were classified as constant formal, three were categorized as constant informal, and only two (29%) were predicted correctly. In the actual formalization group, two out of seven participants were classified as constant informal, five were classified as constant formal, and none were classified correctly. Thus, we could not predict the transitions from the informal into the formal sector and vice versa. This indicates that our inventory for the identification of high potential business owners can and should be refined. Nevertheless, we could differentiate informal from formal business owners at T2 in the majority of cases and failing to predict the transition is not as much of a problem for practical, pragmatic purposes: The current test battery successfully classified 71% of the business owners who formalized their business (actual group membership) as formal at T2 (predicted group membership: constant formal).

Finally, we found that 81% of the formal businesses had also started out in the formal sector. This contradicts Neshamba (1997) who found 72% of his formal sector sample had graduated into formality. The discrepancy to Neshamba's results could be due to sample differences: All of Neshamba's 176 formal participants had manufacturing businesses while only 22 out of our 61 formal businesses at T2 operated in the manufacturing sector and only 9 out of these 22 relied on manufacturing only. Business diversification is a common strategy among African entrepreneurs to compensate for unstable markets (Hugon, 1990; Kiggundu, 2002). Although all of the 9 strictly manufacturing businesses had started out formally, the results of our unequal samples should not be compared. Moreover, our results confirm Hosier (1987, Kenyan study) and Daniels (1994, Zimbabwean study) who also found that the path from the informal into the formal sector is difficult and that only few businesses master the transition.

An additional 10% of the formal businesses had undergone the registration process by the end of the first year of business operation and only one participant had formalized the business more than four years after the business was set up. This suggests that the early phase in business development is where viabilities and opportunities are tried out and where management procedures and an enterprise culture are established. Thereafter, the business probably enters a phase of consolidation and fundamental changes such as business formalization and registration become less likely.

4.4.1 STRENGTHS AND LIMITATIONS

The longitudinal research approach is a strength of the study. With our longitudinal design, we could provide empirical evidence for the causal relationship between operating in the formal sector and employment creation. Furthermore, the successful discrimination of in/formal business owners is a first step towards understanding the formalization process of small businesses. After we established who does and who does not formalize their business, future research should investigate how to promote business formalization and what exactly the bureaucratic (e.g., labor legislation), economic (e.g., price controls), as well as psychological (e.g., reluctance to commit oneself) barriers to business formalization are.

Our sampling requirement of one or more employees is a limitation in so far as the majority of Zimbabwean enterprises in general (Mead & Liedholm, 1998), and probably even more so of informal enterprises, are one-person operations. However, this conservative procedure led to a sample of high-performing business owners which made the detection of differences between formal and informal owners more difficult and our results all the more valuable (cf. Cohen & Cohen, 1983).

4.4.2 FUTURE RESEARCH AND PRACTICAL IMPLICATIONS

The significant relationship between operating in the formal sector and the creation of employment in our Zimbabwean sample suggests opportunities for the economic development of Third World countries: A substantial 16% out of 43 informal participants at T1 had formalized their business by T2. While this quota is auspicious, further improvement should be aspired. Although the registration process is not a main issue of this article, we would still like to emphasize with others (e.g., Daniels, 1994; Jansson & Sedaca, 2000; Kapoor et al., 1997; Lachaud, 1994; van Dijk, 1992) the necessity to review regulations and registration procedures. Moreover, we found 9% out of 79 formal participants at T1 to have moved back from the formal into the informal sector by T2. Therefore, the net flux into the formal sector is less than the above mentioned 16%. Sector fluctuations and counter fluctuations, which were hitherto largely neglected, should be monitored and addressed by researchers as well as by policy makers.

Finally, our results also have implications for the training of small business owners. Even though training is unlikely to impact on the relatively inalterable variable years of education, there are training opportunities in the area of business practice knowledge which is a common weakness among informal (Mason, 1991) as well as formal business owners. For example, 47% of our sample's informal and 31% of the formal owners did not know how to

calculate profit. Psychological factors like risk-taking and uncertainty avoidance could also be addressed in entrepreneurship programs. Both risk-taking and uncertainty avoidance are manifestations of underlying values and beliefs that are modifiable if attended to by appropriate psychological training methods. Moreover, training should be provided before the business is started or in the early phases of business development in order to affect business formalization positively. While it is conceivable that the narrow one year time slot within which businesses are likely to register could broaden in the course of a training program, an early promotion of formal sector business conduct should be preferred until further empirical evidence is available.

4.4.3 CONCLUSION

Economic crises like the current Zimbabwean situation lead to an increased emergence of informal businesses (Yusuf & Schindehutte, 2000). Formalization of this entrepreneurial potential is crucial in order to turn them into an economic power that enhances the national economic prosperity and creates employment on a larger scale. One measure to strengthen the formal business sector is certainly to reduce bureaucratic hurdles (e.g., Jansson & Sedaca, 2000). However, the individual level of intervention is also important and should be recognized. Furthermore, entrepreneurship training programs should not only emphasize economic issues like 'business practice knowledge', but also cover psychological variables such as risk-taking and uncertainty avoidance.

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CHAPTER 5

Conclusion

This fifth and final Chapter summarizes the results of the studies presented in Chapter 2 to 4. First, however, we will address methodological issues of measuring psychological factors that influence the performance of small business owners. Every business owner faces unique opportunities as well as challenges and obstacles. Thus, psychological entrepreneurship research must employ research instruments that are capable of investigating and representing the individual entrepreneurial process adequately.

5.1 MEASURING PSYCHOLOGICAL DETERMINANTS OF ENTREPRENEURIAL PERFORMANCE

The appropriate measurement instruments for psychological determinants of entrepreneurial performance in Southern Africa (Zimbabwe and South Africa) was considered carefully. All findings presented in Chapter 2 to 4 are based on data that was mainly collected with standardized in-depth interviews. Since pilot studies found questionnaires difficult to administer in Africa, the appendant questionnaire was relatively short¹. The questionnaire was designed in English which is an official language in both Zimbabwe and South Africa. Questionnaire translations into the participants' indigenous languages were not an option as a multitude of vernaculars are spoken in both Zimbabwe and South Africa. The majority of the Zimbabwean (81%) and South African (61%) study participants held secondary school certificates (11 years of schooling or more). All Zimbabwean and most South African schools teach in English. Thus, only a few participants felt uncomfortable speaking English². Nonetheless, even for participants who had a good command of social English, the highly structured written English used in questionnaire items was difficult to understand. Conse-

¹ See appendix.

² Participants who felt uncomfortable speaking English were interviewed by local interviewers.

quently, filling out questionnaires took a long time (up to 90 minutes for a 5 pages questionnaire), was strenuous for the entrepreneurs, and led to fatigue. A further concern was that most Southern Africans are very polite and reluctant to deny a request. Hardly anybody would simply refuse to complete a questionnaire, even when they did not fully understand the questions asked. While this is a very likable cultural characteristic, we were worried about the validity of questionnaire measures in our sample when used excessively. Over and above the issue of language barriers, questionnaire items can only reveal the exact information that the items address. In order to operationalize, for instance, strategy process characteristics of business owners (cf. Chapter 3), questionnaire items would not have been appropriate. The measure of strategy process characteristics had to be proximal to actual entrepreneurial behavior and flexible enough to account for the individual strategy content (what exactly does the owner want to reach and with what particular strategy) as well as for the specific context of each business. In order to operationalize psychological determinants of entrepreneurial success we, thus, kept the use of questionnaire items to a minimum and employed combinations of both questionnaire and interview measures whenever possible (cf. method section Chapter 2).

The structured interview itself was worded in plain colloquial English³. The interviewers were trained to repeat their answers in (standardized) alternative wording any time they felt the participants had understanding problems. Hence, the face-to-face interview dialogue lead to a degree of mutual understanding than would have been impossible using questionnaires. Accordingly, the interviewers' ratings on how well the participants understood the interview questions did not indicate any misunderstandings⁴.

Whenever applicable, our interview techniques were designed along the guidelines for the situational interview (Latham & Saari, 1984; Latham & Sue-Chan, 1996). A situational interview is a structured interview that "[...] focuses on behavior oriented toward the future" (Motowidlo, Carter, Dunnette, Tippins, & co-authors, 1992, p.571). An example for measuring behavior toward the future was our operationalization of personal initiative with the overcoming barriers method (Frese, Kring, Soose, & Zempel, 1996; cf. Chapter 2). As suggested by Latham and Sue-Chan (1996), the overcoming barriers method used critical incidents that (A) were relevant in the African entrepreneurial context and (B) posed a dilemma to the participant. Participants had to come up with a solution to the dilemma. In response to the participants' answers, the interviewers introduced new barriers that revived the dilemma. Subse-

³ See appendix.

⁴ Means of the 5-point Likert items (interviewer evaluation questionnaire; cf. appendix) were M=4.27 at T1 and M=4.29 at T2.

quently, the participants' answers were rated separately for each critical incident by two independent raters. The overcoming barriers technique had been shown to have good construct validity (Fay & Frese, 2001; Frese, Fay, Hilburger, Leng, & Tag, 1997).

Another instance where we measured behavior toward the future with a structured situational approach was our operationalization of the participants' strategy process characteristics (cf. Chapter 3). For the strategy process characteristics, we did, however, not employ predefined critical incidents, but the goals and business objectives the participants had set for themselves. Thus, the personal relevance for the entrepreneurs was maximized. We then asked the participants how they would go about reaching their goals. Thereby, we obtained information on actual entrepreneurial goals and on the strategies that the participants intended to employ for the implementation of their goals. Intentions are good predictors of future behavior (Latham & Sue-Chan, 1999). The strategies were subsequently rated by two independent raters regarding the four types of strategy process characteristics (complete planning, critical point planning, opportunistic, reactive) on anchored 5-point Likert scales.

Four meta-analytic studies have shown that the mean corrected criterion validity of structured interviews in general (e.g., .60, Wiesner & Cronshaw, 1988) and of situational interviews in particular is high (.57, Huffcuff & Arthur, 1994; .47, Latham & Sue-Chan, 1999; .50, McDaniel, Whetzel, Schmidt, & Maurer, 1994). Considering our research interests and the characteristics of our sample of African entrepreneurs, the combination of a structured situational interviewing technique with selective questionnaire measures were appropriate and superior to a study design mainly relying on questionnaire measures. In the following, we will give a summarized overview of our findings and their practical implications.

5.2 PSYCHOLOGICAL DETERMINANTS OF ENTREPRENEURIAL PERFORMANCE

The findings presented in this dissertation (cf. Chapters 2 to 4), contribute to the body of evidence in the field of entrepreneurship research in three respects: First, our longitudinal study design enabled us to investigate not only causal relationships, but also reciprocal determinisms in the entrepreneurial processes that had not been taken into account previously. Longitudinal approaches in general and reciprocal analyses in particular are largely underrepresented in entrepreneurship research (Rauch & Frese, 2000). Second, by identifying psychological success determinants that are proximal to actual entrepreneurial behavior, we re-emphasized the importance of the individual in the entrepreneurial process (cf. Gartner, 1989;

Low & MacMillan, 1988). Finally, in investigating the performance of informal and formal sector small business owners in a developing country, we contribute quantitative longitudinal data that allows for causal interpretation to a research area that was hitherto mainly approached qualitatively.

5.2.1 A UNITARY CONCEPT OF ENTREPRENEURIAL ORIENTATION

In Chapter 2, we examined the notion of a single-factor EO construct in a sample of N=248 Zimbabwean and South African small business owners. Even though frequently used as a unitary concept (e.g., Covin & Slevin, 1986; Covin & Slevin, 1989; Dess, Lumpkin, & Covin, 1997; Wiklund, 1999), the appropriateness of a one-factor concept had not been addressed empirically before. Confirmatory factor analyses supported the idea of a single-factor EO construct that consists of learning- and autonomy orientation, competitive aggressiveness, innovative-, achievement-, and risk-taking orientation, and personal initiative.

Yet, the components of the overall EO construct were different for the two country sub-samples (Zimbabwe, South Africa) as well as for the sub-samples of formal (registered) and informal (unregistered) businesses. For the Zimbabwean sub-sample and for the informal sub-sample, competitive aggressiveness was not part of EO. This suggests that EO is influenced by the business environment (cf. Thomas & Mueller, 2000). The concept of EO and its components was developed in Western cultures and for Western business communities. Both, South Africa as well as the formal sub-sample operate on business standards that are comparable to the business conduct in Western economies (Thomas & Bendixen, 2000). In Zimbabwe and in the informal sector, however, business conduct is less similar to Western standards. The Zimbabwean economy continues to deteriorate since 1997 (Robertson, 2003). The currently hostile economic circumstances probably influence business owners' competitive aggressiveness. Anecdotal evidence suggests that many business owners view their competitors more as potential cooperators who provide a network that helps all of them to remain in business than as rivals. A similar argument holds in the informal sector. In the informal sector, business owners are not protected by the law, cannot access financial support, cannot advertise freely, and are not able to develop stable relationships with suppliers or customers (Jansson & Sedaca, 2000, Mambula, 2002). Cooperative relationships with ones' competitors might be necessary in the informal sector in order to stay in business. Thus, we think that competitive aggressiveness is not part of EO in Zimbabwe and the informal sector because it is not an adequate orientation in the respective business environment.

Extending EO by achievement- and learning orientation to a seven component con-

struct was fruitful. Confirmatory factor analyses showed that personal initiative invariably had the highest loadings on EO; the lowest loadings were found for competitive aggressiveness. The second and third most important components of EO were achievement orientation and learning orientation. Neither achievement- nor learning orientation had previously been considered by the predominant firm-level conceptualization of EO (cf. Lumpkin & Dess, 1996).

5.2.2 ENTREPRENEURIAL ORIENTATION, STRATEGY PROCESS CHARACTERISTICS, AND BUSINESS PERFORMANCE

Cross-sectionally, EO and its components were good predictors for business performance (Chapter 2). Especially relevant for small business success were the achievement orientation and the personal initiative of the owner. Both achievement orientation and personal initiative are individual orientations that can be enhanced by psychological training methods (Miron & McClelland, 1979; Frese, Garman, Garmeister, Halemba, & co-authors, 2002).

Longitudinally, we found the causal effect from EO on business performance to be mediated by complete planning, critical point planning, and reactive strategy process characteristics of the business owner (Chapter 3). Strategy process characteristics are action templates that are more proximal to actual entrepreneurial behavior than EO (cf. Kanfer, 1992). Hence, EO influences business performance only via the manner of implementation, the strategy process characteristics of the owner.

Furthermore, we found positive reciprocal determinisms (Bandura, 1978) between EO and complete planning strategy process characteristics on the one hand and business performance on the other hand. Hence, EO and complete planning strategy process characteristics facilitate business success. In turn, business success strengthens the owners' EO and complete planning strategy process characteristics. For reactive strategy process characteristics, the reciprocal determinism was negative: Reactive strategy process characteristics lead to low business performance and low performance increases the owners' success-obstructive reactive strategy process characteristics. Thus, we found reciprocal processes that suggest the existence of upward and downward spirals (cf. Lindsley, Brass, & Thomas, 1995).

Opportunistic strategy process characteristics had no direct impact on business performance. Yet, the relationship was moderated by EO: For business owners low on EO, opportunistic strategy process characteristics have a positive effect on business performance. Highly entrepreneurial owners, on the other hand, are better advised to structure their strategies and to approach business more planningly.

Overall, the influence of complete planning strategy process characteristics was the strongest and the most consistent influence across performance measures. Furthermore, com-

plete planning strategy process characteristics mediated the influence of EO on business performance. Thus, entrepreneurship support programs should concentrate on enhancing the complete planning strategy process characteristics of small business owners. Moreover, our findings indicate that entrepreneurship programs should not attempt to increase business owners' EO without also addressing their strategy process characteristics. An increase in EO could be fatal for business owners who employ opportunistic strategy process characteristics because for them, high EO leads to a decrease in business performance.

5.2.3 INFORMAL AND FORMAL BUSINESSES

While Chapter 2 and Chapter 3 addressed psychological determinants of business performance in an African environment, Chapter 4 shifted the perspective to an aspect that is more particular for developing countries: The issue of entrepreneurial performance in the formal and informal businesses sector. Our longitudinal data provides empirical evidence for the causal relationship between operating a business in the formal sector and the creation of employment. Formal businesses are not only bigger in terms of the number of their employees. Over time, they also create more employment than their informal counterparts.

Furthermore, we established a reliable test battery of individual predictor variables that classified 71% of our participants correctly into four groups of in/formal businesses (constant informal, formalization, informalization, and constant formal). Formal business owners had a better school education, better practical business knowledge, were more risk-taking, and less uncertainty avoiding.

Lastly, we found that 81% of the formal sector businesses had been formal from the first day of their business operation. An additional 10% of the formal businesses had undergone the registration process by the end of the first year in business and only one participant had formalized the business more than four years after the business was set up. This suggests that the early phase in business development is where viabilities and opportunities are tried out and where management procedures and an enterprise culture are established. Thereafter, the business probably enters a phase of consolidation. After the first year of business operation, fundamental changes such as business formalization and registration become less likely.

Economic and political circumstance are certainly contextual aspects that influence individual entrepreneurial success. Nonetheless, even under adverse economic circumstance like in Zimbabwe, individual factors do influence the performance of small businesses owners. This dissertation provides empirical evidence that the contribution of the small businesses sector to economic and social prosperity is likely to increase through the promotion of

(A) psychological success determinants such as complete planning strategy process characteristics and EO, (B) formal sector business conduct as well as, (C) practical business knowledge (D) as early as possible in the entrepreneurial process.

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ERKLÄRUNG

Ich erkläre: Ich habe die vorgelegte Dissertation selbstständig und nur mit den Hilfen angefertigt, die ich in der Dissertation angegeben habe. Alle Textstellen, die wörtlich oder sinngemäß aus veröffentlichten oder nicht veröffentlichten Schriften entnommen sind, und alle Angaben, die auf mündlichen Auskünften beruhen, sind als solche kenntlich gemacht.

Gießen, den 3. Juli 2003

Stefanie I. Krauss

APPENDIX

A.1	The T1 Measurement Instrument	A-1
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Interview of small scale business entrepreneurs / business owners in Zimbabwe 1998/99
--

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 Prof. Dr. Christian Friedrich, Polytechnic of Administration of Giessen
 Dipl.-Psych. Stefanie Krauß, University of Giessen
 David Harrison, Human Resources, Harare

Interviews done by the University of Giessen and Human Resources

Start / Introduction

- "Can I talk to the owner?"
- "For how long do you own this business now?"
- "Can you tell me, how many employees you employ here in this business?" (Min. 1 employee, max. 50 employees)

"I would like to ask you to participate in a research project on business owners. It is not supported by anyone here in Zimbabwe; it is conducted by a German university. We are interested in how owners of a small business run their business. Of particular interest is how you make decisions. It is not only about financial issues. We are also interested in how you go about things, for example, deal with employees, make decisions about your products, marketing, etc."

"All of the information that you give us will be kept absolutely confidential."

"The interview will take about 2 hours. To show our gratitude, we can give you 200 Zim\$. All of those interviewed found it interesting to participate, because it gives you a chance to think about how you have done things and it may give you ideas of how to be more effective in the future. If you are interested in the results, we will send you a short report of our research, after we have finished our study."

"We would appreciate it, if we could tape record the interview."

Before you begin

- ⇒ make sure that background sounds are reduced as far as possible.
- ⇒ note: - the subject number (your personal number plus running number of this person) on all pages of your notes!
 - your name
 - date
 - time of interview start and after you've finished the time of interview end
- ⇒ questions marked with **(F)**: Fact information, no detailed report necessary
- ⇒ questions marked with **(D)**: Detailed description of the subject's words necessary - also and particularly his / her examples.

1. General Information

- 1.0.1 (F) What is your first language? (Shona, Ndebele, English)
 →if "Shona" or "Ndebele" got to 1.1
- 1.0.2 (F) Do you come from a Shona or from a Ndebele background?
- 1.1 (F) Are you the owner of this business?
- 1.1.1 (F) Are there any other owners?
- 1.2 (F) Did you start this business yourself?
- 1.3 (F) When did you start your business?
- 1.4 (F) How many employees do you have at the moment?
- 1.4.1 (F) How many of your employees are full-time employees?
- 1.4.2 (F) And how many are from your extended family?



If you notice that the business doesn't exist for at least one year or the owner doesn't have a minimum of one employee, **stop** the interview at this point. Sometimes it may be useful to actually see the employee or ask the employee as well.

- 1.5 (D) Which line of business are you in? (manufacturing, construction, trade, transport, renting rooms & flats, services, other)
 Please describe your products.
- 1.6.1 (F) How many hours do you work per week?
- 1.6.2 (F) How many months do you work per year?
- 1.7 (F) How much money did you have to start your business unit?
- 1.7.1 (F) How much of that was your own?
- 1.8.1 (F) Are you a member of the chamber of commerce?
- 1.8.2 (F) Are you member of a co-operative?
- 1.8.3 (D) Are you member of any other association society or club that helps you to enhance your business? Please specify.
- 1.9 (F) Do you have a written business plan? →if "no" got to 2.1
- 1.9.1 (D) What time period does your business plan cover?

2. Human Capital


- 2.1 (F) For how many years did you go to school?
- 2.1.1 (F) What's your highest degree of formal education?
- 2.1.2 (F) Have you ever received training concerning entrepreneurship or self-employment?
- 2.2 (F) Were you already self-employed before you started this business?
 →if "no" got to 2.3
- 2.2.1 (F) Were you self-employed in the same line of business?
- 2.3 (F) Were you employed before you started this business? →if "no" got to 2.4

- 2.3.1 (F) What positions did you hold before you started this business?
- 2.3.3 (F) Was the employment in the same line of business?
- 2.4 (F) Were you ever employed while you were a business owner?
- 2.5 (F) Is there any other person in the family, who is a business owner as well?
- 2.6.1 (F) Think of the time when you made the decision to become a business owner. Was there a threat to become unemployed?
- 2.6.2 (F) Did you become a business owner because of that?
- 2.7 (F) What is your age?

3. Targets, Goals, Strategies


"In the following we are interested in your goals for your business. (What are you most interested in? What targets do you have? What do you want to achieve in your business?)

We have written down a number of goals that have been shown to be important. We would like to know, **which ones are most important for your business** and which ones are least important. Please bring these cards into an order of importance. Start with the most important one, then select the second most important one, etc.


-  Write down the ranking of the cards: G1 "show initiative", G2 "new marketing strategy", G3 "improve...", G4 "perform better than competitors", G5 "expanding", G6 "make more profit".

In the following, discuss the two most important goals (no.1 and no.2) in detail with regard to goal specificity, goal difficulty, and strategy.

- 3.1 (D) Can you tell me a bit more about your goals in this area (**point to goal no.1**); what do you want to achieve in this area? What do you aim for?

-  Be sure not to suggest any specificity! If no answer, repeat the question twice - "what-question".

- 3.1.3 (D) Do you think this is a goal which is difficult to achieve or is it easy to achieve? (prompt: Do you think that your competitors have easier or harder ones?)

-  Don't stop until you know how specific and how difficult the goal is!


In the following discuss the strategies of goal no.1 in detail. You need to know:

- any / how much planning
- how much proactiveness
- how much reactivity, so you can make a decision on "reactive", "opportunistic", "complete planning", and "critical point planning".

- 3.3.1-10 (D) You have said:... (**repeat the goals and subgoals S has developed**). How do you go about to achieve this goal / these goals? or How do you reach this goal? or How do you do it?

(D) What have you already done to achieve this goal? (possibly ask this question twice; ask for examples)


(D) How have you done this in the past?

-  Ask for concreteness, realism, planning and proactiveness **prompts:** What do you mean by? Can you give me an example? Can you give me an example for ...? Do you


want to do it differently in the future, how? **general prompt:** repeat what S just said. **Don't say** e.g. "Are you planning this in detail?" **Don't stop until you know, which strategy is used here** (oppor, critp, compl, react)

Now the same for goal no.2

3.1 (D) Can you tell me a bit more about your goals in this area (**point to goal no.2**); what do you want to achieve in this area? What do you aim for?

 Be sure not to suggest any specificity! If no answer, repeat the question twice - "what-question".

3.2.3 (D) Do you think this is a goal which is difficult to achieve or is it easy to achieve? (prompt: Do you think that your competitors have easier or harder ones?)

 Don't stop until you know how specific and how difficult the goal is!


In the following discuss the strategies of goal no.2 in detail. You need to know:

- any / how much planning
- how much proactive
- how much reactive, so you can make a decision on "reactive", opportunistic", "complete planning" and "critical point planning".

3.4.1-10 (D) You have said:... (**repeat the goals and subgoals S has developed**). How do you go about to achieve this goal / these goals? or How do you reach the goal? or How do you do it?


(D) What have you already done to achieve this goal? (possibly ask this question twice; ask for examples)

(D) How have you done this in the past?

 Ask for concreteness, realism, planning and proactiveness **prompts:** What do you mean by? Can you give me an example? Can you give me an example for ...? Do you want to do it differently in the future, how? **general prompt:** repeat what S just said. **Don't say** e.g. "Are you planning this in detail?" **Don't stop until you know, which strategy is used here** (oppor, critp, compl, react)

4. Common Problems per Business Area

4.0 "In the following we use this set of blue cards and would like to know (again) which cards you find important. However, this time it is not the goals, but business areas. When you think and worry about your business, which area is it that you are worrying about most often? Which are the areas which make you have a "headache" from time to time? And which areas do you not think about much and do not worry about?"

 Present the **blue cards** and ask to order them in importance. Probably you'll have to explain personnel and suppliers. (cards: P1 "customers", P2 "suppliers", P3 "competitors", P4 "products", P5 "marketing & pricing", P6 "personnel", P7 "equipment")

Point to most important card

4.1.1 /4.1.2 **(D)** In the past, what problems or difficulties did you have to deal with in this area? (**prompt:** Why was it a difficulty or problem?)

4.1.3 / 4.2.1 **(D)** How did you manage it? (important: effectiveness, problem orientation, anticipation, preventive action)

Show **various answer scales**

4.2.3 **(F)** When you think of this problem, how sure are you that you can successfully manage this problem in the future?

0% — 10% — 20% — 30% — 40% — 50% — 60% — 70% — 80% — 90% — 100%
not at all sure very sure

Point to second most important card

4.1.1 /4.1.2 **(D)** In the past, what problems or difficulties did you have to deal with in this area? (**prompt:** Why was it a difficulty or problem?)

4.1.3 / 4.3.1 **(D)** How did you manage it? (important: effectiveness, problem orientation, anticipation)

Show **various answer scales**

4.3.3 **(F)** When you think of this problem, how sure are you that you can successfully manage this problem in the future?

0% — 10% — 20% — 30% — 40% — 50% — 60% — 70% — 80% — 90% — 100%
not at all sure very sure

5. Competition

5.1 **(D)** Do you offer anything that your competitors do not offer (e.g. a product, a special design, some special material, some service, some machine, anything)? (**prompt:** What exactly do you mean?; if no answer, repeat question.)

5.2 **(D)** Do your products or services fill a gap in the market? In what way?

5.3 **(F)** How many competitors do you have?

5.4 **(D)** Are they really competitors or are they really friends and colleagues?

5.5 **(D)** What is your relationship to your competitors? -- Do you want to beat them or are you nice to them? Do you attempt to push them out of your way or do you think of your competitors more in terms of the saying "live and let live"? (**prompts:** an example for "pushing them out of your way" is: You cut prices to undo your competitor you attempt to get a contract by any means, even if you have to hurt a competitor. An example for being nice to them is: You are in a way working together with your competitors.)

6. Innovativeness and Initiative

6.1 **(D)** Do you plan to change your product-mix or service-mix within the next six months or year? In what way? → If "no", go to 6.2

6.1.1 **(D)** Why do you plan to change your product mix?

6.2 **(D)** During the last two years, did you have a good or creative or innovative idea with regard to your business? What was this idea? (repeat if no answer or **prompt:** I mean

an idea where you said to yourself: Yes, that was a really good idea - it helps my business).

➔If "no", go to 6.3

6.2.3 / 6.2.4 (D) Was this your own idea or did you get it from someone else? Where did you get it from?

6.3 (D) "Now, I will present you a number of difficult situations. Tell me, what one could do in such a situation; use your creativity."

Present the first barrier of the first situation.

When the barrier is overcome, reply: "Pretend for a moment that this does not work."

If the subject is not satisfied with this, give a more specific barrier. Be sure that S accepts the problem as a problem.

If a barrier is not overcome, don't present a new barrier. Repeat the question / barrier again. If there is no answer, don't go further, but start with a new situation. The same applies when the subject repeats (a bit of a variation) of a previous solution.: e.g. the first solution was "I ask the supervisor for help", after the subsequent barrier the subject answers "I look for another supervisor". Ask for a different solution "What else can one do?". If no new solution comes up, stop and start with a new situation.

Repeat the whole procedure 4 times max. per scenario. If the fourth barrier of a situation is overcome, ask the subject: "Have you got any further ideas?"

Write a **detailed protocol** of subject's answers and your barriers. **Write down both, your questions and the subject's answers!** After the interview, count on the basis of the protocol the number of barriers overcome.

0	1 ("pretend this doesn't work...")	2 ("pretend this doesn't work...")	3 ("pretend this doesn't work...")	4 ("pretend this doesn't work...")	5 ("any further ideas....")
no barrier overcome, refused to answer.	1 barrier overcome	2 barriers overcome	3 barriers overcome	4 barriers overcome	5 or more barriers overcome

6.3.1 (D) Pretend for a moment that you are out of money and that you cannot buy the necessary supplies. What do you do? (also important: activeness)

6.3.2 (D) Pretend for a moment that you are producing a product with a machine. This machine breaks down and your workers cannot fix it. What do you do? (also important: activeness)

6.3.3 (D) Pretend for a moment that your supplier for a certain item went out of business. You are under high pressure to finish an order and he is the only one who can supply you with this necessary item. What do you do? (also important: activeness)

6.3.4 (D) Pretend for a moment that your landlord tells you to move your shop within two months. What do you do? (also important: activeness)

6.4 Do you try to get information about:

6.4.1 (F) the market development?

6.4.2 (F) products of the competitors?

6.4.3 (F) demands and needs of the customers?

6.4.4 (F) promising business ideas?

6.4.5 (F) business strategies?

6.4.6 (F) new ways to produce your product?

6.4.7 (F) tools and equipment that can improve the production?

6.4.8 (F) cheap supplies?

6.5 Where do you get the information from? **prompt:** How do you get this information? (also important: activeness!)

7. Leadership and Employees

7.1.1 - 6 (D) Do you do any of the following points with your employees:

- give perks (e.g. free lunch, transport, etc.) **examples!**
- give bonuses (on what basis) **example!**
- give targets (for what time period, how often) **example!**
- participation in decision making by the employees (in which decisions) **example!**
- hold meetings with employees (how often) **example!**

7.2.1 - 7 (F) How many employees, excluding yourself, did you have during the last 6 years or since your start? (full-time, part-time or apprentices)

	1993	1994	1995	1996	1997	1998	1999
full-time							
part-time / apprentice							



You need to write down the numbers for each year separately. Use "X" if the business wasn't founded then and "0" if there were no employees in that particular year; count family members only if they are paid and have a regular job in the business.

7.2.8 How many employees did you have when you started you business?

7.3 (F) Do you or have you ever employed family members? (Write down whether currently or not! Also important: initial reaction.) → if "no", go to 7.3.3

7.3.1.1 (F) How are the employed family members related to you? (e.g. cousin, father, sister)

7.3.2 (D) How does / did it work?

7.3.3-7.3.6.5 (D) Do family members show different behaviour than other employees? In which way? (Write down the positive and negative behaviours.)

7.4 (D) Pretend you have a friend who wants to start his own business. What would you tell him regarding the employment of members of the extended family?

7.5 (D) How do you keep discipline amongst your employees in the business? Please give us some examples. (write down the examples!)

7.6 (F) Did you fire any employees in the last two years? →if "no", got to 7.6

7.6.1 (F) How many?

7.6.1.1-7.6.1.5 (D) What was the reason?

7.7 (D) Did any stealing by employees occur in your business? → if "no", go to 8.

7.7.1-7.7.2 (D) How did you notice it? (important here: extent of checking and concreteness of description!)

8. Difficulties / Problems and Environment

Now we'll talk about another area:

- 8.1 (D) If you could start your business again as you did in the year ..., what would you do differently? (also important: concreteness, evidence of learning)
- 8.2 (D) How do you make sure that everything is going well in your business? That your business is running well and prospering?
- 8.3 business environment: In the following we would like to know, what you think of your business environment.
- Use **answer sheet A** and record each answer. Explain what the numbers 1 to 5 mean on the answer sheet.
- 8.3.1 simplicity/complexity
- 8.3.2 hostility & friendliness
- 8.3.3 stability & predictability
- 8.3.4 controllability
- 8.3.5 phase in business cycle
- 8.4 (D) What do you think is your main advantage in the market in comparison to your competitors? (important here: concreteness, answered to the point, how strong an advantage)

9. Success

Before starting: assure the subject of confidentiality!!

Show **various answer scales**

- 9.1.1-9.1.5 (F) Has the number of customers from 199X to 199X increased, decreased, or did it stay the same? (same procedure for the comparison of each set of years)
- 9.1.6 (F) Compared to last year, has the number of your customers increased or decreased? (%)

Show **various answer scales**

- 9.2.1-9.2.5 (F) Have the sales from 199X to 199X increased, decreased, or did they stay the same? (same procedure for the comparison of each set of years)
- 9.2.6 (F) Compared to last year, has the amount of sold goods increased or decreased? (%)

Show **various answer scales**

- 9.3.1-9.3.5 (F) Has your profit from 199X to 199X increased, decreased, or did it stay the same? (same procedure for the comparison of each set of years)
- 9.3.6 (F) Compared to last year, has your profit increased or decreased? (%)
- 9.3.7 (F) Has your profit increased or decreased during the last 3 years? (%)
- 9.4 (F) How much of your profit do you monthly take out of your business for yourself? (%)
- 9.5 (F) Have you ever applied for a loan or asked family members or friends for a loan?
→ if "no", go to 9.5
- 9.5.0 (F) Did you get a loan? → if "no", go to 9.5
- 9.5.1-9.5.5 (F) Who gave you the loan?

9.6 (F) If a person had a job before his business: "When you compare your salary in your last employment with your income now, what percentage of your last (regular employment) income is your income now?"

9.7 (D) At start-up of your enterprise, did you face any legal problems or problems with the authorities? (to what extent?)

Now show **answer sheet B**.

9.8 (F) In all, how is the success of your business distributed in time

Now show **answer sheet C**.

9.9 (F) Do others say you are

9.10 (F) How successful are you as a business owner compared to your competitors?

9.11 (F) How satisfied are you with your work as a business owner? (☹...☺...☺)

9.12 (F) How satisfied are you with your current income? (☹...☺...☺)

9.13 (F) Please indicate which of the following two statements applies most to you. (business owner A & B)

9.14 (D) During the last year, during 1998, did you ask somebody to help you out with money for your business?

9.15.1 (D) During the last year 1998, could you always pay your employees the usual money or did you have to reduce it, delay it, or could you sometimes not pay? →if "no", got to 9.16

9.15.2 (F) How often did that happen?

9.15.3 (F) Did that also happen in 1997 or was it more frequently in 1998?

9.16.1 (F) Do you have to pay more or less for supplies than 1997?

9.16.2 (F) Can you increase the prices accordingly as you have to pay more for the supplies now?

now show **answer sheet D**

9.16.3 (F) Does your price increases lag behind of that of your suppliers? Please indicate in what way.

9.17 (F) Can you buy more or less for yourself this year in terms of food and other products compared to 1997?

9.18.1 (F) Do you rent out rooms in your house? →if "no", got to 9.19

9.18.2 (F) Did you take on new tenants during the last year?

9.19 (F) Have you got electricity?

9.20 (F) Have you got a phone line?

9.21 (F) Are you in a business directory (e.g. Bold Ads Business Directory or Directory Publishers)?

When you think of last year's sales:

9.22.1 (F) How many month did you have average sales?

9.22.2 (F) What is the sales level (Z\$) in months of average sales?

9.22.3 (F) How many month did you have low sales?

9.22.4 (F) What is the sales level (Z\$) in months of low sales?

9.22.5 (F) How many months did you have high sales?

9.22.6 (F) What is the sales level (Z\$) in months of high sales?

When you think of last week(if it is more appropriate to the subject, use last month and divide numbers by four when rating!!):

9.23.1 (F) What were your sales (Z\$) during the past week/month?

9.23.2 (F) What were your expenses (Z\$) during the past week/month?

9.23.3 (F) How much profit (Z\$) did you make past week/month?

9.23.4 (F) Was the past week a good, a bad, or an average week?

9.24 (F) Have you got a business card?

9.25 (D) How do you do your book-keeping to know how much profit you make?

9.26.1 (F) Do you own the land you operate your business from?

9.26.2 (F) Do you own any other land?

9.27.1 (F) How much money did you spend altogether on equipment (tools, machinery, vehicles, computers, furniture etc.)?

9.27.2 (F) If you sold that today, how much would it be worth?

9.27.3 (F) If you bought that today, how much would you have to pay for it?

9.28 (F) How much do you pay all in all to your workers/ employees every month?

9.29 (F) How much did you pay in all for your supplies last month?

10. Vignettes

10.1 (D) What would happen if somebody would pay you good money to take over your firm and would make you the manager of the firm. You would have the same income as now. Would you accept it? Why? (also important: autonomy orientation)

10.2.1 (D) Pretend you have a friend who owns an informal business (**explain:** no tax, not registered). He is thinking of making it formal. That is he will be registered, pay tax, and will get a sale's tax number. What should he do?

10.2.2 (D) What would you say are the advantages and disadvantages (positive and negative points) of registration. (**repeat once:** Any further advantages or disadvantages?)

10.2.3 (D) What are the two most important reasons for businesses not to register?

10.3.1 (F) Are you registered? Do you pay tax? →if "yes", got to 10.3.2
→if "no", got to 10.3.3

10.3.2 (F) When did you become registered?

10.3.3 (F) Why don't you become registered?

10.4 (F) Digit Span Test (Wechsler)

Two parts: straight and reverse/backward. The interviewer reads the first three digits (1. task, 1. trial). The digits are read with approximately one second between them. For every task both trials have to be completed. Therefore, the second trial digits are to be presented even if the subject couldn't complete the first trial digits. **Stop** if the subject couldn't complete either one of the trials.

- 10.4.1 "We would just like to do a little memory quiz: Can you just repeat the numbers that I now read to you."

task no.	1. trial	2. trial
1.	5-8-2	6-9-4
2.	6-4-3-9	7-2-8-6
3.	4-2-7-3-1	7-5-8-3-6
4.	6-1-9-4-7-3	3-9-2-4-8-7
5.	5-9-1-7-4-2-8	4-1-7-9-3-8-6
6.	5-8-1-9-2-6-4-7	3-8-2-9-5-1-7-4
7.	2-7-5-8-6-2-5-8-4	7-1-3-9-4-2-5-6-8

- 10.4.2 "Now you should reverse it. For example when I say 7-1-9, you say?" ... If the subject couldn't complete the example, correct him/her and give another example (3-4-8). Then start with the 1. trial of the 1. task.

task no.	1. trial	2. trial
1.	2-4	5-8
2.	6-2-9	4-1-5
3.	3-2-7-9	4-9-6-8
4.	1-5-2-8-6	6-1-8-4-3
5.	5-3-9-4-1-8	7-2-4-8-5-6
6.	8-1-2-9-3-6-5	4-7-3-9-1-2-8
7.	9-4-3-7-6-2-5-8	7-2-8-1-9-6-5-3

11. Other Issues

- 11.1 I would like to ask to give us your address: In no case will anybody else be informed about anything you told us - it's completely confidential. When you give us your address, we can send you a report on our results in about a year. Actually we would also like to visit you again in about 1½ years and find out how you have done in the meantime. (**Note down address!**)
- 11.2 Do you know a small business owner here in the area who is particularly successful? What is his/her name? (**Note down address and try to interview this person, but make sure that these people do not constitute more than ¼ of your interviewed group**)
- 11.3 Is it OK with you to ask a third person about your business? (assure confidentiality again; show questionnaire if necessary)
- Note down the end of interview time!**
- 11.4 Give out the questionnaire.

12. Additional Observations

Write down **additional observations** during the time S fills in the questionnaire. Also fill in **interviewer evaluation** and **review** your own notes for completeness.

Red Cards (Goals):

Show Initiative
(G1)

Expanding
(G5)

New Marketing Strategy
(G2)

Make More Profit
(G6)

Improve the Way to Produce a Product
(G3)

Perform Better than Competitors
(G4)

Blue Cards (Problems):

Customers
(P1)

Marketing & Pricing
(P5)

Suppliers
(P2)

Personnel
(P6)

Competitors
(P3)

Equipment
(P7)

Products
(P4)

**Interview of small scale business entrepreneurs / business owners
in Zimbabwe 1998/99
- various answer scales -**

0% — 10% — 20% — 30% — 40% — 50% — 60% — 70% — 80% — 90% — 100%
not at all sure very sure

1993	1994	1995	1996	1997	1998
increase	increase	increase	increase	increase	increase
decrease	decrease	decrease	decrease	decrease	decrease
same	same	same	same	same	same

**Interview of small scale business entrepreneurs / business owners
in Zimbabwe 1998/99
- answer sheet A -**

1) Simplicity vs. Complexity

cmplx

The environment can be seen as complex if a lot of things have to be taken into consideration and a lot of information is needed to do business (How difficult does your environment make it for you to decide something?). Can you show me on this scale, how complex your environment is?

very simple 1	2	3	4	5	6	very complex 7
-------------------------	---	---	---	---	---	--------------------------

2) Hostility vs. Friendliness

hosti

The environment can be seen as hostile, if there is a lot of pressure from competitors. Can you show me on this scale how hostile your environment is?

very little hostile 1	2	3	4	very hostile 5
---------------------------------	---	---	---	--------------------------

friend

The environment can be seen as friendly, if there are a lot of possibilities to do business and make investments. Can you show me on this scale, how friendly your environment is?

very little friendly 1	2	3	4	very friendly 5
----------------------------------	---	---	---	---------------------------

Can you show me on this scale how you would characterise the external environment within which your firm operates?

hostil1 Very safe, little threat to the survival of my firm.	(1) (2) (3) (4) (5) (6) (7)	Very risky, a false step can mean my firm's undoing.
--	-----------------------------	---

hostil2 Rich in investment and marketing opportunities.	(1) (2) (3) (4) (5) (6) (7)	Very stressful, exacting, hostile; very hard to keep afloat.
---	-----------------------------	---

3) Stability vs. Dynamics

dynami

The environment can be seen as dynamic, if it changes fast and future developments cannot be foreseen. Can you show me on this scale how dynamic your environment is?

very little dynamic 1	2	3	4	very dynamic 5
-------------------------------------	---	---	---	--------------------------

predic

Could you show me on this scale how well it is possible to predict the future of your business environment?

very little predictable 1	2	3	4	very predictable 5
---	---	---	---	------------------------------

4) Controllability

cntrl

How much influence do you have on your business environment?

very little controllable 1	2	3	4	very controllable 5
--	---	---	---	-----------------------------------

5) Business Cycle

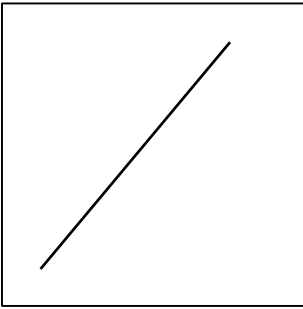
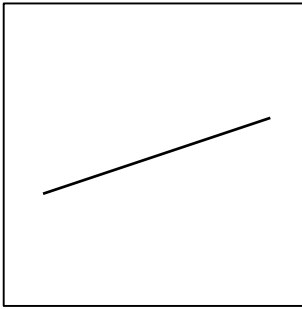
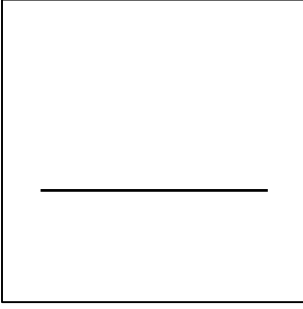
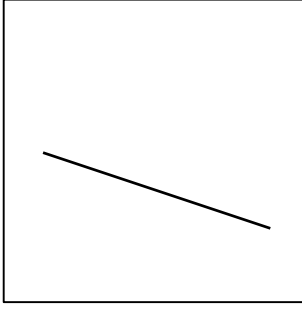
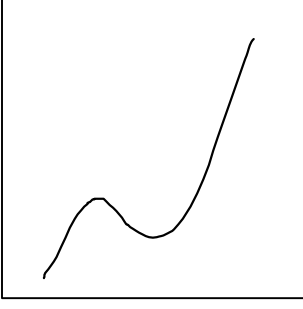
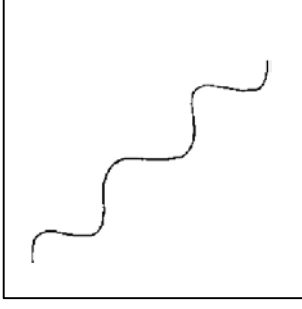
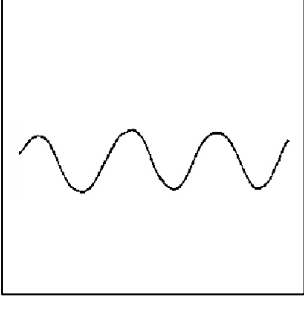
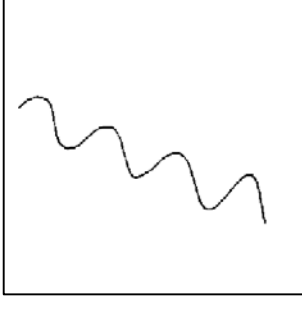
buseyc

Which of the following phases do you think your business is in?

- 1) () phase of economic slow-down/recession
- 2) () phase of stable business
- 3) () phase of growth

**Interview of small scale business entrepreneurs / business owners
in Zimbabwe 1998/99
- answer sheet B -**

In all, how is the success of your business distributed over time?
Please tick one.

<input type="checkbox"/> 1	 <p style="text-align: center;">Time</p>		<input type="checkbox"/> 2
<input type="checkbox"/> 3			<input type="checkbox"/> 4
<input type="checkbox"/> 5			<input type="checkbox"/> 6
<input type="checkbox"/> 7			<input type="checkbox"/> 8

business
develop-
ment

**Interview of small scale business entrepreneurs / business owners
in Zimbabwe 1998/99
- answer sheet C -**

sucoth

1) How successful do you think others say you are as a business owner?

not at all successful () 1	not that successful () 2	medium successful () 3	somewhat successful () 4	very successful () 5
--------------------------------------	------------------------------------	----------------------------------	------------------------------------	--------------------------------








sucsel

2) How successful are you as a business owner compared to your competitors?

not at all successful () 1	not that successful () 2	medium successful () 3	somewhat successful () 4	very successful () 5
--------------------------------------	------------------------------------	----------------------------------	------------------------------------	--------------------------------








satwor

3) How satisfied are you with your work as a business owner?

						
() -3	() -2	() -1	() 0	() 1	() 2	() 3

satinc

4) How satisfied are you with your current income?

						
() -3	() -2	() -1	() 0	() 1	() 2	() 3

In the following, please indicate on this scale for each pair of statement of business owners, which of the statements applies most to you.

I am

exactly like A () 1	more like A () 2	more like B () 4	exactly like B () 5
----------------------------	-------------------------	-------------------------	----------------------------

5)grogol

Business owner A:

"I am satisfied as long as my business provides a living for my family and myself."

Business owner B:

"I am satisfied as long as my business keeps growing and becomes bigger."

6)moti1

Business owner A:

"I just do this business as long as I cannot find another, better job."

Business owner B:

"I really like to be a business owner on my own: I don't want another job."

7)grogol2

Business owner A:

"If I earn enough money for my family, that is good enough."

Business owner B:

"I want my business to grow as much as possible."

8)moti2_r

Business owner A:

"I am really interested in what I do now as a business owner; I would not like to do anything else."

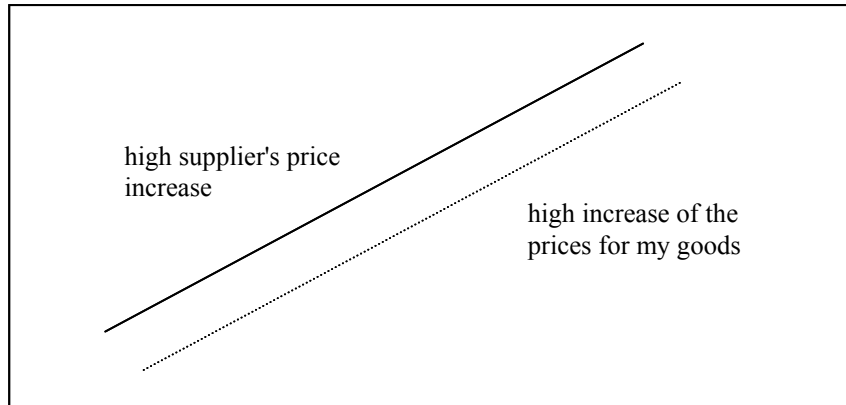
Business owner B:

"I don't care what exactly I work on as long as I earn money with it."

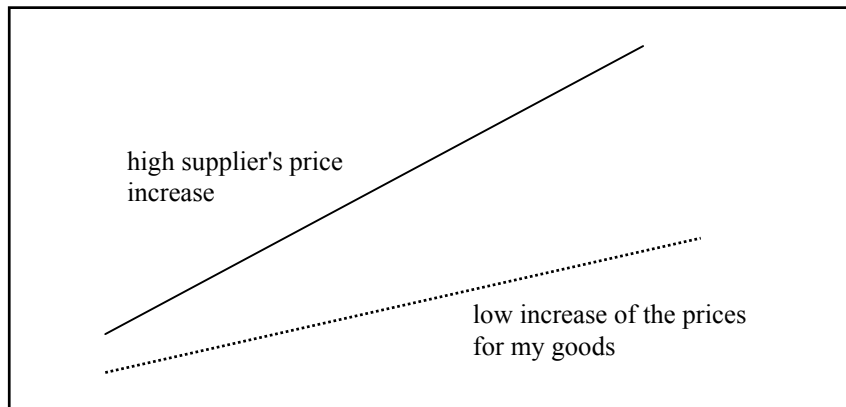
**Interview of small scale business entrepreneurs / business owners
in Zimbabwe 1998/99
- answer sheet D -**

Does your price increase lag behind of that of your suppliers? Please indicate in what way.

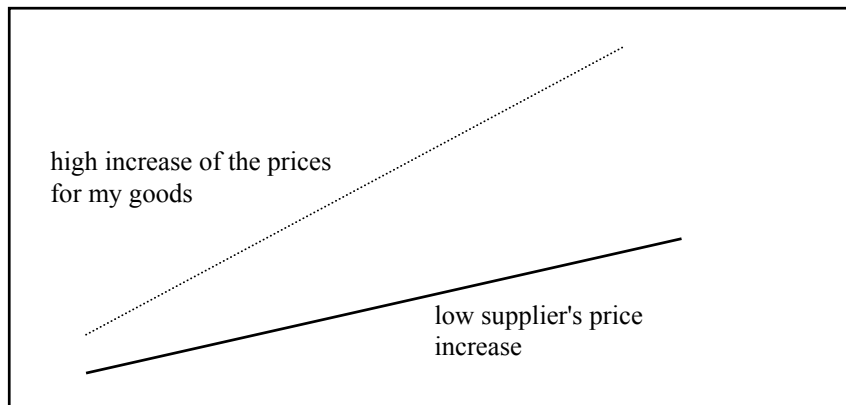
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1



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2



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3



Coding Scheme Zimbabwe 1998/99

If you cannot code something for lack of information or because it is not necessary to code (e.g. because of branched question), use **X**.

0. Interview Information

0.1 sno	subject number		interviewer no. & 001 - max.
0.2 intno	interviewer no.		01 = Michael 02 = Steffi
0.3 date	date of interview (d/m/y)		03 = Vicas 04 = Lynda
0.4 time	total time of interview (minutes)		05 = Klaus 06 = Stephan
0.5.1 rat1	rater 1		07 = Innocent
0.5.2 rat2	rater 2		
0.5.3 rat3	rater 3		
0.5.4 rat4	rater 4		

1. General Business Information

1.0 lang	first language	1 Shona	2 Ndebele	3 English	4 other African
1.0.1 ethn	Shona or Ndebele background?	1 Shona	2 Ndebele	3 other African	
1.1 ownbus	owner of the business	1 no	2 yes		
1.1.1 othown	other business owners	1 no	2 yes (active)	3 yes (non-ac.)	
1.2 selfest	business self- established	1 taken over	2 self- establ.		
1.3 est	year of establishment				
1.4 noemp1	current number of employees (over all)				
1.4.1 noemp2	number of full-time employees				
1.4.2 noemp3	no. of employees from the extended family				
1.5.1 libus1	line of business manufacturing: textiles	1 no	2 yes		
1.5.2 libus2	line of business manufacturing: wood	1 no	2 yes		
1.5.3 libus3	line of business manufacturing: metal	1 no	2 yes		
1.5.4 libus4	line of business manufacturing: other	1 no	2 yes		
1.5.5 libus5	line of business construction	1 no	2 yes		

1.5.6 libus6	line of business trade: retail / trade	1 no	2 yes
1.5.7 libus7	line of business trade: restaurants, bars, hotels, shabeens	1 no	2 yes
1.5.8 libus8	line of business services	1 no	2 yes
1.5.9 libus9	line of business other	1 no	2 yes
1.6.1 hours	number of working hours/week		
1.6.2 months	number of working months/year		
1.7 startc	starting capital		
1.7.1 ownperc	How much of starting capital was own (%)		
1.8.1 chacom	member of chamber of commerce	1 no	2 yes
1.8.2 coop	member of cooperative	1 no	2 yes
1.8.3 club	club/society/assoc. to enhance business	1 no	2 yes
1.9 buspla	written business plan	1 no	2 yes
1.9.1 platim	by plan covered time period	1 ≤ 1 year (operat.)	2 > 1 year (strategic)

2. Human Capital

2.1 eduyear	years of education										
2.1.1 edudeg	highest degree of formal education	1 none	2 grade 7	3 ZJC	4 O- level	5 A- level	6 poly- tech.	7 bache- lor	8 master	9 Ph.D. / D.Sc.	10 other
2.1.2 voctra	received vocational training	1 no	2 yes	if "no", go to 2.3							
2.2 earsel	self-employed before	1 no	2 yes								
2.2.1 slbus	self-employed in the same line of business	1 no	2 yes	if "no", go to 2.4							
2.3 earemp	employed before (or currently)	1 no	2 yes								
2.3.1 hiemp	highest employment position	1 CEO	2 manager	3 clerk	4 worker	5 housew.	6 other				
2.3.2 expman	estimated experience in management	1 none	2	3	4	5 very intense					
2.3.3 empslb	employment in the same line of business	1 no	2 yes								
2.3.4 skill	est. of transferable skills from earlier job	1 none	2	3	4	5 very much					
2.4 ebost	employment and bus. owner at same time	1 no	2 yes, currently		3 yes, during the starting phase			4 yes, during any other phase			
2.5 othfam	another family mem- ber bus. owner	1 no	2 yes								

2.6 unemp	bus. owner because unemployed otherwise	1 no	2 yes
2.7 age	age of subject		

3. Targets, Goals, and Strategies

3.0 redcar	goals: red cards order	1	2	3	4	5	6	
3.0.1 goal1	most important goal	1 show initiative	2 new marketing strategy	3 improve production	4 better than competitors	5 expanding	6 more profit	7 other
3.0.2 goal2	second most important goal	1 show initiative	2 new marketing strategy	3 improve production	4 better than competitors	5 expanding	6 more profit	7 other
3.0.3 goal3	third most important goal	1 show initiative	2 new marketing strategy	3 improve production	4 better than competitors	5 expanding	6 more profit	7 other
3.1 nogoal	no. of subgoals (goal 1&2)							
3.1.0 golmar	marketing and sales issues in the foreground (goal 1&2)	1 low	2	3	4	5 high		
3.1.1 spef1	goal specificity (goal1)	1 low	2	3	4	5 high	<p><u>high</u>: goal is a number or it is very clear when reached</p> <p><u>high</u>: very difficult when lots of effort necessary to reach - given the situation s is in.</p> <p><u>low</u>: there is no chance to reach the goal this way, given the situation s is in.</p> <p><u>high</u>: everything is planned out in detail, e.g. all necessary steps including some substeps are described.</p>	
3.1.2 diffr1	goal difficulty (goal1) rater estimate	1 low	2	3	4	5 high		
3.1.3 diffs1	goal difficulty (goal1) subject's estimate	1 low	2	3	4	5 high		
3.2.1 spef2	goal specificity (goal2)	1 low	2	3	4	5 high		
3.2.2 diffr2	goal difficulty (goal2) rater estimate	1 low	2	3	4	5 high		
3.2.3 diffs2	goal difficulty (goal2) subject's estimate	1 low	2	3	4	5 high		
3.3.1 detai1	detailedness of description (strategies goal1)	1 low	2	3	4	5 high		
3.3.2 reali1	realism (strategies goal1)	1 low	2	3	4	5 high		
3.3.3 plan1	amount of planning (strategies goal1)	1 low	2	3	4	5 high		
3.3.4 proacl	proactiveness (strategies goal1)	1 low	2	3	4	5 high		
3.3.5 actpal	action in the past (strategies goal1)	1 low	2	3	4	5 high		
3.3.6 compl1	complete planning (strategies goal1)	1 low	2	3	4	5 high		

3.3.7 critp1	critical point planning (strategies goal1)	1 low	2	3	4	5 high	<u>high</u> : one important crucial point is described in detail, everything else is left vague; however high goal orientation - keeps goal in mind.
3.3.8 oppor1	opportunistic (strategies goal1)	1 low	2	3	4	5 high	<u>high</u> : does not plan in advance, but actively looks for business chances and exploits them; easily deviates from a goal.
3.3.9 react1	reactive (strategies goal1)	1 low	2	3	4	5 high	<u>high</u> : goes from one issue /problem to the other; does not produce changes, but waits for them to happen and reacts then, no goal orientation.
3.3.10 clear1	can't decide for 1 clear strategy (none 4/5)	1 no	2 yes				
3.3.11 sure1	sureness of rater about judgement of strategies (goal1)	1 low	2	3	4	5 high	
3.4.1 detai2	detailedness of description (strategies goal2)	1 low	2	3	4	5 high	
3.4.2 reali2	realism (strategies goal2)	1 low	2	3	4	5 high	<u>low</u> : there is no chance to reach the goal this way, given the situation s is in.
3.4.3 plan2	amount of planning (strategies goal2)	1 low	2	3	4	5 high	
3.4.4 proac2	proactiveness (strategies goal2)	1 low	2	3	4	5 high	
3.4.5 actpa2	action in the past (strategies goal2)	1 low	2	3	4	5 high	
3.4.6 compl2	complete planning (strategies goal2)	1 low	2	3	4	5 high	<u>high</u> : everything is planned out in detail, e.g. all necessary steps including some substeps are described.
3.4.7 critp2	critical point planning (strategies goal2)	1 low	2	3	4	5 high	<u>high</u> : one important crucial point is described in detail, everything else is left vague; however high goal orientation - keeps goal in mind.
3.4.8 oppor2	opportunistic (strategies goal2)	1 low	2	3	4	5 high	<u>high</u> : does not plan in advance, but actively looks for business chances and exploits them; easily deviates from a goal.
3.4.9 react2	reactive (strategies goal2)	1 low	2	3	4	5 high	<u>high</u> : goes from one issue /problem to the other; does not produce changes, but waits for them to happen and reacts then, no goal orientation.
3.4.10 clear1	can't decide for 1 clear strategy (none 4/5)	1 no	2 yes				
3.4.11 sure2	sureness of rater about judgement of strategies (goal2)	1 low	2	3	4	5 high	

4. Common problems

4.0 blucar	problems: blue cards order	1	2	3	4	5	6	7
4.0.1 prob1	most important problem	1 customers	2 suppliers	3 competitors	4 products	5 marketing & pricing	6 personnel	7 equipment
4.0.2 prob2	second most important problem	1 customers	2 suppliers	3 competitors	4 products	5 marketing & pricing	6 personnel	7 equipment
4.0.3 prob3	third most important problem	1 customers	2 suppliers	3 competitors	4 products	5 marketing & pricing	6 personnel	7 equipment
4.1.1 noprob	how many problems described (card 1&2)							
4.1.2 dtailp	detailedness of description (card 1&2)	1 low	2	3	4	5 high		
4.1.3 dealtp	dealt efficiently / effectively with problems (card 1&2)	1 low	2	3	4	5 high		
4.1.4 antici	anticipation/fast detection of problems (card1&2)	1 late anticip.	2	3	4	5 early anticip		
4.1.5 preven	preventive action (card 1&2)	1 no prev. action	2	3	4	5 a lot prev. action		
4.1.6 promar	marketing and sales issues in the foreground (card 1&2)	1 low	2	3	4	5 high		
4.2.1 procop1	problem oriented coping (card1)	1 low	2	3	4	5 high		
4.2.2 selfef1	self-efficacy in % (card1)							
4.3.1 procop2	problem oriented coping (card2)	1 low	2	3	4	5 high		
4.3.2 selfef2	self-efficacy in % (card2)							

5. Competition

5.1 noissu	number of issues competitors don't have		if "0", go to 5.2					
5.1.1 concom	concreteness of description	1 low	2	3	4	5 high		
5.1.2 inocom	innovativeness	1 low	2	3	4	5 high		
5.2 gapor	gap / niche orientation (owner filled a gap)	1 low	2	3	4	5 high		
5.3 nocomp	number of competitors							
5.4 compfri	competitors or more friends	1 definit. competitors	2	3	4	5 more friends		
5.5 compag	competitive aggressiveness	1 live and let live	2	3	4	5 undo competitors		

high: describes speciality in detail and gives many examples.
high: uses new ideas for this line of business and this environment. the more unusual the idea the more innovative.

6. Innovativeness and Initiative

6.1 planch	plans change	1 no	2 yes	if "no", go to 6.2			
6.1.1 inocha	innovativeness of change	1 low	2	3	4	5 high	
6.1.2 realch	realism of change	1 low	2	3	4	5 high	
6.1.3 concino	concreteness of description (change)	1 low	2	3	4	5 high	
6.2 idea	had innovative idea	1 no	2 yes	if "no", go to 6.3			
6.2.1 conconcide	concreteness of description (idea)	1 low	2	3	4	5 high	
6.2.2 inoidea	innovativeness (idea)	1 low	2	3	4	5 high	
6.2.3 ideaelse	got idea from someone else	1 no	2 yes	if "no", go to 6.3			
6.2.4 else	this other person was	1 competitor	2 employee	3 customer	4 family	5 friend	6 other
6.3 undsta	overcoming barriers: understood question	1 not at all	2	3	4	5 very well	
6.3.1 nobar1	number of different ideas: "out of money"						
6.3.1.1 actbar1	how much did S stay active / how much did he delegate "out of money"	1 not at all active	2	3	4	5 very active	
6.3.2 nobar2	number of different ideas: "broken machine"						
6.3.2.1 actbar2	how much did S stay active / how much did he delegate "machine"	1 not at all active	2	3	4	5 very active	
6.3.3 nobar3	number of different ideas: "no supplies"						
6.3.3.1 actbar3	how much did S stay active / how much did he delegate "supplies"	1 not at all active	2	3	4	5 very active	
6.3.4 nobar4	number of different ideas: "landlord"						
6.3.4.1 actbar4	how much did S stay active / how much did he delegate "landlord"	1 not at all active	2	3	4	5 very active	
6.4.1 i_mark	seeks info about market development	1 no	2 yes				
6.4.2 i_comp	seeks info about competitors' products	1 no	2 yes				
6.4.3 i_cus	seeks info about customers' demands	1 no	2 yes				
6.4.4 i_idea	seeks info about promising bus. ideas	1 no	2 yes				
6.4.5 i_str	seeks info about bus. strategies	1 no	2 yes				
6.4.6 i_prod	seeks info about new ways to produce	1 no	2 yes				
6.4.7 i_tool	seeks info about tool & equipment	1 no	2 yes				

6.4.8 i_sup	seeks info about economy-price supply	1 no	2 yes			
6.5.1 s_cus	info source: customers	1 no	2 yes			
6.5.2 s_fam	info source: friends/family	1 no	2 yes			
6.5.3 s_comp	info source: competitors	1 no	2 yes			
6.5.4 s_medi	info source: media & advertisements	1 no	2 yes			
6.5.5 s_coop	info source: cooperative, etc.	1 no	2 yes			
6.5.6 s_jour	info source: professional journals	1 no	2 yes			
6.5.7 s_sup	info source: suppliers	1 no	2 yes			
6.5.8 s_oth	info source: other	1 no	2 yes			
6.6 feed	more than one source of info (feedback)	1 no	2 yes			
6.7 acti	estimate of activeness "info seeking"	1 reactive	2	3	4	5 active

7. Leadership and Employees

7.1 systot	systematic approach to motivation	1 not at all	2	3	4	5 very sys.
7.1.1 perk	gives perks (free transport, lunch, etc.)	1 none	2	3	4	5 a lot
7.1.2 bonus1	gives bonuses	1 no	2 yes	→ if "no", go to 7.1.3		
7.1.2.1 bonus2	gives regular bonuses (e.g.annual)	1 no	2 yes			
7.1.2.2 bonus3	gives bonuses on performance	1 no	2 yes			
7.1.2.3 bonus4	gives bonuses on bus. success	1 no	2 yes			
7.1.3 target	gives targets	1 none	2 irregular	3 monthly	4 weekly	5 daily
7.1.4 partic	employee participation in decision making	1 low	2	3	4	5 high
7.1.5 meet	holds meetings	1 none	2 irregular	3 monthly	4 weekly	5 daily
7.2.1 noem93	number of employees 1993		count part-timers appropriately; rate "0" when not yet founded or no employees.			
7.2.2 noem94	number of employees 1994					
7.2.3 noem95	number of employees 1995					
7.2.4 noem96	number of employees 1996					
7.2.5 noem97	number of employees 1997					
7.2.6 noem98	number of employees 1998					
7.2.7 noem99	number of employees 1999					

7.2.8 noemst	number of employees when started					
7.3 famem	employed / employs family members	1 no	2 yes, in the past	3 yes, currently	if "no", go to 7.3.1 and then 7.3.3	
7.3.1.1 corfam	employed family members belong(ed) to core family	1 no	2 yes, all of them	3 yes, some do	core family: child, brother, sister, cousin, mother, father, husband, wife, uncle, aunt	
7.3.2 worked	it worked	1 not at all	2	3	4	5 very well
7.3.3 difbeh	they show different behaviour	1 not at all	2	3	4	5 very much so
7.3.4 negpos	behaviours described are mostly negative vs. positive	1 very negative	2	3	4	5 very positive
7.3.5.1 reliab	more reliable	1 no	2 yes	positive behaviours mentioned		
7.3.5.2 talk	easier to talk to	1 no	2 yes			
7.3.5.3 undif	more understanding for difficulties	1 no	2 yes			
7.3.5.4 deman	less demanding	1 no	2 yes			
7.3.5.5 othpos	other positive behaviours	1 no	2 yes			
7.3.6.1 steal	steal more	1 no	2 yes	negative behaviours mentioned		
7.3.6.2 accept	do not accept profit for owner	1 no	2 yes			
7.3.6.3 arrog	arrogant towards other employees	1 no	2 yes			
7.3.6.4 diffic	more difficult to correct	1 no	2 yes			
7.3.6.5 othneg	other negative behaviours	1 no	2 yes			
7.4 advice	advice, to employ	1 definit. not	2	3	4	5 definit. yes
7.5 dissys	systematic approach to keeping discipline	1 not at all	2	3	4	5 very much
7.5.1 noexp	number of examples					
7.5.1.1 money	keeping discipline by money	1 no	2 yes	if "no", got to 7.7		
7.5.1.2 check	keeping discipline by frequent checking	1 no	2 yes			
7.5.1.3 rules	keeping discipline by a set of rules	1 no	2 yes			
7.5.1.4 disoth	keeping discipline by other means	1 no	2 yes			
7.6 firemp	has fired employee(s)	1 no	2 yes			
7.6.1 nofire	number of fired employees					

7.6.1.1 stealf	reason for firing: stealing	1 no	2 yes			
7.6.1.2 lazyf	reason for firing: laziness	1 no	2 yes			
7.6.1.3 drinkf	reason for firing: drinking	1 no	2 yes			
7.6.1.4 ostaff	reason for firing: overstaffed	1 no	2 yes			
7.6.1.5 firoth	reason for firing: other	1 no	2 yes			
7.7 theft	stealing occurred	1 no	2 yes	if "no", go to 8.		
7.7.1 concost	concreteness of description	1 low	2	3	4	5 high
7.7.2 checks	extent of checking	1 low	2	3	4	5 high

8. Difficulties / Problems and Environment

8.1 dodiff	would do things differently	1 no	2 yes	if "no", got to 8.2		
8.1.1 concid	concreteness of ideas	1 low	2	3	4	5 high
8.1.2 learn	evidence of learning from experience	1 low	2	3	4	5 high
8.2 proact	make sure bus. is well: proactiveness	1 low	2	3	4	5 high
8.3.1 complx	environment simplicity/complexity					
8.3.2.1 hosti	environment hostility					
8.3.2.2 friend	environment friendliness					
8.3.2.3 hostil1	environmental hostility 1					
8.3.2.4 hostil2	environmental hostility 2					
8.3.3.1 dynami	environment dynamic					
8.3.3.2 predic	environment predictability					
8.3.4 cntrl	environment controllability					
8.3.5 buscyc	business cycle					
8.4.1 concad	concreteness of de- scription of advantage	1 low	2	3	4	5 high
8.4.2 answer	question answered to the point	1 not at all	2	3	4	5 abso- lutely
8.4.3 advant	estimate of how strong advantage is compared to competitors	1 very weak	2	3	4	5 very strong

9. Success

9.1.1 cus34	comparison customers 1993/1994	1=1993 higher	2=1994 higher	3 same
9.1.2 cus45	comparison customers 1994/1995	1=1994 higher	2=1995 higher	3 same

9.1.3 cus56	comparison customers 1995/1996	1=1995 higher	2=1996 higher	3 same	
9.1.4 cus67	comparison customers 1996/1997	1=1996 higher	2=1997 higher	3 same	
9.1.5 cus78	comparison customers 1997/1998	1=1997 higher	2=1998 higher	3 same	
9.1.6 cus98	decrease / increase of customers 1997-98/9	1 decrease	2 increase	3 same	
9.1.6.1 cus98a	% decrease sold goods 1997-1998/9				
9.1.6.2 cus98b	% increase sold goods 1997-1998/9				
9.2.1 sal34	comparison sales 1993/1994	1=1993 higher	2=1994 higher	3 same	
9.2.2 sal45	comparison sales 1994/1995	1=1994 higher	2=1995 higher	3 same	
9.2.3 sal56	comparison sales 1995/1996	1=1995 higher	2=1996 higher	3 same	
9.2.4 sal67	comparison sales 1996/1997	1=1996 higher	2=1997 higher	3 same	
9.2.5 sal78	comparison sales 1997/1998	1=1997 higher	2=1998 higher	3 same	
9.2.6 sal98	decrease / increase of sold goods 1997-98/9	1 decrease	2 increase	3 same	
9.2.6.1 sal98a	% decrease sold goods 1997-1998/9				
9.2.6.2 sal98b	% increase sold goods 1997-1998/9				
9.3.1 pro34	comparison profit 1993/1994	1=1993 higher	2=1994 higher	3 same	
9.3.2 pro45	comparison profit 1994/1995	1=1994 higher	2=1995 higher	3 same	
9.3.3 pro56	comparison profit 1995/1996	1=1995 higher	2=1996 higher	3 same	
9.3.4 pro67	comparison profit 1996/1997	1=1996 higher	2=1997 higher	3 same	
9.3.5 pro78	comparison profit 1997/1998	1=1997 higher	2=1998 higher	3 same	
9.3.6 pro98	decrease / increase of profit 1997-98/9	1 decrease	2 increase	3 same	
9.3.6.1 pro98	% decrease profit 1997-1998/9				
9.3.6.2 pro98	% increase profit 1997-1998/9				
9.3.7 indpro	increase / decrease profit (last 3 years)	1 decrease	2 increase	3 same	
9.3.7.1 decpro	% decrease profit (last 3 years)				
9.3.7.2 incpro	% increase profit (last 3 years)				
9.4 proout	% of profit taken out of business				
9.5 loapp	applied for loan	1 no	2 yes		if "no", got to 9.5
9.5.0 loan	got a loan	1 no	2 yes		if "no", got o 9.5

9.5.1 lobank	loan by bank	1 no	2 yes				
9.5.2 lofam	loan by family	1 no	2 yes				
9.5.3 lofri	loan by friend	1 no	2 yes				
9.5.4 logov	loan by government	1 no	2 yes				
9.5.5 longo	loan by ngo	1 no	2 yes				
9.5.6 othlo	lone by other	1 no	2 yes				
9.6 percinc	% of last employment income						
9.7 govint	extent of government interference	1 none	2	3	4	5 great extent	
9.8 dissuc	distribution of success (graphs sheet)						
9.9 sucoth	others say about success						
9.10 sucsel	how successful compared to competitors						
9.11 satwor	satisfied with work						
9.12 satinc	satisfied with current income						
9.13.1 grogo1	growth goal 1 (bus. owner A vs. B)						
9.13.2 moti1	motivation 1 (business owner A vs. B)						
9.13.3 grogo2	growth goal 2 (bus. owner A vs. B)						
9.13.4 moti2	motivation 2 (business owner A vs. B)						
9.14 kohle	asked someone for money 1997	1 no	2 yes				
9.15.1 payemp	could pay employees 1998	1 no pay	2 reduced	3 yes	4 delayed	if "yes", go to 9.16	
9.15.2 payoft	how often did that happen						
9.15.3 pay67	more frequently in 1998	1 less	2 more	3 same			
9.16.1 supcos	pays more / less for supplies in 1997	1 less	2 more	3 same			
9.16.2 pricin	price increae according to supplies' costs	1 no	2 yes				
9.16.3 prilag	price increase lag						
9.17 buy	can you buy more / less for him/her self	1 less	2 more	3 same			
9.18 tenant	took on additional tenant 1997	1 no	2 yes				
9.19 elec	has electricity	1 no	2 yes				
9.20 phone	has a telephone line	1 no	2 yes				

9.21 indreg	is in an industry register	1 no	2 yes				
9.22.1 monav	no. of month: average sales						
9.22.2 salav	sales level: months of average sales						
9.22.3 monlo	no. of month: low sales						
9.22.4 sallo	sales level: months of low sales						
9.22.5 monhi	no. of month: high sales						
9.22.6 salhi	sales level: months of high sales						
9.23.1 lassal	sales during last week						
9.23.2 lasexp	expenses during last week						
9.23.3 laspro	profit last week						
9.23.4 lasav	was last week low, high, or average	1 low	2 average	3 high			
9.24 bucard	has business card	1 no	2 yes				
9.25 book	How do you do book-keeping	1 I have it in my head	2 I calculate it each month or at irregular intervals	3 I do professional book-keeping	4 My wife (or another fam. member) does the professional book-keeping	5 I have a professional book-keeper	
9.26.1 land1	Land S operates from belongs to him/her	1 no	2 yes				
9.26.2 land2	Owens other land	1 no	2 yes				
9.27.1 equip1	Money spent on equipment						
9.27.2 equip2	Value today 1						
9.27.3 equip3	Value today 2						
9.28 wages	Payment to workers (monthly)						
9.29 supply	Payment for supplies (last month)						

10. Vignettes

10.1.1 wldsel	would sell	1 no	2 yes			
10.1.2 autor	shows autonomy orientation	1 low	2	3	4	5 high
10.2.1 warn	would warn friend of registration	1 not at all	2	3	4	5 definitely
10.2.2.1 noneg	number of negative statements					
10.2.2.2 nopus	number of positive statements					

10.2.3.1 reg1	reason for not reg.: tax	1 no	2 yes				
10.2.3.2 reg2	reason for not reg.: fear of the unknown	1 no	2 yes				
10.2.3.3 reg3	reason for not reg.: too much hassle in the process of registration	1 no	2 yes				
10.2.3.4 reg4	reason for not reg.: doesn't have the skills to do it	1 no	2 yes				
10.2.3.5 reg5	reason for not reg.: psych. barriers (it's another world he can't even imagine being in)	1 no	2 yes				
10.2.3.6 reg6	reason for not reg.: other	1 no	2 yes				
10.3.1 formal	formal / informal sector	1 regis- tered	2 pays taxes	3 tax & reg.	4 doesn't know	5 no tax, not reg.	→if "not reg." go to 10.3.3.1 →if "reg." go to 10.3.2
10.3.2 became	when did S become formal			→now go to 10.4.1			
10.3.3.1 regre1	reason for not reg.: tax	1 no	2 yes				
10.3.3.2 regre2	reason for not reg.: fear of the unknown	1 no	2 yes				
10.3.3.3 regre3	reason for not reg.: too much hassle in the process of registration	1 no	2 yes				
10.3.3.4 regre4	reason for not reg.: doesn't have the skills to do it	1 no	2 yes				
10.3.3.5 regre5	reason for not reg.: psych. barriers (it's another world he can't even imagine being in)	1 no	2 yes				
10.3.3.6 regre6	reason for not reg.: other	1 no	2 yes				
10.4.1 dsforw	digit span test forward			2 points when S completed both trials of one task correctly. 1 point when S completed one of the two trials correctly. 0 points when S completed none of the two trials of one task. !! maximum of points for all seven tasks: 14 !!			
10.4.2 dsback	digit span test backward / reversed			2 points when S completed both trials of one task correctly. 1 point when S completed one of the two trials correctly. 0 points when S completed none of the two trials of one task. !! maximum of points for all seven tasks: 14 !!			

11. Other Issues

11.1 adres	gave us own address	1 no	2 yes
11.2 nomin	nominated someone else as successful entrepreneur	1 no	2 yes
11.3 approv	ask third person about business ok.	1 no	2 yes

**Interview of small scale business entrepreneurs / business owners
in Zimbabwe 1998/99 - interviewer evaluation**

subject no.:
interviewer:

rater
date:

rater (1st, 2nd, ...):

		1	2	3	4	5
1	understood the questions	didn't ()	()	()	()	understood ()
2	estimate of IQ.	low ()	()	()	()	high ()
3	active / inactive interview dialogue behaviour	passive ()	()	()	()	active ()
4	behaves actively / passively	passive ()	()	()	()	active ()
5	goal orientation (vs. easily gets diverted from goal)	low ()	()	()	()	high ()
6	goal specificity	low ()	()	()	()	high ()
7	goal difficulty	low ()	()	()	()	high ()
8	externally / internally controlled	externally ()	()	()	()	internally ()
9	motivation to act	low ()	()	()	()	high ()
10	postpones vs. acts quickly	postpones ()	()	()	()	acts quickly ()
11	ambitiousness	low ()	()	()	()	high ()
12	autonomous drive	low ()	()	()	()	high ()
13	innovativeness	low ()	()	()	()	high ()
14	level of initiative	low ()	()	()	()	high ()
15	risk taking	low ()	()	()	()	high ()
16	competitive aggressiveness	low ()	()	()	()	high ()
17	learning orientation	low ()	()	()	()	high ()
18	emotional stability	low ()	()	()	()	high ()
19	achievement orientation	low ()	()	()	()	high ()
20	personal integrity	low ()	()	()	()	high ()
21	estimate of time pressure (incl. how hard/easy it is to get an appointment)	low ()	()	()	()	high ()
22	standard of equipment	low ()	()	()	()	high ()
23	interaction with employees (hostile vs. friendly)	hostile ()	()	()	()	friendly ()
24	authoritarianism (power distance towards employees)	low ()	()	()	()	high ()
25	vision for company	no vision ()	()	()	()	detailed vision ()

		1	2	3	4	5	
26	ability to communicate vision	low ()	()	()	()	high ()	
27	wants to look good	low ()	()	()	()	high ()	
28	underplays vs. exaggerates his achievements	underplays ()	()	()	()	exaggerates ()	
29	linkage to formal sector	not present ()	()	()	()	present ()	
30	passive vs. active coping	passive ()	()	()	()	active ()	
31	energetic behaviour	low ()	()	()	()	high ()	
32	learned helplessness	low ()	()	()	()	high ()	
33	externalisation of responsibility (e.g. lack of capital, government, bad luck)	low ()	()	()	()	high ()	
34	3rd world business vs. 1st world business	3rd world ()	()	()	()	1st world ()	
35	interview was broken off at some point	no ()	yes ()				
36	S seemed to invent goals, he/she didn't really have	low ()	()	()	()	high ()	
37	S did the interview only for the money	not at all ()	()	()	()	definitely ()	
38	probability of non-family employees actually being family members	low ()	()	()	()	high ()	
39	learns slowly vs. learns quickly	slowly ()	()	()	()	quickly ()	
40	Personal Achiever (achievement oriented, hard working, loves his work)	low ()	()	()	()	high ()	
41	Real Manager (putting system into place, standardisations, organisational structures)	low ()	()	()	()	high ()	
42	Idea Generator (one idea in the foreground high expertise, Innovativeness, often market niche)	low ()	()	()	()	high ()	
43	Supersalesperson (extroverted, marketing & sales in the foreground, good communication skills, likes to work with others)	low ()	()	()	()	high ()	
44	interview was done in	English ()	mainly English ()	Shona ()	mainly Shona ()	Ndebele ()	mainly Ndebele ()
45	general impression of entrepreneurial success	low ()	()	()	()	high ()	
46	sureness of interviewer of his/her judgement (on entrepreneurial success)	low ()	()	()	()	high ()	
47	S was motivated - including filling in the questionnaire	low ()	()	()	()	high ()	
48	S understood the questionnaire	not at all ()	()	()	()	very well ()	
49	the business area was	rural ()	urban ()				

		1	2
50	business is located in a growth point or business site	no ()	yes ()
51	subject's gender	male ()	female ()
52	S was suggested by peer as a successful entrepreneur	no ()	yes ()
53	S participated in the pre-pilot study	no ()	yes ()

External Success Evaluation

subject number:

interviewer:

date:

1. How successful do you think is the person in question as a business owner in comparison with his/her competitors? (sucex1_r)

most successful business owner ()	belongs to the 10% most successful business owners ()	belongs to the upper 25% of successful business owners ()	belongs to the more successful half of business owners ()	belongs to the less successful half of business owners ()
--	--	---	--	---

2. How successful do you think is the person in question as a business owner in comparison with his/her competitors? (sucex2)

not at all successful () 1	not that successful () 2	medium successful () 3	somewhat successful () 4	very successful () 5
--------------------------------------	------------------------------------	----------------------------------	------------------------------------	--------------------------------

note: Multiple answers are possible!

3. What is your relationship to the person/business owner in question?

- a) () I am a neighbour. (who1)
- b) () I am the manager of the business site / industrial hive. (who2)
- c) () I am the manager of the growth point. (who3)
- d) () I am a competitor. (who4)
- e) () I am an employee. (who5)
- f) () I am a family member. (who6)
- g) () I am a member of the same co-operative. (who7)
- h) () I work at the chamber of commerce. (who8)
- i) () We are both members of the chamber of commerce. (who9)
- j) () I am a friend. (who10)
- k) () other: _____.(who11)

4. How long do you know each other? Please give an approximation of months and years.

(know)

To be filled in by the interviewer:	subject number: interviewer: date:
--	--

Please fill in this questionnaire by ticking the correct k as shown in the following example. Be cautious to answer every question. If you have any further questions, please ask the interviewer.

Example:

You answer question by ticking the correct answer. Here, a person has answered that the statement „I am taller than most other people“ is very false for him/her.

	very false				very true
I am taller than most other people.	-- <input checked="" type="checkbox"/> 1	- <input type="checkbox"/> 2	+/- <input type="checkbox"/> 3	+ <input type="checkbox"/> 4	++ <input type="checkbox"/> 5

Do the following statements apply to you?	Not at all	A bit	Neither a bit, nor a lot	A lot	Totally
erorc1 When I have made a mistake, I know immediately how to correct it.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
erorc2 When I do something wrong at work, I correct it immediately.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
erorc3 If it is at all possible to correct a mistake, then I usually know how to go about it.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
erorc4 I don't let go of the goal, although I may make mistakes.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
erors1 I find it stressful when I err.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
erors2 I am often afraid of making mistakes.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
erors3 I feel embarrassed when I make an error.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
erors4 If I make a mistake at work, I "lose my cool" and become angry.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
erors5 While working I am concerned that I could do something wrong.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

How do the following statements apply to you?	very false					very true
exloc1 To a great extent my life is controlled by accidental happenings.	--- () 1	-- () 2	- () 3	+ () 4	++ () 5	+++ () 6
inloc1 When I make plans, I am almost certain to make them work.	--- () 1	-- () 2	- () 3	+ () 4	++ () 5	+++ () 6
exloc2 Often there is no chance of protecting my personal interest from bad luck happenings.	--- () 1	-- () 2	- () 3	+ () 4	++ () 5	+++ () 6
exloc3 When I get what I want, it's usually because I'm lucky.	--- () 1	-- () 2	- () 3	+ () 4	++ () 5	+++ () 6
exloc4 People like myself have very little chance of protecting our personal interests when they conflict with those of strong pressure groups.	--- () 1	-- () 2	- () 3	+ () 4	++ () 5	+++ () 6
exloc5 It's not always wise for me to plan too far ahead because many things turn out to be a matter of good or bad fortune	--- () 1	-- () 2	- () 3	+ () 4	++ () 5	+++ () 6
exloc6 Whether or not I get to be a leader depends on whether I'm lucky enough to be in the right place at the right time.	--- () 1	-- () 2	- () 3	+ () 4	++ () 5	+++ () 6
inloc2 I can pretty much determine what will happen in my life.	--- () 1	-- () 2	- () 3	+ () 4	++ () 5	+++ () 6
inloc3 I am usually able to protect my personal interests.	--- () 1	-- () 2	- () 3	+ () 4	++ () 5	+++ () 6
inloc4 When I get what I want, it's usually because I worked hard for it.	--- () 1	-- () 2	- () 3	+ () 4	++ () 5	+++ () 6
inloc5 My life is determined by my own actions.	--- () 1	-- () 2	- () 3	+ () 4	++ () 5	+++ () 6
exloc7 It's chiefly a matter of fate whether or not I have a few friends or many friends	--- () 1	-- () 2	- () 3	+ () 4	++ () 5	+++ () 6

How do the following statements apply to you?	never	very seldom	seldom	sometimes	normally	nearly always	always
ndom1 I seek an active role in the leadership of a group.	() 1	() 2	() 3	() 4	() 5	() 6	() 7
ndom2 I strive to gain more control over the events around me at work.	() 1	() 2	() 3	() 4	() 5	() 6	() 7
ndom3 I strive to be "in command" when I am working in a group.	() 1	() 2	() 3	() 4	() 5	() 6	() 7

Do the following statements apply to you?	applies not at all to me	applies a little to me	medium	applies a lot to me	applies definitely to me
risk1_r I am not willing to take risks when choosing a job or a company to work for.	() 1	() 2	() 3	() 4	() 5
risk2_r I prefer a low risk/high security job with a steady salary over a job that offers high risks and rewards.	() 1	() 2	() 3	() 4	() 5
risk3_r I prefer to remain on a job that has problems that I know about rather than take the risk of working at a new job that has unknown problems even if the new job offers greater rewards.	() 1	() 2	() 3	() 4	() 5
risk4_r I view risk on a job as a situation to be avoided at all cost.	() 1	() 2	() 3	() 4	() 5

Do the following statements apply to you?	Not at all True	Barely True	Moderately True	Exactly True
selef1 I can always manage to solve difficult problems if I try hard enough.	() 1	() 2	() 3	() 4
selef2 If someone opposes me, I can find means and ways to get what I want.	() 1	() 2	() 3	() 4
selef3 It is easy for me to stick to my aims and accomplish my goals.	() 1	() 2	() 3	() 4
selef4 I am confident that I could deal efficiently with unexpected events.	() 1	() 2	() 3	() 4
selef5 Thanks to my resourcefulness, I know how to handle unforeseen situations.	() 1	() 2	() 3	() 4
selef6 I can solve most problems if I invest the necessary effort.	() 1	() 2	() 3	() 4
selef7 I can remain calm when facing difficulties because I can rely on my coping abilities.	() 1	() 2	() 3	() 4
selef8 When I am confronted with a problem, I can usually find several solutions.	() 1	() 2	() 3	() 4
selef9 If I am in a bind, I can usually think of something to do.	() 1	() 2	() 3	() 4
selef10 No matter what comes my way, I'm usually able to handle it.	() 1	() 2	() 3	() 4

Please complete the following statements by ticking the extension that applies most to you.

nach1 Working is something:	<input type="checkbox"/> I would rather not do	<input type="checkbox"/> I don't like doing very much	<input type="checkbox"/> I would rather do now and then	<input type="checkbox"/> I like doing	<input type="checkbox"/> I like doing very much
nach2_r Other people think I:	<input type="checkbox"/> work very hard	<input type="checkbox"/> work hard	<input type="checkbox"/> work pretty hard	<input type="checkbox"/> don't work very hard	<input type="checkbox"/> don't work hard
nach3_r At school they thought I was:	<input type="checkbox"/> very diligent	<input type="checkbox"/> diligent	<input type="checkbox"/> not always so diligent	<input type="checkbox"/> rather easy-going	<input type="checkbox"/> very easy-going
nach4_r I usually am:	<input type="checkbox"/> very busy	<input type="checkbox"/> busy	<input type="checkbox"/> not so busy	<input type="checkbox"/> not busy	<input type="checkbox"/> not busy at all
nach5 When doing something difficult:	<input type="checkbox"/> I give up very quickly	<input type="checkbox"/> I give up quickly	<input type="checkbox"/> I give up rather quickly	<input type="checkbox"/> I don't give up too soon	<input type="checkbox"/> I usually see it through
nach6_r If I have not attained my goal and have not done a task well then:	<input type="checkbox"/> I continue to do my best to attain the goal	<input type="checkbox"/> I exert myself once again to attain the goal	<input type="checkbox"/> I find it difficult to not lose heart	<input type="checkbox"/> I'm inclined to give up	<input type="checkbox"/> I usually give up
nach7_r I usually do:	<input type="checkbox"/> much more than I resolved to do	<input type="checkbox"/> a bit more than I resolved to do	<input type="checkbox"/> about as much as I resolved to do	<input type="checkbox"/> a little less than I resolved to do	<input type="checkbox"/> much less than I resolved to do

How do the following statements apply to you?

	very seldom	seldom	medium	often	very often
ini1 I actively approach problems.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
ini2 Whenever something goes wrong, I search for a solution immediately.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
ini3 Whenever there is a chance to get actively involved, I take it.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
ini4 I take initiative immediately even when others do not.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
ini5 I use opportunities quickly in order to attain my goals.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
ini6 Usually I do more than I am asked to do.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
ini7 I am particularly good at realising ideas.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

Do the following statements apply to you?

	applies not at all to me	applies a little to me	medium	applies a lot to me	applies definitely to me
tmgmt1 Before every working day I reserve some time to prepare and plan my work.	() 1	() 2	() 3	() 4	() 5
tmgmt2 I write down tasks, goals and dead-lines for accomplishing them.	() 1	() 2	() 3	() 4	() 5
tmgmt3 Every day I put down a priority list of the things to be done. I start working on the most important tasks first.	() 1	() 2	() 3	() 4	() 5
tmgmt4 I try to keep my workday as free as possible from disturbing telephone calls, unexpected visitors and ad hoc meetings.	() 1	() 2	() 3	() 4	() 5
tmgmt5 I am able to say no if others demand time from me although I have to finish important things.	() 1	() 2	() 3	() 4	() 5
emres1 I only interfere if I notice considerable deviation or unexpected situations. All normal tasks are in the responsibility of my employees.	() 1	() 2	() 3	() 4	() 5
emres2 My employees take over a lot of my responsibilities.	() 1	() 2	() 3	() 4	() 5
emres3 My employees inspect the quality of their work themselves.	() 1	() 2	() 3	() 4	() 5
emres4 My employees always know quickly what they have to do.	() 1	() 2	() 3	() 4	() 5
emres5 My employees look after the quality of their products, without me having to do anything about it.	() 1	() 2	() 3	() 4	() 5
emres6 My employees work very independently.	() 1	() 2	() 3	() 4	() 5
motem1 I encourage my employees to take their own initiative.	() 1	() 2	() 3	() 4	() 5
motem2 The relationship with my employees can be described as: mutual trust, respect, a certain degree of warmth and personal relationship.	() 1	() 2	() 3	() 4	() 5
motem3 I try to increase the performance of my employees by motivating them with my own activity.	() 1	() 2	() 3	() 4	() 5

Rejection Rate Documentation

date:

interviewer:

subject number:

note: multiple answers are possible!

1. Owner is not eligible for participation, because:

- a. he/she does not have any employees. (rej11)
- b. his/her business exists for less than one year. (rej12)
- c. other: _____ . (rej13)

2. Owner does not want to participate, because:

- a. he/she thinks the interview is too long. (rej21)
- b. he/she does not have the time. (rej22)
- c. of respondent fatigue (he/she is fed up with being interviewed). (rej23)
- d. he/she thinks the interview is a "trick" of the tax department. (rej24)
- e. he/she had bad experiences with similar interviews/projects. (rej25)
- f. other: _____ . (rej26)

3. Owner agreed to participate, but:

- a. did not show up for the appointment. (rej31)
- b. broke off the interview. (note at what point:
_____) (rej32)
- c. other: _____ . (rej33)

Interview of Small Scale Entrepreneurs / Business Owners in Zimbabwe 2000/01

Prof. Dr. Michael Frese, University of Giessen
 Prof. Dr. Christian Friedrich, Polytechnic of Administration of Giessen
 Dipl.-Psych. Stefanie Krauß, University of Giessen
 David Harrison, Human Resources, Harare

Interviews done by the University of Giessen and Human Resources

Start / Introduction

- "Can I talk to the owner?"
- "For how long do you own this business now?"
- "Can you tell me, how many employees you employ here in this business?" (Min. 1 employee, max. 50 employees)


"I would like to ask you to participate again in a research project on business owners. It is not supported by anyone here in Zimbabwe; it is conducted by a German university. We are interested in how owners of a small business run their business. Of particular interest is how you make decisions. It is not only about financial issues. We are also interested in how you go about things, for example, deal with employees, make decisions about your products, marketing, etc."

"All of the information that you give us will be kept absolutely confidential."

"The interview will take about 2 hours. To show our gratitude, we can give you 200 Zim\$. All of those interviewed found it interesting to participate, because it gives you a chance to think about how you have done things and it may give you ideas of how to be more effective in the future. If you are interested in the results, we will send you a short report of our research, after we have finished our study."

"We would appreciate it, if we could tape record the interview."

Before you begin

-  Make absolutely sure that the SAME person is interviewed again!! Rather have a missing document than risking a wrong person participating in the interview!
- ⇒ make sure that background sounds are reduced as far as possible.
- ⇒ note: - the subject number (your personal number plus running number of this person) on all pages of your notes!
 - your name
 - date
 - time of interview start and after you've finished the time of interview end
- ⇒ questions marked with **(F)**: Fact information, no detailed report necessary
- ⇒ questions marked with **(D)**: Detailed description of the subject's words necessary - also and particularly his / her examples.

1. General Information

- 1.0 (F) Are you Mr./Mrs. X?
- 1.1 (F) Are you the owner of this business?
 - 1.1.1 (F) Are there any other owners? (active, inactive?)
 - 1.1.2 (F) Were you the person I talked to last time, in 1998/99? →if "yes", go to 1.2
 - 1.1.3 (F) Is the owner I talked to still active in the business? →if "yes", try to make a new appointment with the appropriate person!
 - 1.1.4 (F) When did you take the business over? (day, month, year)
 - 1.1.5 (F) How much did you pay for it?
 - 1.1.6 (F) Are you a family member? →if "no", go to 1.2
 - 1.1.7 (F) How are you related to the former owner?
- 1.2 (F) Did you start this business yourself?
- 1.3 (F) When did you start your business?
- 1.4 (F) How many employees do you have at the moment?
 - 1.4.1 (F) How many of your employees are full-time employees?
 - 1.4.2 (F) And how many are from your extended family?
- 1.5 (D) Which line of business are you in? Please describe your products.
- 1.6.1 (F) How many hours do you work per week?
- 1.6.2 (F) How many months do you work per year?
- 1.6.3 (F) What are the opening hours of your business? (per week)
- 1.7.1 (F) Are you a member of the chamber of commerce?
- 1.7.2 (F) Are you member of a co-operative?
- 1.7.3 (D) Are you member of any other association society or club that helps you to enhance your business? Please specify.
- 1.8 (F) Do you have a written business plan? →if "no" got to 2.
 - 1.8.1 (D) What time period does your business plan cover?


2. Human Capital

- 2.1 (F) For how many years did you go to school?
 - 2.1.1 (F) What's your highest degree of formal education?
- 2.2 (F) Have you ever received training concerning entrepreneurship or self-employment?
- 2.3 (F) Were you ever employed while you were a business owner? (When?)
- 2.4 (F) What is your age?

3. Targets, Goals, Strategies


"In the following we are interested in your goals for your business. (What are you most interested in? What targets do you have? What do you want to achieve in your business?)

We have written down a number of goals that have been shown to be important. We would like to know, **which ones are most important for your business** and which ones are least important. Please bring these cards into an order of importance. Start with the most important one, then select the second most important one, etc.

 Write down the ranking of the cards: G1 "show initiative", G2 "new marketing strategy", G3 "improve...", G4 "perform better than competitors", G5 "expanding", G6 "make more profit".

In the following, discuss the two most important goals (no.1 and no.2) in detail with regard to goal specificity, goal difficulty, and strategy.

3.1 (D) Can you tell me a bit more about your goals in this area (**point to goal no.1**); what do you want to achieve in this area? What do you aim for?

 Be sure not to suggest any specificity! If no answer, repeat the question twice - "what-question".


 Show **various answer scales**

Now pick out the three most specific and precise subgoals of goal card no. 1 and ask the following question for each subgoal separately (one after the other). If there are less than three subgoals, ask for as many goals as possible.

"You said you want to achieve XXX ..."; "One of your goals is XXX ..."

3.1.3 (D) How sure are you to achieve this goal?

0% — 10% — 20% — 30% — 40% — 50% — 60% — 70% — 80% — 90% — 100%
not at all sure very sure

 Don't stop until you know how specific and how difficult the goal is!


In the following discuss the strategies of goal no.1 in detail. You need to know:

- any / how much planning
- how much proactiveness
- how much reactiveness, so you can make a decision on "reactive", opportunistic", "complete planning", and "critical point planning".

3.3.1-10 (D) You have said:... (**repeat the goals and subgoals S has developed**). How do you go about to achieve this goal / these goals? or How do you reach this goal? or How do you do it?

(D) What have you already done to achieve this goal? (possibly ask this question twice; ask for examples)


(D) How have you done this in the past?

 Ask for concreteness, realism, planning and proactiveness **prompts**: What do you mean by? Can you give me an example? Can you give me an example for ...? Do you want to do it differently in the future, how? **general prompt**: repeat what S just said.

Don't say e.g. "Are you planning this in detail?" **Don't stop until you know, which strategy is used here** (oppor, critp, compl, react)

Now the same for goal no.2

3.2 (D) Can you tell me a bit more about your goals in this area (**point to goal no.2**); what do you want to achieve in this area? What do you aim for?

 Be sure not to suggest any specificity! If no answer, repeat the question twice - "what-question".


 Show **various answer scales**

Now pick out the three most specific and precise subgoals of goal card no. 2 and ask the following question for each subgoal separately (one after the other). If there are less than three subgoals, ask for as many goals as possible.

"You said you want to achieve XXX ..."; "One of your goals is XXX ..."

3.2.3 (D) How sure are you to achieve this goal?

0% — 10% — 20% — 30% — 40% — 50% — 60% — 70% — 80% — 90% — 100%
not at all sure very sure

 Don't stop until you know how specific and how difficult the goal is!


In the following discuss the strategies of goal no.2 in detail. You need to know:

- any / how much planning
- how much proactive
- how much reactive, so you can make a decision on "reactive", opportunistic", "complete planning" and "critical point planning".

3.4.1-10 (D) You have said:... (**repeat the goals and subgoals S has developed**). How do you go about to achieve this goal / these goals? or How do you reach the goal? or How do you do it?

(D) What have you already done to achieve this goal? (possibly ask this question twice; ask for examples)

(D) How have you done this in the past?

 Ask for concreteness, realism, planning and proactiveness **prompts**: What do you mean by? Can you give me an example? Can you give me an example for ...? Do you want to do it differently in the future, how? **general prompt**: repeat what S just said. **Don't say** e.g. "Are you planning this in detail?" **Don't stop until you know, which strategy is used here** (oppor, critp, compl, react)

4. Competition

4.1 (D) Do you offer anything that your competitors, the people who sell or produce the same thing as you and who have similar customers, do not offer (e.g. a product, a special design, some special material, some service, some machine, anything)? (**prompt**: What exactly do you mean?; if no answer, repeat question.)

4.2 (D) Do your products or services fill a gap in the market? In what way? (Definition Gap: Innovative/unusual product/service which many customers want but only few firm offer)

4.3 (F) How many competitors do you have?

(D) Are they really competitors or are they really friends and colleagues?

To be judged by interviewer when coding!

4.4 (D) What is your relationship to your competitors? -- Do you want to beat them or are you nice to them? Do you attempt to push them out of your way or do you think of your competitors more in terms of the saying "live and let live"? (**prompts:** an example for "pushing them out of your way" is: You cut prices to undo your competitor you attempt to get a contract by any means, even if you have to hurt a competitor. An example for being nice to them is: You are in a way working together with your competitors.)

To be judged by interviewer when coding!

5. Innovativeness and Initiative

5.1 (D) Do you plan to change your product-mix or service-mix within the next six months or year? In what way? →If "no", go to 5.2

5.1.1 (D) Why do you plan to change your product mix?

5.2 (D) During the last two years, did you have a good or creative or innovative idea with regard to your business? What was this idea? (repeat if no answer or **prompt:** I mean an idea where you said to yourself: Yes, that was a really good idea - it helps my business).

→If "no", go to 5.3

5.2.3 / 5.2.4 (D) Was this your own idea or did you get it from someone else? Where did you get it from?

5.3 (D) "Now, I will present you a number of difficult situations. Tell me, what one could do in such a situation; use your creativity."

Present the first barrier of the first situation.

When the barrier is overcome, reply: "Pretend for a moment that this does not work." If the subject is not satisfied with this, give a more specific barrier. Be sure that S accepts the problem as a problem.

If a barrier is not overcome, don't present a new barrier. Repeat the question / barrier again. If there is no answer, don't go further, but start with a new situation. The same applies when the subject repeats (a bit of a variation) of a previous solution.: e.g. the first solution was "I ask the supervisor for help", after the subsequent barrier the subject answers "I look for another supervisor". Ask for a different solution "What else can one do?". If no new solution comes up, stop and start with a new situation. Repeat the whole procedure 4 times max. per scenario. This means you give **5** barriers (7.10.2000). If the fifth barrier of a situation is overcome, ask the subject: "Have you got any further ideas?"

Write a **detailed protocol** of subject's answers and your barriers. **Write down both, your questions and the subject's answers!** After the interview, count on the basis of the protocol the number of barriers overcome.

0	1 ("pretend this doesn't work...")	2 ("pretend this doesn't work...")	3 ("pretend this doesn't work...")	4 ("pretend this doesn't work...")	5 ("any further ideas....")
no barrier overcome, refused to answer.	1 barrier overcome	2 barriers overcome	3 barriers overcome	4 barriers overcome	5 or more barriers overcome

- 5.3.1 **(D)** Pretend for a moment that you are out of money and that you cannot buy the necessary supplies. What do you do? (also important: activeness)
- 5.3.2 **(D)** Pretend for a moment that you are producing a product with a machine. This machine breaks down and your workers cannot fix it. What do you do? (also important: activeness)
- 5.3.3 **(D)** Pretend for a moment that your supplier for a certain item went out of business. You are under high pressure to finish an order and he is the only one who can supply you with this necessary item. What do you do? (also important: activeness)
- 5.3.4 **(D)** Pretend for a moment that your landlord tells you to move your shop within two months. What do you do? (also important: activeness)

6. Leadership and Employees



Show **various answer scales**

6.1.1 - 7 **(D)** How confident are you that you can:


- lead people well?
- negotiate with fellow business men well?
- negotiate with customers well?
- keep an overview over your financial affairs well?
- do the pricing of your products well?
- communicate with other people well?
- convince customers to buy products well?

6.2.1 - 3 **(F)** How many employees, excluding yourself, did you have during 1998, 1999, 2000, and now? (full-time, part-time or apprentices)

	1998	1999	2000	2001
full-time				
part-time / apprentice				




You need to write down the numbers for each year separately. Use "X" if the business wasn't founded then and "0" if there were no employees in that particular year; count family members only if they are paid and have a regular job in the business.

- 6.3 (F) Do you or have you ever employed family members? (Write down whether currently or not!) → if "no", go to 6.4.1
- 6.3.1 (F) How are the employed family members related to you? (e.g. cousin, father, sister)
- 6.3.2 (D) How does / did it work?
- 6.4.1 (F) To whom should a man feel closest? To his wife or to his mother (father, brother)?
- 6.4.2 (F) If a man must choose between a job that he likes or a job which his parents prefer for him, which should he choose? The job he prefers or the job his parent prefer?
-  Show **various answer scales** and record each answer. Explain what the numbers 1 to 3 / 1 to 5 mean on the answer sheet.
- 6.4.3 (F) Kinship obligation 3
- 6.4.4 (F) Kinship obligation 4
- 6.4.5 (F) Kinship obligation 5

7. Difficulties / Problems and Environment

Now we'll talk about another area:

- 7.1 (D) If you could start your business again as you did in the year ..., what would you do differently? (also important: concreteness, evidence of learning)
- 7.2 Business environment: In the following we would like to know, what you think of your business environment. Your environment are your suppliers, your customers (komberedza), your competitors and all other people around you as well as your business area, the authorities, and the general situation.
-  Use **answer sheet A** and record each answer. Explain what the numbers 1 to 5 mean on the answer sheet.
- 7.2.1 simplicity/complexity
- 7.2.2 hostility & friendliness
- 7.2.3 stability & predictability
- 7.2.4 controllability
- 7.2.5 phase in business cycle
- 7.3 (D) What do you think is your main advantage in the market in comparison to your competitors? (important here: concreteness, answered to the point, how strong an advantage)
- 7.4 Imagine you had a friend who wanted to open a business just like yours. What would you advise your friend? Should he put money in a business like yours, or should he not?

8. Success

Before starting: assure the subject of confidentiality!!



Show **various answer scales**

- 8.1 **(F)** Has the number of customers from 1998 to 1999 increased, decreased, or did it stay the same? Compared to the previous year, has the number of your customers increased or decreased? (%; same procedure for the comparison of 1999 to 2000 and from 2000 to 2001.)



Show **various answer scales**

- 8.2 **(F)** Have the sales from 1998 to 1999 increased, decreased, or did they stay the same? Compared to the previous year, has the amount of sold goods increased or decreased? (%; same procedure for the comparison of 1999 to 2000 and from 2000 to 2001.)



Show **various answer scales**

- 8.3 **(F)** Has your profit from 1998 to 1999 increased, decreased, or did it stay the same? Compared to the previous year, has your profit increased or decreased? (%; same procedure for the comparison of 1999 to 2000 and from 2000 to 2001.)

- 8.4 **(F)** Has your profit increased or decreased during the last 3 years? (%)

- 8.5 **(F)** How much of your profit do you monthly take out of your business for yourself? (%)

- 8.6 **(F)** Have you ever applied for a loan or asked family members or friends for a loan?
→ if "no", go to 8.7

- 8.6.0 **(F)** Did you get a loan? → if "no", go to 8.7

- 8.6.1-8.6.6 **(F)** Who gave you the loan?

- 8.6.7 **(F)** How big was your loan? (note down each loan separately)

- 8.6.8 **(F)** In what year did you get your loan? (note down each loan separately)



Now show **answer sheet B**.

- 8.7 **(F)** In all, how is the success of your business distributed in time



Now show **answer sheet C**.

- 8.8 **(F)** Do others say you are

- 8.9 **(F)** How successful are you as a business owner compared to your competitors?

- 8.10 **(F)** How satisfied are you with your work as a business owner? (☹...☺...☺)

- 8.11 **(F)** How satisfied are you with your current income? (☹...☺...☺)

- 8.12 **(F)** Please indicate which of the following two statements applies most to you. (business owner A & B)

- 8.13 **(D)** During the last year, did you ask somebody to help you out with money for your business?

- 8.14.1 **(D)** During the last year, could you always pay your employees the usual money or did you have to reduce it, delay it, or could you sometimes not pay? →if "no", got to 8.15

- 8.14.2 (F) How often did that happen?
- 8.14.3 (F) Did that also happen in 1999 or was it more frequently last year, in 2000?
- 8.15.1 (F) Do you have to pay more or less for supplies than last year? →if "equal" or "less", got to 8.16
- 8.15.2 (F) Can you increase the prices accordingly as you have to pay more for the supplies now?



now show **answer sheet D**

- 8.15.3 (F) Does your price increases lag behind of that of your suppliers? Please indicate in what way.
- 8.16 (F) Can you buy more or less for yourself this year in terms of food and other products compared to last year?
- 8.17.1 (F) Do you rent out rooms in your house? →if "no", got to 8.18
- 8.17.2 (F) Did you take on new tenants during the last year?
- 8.18 (F) Have you got electricity?
- 8.19 (F) Have you got a phone line?
- 8.20 (F) Are you in a business directory (e.g. Bold Ads Business Directory or Directory Publishers)?
- 8.21 Make a table for average, low, and high months and fill it in together with participant

	No. of Months	Sales Level
Average		
Low		
High		

When you think of last year's sales:

- 8.21.1 (F) How many months did you have average sales?
- 8.21.2 (F) What is the sales level (Z\$) in months of average sales?
- 8.21.3 (F) How many months did you have low sales?
- 8.21.4 (F) What is the sales level (Z\$) in months of low sales?
- 8.21.5 (F) How many months did you have high sales?
- 8.21.6 (F) What is the sales level (Z\$) in months of high sales?

When you think of last week (if it is more appropriate to the subject, use last month and divide numbers by four when rating!!):

- 8.22.1 (F) What were your sales (Z\$) during the past week/month?
- 8.22.2 (F) What were your expenses (Z\$) during the past week/month?
- 8.22.3 (F) How much profit (Z\$) did you make past week/month?
- 8.22.4 (F) Was the past week a good, a bad, or an average week?
- 8.23 (F) Have you got a business card?

- 8.24.1 **(D)** How do you do your book-keeping to know how much profit you make?
- 8.24.2 **(D)** What experiences and qualifications do you have (has the person who does your book-keeping) in book-keeping?
- 8.25.1 **(F)** Do you own the land you operate your business from?
- 8.25.2 **(F)** Do you own any other land?
- 8.26.1 **(F)** How much money did you spend altogether on equipment (tools, machinery, vehicles, computers, furniture etc.)?
- 8.26.2 **(F)** If you sold that today, how much would it be worth?
- 8.26.3 **(F)** If you bought that today, how much would you have to pay for it?
- 8.27 **(F)** How much do you pay all in all to your workers/ employees every month?
- 8.28 **(F)** How much did you pay in all for your supplies last month?
- 8.29.1 **(F)** Do you have a personal bank account? →if "no", go to 8.29.3
- 8.29.2 **(F)** Do you use your personal bank account for business, too?
- 8.29.3 **(F)** Do you have a bank account only for your business?

9. Vignettes

- 9.1 **(D)** What would happen if somebody would pay you good money to take over your firm and would make you the manager of the firm. You would have the same income as now. Would you accept it? Why? (also important: autonomy orientation)
- 9.2.1 **(D)** Pretend you have a friend who owns an informal business (**explain:** no tax, not registered). He is thinking of making it formal. That is he will be registered, pay tax, and will get a sale's tax number. What should he do?
- 9.2.2 **(D)** What would you say are the advantages and disadvantages (positive and negative points) of registration. (**repeat once:** Any further advantages or disadvantages?)
- 9.2.3 **(D)** What are the two most important reasons for businesses not to register?
- 9.3.1 **(F)** Are you registered? Do you pay tax? →if "yes", got to 9.3.2
→if "no", got to 9.3.3
- 9.3.2 **(F)** When did you become registered?
- 9.3.3 **(F)** Why don't you become registered?
- 9.4 **(F)** ZVT Intelligence Test (short version)

"Now we would like to do a little quiz or puzzle. Do you mind participating?"

Show the sheet with the two exercises. "In this field (point to exercise one) you should connect the numbers in the correct order like you would count. 1, 2, 3, 4, etc. You should start at the "1" with your pen (demonstrate with the finger) and draw a line to number "2", then to number "3", from "3" to "4" and so forth. The next number can always be reached by a straight or diagonal line and is immediately neighbouring. The lines might also cross each other (show at the numbers 7,8,9, and 10).

The test is not about the beauty of your lines. What counts is speed. You should be as quick as possible under circumstances of highest demand. For that, you should first sit down comfortably. In order not to cover the numbers you should hold the pen at the far end. Now let's try **exercise 1**. When I tell you to, you start with number one and connect the numbers just as you count and as quickly as possible.

"Do you mind participating?" "Do you want to do it?"

"Let's start!"

Check whether the instructions have been understood (explain again if not): "This should get a bit better. Please sit down comfortably and try to find a position that allows you to be even faster. Let's try it again with **exercise 2**."

"Let's start!"

"Now we want to do the same test with more numbers. If you make a mistake, correct it very quickly. Remember this is about being fast." Now give out **test matrices A-D**. Time measurement begins when the participant draws the first line and ends when number 90 is reached. Take down the times for the single matrices on the exercise and protocol sheet. There should be no breaks between the test matrices.

"Let's start!"

10. Modernism

- 10.1 (F) If you were to meet a person who lives in another country a long way off, could you understand his way of thinking? (Y/N)
- 10.2 (F) Do you think a man can be truly good without having any religion at all? (Y/N)
- 10.3 (F) Do you belong to any organisation such as e.g., social clubs, unions, church organisations, political groups, or other groups? If Yes, what are the names of all organisations you belong to.
- 10.4 (F) If there were no kinds of obstacles, how much schooling (in years) do you think children of people like yourself should have?
- 10.5 (F) Would you tell me, what are the biggest problems you see facing your country?
- "Now we have a bit of a different question. Could you please tell me..."
- 10.6 (F) In what country is Moscow?



now show **answer sheet E**

- 10.7 (F) Interests
- 10.8 (F) Newspaper information
- 10.9 (F) New ways of doing things
- 10.10 (F) Qualification
- 10.11 (F) Important for future
- 10.12 (F) Earthquakes
- 10.13 (F) Doing something about it

10.14 (F) Opinions

11. Other Issues

11.1 Do you mind if we take down your address again and if your address changed, would you give us your new address? In no case will anybody else be informed about anything you told us - it's completely confidential. And again, when you give us your address, we can send you a report on our results in about a year. (**Note down address, but not in the type-written protocol! Extra file!**)

11.2 What province is your business in?

11.3 Is it OK with you that we ask a third person about your business? (assure confidentiality again; show questionnaire if necessary)



Note down the end of interview time!

11.4 Give out the questionnaire.



Questionnaires must be filled out under supervision!! Exceptions must be marked under Additional Observations. Do the ratings while participant fills out questionnaire!

12. Additional Observations

Write down **additional observations** during the time S fills in the questionnaire. Also fill in **interviewer evaluation** and **review** your own notes for completeness and do the **ratings**.

Red Cards (Goals):

Show Initiative
(G1)

Expanding
(G5)

New Marketing Strategy
(G2)

Make More Profit
(G6)

Improve the Way to Produce a Product
(G3)

Perform Better than Competitors
(G4)

**Interview of small scale entrepreneurs / business owners in Zimbabwe 2000/01
- various answer scales -**

0% — 10% — 20% — 30% — 40% — 50% — 60% — 70% — 80% — 90% — 100%
not at all sure very sure

1998	1999	2000	2001
increase	increase	increase	increase
decrease	decrease	decrease	decrease
same	same	same	same

100% - 75%----- 50% ----- 25% --- **SAME** -- 25% -----50%-----75%--100%
DECREASE **INCREASE**

ko3/R

Suppose a young man works in a factory. He has barely managed to save a very small amount of money. Now his first cousin comes to him and tells him that he needs money badly since he has no work at all. How much obligation do you think the factory worker has to share his savings with his first cousin?

a strong obligation 1	a not so strong obligation 2	no obligation 3
---------------------------------	--	---------------------------

ko4/R

Now suppose in the story it was not his first cousin, but a distant cousin who came to the factory worker and said he had no money. How much obligation do you think the factory worker has to share his savings with his distant cousin?

a strong obligation 1	a not so strong obligation 2	no obligation 3
---------------------------------	--	---------------------------

ko5/R

Some people say that a boy should be taught to give preference to a friend or relative, even when others have a more rightful claim. Others say a boy should be taught not to break an important rule even for a friend or relative. Do you think a boy should be taught to give preference to a friend or relative:

always 1	usually 2	sometimes 3	rarely 4	never 5
--------------------	---------------------	-----------------------	--------------------	-------------------

**Interview of small scale entrepreneurs / business owners in Zimbabwe 2000/01
- answer sheet A -**

1) Simplicity vs. Complexity

cmplx

The environment can be seen as complex if a lot of things have to be taken into consideration and a lot of information is needed to do business (How difficult does your environment make it for you to decide something?). Can you show me on this scale, how complex your environment is?

very simple 1	2	3	4	5	6	very complex 7
-------------------------	---	---	---	---	---	--------------------------

2) Hostility vs. Friendliness

hosti

The environment can be seen as hostile, if there is a lot of pressure from competitors. Can you show me on this scale how hostile your environment is?

very little hostile 1	2	3	4	very hostile 5
---------------------------------	---	---	---	--------------------------

friend

The environment can be seen as friendly, if there are a lot of possibilities to do business and make investments. Can you show me on this scale, how friendly your environment is?

very little friendly 1	2	3	4	very friendly 5
----------------------------------	---	---	---	---------------------------

Can you show me on this scale how you would characterise the external environment within which your firm operates?

<small>hostil1</small> Very safe, little threat to the survival of my firm.	(1) (2) (3) (4) (5) (6) (7)	Very risky, a false step can mean my firm's undoing.
---	-----------------------------	---

<small>hostil2</small> Rich in investment and marketing opportunities.	(1) (2) (3) (4) (5) (6) (7)	Very stressful, exacting, hostile; very hard to keep afloat.
--	-----------------------------	---

3) Stability vs. Dynamics

dynami

The environment can be seen as dynamic, if it changes fast and future developments cannot be foreseen. Can you show me on this scale how dynamic your environment is?

very little dynamic 1	2	3	4	very dynamic 5
-------------------------------------	---	---	---	--------------------------

predic

Could you show me on this scale how well it is possible to predict the future of your business environment?

very little predictable 1	2	3	4	very predictable 5
---	---	---	---	------------------------------

4) Controllability

cntrl

How much influence do you have on your business environment?

very little controllable 1	2	3	4	very controllable 5
--	---	---	---	-----------------------------------

5) Business Cycle

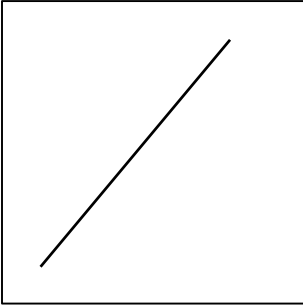
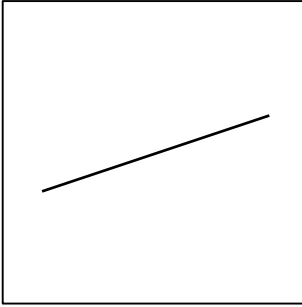
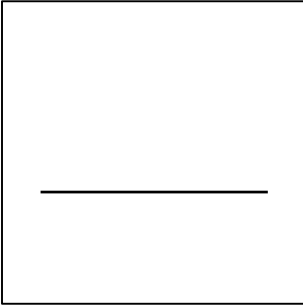
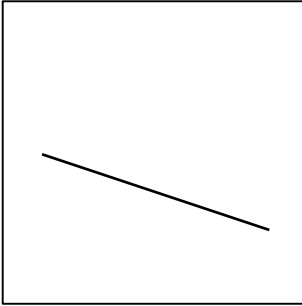
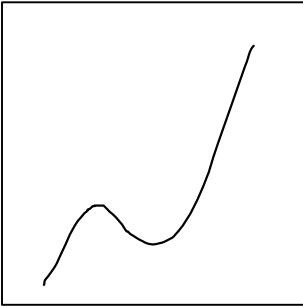
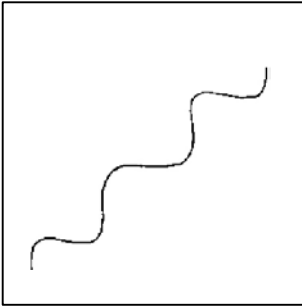
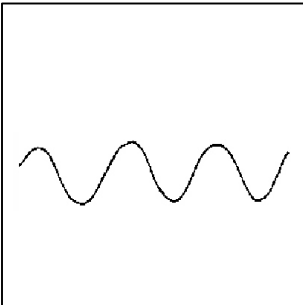
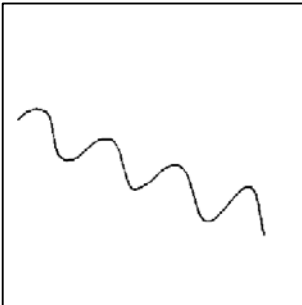
buseyc

Which of the following phases do you think your business is in?

- 1) () phase of economic slow-down/recession
- 2) () phase of stable business
- 3) () phase of growth

**Interview of small scale entrepreneurs / business owners in Zimbabwe 2000/01
- answer sheet B -**

In all, how is the success of your business distributed over time?
Please tick one.

<input type="checkbox"/> 1			<input type="checkbox"/> 2
business develop- ment	Time		
<input type="checkbox"/> 3			<input type="checkbox"/> 4
<input type="checkbox"/> 5			<input type="checkbox"/> 6
<input type="checkbox"/> 7			<input type="checkbox"/> 8

**Interview of small scale entrepreneurs / business owners in Zimbabwe 2000/01
- answer sheet C -**

sucoth

1) How successful do you think others say you are as a business owner?

not at all successful () 1	not that successful () 2	medium successful () 3	somewhat successful () 4	very successful () 5
--------------------------------------	------------------------------------	----------------------------------	------------------------------------	--------------------------------








sucsel

2) How successful are you as a business owner compared to your competitors?

not at all successful () 1	not that successful () 2	medium successful () 3	somewhat successful () 4	very successful () 5
--------------------------------------	------------------------------------	----------------------------------	------------------------------------	--------------------------------








satwor

3) How satisfied are you with your work as a business owner?

						
() -3	() -2	() -1	() 0	() 1	() 2	() 3

satinc

4) How satisfied are you with your current income?

						
() -3	() -2	() -1	() 0	() 1	() 2	() 3

In the following, please indicate on this scale for each pair of statement of business owners, which of the statements applies most to you.

I am

exactly like A () 1	more like A () 2	more like B () 4	exactly like B () 5
----------------------------	-------------------------	-------------------------	----------------------------

5)grogol

Business owner A:

"I am satisfied as long as my business provides a living for my family and myself."

Business owner B:

"I am satisfied as long as my business keeps growing and becomes bigger."

6)moti1

Business owner A:

"I just do this business as long as I cannot find another, better job."

Business owner B:

"I really like to be a business owner on my own: I don't want another job."

7)grogol2

Business owner A:

"If I earn enough money for my family, that is good enough."

Business owner B:

"I want my business to grow as much as possible."

8)moti2_r

Business owner A:

"I am really interested in what I do now as a business owner; I would not like to do anything else."

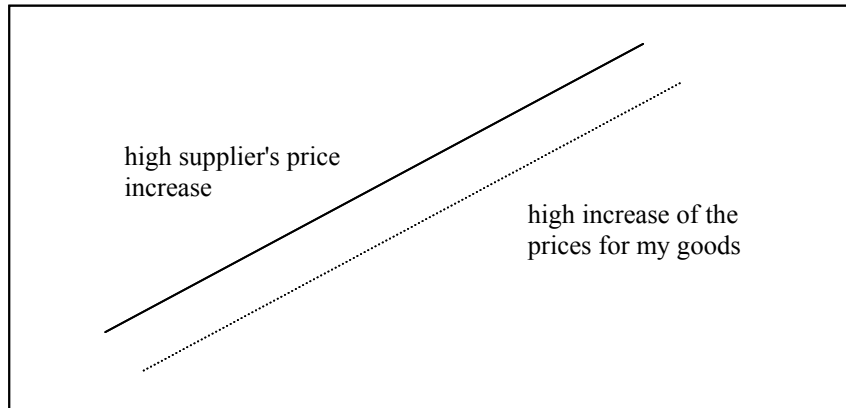
Business owner B:

"I don't care what exactly I work on as long as I earn money with it."

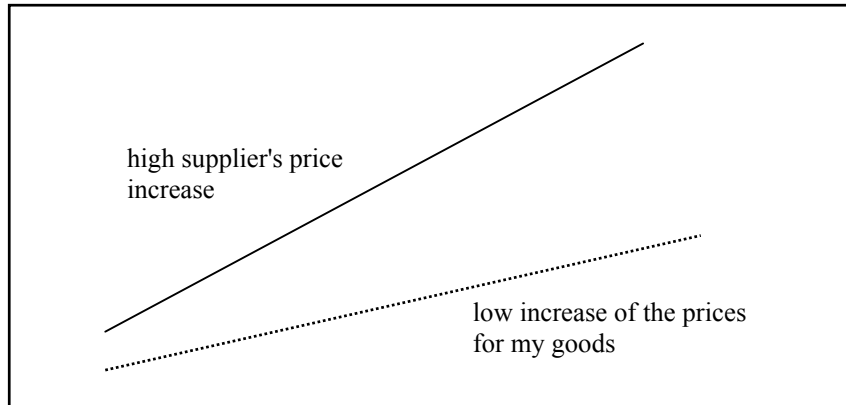
**Interview of small scale entrepreneurs / business owners in Zimbabwe 2000/01
- answer sheet D -**

Does your price increase lag behind of that of your suppliers? Please indicate in what way.

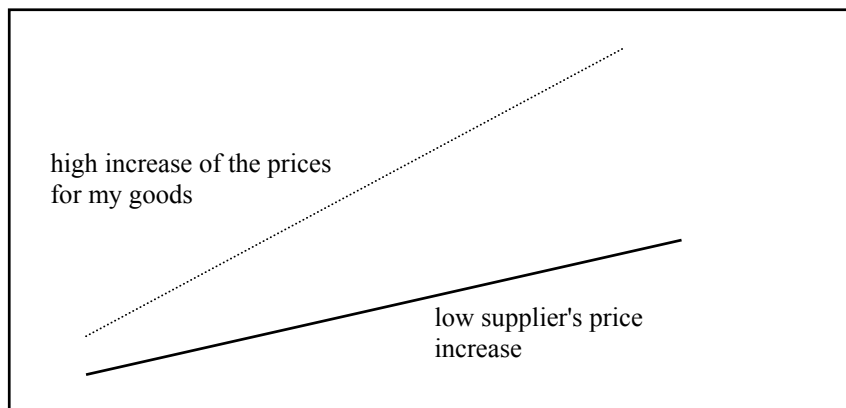
()
1



()
2



()
3



**Interview of small scale entrepreneurs / business owners in Zimbabwe 2000/01
- answer sheet E -**

mm10/R

Which one of these following news interests you most?

World events (in other countries) () 1	The nation () 2	My home town or village () 3	Sports () 4	Religious or tribal events, ceremonies or festivals () 5
---	----------------------------	---	------------------------	---

mm5/R

How often do you usually get news and information from newspapers?

Everyday () 1	Few times a week () 2	Occasionally () 3	Never () 4
----------------------	------------------------------	--------------------------	-------------------

ch3/R

While some people say that it is useful to discuss ideas about new and different ways of doing things, others think that it is not worthwhile since the traditional and familiar ways are best. Do you feel that thinking about new and different ways of doing things is:

always useful () 1	usually useful () 2	only useful at times () 3	rarely useful () 4
---------------------------	----------------------------	----------------------------------	---------------------------

ci13/R

What should most qualify a man to hold high office?

Coming from high family background () 1	Devotion to the old and time-honoured ways () 2	Being the most popular among the people () 3	High education and special knowledge () 4
--	--	---	--

ef11/R

Which is the most important for the future of this country?

The hard work of the people <input type="checkbox"/> 1	Good planning on the part of the government <input type="checkbox"/> 2	God's help <input type="checkbox"/> 3	Good luck <input type="checkbox"/> 4
--	--	---	--

ef14/R

Learned men in the universities are studying such things as what determines whether a baby is a boy or a girl and why there are earthquakes. Do you think that these studies are:

All very good <input type="checkbox"/> 1	All somewhat good <input type="checkbox"/> 2	All somewhat harmful <input type="checkbox"/> 3	All very harmful <input type="checkbox"/> 4
--	--	---	---

ac6/R

Have you ever gotten so highly concerned regarding some public issue that you wanted to do something about it?

frequently <input type="checkbox"/> 1	few times <input type="checkbox"/> 2	never <input type="checkbox"/> 3
---	--	--

fs3/R

Which of these opinions do you agree more with?

It is necessary for a man and his wife to limit the number of children to be born so they can take better care to those they do already have. <input type="checkbox"/> A	It is wrong for a man and wife purposely to limit the number of children. <input type="checkbox"/> B
--	--

Subject No.:	
Interviewer No.:	
Date:	

A	
B	
C	
D	
Σ	

EXERCISE 1:

TASK: Please link the numbers in their serial order:

1 – 2 – 3 – 4 – 5 – 6

START

1	2	4	5	6
19	20	3	7	9
	END			
18	16	13	10	8
17	14	15	12	11

EXERCISE 2:

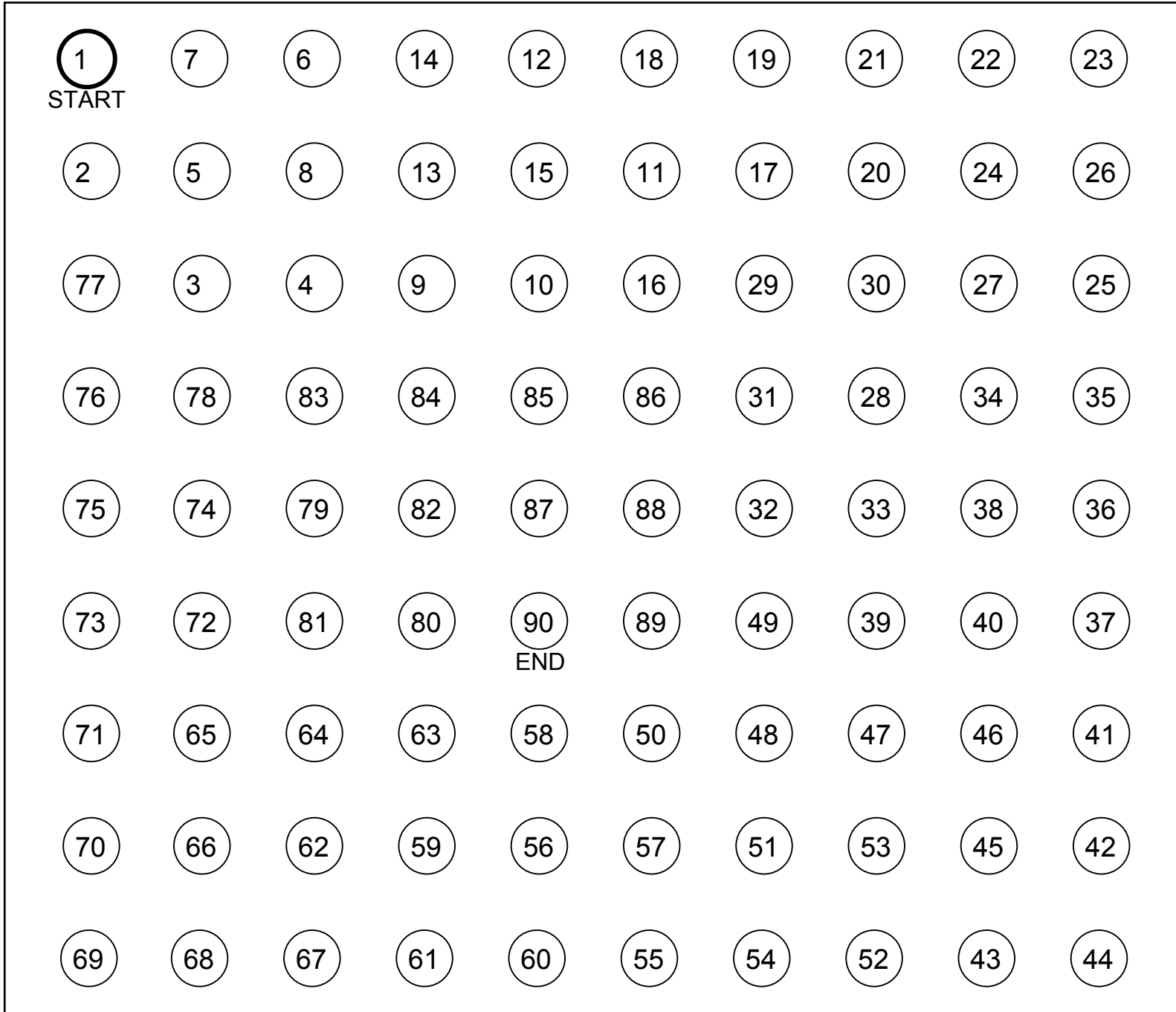
TASK: Please link the numbers in their serial order:

1 – 2 – 3 – 4 – 5 – 6

START

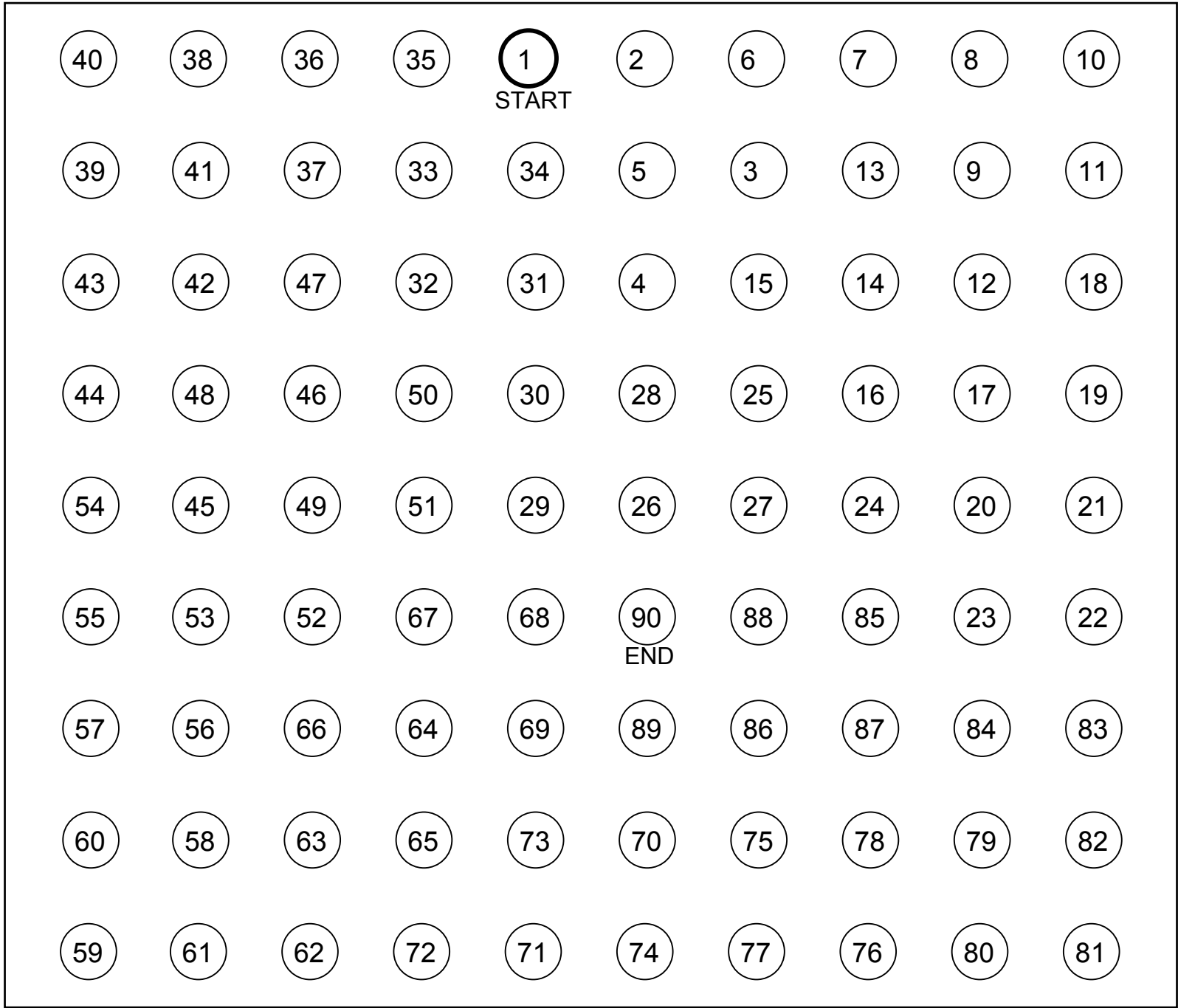
1	2	4	5	6
19	20	3	7	9
	END			
18	16	13	10	8
17	14	15	12	11

A



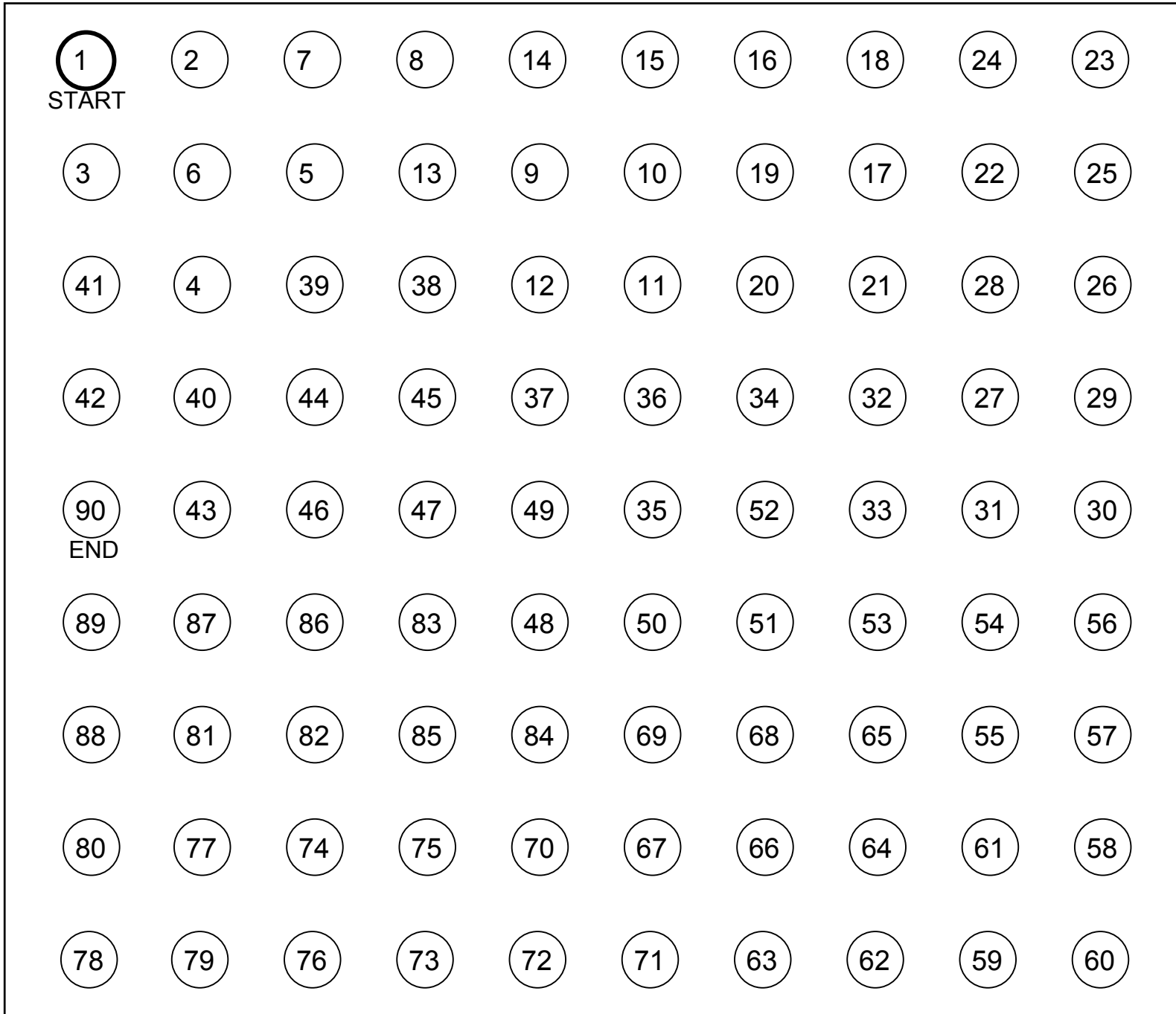
Subj.no.	
Int.no.	
Date	

B



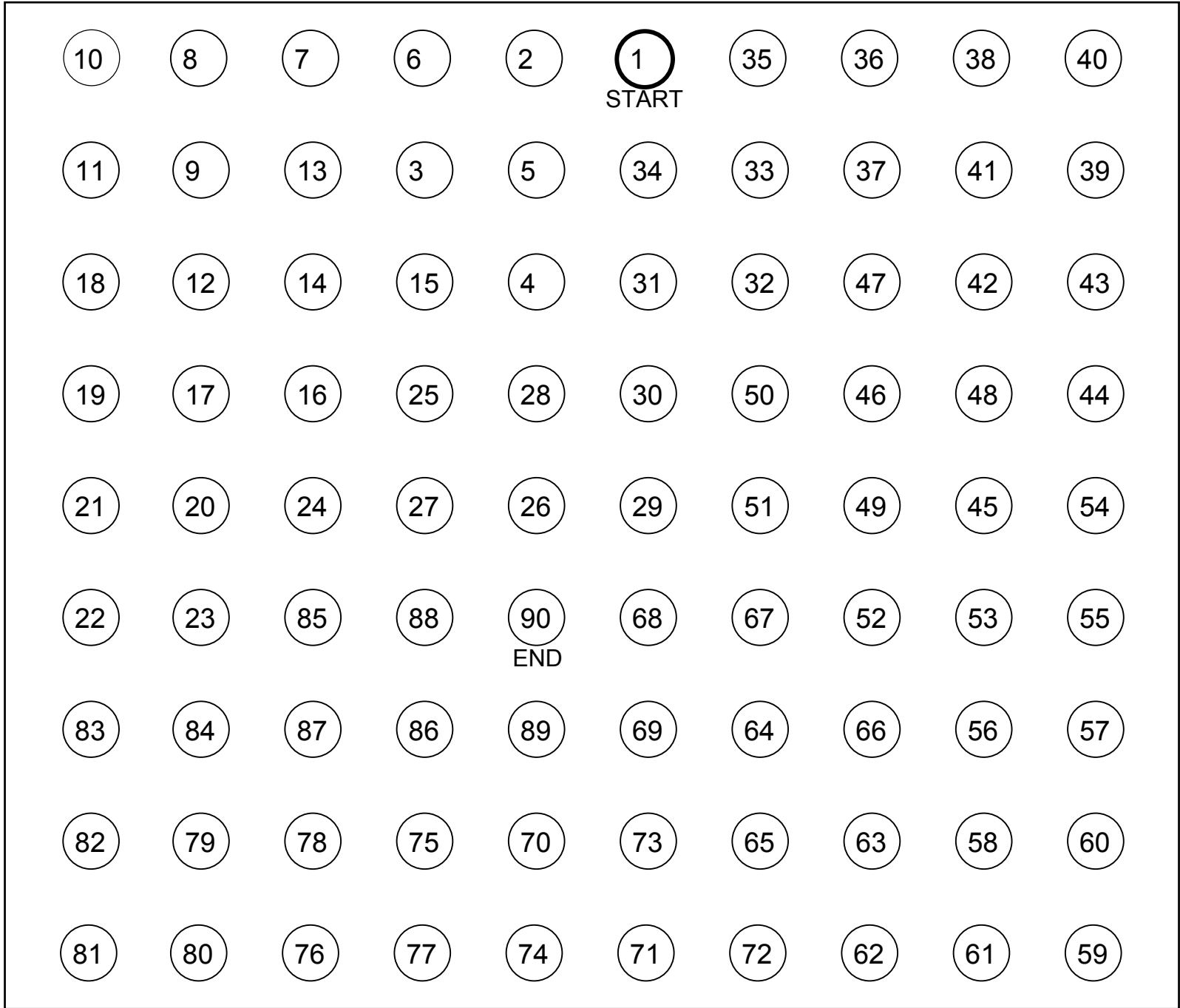
Subj.no.	
Int.no.	
Date	

C



Subj.no.	
Int.no.	
Date	


D



Subj.no.	
Int.no.	
Date	

Coding Scheme Interview Zimbabwe 2000/01

If you cannot code something for lack of information or because it is not necessary to code (e.g. because of branched question), use **X**.

 Use the extremes of scales, especially with innovativeness!

0. Interview Information

0.1 sno	subject number		interviewer no. & 001 - max.		
0.2 intno	interviewer no.		01 = Michael	17 = Valerie	
			02 = Steffi		
0.3 date	date of interview (d/m/y)		03 = Vicas		
			04 = Lynda		
0.4 time	total time of interview (minutes)		05 = Klaus		
			06 = Stephan		
0.5.1 rat1	rater 1		07 = Innocent		
			08 = Jens		
0.5.2 rat2	rater 2		09 = Pfungwa		
			10 = Elijah		
0.5.3 rat3	rater 3		11 = Edward		
			12 = Mufaro		
0.5.4 rat4	rater 4		13 = Lovemore		
			14 = Admire		
0.5.5	first or second (3 rd , 4 th) rating		15 = Richard		
			16 = Simone		
0.6 exist	the business does still exist	1 no	2 yes	3 unknown	
0.7 state	the participant	1 agreed to participate again	2 rejected to participate again	3 was not found	

1. General Business Information

1.0 name	are you Mr./Mrs. X	1 no	2 yes				
1.1 ownbus	owner of the business	1 no	2 yes				
1.1.1 othown	other business owners	1 no	2 yes (active)	3 yes (non-ac.)			
1.1.2 same	same person as 1998/99	1 no	2 yes	if "yes", go to 1.2			
1.1.3 samac	is the "same" person still active	1 no	2 yes				
1.1.4 takov	when was business taken over	day	month	year			
1.1.5 takpay	how much did you pay for it?						
1.1.6 relat	are you a relative?	1 taken over	2 self- establ.				
1.1.7 relhow	how are you related to the former owner?	1 mother/f ather	2 child	3 uncle/au nt	4 wife/hus band	5 brother/s ister	6 cousin
1.1.7.1 relcor	belongs to core or extended family	1 core	2 extended				

1.2 selfest	business self-established	1 taken over	2 self-establ.
1.3 est	year of establishment		
1.4 noemp1	current number of employees (over all)		
1.4.1 noemp2	number of full-time employees		
1.4.2 noemp3	no. of employees from the extended family		
1.5.1 libus1	line of business manufacturing: textiles	1 no	2 yes
1.5.2 libus2	line of business manufacturing: wood	1 no	2 yes
1.5.3 libus3	line of business manufacturing: metal	1 no	2 yes
1.5.4 libus4	line of business manufacturing: other	1 no	2 yes
1.5.5 libus5	line of business construction	1 no	2 yes
1.5.6 libus6	line of business trade: retail / trade	1 no	2 yes
1.5.7 libus7	line of business trade: restaurants, bars, hotels, shabeens	1 no	2 yes
1.5.8 libus8	line of business services	1 no	2 yes
1.5.9 libus9	line of business other	1 no	2 yes
1.6.1 hours	number of working hours/week		
1.6.2 months	number of working months/year		
1.6.3 open	weekly opening hours		
1.7.1 chacom	member of chamber of commerce	1 no	2 yes
1.7.2 coop	member of cooperative	1 no	2 yes
1.7.3 club	club/society/assoc. to enhance business	1 no	2 yes
1.7.4 savcl	member of savings / banking club	1 no	2 yes
1.8 buspla	written business plan	1 no	2 yes
1.8.1 platim	by plan covered time period	1 ≤ 1 year (operat.)	2 > 1 year (strategic)

Attention! Members of savings & banking clubs are rated both, 1.7.3 and 1.7.4 (new category)

2. Human Capital

2.1 eduyear	years of education										
2.1.1 edudeg	highest degree of formal education	1 none	2 grade 7, stand. 6	3 ZJC	4 O-level	5 A-level	6 poly-tech.	7 bachelor	8 master	9 Ph.D. / D.Sc.	10 other

2.2 voctra	received vocational training	1 no	2 yes			
2.3 ebost	employment and bus. owner at same time	1 no	2 yes, currently	3 yes, during the starting phase	4 yes, during any other phase	
2.4 age	age of subject					

3. Targets, Goals, and Strategies

3.0 redcar	goals: red cards order	1	2	3	4	5	6	
3.0.1 goal1	most important goal	1 show initiative	2 new marketing strategy	3 improve production	4 better than competitors	5 expanding	6 more profit	7 other
3.0.2 goal2	second most important goal	1 show initiative	2 new marketing strategy	3 improve production	4 better than competitors	5 expanding	6 more profit	7 other
3.0.3 goal3	third most important goal	1 show initiative	2 new marketing strategy	3 improve production	4 better than competitors	5 expanding	6 more profit	7 other
3.1 nogoal	no. of subgoals (goal 1&2)							
3.1.0 golmar	marketing and sales issues in the foreground (goal 1&2)	1 low	2	3	4	5 high		
3.1.1 spef1	goal specificity (goal1)	1 low	2	3	4	5 high	<u>high</u> : goal is a number or it is very clear when reached <u>high</u> : very difficult when lots of effort necessary to reach - given the situation s is in.	
3.1.2 diff1	goal difficulty (goal1) rater estimate	1 low	2	3	4	5 high		
3.1.3.1 seff1	self-efficacy subgoal 1 (goal card 1)							
3.1.3.2 seff2	self-efficacy subgoal 2 (goal card 1)							
3.1.3.3 seff3	self-efficacy subgoal 3 (goal card 1)							
3.2.1 spef2	goal specificity (goal2)	1 low	2	3	4	5 high		
3.2.2 diff2	goal difficulty (goal2) rater estimate	1 low	2	3	4	5 high		
3.2.3.1 seff4	self-efficacy subgoal 1 (goal card 2)							
3.2.3.2 seff5	self-efficacy subgoal 2 (goal card 2)							
3.2.3.3 seff6	self-efficacy subgoal 3 (goal card 2)							
3.3.1 detail	detailedness of description (strategies goal1)	1 low	2	3	4	5 high		
3.3.2 real1	realism (strategies goal1)	1 low	2	3	4	5 high	<u>low</u> : there is no chance to reach the goal this way, given the situation s is in.	
3.3.3 plan1	amount of planning (strategies goal1)	1 low	2	3	4	5 high		

3.3.4 proac1	proactiveness (strategies goal1)	1 low	2	3	4	5 high
3.3.5 actpa1	action in the past (strategies goal1)	1 low	2	3	4	5 high
3.3.6 compl1	complete planning (strategies goal1)	1 low	2	3	4	5 high
3.3.7 critp1	critical point planning (strategies goal1)	1 low	2	3	4	5 high
3.3.8 oppor1	opportunistic (strategies goal1)	1 low	2	3	4	5 high
3.3.9 react1	reactive (strategies goal1)	1 low	2	3	4	5 high
3.3.10 clear1	can't decide for 1 clear strategy (none 4/5)	1 no	2 yes			
3.3.11 sure1	sureness of rater about judgement of strate- gies (goal1)	1 low	2	3	4	5 high
3.4.1 detai2	detailedness of description (strategies goal2)	1 low	2	3	4	5 high
3.4.2 reali2	realism (strategies goal2)	1 low	2	3	4	5 high
3.4.3 plan2	amount of planning (strategies goal2)	1 low	2	3	4	5 high
3.4.4 proac2	proactiveness (strategies goal2)	1 low	2	3	4	5 high
3.4.5 actpa2	action in the past (strategies goal2)	1 low	2	3	4	5 high
3.4.6 compl2	complete planning (strategies goal2)	1 low	2	3	4	5 high
3.4.7 critp2	critical point planning (strategies goal2)	1 low	2	3	4	5 high
3.4.8 oppor2	opportunistic (strategies goal2)	1 low	2	3	4	5 high

high: everything is planned out in detail, e.g. all necessary steps including some substeps are described.

high: one important crucial point is described in detail, everything else is left vague; however high goal orientation - keeps goal in mind.

high: does not plan in advance, but actively looks for business chances and exploits them; easily deviates from a goal.

high: goes from one issue /problem to the other; does not produce changes, but waits for them to happen and reacts then, no goal orientation.

low: there is no chance to reach the goal this way, given the situation s is in.

high: everything is planned out in detail, e.g. all necessary steps including some substeps are described.

high: one important crucial point is described in detail, everything else is left vague; however high goal orientation - keeps goal in mind.

high: does not plan in advance, but actively looks for business chances and exploits them; easily deviates from a goal.

3.4.9 react2	reactive (strategies goal2)	1 low	2	3	4	5 high
3.4.10 clear1	can't decide for 1 clear strategy (none 4/5)	1 no	2 yes			
3.4.11 sure2	sureness of rater about judgement of strate- gies (goal2)	1 low	2	3	4	5 high

high: goes from one issue /problem to the other; does not produce changes, but waits for them to happen and reacts then, no goal orientation.

4. Competition

4.1 noissu	number of issues competitors don't have	if "0", go to 4.2				
4.1.1 concom	concreteness of de- scription	1 low	2	3	4	5 high
4.1.2 inocom	innovativeness	1 low	2	3	4	5 high
4.2 gapor	gap / niche orientation (owner filled a gap)	1 low	2	3	4	5 high
4.3 nocomp	number of competitors					
4.4 compfri	competitors or more friends	1 definit. com- petitors	2	3	4	5 more friends
4.5 compag	competitive aggressiveness	1 live and let live	2	3	4	5 undo com- petitors

high: describes speciality in detail and gives many examples.

high: uses new ideas for this line of business and this environment. the more unusual the idea the more innovative.

Gap: Innovative/unusual product/service which many customers want but only few firm offer

Interviewer judgement!

Interviewer judgement!

5. Innovativeness and Initiative

5.1 planch	plans change	1 no	2 yes	if "no", go to 5.2			
5.1.1 inocha	innovativeness of change	1 low	2	3	4	5 high	
5.1.2 realch	realism of change	1 low	2	3	4	5 high	
5.1.3 concino	concreteness of de- scription (change)	1 low	2	3	4	5 high	
5.2 idea	had innovative idea	1 no	2 yes	if "no", go to 5.3			
5.2.1 deconcide	concreteness of de- scription (idea)	1 low	2	3	4	5 high	
5.2.2 inoidea	innovativeness (idea)	1 low	2	3	4	5 high	
5.2.3 ideaelse	got idea from someone else	1 no	2 yes	if "no", go to 5.3			
5.2.4 else	this other person was	1 com- petitor	2 em- ployee	3 customer	4 family	5 friend	6 other

5.3 undsta	overcoming barriers: understood question	1 not at all	2	3	4	5 very well
5.3.1 nobar1	number of different ideas: "out of money"					
5.3.1.1 actbar1	how much did S stay active / how much did he delegate "out of money"	1 not at all active	2	3	4	5 very active
5.3.2 nobar2	number of different ideas: "broken machine"					
5.3.2.1 actbar2	how much did S stay active / how much did he delegate "machine"	1 not at all active	2	3	4	5 very active
5.3.3 nobar3	number of different ideas: "no supplies"					
5.3.3.1 actbar3	how much did S stay active / how much did he delegate "supplies"	1 not at all active	2	3	4	5 very active
5.3.4 nobar4	number of different ideas: "landlord"					
5.3.4.1 actbar4	how much did S stay active / how much did he delegate "landlord"	1 not at all active	2	3	4	5 very active

6. Leadership and Employees

6.1.1 conf1	confidence in leading					
6.1.2 conf2	confidence in negotiating (bus.)					
6.1.3 conf3	confidence in negotiating (cus.)					
6.1.4 conf4	confidence in financial overview					
6.1.5 conf5	confidence in own pricing					
6.1.6 conf6	confidence on communicating					
6.1.7 conf7	confidence in convincing					
6.2.1 noem98	number of employees 1998					
6.2.2 noem99	number of employees 1999					
6.2.3 noem00	number of employees 2000					
6.2.3 noem01	number of employees 2001					
6.3 famem	employed / employs family members	1 no	2 yes, in the past	3 yes, currently	if "no", go to 6.4	
6.3.1 corfam	employed family members belong(ed) to core family	1 no	2 yes, all of them	3 yes, some do	core family: child, brother, sister, cousin, mother, father, husband, wife, uncle, aunt	

6.3.2 worked	it worked	1 not at all	2	3	4	5 very well
6.4.1 kinsh1		1 wife	2 mother, etc.			
6.4.2 kinsh2		1 his choice	2 parents' choice			
6.4.3 kinsh3						
6.4.4 kinsh4						
6.4.5 kinsh5						

7. Difficulties / Problems and Environment

7.1 dodiff	would do things differently	1 no	2 yes	if "no", got to 7.2		
7.1.1 concid	concreteness of ideas	1 low	2	3	4	5 high
7.1.2 learn	evidence of learning from experience	1 low	2	3	4	5 high
7.2.1 complx	environment simplicity/complexity					
7.2.2.1 hosti	environment hostility					
7.2.2.2 friend	environment friendliness					
7.2.2.3 hostil1	environmental hostility 1					
7.2.2.4 hostil2	environmental hostility 2					
7.2.3.1 dynami	environment dynamic					
7.2.3.2 predic	environment predictability					
7.2.4 cntrl	environment controllability					
7.2.5 buscyc	business cycle					
7.3.1 deconcad	concreteness of de- scription of advantage	1 low	2	3	4	5 high
7.3.2 answer	question answered to the point	1 not at all	2	3	4	5 abso- lutely
7.3.3 advant	estimate of how strong advantage is compared to competitors	1 very weak	2	3	4	5 very strong
7.4 busad	friend should(n't) invest in same bus.	1 should absolutely	2	3	4	5 should absolutely not

8. Success

8.1.1 cus89	decrease / increase of customers 1998-1999	1 decrease	2 same	3 increase
8.1.1.1 cus89a	% decrease of customers 1998-1999			
8.1.1.2 cus89b	% increase of customers 1998-1999			

8.1.2 cus92	decrease / increase of customers 1999-2000	1 decrease	2 same	3 increase
8.1.2.1 cus92a	% decrease of customers 1999-2000			
8.1.2.2 cus92b	% increase of customers 1999-2000			
8.1.3 cus01	decrease / increase of customers 2000-2001	1 decrease	2 same	3 increase
8.1.3.1 cus01a	% decrease of customers 2000-2001			
8.1.3.2 cus01b	% increase of customers 2000-2001			
8.2.1 sal89	decrease / increase of sold goods 1998-1999	1 decrease	2 same	3 increase
8.2.1.1 sal89a	% decrease of sold goods 1998-1999			
8.2.1.2 sal89b	% increase of sold goods 1998-1999			
8.2.2 sal92	decrease / increase of sold goods 1999-2000	1 decrease	2 same	3 increase
8.2.2.1 sal92a	% decrease of sold goods 1999-2000			
8.2.2.2 sal92b	% increase of sold goods 1999-2000			
8.2.3 sal01	decrease / increase of sold goods 1999-2000	1 decrease	2 same	3 increase
8.2.3.1 sal01a	% decrease of sold goods 2000-2001			
8.2.3.2 sal01b	% increase of sold goods 2000-2001			
8.3.1 pro89	decrease / increase of profit 2000-2001	1 decrease	2 same	3 increase
8.3.1.1 pro89	% decrease of profit 1998-1999			
8.3.1.2 pro89	% increase of profit 1998-1999			
8.3.2 pro92	decrease / increase of profit 1999-2000	1 decrease	2 same	3 increase
8.3.2.1 pro92a	% decrease of profit 1999-2000			
8.3.2.2 pro92b	% increase of profit 1999-2000			
8.3.3 pro01	decrease / increase of profit 2000-2001	1 decrease	2 same	3 increase
8.3.3.1 pro01a	% decrease of profit 2000-2001			
8.3.3.2 pro01b	% increase of profit 2000-2001			
8.4 indpro	increase / decrease profit (last 3 years)	1 decrease	2 same	3 increase
8.4.1 decpro	% decrease profit (last 3 years)			
8.4.2 incpro	% increase profit (last 3 years)			
8.5 proout	% of profit taken out of business			

8.6 loapp	applied for loan	1 no	2 yes	if "no", got to 8.7		
8.6.0 loan	got a loan	1 no	2 yes	if "no", got o 8.7		
8.6.0.1 lopro	got a loan	1 no	2 yes	3 it's still being processed		Attention! Rate twice new, categories were added!
8.6.1 lobank	loan by bank	1 no	2 yes			
8.6.2 lofam	loan by family	1 no	2 yes			
8.6.3 lofri	loan by friend	1 no	2 yes			
8.6.4 logov	loan by government	1 no	2 yes			
8.6.5 longo	loan by ngo	1 no	2 yes			
8.6.6 othlo	loan by other	1 no	2 yes			
8.6.7.1 much1	how much loan 1					
8.6.8.1 loyea1	what year loan 1					
8.6.7.2 much2	how much loan 2					
8.6.8.2 loyea2	what year loan 2					
8.6.7.3 much3	how much loan 3					
8.6.8.3 loyea3	what year loan 3					
8.7 dissuc	distribution of success (graphs sheet)					
8.8 sucoth	others say about success					
8.9 sucsel	how successful com- pared to competitors					
8.10 satwor	satisfied with work					
8.11 satinc	satisfied with current income					
8.12.1 grogol	growth goal 1 (bus. owner A vs. B)					
8.12.2 moti1	motivation 1 (business owner A vs. B)					
8.12.3 grogol2	growth goal 2 (bus. owner A vs. B)					
8.12.4 moti2	motivation 2 (business owner A vs. B)					
8.13 kohle	asked someone for money last year 2000	1 no	2 yes			
8.14.1 payemp	could pay employees 2000	1 no pay	2 reduced	3 yes	4 delayed	
8.14.1.1 paynew	could pay employees 2000	1 no pay	2 reduced	3 delayed	4 normal	5 increase
8.14.2 payoft	how often did that happen					if "4 or 5", go to 8.15

8.14.3 pay67	more frequently in 2000	1 less	2 same	3 more		
8.15.1 supcos	pays more / less for supplies than last year	1 less	2 same	3 more	if "equal" or "less", got to 8.16	
8.15.2 pricin	price increase according to supplies' costs	1 no	2 yes			
8.15.3 prilag	price increase lag					
8.16 buy	can you buy more / less for him/her self	1 less	2 same	3 more		
8.17 tenant	took on additional tenant 1997	1 no	2 yes			
8.18 elec	has electricity	1 no	2 yes			
8.19 phone	has a telephone line	1 no	2 yes			
8.20 indreg	is in an industry register	1 no	2 yes			
8.21.1 monav	no. of month: average sales					
8.21.2 salav	sales level: months of average sales					
8.21.3 monlo	no. of month: low sales					
8.21.4 sallo	sales level: months of low sales					
8.21.5 monhi	no. of month: high sales					
8.21.6 salhi	sales level: months of high sales					
8.22.1 lassal	sales during last week					
8.22.2 lasexp	expenses during last week					
8.22.3 laspro	profit last week					
8.22.4 lasav	was last week low, high, or average	1 low	2 average	3 high		
8.23 bucard	has business card	1 no	2 yes			
8.24.1 book	How do you do book-keeping	1 I have it in my head	2 I calculate it each month or at irregular intervals	3 I do professional book-keeping	4 My wife (or another fam. member) does the professional book-keeping	5 I have a professional book-keeper
Attention! Must be rated twice because new categories were added!						
8.24.1.1 book1	How do you do your book-keeping	1 I do it	2 A relative does it	3 An employee does it	4 An external book-keeper does it	5 Other
8.24.2 boexp	Estimate of experience / qualification of the book-keeping person	1 low			5 high	
8.25.1 land1	Land S operates from belongs to him/her	1 no	2 yes			

8.25.2 land2	Owens other land	1 no	2 yes	
8.26.1 equip1	Money spent on equipment			
8.26.2 equip2	Value today 1			
8.26.3 equip3	Value today 2			
8.27 wages	Payment to workers (monthly)			
8.28 supply	Payment for supplies (last month)			
8.29.1 accp1	Has personal bank account	1 no	2 yes	
8.29.2 accp2	Uses personal account for business	1 no	2 yes	3 sometimes
8.29.3 accb	Has extra business bank account	1 no	2 yes	

9. Vignettes

9.1.1 wldsel	would sell	1 no	2 yes			
9.1.2 autor	shows autonomy orientation	1 low	2	3	4	5 high
9.2.1 warn	would warn friend of registration	1 not at all	2	3	4	5 defi- nitely
9.2.2.1 noneg	number of negative statements					
9.2.2.2 nopus	number of positive statements					
9.2.3.1 reg1	reason for not reg.: tax	1 no	2 yes			
9.2.3.2 reg2	reason for not reg.: fear of the unknown	1 no	2 yes			
9.2.3.3 reg3	reason for not reg.: too much hassle in the process of registration	1 no	2 yes			
9.2.3.4 reg4	reason for not reg.: doesn't have the skills to do it	1 no	2 yes			
9.2.3.5 reg5	reason for not reg.: psych. barriers (it's another world he can't even imagine being in)	1 no	2 yes			
9.2.3.6 reg6	reason for not reg.: other	1 no	2 yes			
9.2.3.7 reg7	not qualified / too small	1 no	2 yes			
9.2.3.8 reg8	wants to operate on low profile/from home	1 no	2 yes			
9.2.3.9 reg9	avoiding gov. inter-ference/monitoring	1 no	2 yes			
9.2.3.10 reg10	reg. process too expensive	1 no	2 yes			
9.2.3.11 reg11	to do illegal business	1 no	2 yes			

9.2.3.12 reg12	compulsory require- ments (e.g. med aid & wages)	1 no	2 yes				
9.3.1 formal	formal / informal sector	1 regis- tered	2 pays taxes	3 tax & reg.	4 doesn't know	5 no tax, not reg.	→if "not reg." go to 9.3.3.1 →if "reg." go to 9.3.2
9.3.2 became	when did S become formal		→now go to 9.4				
9.3.3.1 regre1	reason for not reg.: tax	1 no	2 yes				
9.3.3.2 regre2	reason for not reg.: fear of the unknown	1 no	2 yes				
9.3.3.3 regre3	reason for not reg.: too much hassle in the process of registration	1 no	2 yes				
9.3.3.4 regre4	reason for not reg.: doesn't have the skills to do it	1 no	2 yes				
9.3.3.5 regre5	reason for not reg.: psych. barriers (it's another world he can't even imagine being in)	1 no	2 yes				
9.3.3.6 regre6	reason for not reg.: other	1 no	2 yes				
9.3.3.7 regre7	not qualified / too small	1 no	2 yes				
9.3.3.8 regre8	wants to operate on low profile/from home	1 no	2 yes				
9.3.3.9 regre9	avoiding gov. inter- ference/monitoring	1 no	2 yes				
9.3.3.10 regre10	reg. process too expensive	1 no	2 yes				
9.3.3.11 regre11	to do illegal business	1 no	2 yes				
9.3.3.12 regre12	compulsory require- ments (e.g. med aid & wages)	1 no	2 yes				
9.4.1 zvt1	IQ test item 1			seconds			
9.4.2 zvt2	IQ test item 2			seconds			
9.4.3 zvt3	IQ test item 3			seconds			
9.4.4 zvt4	IQ test item 4			seconds			

10. Modernism

10.1 ne5/R	understand way of thinking	1 no	2 yes	
10.2 re12/R	be truly good without religion	1 no	2 yes	
10.3 acl	organisations			Count no. of organisations & omit the compulsory ones
10.4 asl	how much schooling	years		

10.5 go2	problems facing your country?		Count no. of problems	
10.6 in7	In what country is Moscow?	1 wrong	2 right	
10.7 mm10/R	Interests			
10.8 mm5/R	Newspaper information			
10.9 ch3/R	New ways of doing things			
10.10 ci13/R	Qualification			
10.11 ef11/R	Important for future			
10.12 ef14/R	Earthquakes			
10.13ac 6/R	Doing something about it			
10.14 fs3/R	Opinions	1 A	2 B	

11. Other Issues

11.1 adres	gave us own address	1 no	2 yes					
11.2 province	what province is your business in?	1 Harare	2 Matabeleland	3 Mashonaland East	4 Moshonaland Central	5 other		
11.3 approv	asking a third person about business is ok.	1 no	2 yes					

**Interview of small scale business entrepreneurs / business owners
in Zimbabwe 2000 - interviewer evaluation**

subject no.: _____ rater _____ rater (1st, 2nd, ...): _____
interviewer: _____ date: _____

(questions in brackets not to be answered for exit-interview!)

		1	2	3	4	5
1	understood the questions	didn't ()	()	()	()	understood ()
2	estimate of IQ.	low ()	()	()	()	high ()
3	active / inactive interview dialogue behaviour	passive ()	()	()	()	active ()
4	behaves actively / passively	passive ()	()	()	()	active ()
5	goal orientation (vs. easily gets diverted from goal)	low ()	()	()	()	high ()
6	goal specificity	low ()	()	()	()	high ()
7	goal difficulty	low ()	()	()	()	high ()
8	externally / internally controlled	externally ()	()	()	()	internally ()
9	motivation to act	low ()	()	()	()	high ()
10	postpones vs. acts quickly	postpones ()	()	()	()	acts quickly ()
11	ambitiousness	low ()	()	()	()	high ()
12	autonomous drive	low ()	()	()	()	high ()
13	innovativeness	low ()	()	()	()	high ()
14	level of initiative	low ()	()	()	()	high ()
15	risk taking	low ()	()	()	()	high ()
16	competitive aggressiveness	low ()	()	()	()	high ()
17	learning orientation	low ()	()	()	()	high ()
18	emotional stability	low ()	()	()	()	high ()
19	achievement orientation	low ()	()	()	()	high ()
20	personal integrity	low ()	()	()	()	high ()
21	estimate of time pressure (incl. how hard/easy it is to get an appointment)	low ()	()	()	()	high ()
22	standard of equipment	low ()	()	()	()	high ()
23	interaction with employees (hostile vs. friendly)	hostile ()	()	()	()	friendly ()
24	authoritarianism (power distance towards employees)	low ()	()	()	()	high ()
25	vision for company	no vision ()	()	()	()	detailed vision ()

		1	2	3	4	5	
26	ability to communicate vision	low ()	()	()	()	high ()	
27	wants to look good	low ()	()	()	()	high ()	
28	underplays vs. exaggerates his achievements	underplays ()	()	()	()	exaggerates ()	
29	linkage to formal sector (also for exit-interview)	not present ()	()	()	()	present ()	
30	passive vs. active coping	passive ()	()	()	()	active ()	
31	energetic behaviour	low ()	()	()	()	high ()	
32	learned helplessness	low ()	()	()	()	high ()	
33	externalisation of responsibility (e.g. lack of capital, government, bad luck)	low ()	()	()	()	high ()	
34	3rd world business vs. 1st world business	3rd world ()	()	()	()	1st world ()	
35	interview was broken off at some point	no ()	yes ()				
36	S seemed to invent goals, he/she didn't really have	low ()	()	()	()	high ()	
37	S did the interview only for the money	not at all ()	()	()	()	definitely ()	
38	probability of non-family employees actually being family members	low ()	()	()	()	high ()	
39	learns slowly vs. learns quickly	slowly ()	()	()	()	quickly ()	
40	Personal Achiever (achievement oriented, hard working, loves his work) → Interested in task content, if you think they would do any other work, not a personal achiever!	low ()	()	()	()	high ()	
41	Real Manager (putting system into place, standardisations, organisational structures) → e.g., how to deal with employees, how to select them	low ()	()	()	()	high ()	
42	Idea Generator (one idea in the foreground high expertise, Innovativeness, often market niche)	low ()	()	()	()	high ()	
43	Supersalesperson (extroverted, marketing & sales in the foreground, good communication skills, likes to work with others) → Would you like to buy something from this person?	low ()	()	()	()	high ()	
44	interview was done in	English ()	mainly English ()	Shona ()	mainly Shona ()	Ndebele ()	mainly Ndebele ()

		1	2	3	4	5
45	general impression of entrepreneurial success (consider: busy shop, fig. current & past, fall/rise, employees stable, growth minor issue → what he is getting, strategies, do figures relate to what you see; Do not take into account business environment!)	low ()	()	()	()	high ()
46	sureness of interviewer of his/her judgement (on entrepreneurial success)	low ()	()	()	()	high ()
47	S was motivated - including filling in the questionnaire	low ()	()	()	()	high ()
48	S understood the questionnaire	not at all ()	()	()	()	very well ()
49	the business area was	rural ()	urban ()			
50	business is located in a growth point or business site	no ()	yes ()			
51	subject's gender	male ()	female ()			
52	Interview was done at	business site ()	HRS ()	subject's home ()	other ()	
53	Both raters during interview present (not the same as 55-57!; here we ask for the "normal" procedure)	no ()	yes ()			
54	Questionnaire filled in while interviewer present	no ()	yes ()	unsure ()		
55	Two protocols with ratings	no ()	yes ()			
56	1. Protocol (= Interviewer) by (Rater/Interviewer, Identification No.)					
57	2. Protocol by (Rater/Interviewer, Identification Number)					

Interview of Small Scale Entrepreneurs / Business Owners in Zimbabwe 2000

External Success Evaluation

subject number:

interviewer:

date:

1. How successful do you think is the person in question as a business owner in comparison with his/her competitors? (sucex1_r)

most successful business owner ()	belongs to the 10% most successful business owners ()	belongs to the upper 25% of successful business owners ()	belongs to the more successful half of business owners ()	belongs to the less successful half of business owners ()
---	---	---	---	---

2. How successful do you think is the person in question as a business owner in comparison with his/her competitors? (sucex2)

not at all successful () 1	not that successful () 2	medium successful () 3	somewhat successful () 4	very successful () 5
-----------------------------------	---------------------------------	-------------------------------	---------------------------------	-----------------------------

note: Multiple answers are possible!

3. What is your relationship to the person/business owner in question?

- a) () I am a neighbour. (who1)
- b) () I am the manager of the business site / industrial hive. (who2)
- c) () I am the manager of the growth point. (who3)
- d) () I am a competitor. (who4)
- e) () I am an employee. (who5)
- f) () I am a family member. (who6)
- g) () I am a member of the same co-operative. (who7)
- h) () I work at the chamber of commerce. (who8)
- i) () We are both members of the chamber of commerce. (who9)
- j) () I am a friend. (who10)
- k) () other: _____.(who11)

4. How long do you know each other? Please give an approximation of months and years.

(know)

To be filled in by the interviewer:	subject number:
	interviewer:
	date:

Please fill in this questionnaire by ticking the correct answer as shown in the following example. Be cautious to answer every question. If you have any further questions, please ask the interviewer.

Example:

You answer question by ticking the correct answer. Here, a person has answered that the statement „I am taller than most other people“ is very false for him/her.

	very false				very true	
I am taller than most other people.	-- (X) 1	- () 2	+/- () 3	+ () 4	++ () 5	

Please complete the following statements as it applies most to you when thinking of the past five years.

envch1 Market activities of your key competitors:	Have become far more predictable	no change	Have become far less predictable	() 1	() 2	() 3	() 4	() 5	() 6	() 7
envch2 The tastes and preferences of your customers in your principal business:	Have become much more stable and predictable	no change	Have become much more hard to forecast	() 1	() 2	() 3	() 4	() 5	() 6	() 7
envch3 Rate of innovation (new operating processes, new products or services) in your main industry:	Has fallen dramatically	no change	Has increased dramatically	() 1	() 2	() 3	() 4	() 5	() 6	() 7
envch4 Your industries downswings and upswings:	Have become far more predictable	no change	Have become far less predictable	() 1	() 2	() 3	() 4	() 5	() 6	() 7
envch5 Market activities of your key competitors:	Have become far more hostile	no change	Have become far less hostile	() 1	() 2	() 3	() 4	() 5	() 6	() 7
envch6 Market activities of your key competitors:	Affect the firm in far fewer areas (e.g. pricing, delivers, service, quality)	no change	Affect the firm in far more areas	() 1	() 2	() 3	() 4	() 5	() 6	() 7
envch7 Variety in your production methods and marketing tactics to cater to your different customers:	Has dramatically decreased	no change	Has dramatically increased	() 1	() 2	() 3	() 4	() 5	() 6	() 7

Please complete the following statements by ticking the extension that applies most to you.

nach1 Working is something:	<input type="checkbox"/> I would rather not do	<input type="checkbox"/> I don't like doing very much	<input type="checkbox"/> I would rather do now and then	<input type="checkbox"/> I like doing	<input type="checkbox"/> I like doing very much
nach2_r Other people think I:	<input type="checkbox"/> work very hard	<input type="checkbox"/> work hard	<input type="checkbox"/> work pretty hard	<input type="checkbox"/> don't work very hard	<input type="checkbox"/> don't work hard
nach3_r At school they thought I was:	<input type="checkbox"/> very diligent	<input type="checkbox"/> diligent	<input type="checkbox"/> not always so diligent	<input type="checkbox"/> rather easy-going	<input type="checkbox"/> very easy-going
nach4_r I usually am:	<input type="checkbox"/> very busy	<input type="checkbox"/> busy	<input type="checkbox"/> not so busy	<input type="checkbox"/> not busy	<input type="checkbox"/> not busy at all
nach5 When doing something difficult:	<input type="checkbox"/> I give up very quickly	<input type="checkbox"/> I give up quickly	<input type="checkbox"/> I give up rather quickly	<input type="checkbox"/> I don't give up too soon	<input type="checkbox"/> I usually see it through
nach6_r If I have not attained my goal and have not done a task well then:	<input type="checkbox"/> I continue to do my best to attain the goal	<input type="checkbox"/> I exert myself once again to attain the goal	<input type="checkbox"/> I find it difficult to not lose heart	<input type="checkbox"/> I'm inclined to give up	<input type="checkbox"/> I usually give up

Please indicate your agreement with the following statements and tick the number that most closely represents your opinion.

ua1/R Orderliness and consistency should be stressed, even at the expense of experimentation and innovation.	Strongly agree <input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	Strongly disagree <input type="checkbox"/> 7
ua2/R Rules should cover:	Almost all situations <input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	Very few situations <input type="checkbox"/> 7
ua3/R Good managers:	Provide detailed instructions on how to achieve goals <input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	Allow subordinates freedom in how to achieve goals. <input type="checkbox"/> 7
ua4/R People have good reason to become irritated when one wants an exception to the rule.	Strongly agree <input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	Strongly disagree <input type="checkbox"/> 7
ua5/R People should follow <u>one</u> set of values.	Strongly agree <input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	Strongly disagree <input type="checkbox"/> 7
ua6/R A person whose work is highly structured with few unexpected events:	Has a lot to be thankful for <input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	Is missing a lot of excitement <input type="checkbox"/> 7
ua7/R Job requirements should be spelled out in detail so employees know what they are expected to do.	Strongly agree <input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	Strongly disagree <input type="checkbox"/> 7

How do the following statements apply to you?	strongly disagree							strongly agree
	() 1	() 2	() 3	() 4	() 5	() 6	() 7	
hos1s The failure rate of firms in my industry is high.	() 1	() 2	() 3	() 4	() 5	() 6	() 7	
hos2s My industry is very risky. One bad decision could easily threaten the survival of my firm.	() 1	() 2	() 3	() 4	() 5	() 6	() 7	
hos3s Setitive intensity is high in my industry.	() 1	() 2	() 3	() 4	() 5	() 6	() 7	
hos4s Customer loyalty is low in my industry.	() 1	() 2	() 3	() 4	() 5	() 6	() 7	
hos5s Severe price wars are characteristic of my industry.	() 1	() 2	() 3	() 4	() 5	() 6	() 7	
hos6s Low profit margins are characteristic of my industry.	() 1	() 2	() 3	() 4	() 5	() 6	() 7	

Do the following statements apply to you?	applies not at all to me	applies a little to me	medium	applies a lot to me	applies definitely to me
risk1_r I am not willing to take risks when choosing a job or a company to work for.	() 1	() 2	() 3	() 4	() 5
risk2_r I prefer a low risk/high security job with a steady salary over a job that offers high risks and rewards.	() 1	() 2	() 3	() 4	() 5
risk3_r I prefer to remain on a job that has problems that I know about rather than take the risk of working at a new job that has unknown problems even if the new job offers greater rewards.	() 1	() 2	() 3	() 4	() 5
risk4_r I view risk on a job as a situation to be avoided at all cost.	() 1	() 2	() 3	() 4	() 5

Please indicate your agreement with the following statements:

krisk1 I have a co-operative coexistence with rival firms.	(1) (2) (3) (4) (5) (6) (7)	I have a very competitive "undo-the-competitors" philosophy
krisk2 I don't borrow or use loans for any business activities.	(1) (2) (3) (4) (5) (6) (7)	I use a lot of outside financing in my business (borrowing, loans, etc.)
krisk3 I prefer low risk business activities that have a moderate, but secure return.	(1) (2) (3) (4) (5) (6) (7)	I prefer high risk business activities that have a high return, but where there is also the chance of earning nothing
krisk4 In my business I avoid new uncertain ideas, products or services	(1) (2) (3) (4) (5) (6) (7)	In my business, I often push new ideas, products or services with an uncertain outcome.

How do the following statements apply to you?	very seldom	seldom	medium	often	very often
ini1 I actively approach problems.	() 1	() 2	() 3	() 4	() 5
ini2 Whenever something goes wrong, I search for a solution immediately.	() 1	() 2	() 3	() 4	() 5
ini3 Whenever there is a chance to get actively involved, I take it.	() 1	() 2	() 3	() 4	() 5
ini4 I take initiative immediately even when others do not.	() 1	() 2	() 3	() 4	() 5
ini5 I use opportunities quickly in order to attain my goals.	() 1	() 2	() 3	() 4	() 5
ini7 I am particularly good at realising ideas.	() 1	() 2	() 3	() 4	() 5

Please indicate your agreement with the following statements and tick the number that most closely represents your opinion.

pd1/R People in positions of power should:	Maximise their social distance from less powerful people	Minimise their social distance from less powerful people
pd2/R Power should be:	Concentrated at the top of the firm	Shared throughout the firm
pd3/R A person's influence should be based on:	Ability and contribution to the firm	Authority of one's position
pd4/R When disagreeing with superiors, subordinates should generally obey superiors:	Strongly agree	Strongly disagree
pd5/R Rank should have its privileges.	Strongly agree	Strongly disagree
pd6/R Subordinates should:	Obey their boss without questions	Question their boss when disagreeing
pd7/R Important business decisions should be made by:	The management	The employees

Do the following statements apply to you?	Not at all	A bit	Neither a bit, nor a lot	A lot	Totally
erors1 I find it stressful when I err.	() 1	() 2	() 3	() 4	() 5
erors2 I am often afraid of making mistakes.	() 1	() 2	() 3	() 4	() 5
erors3 I feel embarrassed when I make an error.	() 1	() 2	() 3	() 4	() 5
erors4 If I make a mistake at work, I “lose my cool” and become angry.	() 1	() 2	() 3	() 4	() 5
erors5 While working I am concerned that I could do something wrong.	() 1	() 2	() 3	() 4	() 5

How do the following statements apply to you?	strongly disagree strongly agree								
hi1 I prefer to be direct and forthright when I talk to people.	() 1	() 2	() 3	() 4	() 5	() 6	() 7	() 8	() 9
hc1 My happiness depends very much on the happiness of those around me.	() 1	() 2	() 3	() 4	() 5	() 6	() 7	() 8	() 9
vc1 I would do what would please my family, even if I detested that activity.	() 1	() 2	() 3	() 4	() 5	() 6	() 7	() 8	() 9
vi1 Winning is everything.	() 1	() 2	() 3	() 4	() 5	() 6	() 7	() 8	() 9
hi2 One should live ones life independently of others.	() 1	() 2	() 3	() 4	() 5	() 6	() 7	() 8	() 9
hi3 What happens to me is my own doing.	() 1	() 2	() 3	() 4	() 5	() 6	() 7	() 8	() 9
vc2 I usually sacrifice my self-interest for the benefit of my group.	() 1	() 2	() 3	() 4	() 5	() 6	() 7	() 8	() 9
vi2 It annoys me when other people perform better than I do.	() 1	() 2	() 3	() 4	() 5	() 6	() 7	() 8	() 9
hc2 It is important for me to maintain harmony within my group.	() 1	() 2	() 3	() 4	() 5	() 6	() 7	() 8	() 9
vi3 It is important to me that I do my job better than others.	() 1	() 2	() 3	() 4	() 5	() 6	() 7	() 8	() 9
hc3 I like sharing little things with my neighbours.	() 1	() 2	() 3	() 4	() 5	() 6	() 7	() 8	() 9

How do the following statements apply to you?	very false						very true
	() 1	() 2	() 3	() 4	() 5	() 6	
exloc1 To a great extent my life is controlled by accidental happenings.	---	--	-	+	++	+++	
inloc1 When I make plans, I am almost certain to make them work.	---	--	-	+	++	+++	
exloc2 Often there is no chance of protecting my personal interest from bad luck happenings.	---	--	-	+	++	+++	
exloc3 When I get what I want, it's usually because I'm lucky.	---	--	-	+	++	+++	
exloc4 People like myself have very little chance of protecting our personal interests when they conflict with those of strong pressure groups.	---	--	-	+	++	+++	
exloc5 It's not always wise for me to plan too far ahead because many things turn out to be a matter of good or bad fortune	---	--	-	+	++	+++	
exloc6 Whether or not I get to be a leader depends on whether I'm lucky enough to be in the right place at the right time.	---	--	-	+	++	+++	
inloc2 I can pretty much determine what will happen in my life.	---	--	-	+	++	+++	
inloc3 I am usually able to protect my personal interests.	---	--	-	+	++	+++	
inloc4 When I get what I want, it's usually because I worked hard for it.	---	--	-	+	++	+++	
inloc5 My life is determined by my own actions.	---	--	-	+	++	+++	
exloc7 It's chiefly a matter of fate whether or not I have a few friends or many friends	---	--	-	+	++	+++	

How do the following statements apply to you?	strongly disagree						strongly agree		
	() 1	() 2	() 3	() 4	() 5	() 6	() 7	() 8	() 9
vi4 I enjoy working in situations involving competition with others.	() 1	() 2	() 3	() 4	() 5	() 6	() 7	() 8	() 9
vc3 We should keep our ageing parents with us at home.	() 1	() 2	() 3	() 4	() 5	() 6	() 7	() 8	() 9
hc4 The well-being of my co-workers is important to me.	() 1	() 2	() 3	() 4	() 5	() 6	() 7	() 8	() 9
hi4 I enjoy being unique and different from others in many ways.	() 1	() 2	() 3	() 4	() 5	() 6	() 7	() 8	() 9

How do the following statements apply to you?

	strongly disagree								strongly agree
hc5 If a relative were in financial difficulty, I would help within my means.	() 1	() 2	() 3	() 4	() 5	() 6	() 7	() 8	() 9
vc4 Children should feel honoured if their parents receive a distinguished award.	() 1	() 2	() 3	() 4	() 5	() 6	() 7	() 8	() 9
hi5 I often do "my own thing".	() 1	() 2	() 3	() 4	() 5	() 6	() 7	() 8	() 9
vi5 Competition is the law of nature.	() 1	() 2	() 3	() 4	() 5	() 6	() 7	() 8	() 9
hc6 If a co-worker gets a prize I would feel proud.	() 1	() 2	() 3	() 4	() 5	() 6	() 7	() 8	() 9
hi6 I am a unique individual.	() 1	() 2	() 3	() 4	() 5	() 6	() 7	() 8	() 9
hc7 To me, pleasure is spending time with others.	() 1	() 2	() 3	() 4	() 5	() 6	() 7	() 8	() 9
vi6 When another person does better than I do, I get tense and aroused.	() 1	() 2	() 3	() 4	() 5	() 6	() 7	() 8	() 9
vc5 I would sacrifice any activity that I enjoy very much if my family did not approve of it.	() 1	() 2	() 3	() 4	() 5	() 6	() 7	() 8	() 9
hi7 I like my privacy.	() 1	() 2	() 3	() 4	() 5	() 6	() 7	() 8	() 9
vi7 Without competition it is not possible to have a good society.	() 1	() 2	() 3	() 4	() 5	() 6	() 7	() 8	() 9
vc6 Children should be taught to place duty before pleasure.	() 1	() 2	() 3	() 4	() 5	() 6	() 7	() 8	() 9
hc8 I feel good when I co-operate with others.	() 1	() 2	() 3	() 4	() 5	() 6	() 7	() 8	() 9
vc7 I hate to disagree with others in my group.	() 1	() 2	() 3	() 4	() 5	() 6	() 7	() 8	() 9
vi8/R Some people emphasise winning; I am not one of them.	() 1	() 2	() 3	() 4	() 5	() 6	() 7	() 8	() 9
vc8 Before taking a major trip, I consult with most members of my family and many friends.	() 1	() 2	() 3	() 4	() 5	() 6	() 7	() 8	() 9
hi8 When I succeed, it is usually because of my abilities.	() 1	() 2	() 3	() 4	() 5	() 6	() 7	() 8	() 9

THE BUSINESS QUESTIONNAIRE

INSTRUCTIONS

Please answer the questions below. Read the whole problem carefully and then chose the answer which you believe is the best one. Please choose only one answer for every problem.

1. Profit is determined by;

- | | |
|---|---|
| * | a) Business income minus expenses. |
| | b) Business income minus wages. |
| | c) Business income minus advertising costs. |

2. Market research is important for:

- | | |
|---|--|
| * | a) Determining whether or not your products or services will sell. |
| | b) Recruiting employees. |
| | c) Keeping within the law. |

3. National employment regulations must be observed by:

- | | |
|---|--------------------------------|
| * | a) All employers. |
| | b) Only registered businesses. |
| | c) Only tax paying businesses. |

4. Which is the best method of checking on business progress?

- | | |
|---|--------------------------------------|
| * | a) Inspecting the business accounts. |
| | b) Number of customers. |
| | c) Volume of sales. |

5. Why is advertising important?

- | | |
|---|--|
| * | a) The public learns about your product. |
| | b) You can be proud of your business. |
| | c) It helps you get loans. |

6. Business discounts given to friends and family:

- | | |
|---|--------------------------------|
| * | a) Need to be recorded. |
| | b) Do not need to be recorded. |

7. Unregistered businesses:

- | | |
|---|--------------------------------------|
| * | a) Are obliged to pay sales tax. |
| | b) Are not obliged to pay sales tax. |

8. Which of the following statements is true?

- | | |
|---|---|
| * | a) Any business earning \$60,000 per annum is required to register for sales tax. |
| | b) Informal businesses earning less than \$60,000 per annum need not register for sales tax. |
| | c) Only formal businesses earning over \$60,000 per annum are required to register for sales tax. |

9. When business is bad:

- | | |
|---|---|
| | a) All businesses may reduce wages to employees. |
| * | b) No businesses may reduce wages to employees without the agreement of employees or application to the Labour Relations Board. |
| | c) Only unregistered businesses may reduce wages. |

10. A business contract is binding:

- | | |
|---|--|
| * | a) If both parties have agreed to clear terms. |
| | b) Only if both parties have agreed to clear terms in writing. |

11. If you make an offer to sell a product or service and this offer is accepted by the other party:

- | | |
|---|---|
| * | a) You are legally bound to provide the product or service as agreed. |
| | b) You can change the terms if you feel it necessary. |

12. Which of the following is a business expense?

- | | |
|---|---|
| | a) Donations to charity. |
| * | b) Repairs to plumbing on the business premises. |
| | c) Payment for tax advice. |
| | d) Paying for a party to which customers are invited. |

13. A manufacturer must:

- | | |
|---|--|
| * | a) Replace or repair goods proven to be faulty when purchased. |
| | b) Does not need to compensate – it is the buyer's risk. |

14. A sale is completed when:

- | | |
|---|---------------------------------------|
| * | a) Agreement has been reached. |
| | b) Only when money has changed hands. |

15. Collateral for a loan is required:

- | | |
|---|---|
| * | a) To protect the interests of the lender. |
| | b) To keep certain people from entering business. |

16. If business is bad:

- | | |
|---|---|
| | a) A borrower may reschedule payment of the debt. |
| * | b) A borrower may only reschedule payment of the debt with the agreement of the lender. |

17. Informal, unregistered companies:

- | | |
|---|--|
| | a) Are not required to register for income tax purposes. |
| * | b) Are required to register for income tax purposes. |

18. Employees in unregistered companies:

- | | |
|---|--|
| * | a) Must have PAYE deducted if their earnings are above \$30,000 per annum. |
| | b) Do not need to have PAYE deductions made by the employer. |

19. Which of the following could be a source of finance for business expansion?

- | | |
|---|--|
| * | a) Loan from bank. |
| | b) Government subsidy. |
| | c) The National Social Security Authority. |

20. Which of the following is a business expense?

- | | |
|---|--|
| | a) Proprietor pays for a haircut. |
| | b) Proprietor buys lunch. |
| * | c) Proprietor pays for an advertisement of the business. |

SAMPLE DESCRIPTION

**Psychological Success Factors of Small and Micro Business Owners in
Southern Africa: A Longitudinal Approach**

(T1 & T2)

We applied a descriptive and behavioral definition of entrepreneurs (Gartner, 1989) and sampled business owners who had started their enterprise and carried the load of day-to-day management (Rauch & Frese, 2000). The sample consisted of Black indigenous owner/manager/founders of firms who had at least one and up to fifty employees at the time of their first interview. There is a qualitative difference between one-person enterprises and owners who have at least one employee: The step to having employees implies a change in responsibility, in one's self-perception and identity as a business person, in the psychological investment into one's career, and in the necessity of managerial skills (Frese, 2000). Also, businesses of more than 50 employees are no longer a small businesses (ILO; 1972) and the owner/manager/founders' tasks are different (e.g., more delegation). Focusing on the person of the owner would no longer be the adequate level of investigation above 50 employees. However, the majority of Zimbabwean enterprises are one-person operations (69%; Mead & Liedholm, 1998). Therefore, our sample are high-performing African business owners and generalization of our results should be pondered carefully. Furthermore, we only selected businesses that operated for more than one year in order to ensure that our participants had adequate experience in their trade to complete our interview and questionnaires as well as to exclude those who just try to bridge two periods of employment. Finally, all our participants were Black because in the course of African indigenization it is especially interesting to understand Black businesses.

Small scale businesses in Southern Africa are usually clustered in certain areas. In the city, the industrial areas (called home industries or industrial hives) are mainly located near high density housing areas. In rural areas, businesses are concentrated in so called growth points. Most of these businesses are not registered, do not appear in any listing (in order not to be evicted by the authorities), and do not have telephone lines. Therefore, we used a random walk procedure in the industrial areas to ask for participation. Businesses typically found in such areas include scrap metal merchants, garages, furniture manufacturers, bottle stores, grocery stalls, tailors, welders, soap manufacturers, and others who produce for their immediate local markets. To include up-market businesses and those located in urban office buildings (e.g., commodity brokers, travel agencies, advertising agencies, and

telecommunication companies), we consulted business directories and made appointments. We tried to sample the listed businesses at random. However, addresses and phone numbers were often incomplete or not up to date.

SAMPLE T1

The overall sample size at T1 consisted of $n=248$ Zimbabwean and South African business owners (Table 1). Both samples were drawn between September 1998 and April 1999.

Table 1: Sample Description T1

	Zimbabwe			South Africa			Overall $n=248$
	Overall $n=122$	Informal $n=43$	Formal $n=79$	Overall $n=126$	Informal ^a $n=48$	Formal ^a $n=77$	
The Owner							
Gender male (%)	82.8	83.7	82.2	85.7	81.3	89.6	84.3
Average owners' age	38	35	39	44	41	45	41
The Business							
Year of establishment (average) ^b	1993	1994	1993	1993	1994	1992	1993
Starting capital (average US\$)	17,066	3,723	24,328	5,226	794	8,021	11,051
Starting capital < 1000 US\$ (%)	35.2	44.2	30.4	63.5	70.8	59.7	49.6
Industry^c							
Manufacturing (%)	47.5	72.1	34.2	55.6	41.7	63.6	51.6
Construction (%)	4.1	0.0	6.3	0.8	0.0	1.3	2.4
Trade (%)	31.1	18.6	38.0	24.6	33.3	19.5	27.8
Gastronomy (%)	1.6	0.0	2.5	2.4	4.2	1.3	2.0
Service (%)	35.2	27.9	39.2	28.6	22.9	32.5	31.9
Other (%)	6.6	0.0	10.1	3.2	8.3	0.0	4.8
Employment							
Number of employees	8.44	3.81	10.96	5.20	2.77	6.73	6.8
Micro-businesses (%) ^d	77.9	97.7	67.1	88.1	97.9	81.8	83.1

Note. ^a1 missing data. ^bYears of establishment ranged from 1971 to 1998 in Zimbabwe and from 1951 to 1998 in South Africa. ^cMultiple answers were possible. ^d1-10 employees (ILO, 1972).

In Zimbabwe, we included the two major ethnic groups (Shona and Ndebele). The overall Zimbabwean sample size was $n=122$ ($n=98$ Shona -- the ethnic majority in Zimbabwe, $n=21$ Ndebele, and $n=3$ of other African origin). We carried out interviews in the mainly urban regions of Harare, Mashonaland (homeland of the Shona; 82%) and Bulawayo, Matabeleland (homeland of the Ndebele; 18%). Participants received the equivalent of five US Dollars as a sign of gratitude and a compensation for their time. The refusal rate of 30% was low for a study of such length (up to two hours).

In South Africa, all interviews were carried out in and around Cape Town, Cape Province. We included the major local ethnic groups (Xhosa, Zulu, and Coloureds). (Because racial classification played such an important role in even recent Southern African history, we are forced to use these racial labels. 'Coloured' is a self-descriptive term by people of mixed background who were not accepted as white and did not think of themselves as being Black Africans. The First language of the Coloured population is usually Afrikaans, the language of the settlers of Boer descent in South Africa. During colonialism and Apartheid Coloureds were less discriminated than Blacks.). The South African sample size was $n=126$ ($n=36$ Xhosa, $n=2$ Zulu, $n=71$ Coloured, and $n=17$ of other African origin). Participants were given a pen with the 'University of Giessen' logo as a sign of gratitude. The refusal rate in South Africa was 44% which again is quite low for an interview study of this kind.

SAMPLE T2

At T2, data was only collected in Zimbabwe. The sample can be divided into owners that had already participated at T1 ($n=97$ longitudinal) and owners who participated for the first time at T2 ($n=183$ cross-sectional). Therefore, we will report data for the overall sample ($n=280$) as well as for the longitudinal sub-group (Table 2).

At T2, data collection was carried out from May 2000 to July 2001. The time frame for data collection was relatively long because many of the T1 participants had relocated their business. We had to apply extensive search strategies that entailed seeking information from former neighbors, from competitors, from relatives, etc. The lack of phone lines regularly hampered the data collection in the second wave of interviews because we often had to revisit several times before we could meet the owner for an interview appointment. Again, the interviews were carried out in the mainly urban regions of Harare, Mashonaland and Bulawayo, Matabeleland and participants received the equivalent of five US Dollars as a sign of gratitude and a compensation for their time.

Of the 122 owners interviewed for T1, we revisited 104 participants. The remaining 18 could either not be found ($n=11$), rejected to participate again ($n=4$), or had passed away

(n=3). Out of the 104 T2 participants, seven had given up their business. Therefore, the resulting sample size for T2 longitudinal was 97.

Table 2: Sample Description T2

	T2 longitudinal			T2 All		
	Overall <u>n</u> =97 ^d	Informal <u>n</u> =36	Formal <u>n</u> =61	Overall <u>n</u> =280	Informal ^e <u>n</u> =174	Formal ^e <u>n</u> =104
The Owner						
Gender male (%)	83.5	88.9	80.3	87.5	88.4	85.6
Average owners' age	39	35	42	34	32	38
The Business						
Year of establishment (average) ^a	1992	1992	1993	1994	1995	1993
Starting capital (average US\$)	19,286	4,724	26,189	— ^f	— ^f	— ^f
Starting capital < 1000 US\$ (%)	47.4	61.1	39.3	— ^f	— ^f	— ^f
Industry^b						
Manufacturing (%)	51.5	77.8	36.1	49.8	53.8	43.3
Construction (%)	8.2	5.6	9.8	5.4	3.5	8.7
Trade (%)	45.4	38.9	49.2	38.2	36.2	42.3
Gastronomy (%)	2.1	0	3.3	3.2	2.3	4.9
Service (%)	43.3	22.2	55.7	34.9	28.7	46.1
Other (%)	4.1	5.6	3.3	3.9	4.0	2.9
Employment						
Average number of employees	10.51	2.94	14.85	5.10	2.14	10.06
Micro-businesses (%) ^c	78.1	100	65.6	91.4	100	76.9

Note. ^aYears of establishment ranged from 1971 to 1998. ^bMultiple answers were possible. ^c1-10 employees (ILO, 1972). ^dn =7 participants had given up their business of whom 1 had been informal and 6 had been formal at T1. ^e2 missing data. ^fnot measured at T2.

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MANUAL OF SCALES

Psychological Success Factors of Small and Micro Business Owners in**Southern Africa: A Longitudinal Approach**

(T1 & T2)

Personality

Error Strain _____	A-109
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Need for Dominance _____	A-112
Self - Efficacy (Questionnaire) _____	A-113
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Scale name t1: xerors

Scale name t2: xerorss

Error Strain

Source: Rybowskiak, V. Garst, H. Frese, M., & Batinic, B. (1998). Error Orientation Questionnaire (EOQ): Reliability, validity, and different language equivalence. *Journal of Organizational Behavior*, 19, 527-547.

Content: Dealing with and handling of mistakes

	t1 ¹ All	t1 ² Zimbabwe	t1 ³ South Africa	t2 ⁴ All	t2 ⁵ longitudinal
Alpha	.730	.658	.787	.786	.774
Mean	2.948	2.977	2.919	2.9221	3.028
SD	1.100	1.055	1.144	1.094	1.100
N	246	121	125	269	88

Do the following statements apply to you?

Item	Re-code	Scale	Label	Corrected Item-Total Correlation				
				t1 ¹ All	T1 ² Zim	t1 ³ S.Af.	t2 ⁴ All	t2 ⁵ long
erors1 erors1s		1-5	I find it stressful when I err.	.384	.283	.482	.553	.574
erors2 erors2s		1-5	I am often afraid of making mistakes.	.591	.554	.620	.654	.537
erors3 erors3s		1-5	I feel embarrassed when I make an error.	.652	.582	.718	.707	.692
erors4 erors4s		1-5	If I make a mistake at work, I “lose my cool” and become angry.	.464	.351	.570	.467	.516

¹ Zimbabwean and South African business owners interviewed in 1998/99; ² Zimbabwean business owners interviewed in 1998/99; ³ South African business owners interviewed in 1998/99; ⁴ Zimbabwean business owners interviewed in 2000/01; ⁵ Zimbabwean business owners re-interviewed in 2000/01.

Scale name t1: xexloc
Scale name t2: xexlocs

External Locus of Control

Source: Levenson, H. (1974). Activism and Powerful Others: Distinctions Within the Concept of Internal-External Control. *Journal of Personality Assessment*, 38, 377-383.

Content: Perceived external control and influence on one's life, business success, etc.

	t1 ¹ All	t1 ² Zimbabwe	t1 ³ South Africa	t2 ⁴ All	t2 ⁵ longitudinal
Alpha	.793	.730	.842	.756	.768
Mean	2.913	2.929	2.898	2.867	2.926
SD	1.229	1.159	1.298	1.081	1.146
N	246	121	125	271	91

How do the following statements apply to you?

Item	Re-code	Scale	Label	Corrected Item-Total Correlation				
				t1 ¹ All	t1 ² Zim	t1 ³ S.Af.	t2 ⁴ All	t2 ⁵ long
exloc1 exloc1s		1-6	To a great extent my life is controlled by accidental happenings.	.523	.465	.584	.481	.501
exloc2 exloc2s		1-6	Often there is no chance of protecting my personal interest from bad luck happenings.	.422	.247	.574	.488	.364
exloc3 exloc3s		1-6	When I get what I want, it's usually because I'm lucky.	.557	.541	.579	.624	.548
exloc4 exloc4s		1-6	People like myself have very little chance of protecting our personal interests when they conflict with those of strong pressure groups.	.590	.431	.723	.447	.353
exloc5 exloc5s		1-6	It's not always wise for me to plan too far ahead because many things turn out to be a matter of good or bad fortune	.522	.507	.545	.605	.622
exloc6 exloc6s		1-6	Whether or not I get to be a leader depends on whether I'm lucky enough to be in the right place at the right time.	.605	.561	.666	.541	.556
exloc7 exloc7s		1-6	It's chiefly a matter of fate whether or not I have a few friends or many friends.	.429	.343	.504	.164	.489

¹ Zimbabwean and South African business owners interviewed in 1998/99; ² Zimbabwean business owners interviewed in 1998/99; ³ South African business owners interviewed in 1998/99; ⁴ Zimbabwean business owners interviewed in 2000/01; ⁵ Zimbabwean business owners re-interviewed in 2000/01.

Scale name t1: xinloc

Scale name t2: xinlocs

Internal Locus of Control

Source: Levenson, H. (1974). Activism and Powerful Others: Distinctions Within the Concept of Internal-External Control. *Journal of Personality Assessment*, 38, 377-383.

Content: Perceived self-control on one's life, business success, work, etc.

	t1 ¹ All	t1 ² Zimbabwe	t1 ³ South Africa	t2 ⁴ All	t2 ⁵ longitudinal
Alpha	.735	.656	.796	.505	.624
Mean	5.122	5.159	5.085	4.610	4.813
SD	.930	.874	.983	.839	.832
N	246	121	125	272	91

How do the following statements apply to you?

Item	Re-code	Scale	Label	Corrected Item-Total Correlation				
				t1 ¹ All	t1 ² Zim	t1 ³ S.Af.	t2 ⁴ All	t2 ⁵ long
inloc1 inloc1s		1-6	When I make plans, I am almost certain to make them work.	.444	.426	.459	.089	.395
inloc2s		1-6	I can pretty much determine what will happen in my life.	—	—	—	.087	.344
inloc3 inloc3s		1-6	I am usually able to protect my personal interests.	.509	.373	.620	.482	.434
inloc4 inloc4s		1-6	When I get what I want, it's usually because I worked hard for it.	.583	.457	.691	.513	.448
inloc5 inloc5s		1-6	My life is determined by my own actions.	.593	.508	.705	.446	.355

¹ Zimbabwean and South African business owners interviewed in 1998/99; ² Zimbabwean business owners interviewed in 1998/99; ³ South African business owners interviewed in 1998/99; ⁴ Zimbabwean business owners interviewed in 2000/01; ⁵ Zimbabwean business owners re-interviewed in 2000/01.

Scale name t1: xndom**Scale name t2: n.a.****Need for Dominance**

Source: Steers, R.M. & Braunstein, D.N. (1976). Scale for Measuring Need of Dominance. *Journal of Vocational Behavior*, 9, 251-266.

Content: Participants' need for dominance at work

	t1 ¹ All	t1 ² Zimbabwe	t1 ³ South Africa	t2 ⁴ All	t2 ⁵ longitudinal
Alpha	.706	.644	.730	—	—
Mean	5.122	5.159	5.085	—	—
SD	.930	.874	.983	—	—
N	246	121	125	—	—

How do the following statements apply to you?

Item	Re-code	Scale	Label	Corrected Item-Total Correlation				
				t1 ¹ All	t1 ² Zim	t1 ³ S.Af.	t2 ⁴ All	t2 ⁵ long
ndom1		1-7	I seek an active role in the leadership of a group.	.474	.427	.484	—	—
ndom2		1-7	I strive to gain more control over events around me at work.	.536	.413	.612	—	—
ndom3		1-7	I strive to be 'in command' when I am working in a group.	.566	.539	.565	—	—

¹ Zimbabwean and South African business owners interviewed in 1998/99; ² Zimbabwean business owners interviewed in 1998/99; ³ South African business owners interviewed in 1998/99; ⁴ Zimbabwean business owners interviewed in 2000/01; ⁵ Zimbabwean business owners re-interviewed in 2000/01.

Scale name t1: xselef

Scale name t2: n.a.

Self - Efficacy (Questionnaire)

Source: Schwarzer, R., Bäßler, J., Kwiatek, P., Schröder, K., & Zhang, J.X. (1997). The assessment of optimistic self-beliefs: Comparison of German, Spanish, and Chinese versions of the General Self-Efficacy Scale. *Applied Psychology: An International Review*, 46 (1), 69-88.

Content: Participants' believe in their general potency and self – efficacy

	t1 ¹ All	t1 ² Zimbabwe	t1 ³ South Africa	t2 ⁴ All	t2 ⁵ longitudinal
Alpha	.832	.742	.893	—	—
Mean	3.301	3.330	3.273	—	—
SD	.545	.494	.4918	—	—
N	244	121	123	—	—

Do the following statements apply to you?

Item	Re-code	Scale	Label	Corrected Item-Total Correlation				
				t1 ¹ All	t1 ² Zim	t1 ³ S.Af.	t2 ⁴ All	t2 ⁵ long
selef1		1-4	I can always manage to solve difficult problems if I try hard enough.	.611	.492	.718	—	—
selef3		1-4	It is easy for me to stick to my aims and accomplish my goals.	.473	.387	.532	—	—
selef4		1-4	I am confident that I could deal efficiently with unexpected events.	.586	.485	.685	—	—
selef5		1-4	Thanks to my resourcefulness, I know how to handle unforeseen situations.	.569	.468	.683	—	—
selef6		1-4	I can solve most problems if I invest the necessary effort.	.558	.405	.692	—	—
selef7		1-4	I can remain calm when facing difficulties because I can rely on my coping abilities.	.520	.409	.679	—	—
selef8		1-4	When I am confronted with a problem, I can usually find several solutions.	.432	.341	.523	—	—
selef9		1-4	If I am in a bind, I can usually think of something to do.	.593	.400	.741	—	—
selef10		1-4	No matter what comes my way, I'm usually able to handle it.	.529	.402	.637	—	—

¹ Zimbabwean and South African business owners interviewed in 1998/99; ² Zimbabwean business owners interviewed in 1998/99; ³ South African business owners interviewed in 1998/99; ⁴ Zimbabwean business owners interviewed in 2000/01; ⁵ Zimbabwean business owners re-interviewed in 2000/01.

Scale name t1: xselfef

Scale name t2: xseffs

Self - Efficacy (Interview)

Source: Self – developed along the lines suggested by Bandura (1997).

Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: W.H. Freeman and Company.

Content: Judgement of participants about their self - efficacy (percentage) regarding dealing with their main business goals, problems, and regarding tasks that are essential and specific for managing a business.

	t1 ¹ All	t1 ² Zimbabwe	t1 ³ South Africa	t2 ⁴ All	t2 ⁵ longitudinal
Alpha	—	—	—	.844	.864
Mean	66.214	70.539	61.960	80.550	78.850
SD	26.068	18.833	31.110	11.641	11.703
N	246	122	124	269	89

Note: Alpha was only computed for scales with more than two variables.

Item	Re-code	Scale	Label	Corrected Item-Total Correlation				
				t1 ¹ All	t1 ² Zim	t1 ³ S.Af.	t2 ⁴ All	t2 ⁵ long
selfe1 seff1s		0- 100%	t1: How sure are you that you can successfully manage this problem in the future? t2: How sure are you to achieve this goal? (normal interview) or How sure are you that you could manage this problem today? (exit interview)	.501	.268	.595	.522	.684
selfe2 seff2s		0- 100%	t1: How sure are you that you can successfully manage this problem in the future? t2: How sure are you to achieve this goal? (normal interview) or How sure are you that you could manage this problem today? (exit interview)	.501	.268	.595	.626	.652
seff3s		0- 100%	t2: How sure are you to achieve this goal? (normal interview) or How sure are you that you could manage this problem today? (exit interview)	—	—	—	.498	.541
seff4s		0- 100%	t2: How sure are you to achieve this goal? (normal interview) or How sure are you that you could manage this problem today? (exit interview)	—	—	—	.560	.625
seff5s		0- 100%	t2: How sure are you to achieve this goal? (normal interview) or How sure are you that you could manage this problem today? (exit interview)	—	—	—	.504	.737
seff6s		0- 100%	t2: How sure are you to achieve this goal? (normal interview) or How sure are you that you could manage this problem today? (exit interview)	—	—	—	.487	.612

conf1s		0-100%	How confident are you that you can lead people well	—	—	—	.493	.405
conf2s		0-100%	How confident are you that you can negotiate with fellow business men well?	—	—	—	.477	.400
conf3s		0-100%	How confident are you that you can negotiate with customers well?	—	—	—	.529	.525
conf4s		0-100%	How confident are you that you can keep an overview over your financial affairs well?	—	—	—	.421	.391
conf5s		0-100%	How confident are you that you can do the pricing of your products well?	—	—	—	.453	.453
conf6s		0-100%	How confident are you that you can communicate with other people well?	—	—	—	.398	.318
conf7s		0-100%	How confident are you that you can convince customers to buy products well?	—	—	—	.576	.578

¹ Zimbabwean and South African business owners interviewed in 1998/99; ² Zimbabwean business owners interviewed in 1998/99; ³ South African business owners interviewed in 1998/99; ⁴ Zimbabwean business interviewed in 2000/01; ⁵ Zimbabwean business owners re-interviewed in 2000/01.

Scale name t1: xnach

Scale name t2: n.a.

Need for Achievement

Source: Hermans, H.J.M. (1970). A questionnaire measure of achievement motivation. *Journal of Applied Psychology*, 45 (4), 353-363.

Content: Work related achievement motivation.

	t1 ¹ All	t1 ² Zimbabwe	t1 ³ South Africa	t2 ⁴ All	t2 ⁵ longitudinal
Alpha	.695	.701	.702	—	—
Mean	4.211	4.203	4.220	—	—
SD	.754	.834	.672	—	—
N	242	119	123	—	—

Item	Re-code	Scale	Label	Corrected Item-Total Correlation				
				t1 ¹ All	t1 ² Zim	t1 ³ S.Af.	t2 ⁴ All	t2 ⁵ long
nach1		1-5	Working is something: 1. I would rather not do 2. I don't like doing very much 3. I would rather do now and then 4. I like doing 5. I like doing very much	.523	.578	.450	—	—
nach4/R	X	1-5	I usually am: 1. very busy 2. busy 3. not so busy 4. not busy 5. not busy at all	.537	.526	.592	—	—
nach5		1-5	When doing something difficult: 1. I give up very quickly 2. I give up quickly 3. I give up rather quickly 4. I don't give up to soon 5. I usually see it through	.472	.453	.518	—	—

¹ Zimbabwean and South African business owners interviewed in 1998/99; ² Zimbabwean business owners interviewed in 1998/99; ³ South African business owners interviewed in 1998/99; ⁴ Zimbabwean business owners interviewed in 2000/01; ⁵ Zimbabwean business owners re-interviewed in 2000/01.

Scale name t1: xbeact

Scale name t2: xbeacts

Behavioral Activeness

Source: Self - developed

Content: Interviewer evaluation of participants' activeness during the interview and in daily business

	t1 ¹ All	t1 ² Zimbabwe	t1 ³ South Africa	t2 ⁴ All	t2 ⁵ longitudinal
Alpha	.854	.861	.829	.839	.883
Mean	3.461	3.657	3.271	3.349	3.299
SD	.958	1.046	.825	.882	1.079
N	248	122	126	280	97

Item	Re-code	Scale	Label	Corrected Item-Total Correlation				
				t1 ¹ All	t1 ² Zim	t1 ³ S.Af.	t2 ⁴ All	t2 ⁵ long
eval3 eval3s		1-5	active interview dialogue behavior (interviewer evaluation)	.675	.750	.553	.753	.733
eval4 eval4s		1-5	behaves passively vs. actively (interviewer evaluation)	.766	.742	.792	.797	.833
eval31e eval31s		1-5	energetic behavior (interviewer evaluation)	.743	.732	.736	.704	.762

¹ Zimbabwean and South African business owners interviewed in 1998/99; ² Zimbabwean business owners interviewed in 1998/99; ³ South African business owners interviewed in 1998/99; ⁴ Zimbabwean business owners interviewed in 2000/01; ⁵ Zimbabwean business owners re-interviewed in 2000/01.

Scale name t1: xiq
Scale name t2: xiqs

Cognitive Ability

Source t1: Tewes, U. (1991). HAWIE-R: Hamburg-Wechsler Intelligenztest für Erwachsene. Handbuch und Testanweisung. Stuttgart: Huber.

Source t2: Oswald, W. D., & Roth, E. (1987). Der Zahlen-Verbindungs-Test (ZVT) - The Connecting numbers test. Göttingen, Germany: Hogrefe. (Builds on the Trail Making Test used in the U.S. Army test of general mental ability.)

Content t1: Digit span test (forward and backward).

Content t2: Short measure of cognitive performance speed.

	t1 ¹ All	t1 ² Zimbabwe	t1 ³ South Africa	t2 ⁴ All	t2 ⁵ longitudinal
Alpha	.755	.690	.818	.961	.965
Mean	.006	-.014	.004	-.019	-.031
SD	.815	.783	.854	.912	.899
N	240	115	125	260	84

Item	Re-code	Scale	Label	Corrected Item-Total Correlation				
				t1 ¹ All	t1 ² Zim	t1 ³ S.Af.	t2 ⁴ All	t2 ⁵ long
zdsback		factual *	digit span test forward	.602	.546	.645	—	—
zdsforw		factual *	digit span test backward	.549	.450	.641	—	—
zeval2		1-5*	estimate of IQ (interviewer evaluation)	.603	.522	.726	—	—
zzvt1s		factual *	Connecting numbers test item 1	—	—	—	.878	.883
zzvt2s		factual *	Connecting numbers test item2	—	—	—	.908	.928
zzvt3s		factual *	Connecting numbers test item3	—	—	—	.919	.925
zzvt4s		factual *	Connecting numbers test item4	—	—	—	.910	.925

Note: * z- standardized.

¹ Zimbabwean and South African business owners interviewed in 1998/99; ² Zimbabwean business owners interviewed in 1998/99; ³ South African business owners interviewed in 1998/99; ⁴ Zimbabwean business owners interviewed in 2000/01; ⁵ Zimbabwean business owners re-interviewed in 2000/01.

Scale name t1: xhc

Scale name t2: n.a.

Human Capital

Source: Self - developed

Content: Years of formal education, management experience from earlier employment, and vocational training

	t1 ¹ All	t1 ² Zimbabwe	t1 ³ South Africa	t2 ⁴ All	t2 ⁵ longitudinal
Alpha	.648	.670	.255	—	—
Mean	-.008	-.025	.009	—	—
SD	.748	.766	.636	—	—
N	248	122	126	—	—

Item	Re-code	Scale	Label	Corrected Item-Total Correlation				
				t1 ¹ All	t1 ² Zim	t1 ³ S.Af.	t2 ⁴ All	t2 ⁵ long
zeduyea		factual *	years of education	.511	.537	.202	—	—
zexpman		1-5*	estimated experience in management	.299	.335	-.073	—	—
zvotra		1-5*	received vocational training	.587	.593	.346	—	—

Note: * z- standardized.

¹ Zimbabwean and South African business owners interviewed in 1998/99; ² Zimbabwean business owners interviewed in 1998/99; ³ South African business owners interviewed in 1998/99; ⁴ Zimbabwean business owners interviewed in 2000/01; ⁵ Zimbabwean business owners re-interviewed in 2000/01.

Scale name t1: n.a.
Scale name t2: xbps

Business Practice Knowledge

Source: self-developed

Content: Knowledge on business practices and regulations.

	t1 ¹ All	t1 ² Zimbabwe	t1 ³ South Africa	t2 ⁴ All	t2 ⁵ longitudinal
Alpha	—	—	—	.604	.753
Mean	—	—	—	.7935	.813
SD	—	—	—	.173	.200
N	—	—	—	259	80

Item	Re-code	Scale	Label	Corrected Item-Total Correlation				
				t1 ¹ All	t1 ² Zim	t1 ³ S.Af.	t2 ⁴ All	t2 ⁵ long
bqs1r	X	multip. choice	Profit is determined by: a) Business income minus expenses. (*) b) Business income minus wages. c) Business income minus advertising costs.	—	—	—	.406	.430
bqs2r	X	multip. choice	Market research is important for: a) Determining whether or not your products or services will sell. (*) b) Recruiting employees. c) Keeping within the law	—	—	—	.351	.327
bqs4r	X	multip. choice	Which is the best method of checking on business progress: a) Inspecting the business accounts. (*) b) Number of customers. c) Volume of sales.	—	—	—	.214	.452
bqs5r	X	multip. choice	Why is advertising important? a) The public learns about your product. (*) b) You can be proud of your business. c) It helps you get loans.	—	—	—	.448	.356
bqs6r	X	multip. choice	Business discounts given to your friends and family: a) Need to be recorded. (*) b) Do not need to be recorded.	—	—	—	.153	.162
bqs9r	X	multip. choice	When business is bad: a) All businesses may reduce wages to employees. b) No business may reduce wages to employees without the agreement of employees or application to the Labour Relations Board. (*) c) Only unregistered businesses may reduce wages.	—	—	—	.263	.381
bqs11r	X	multip. choice	If you make an offer to sell a product or service and this offer is accepted by the other party: a) You are legally bound to provide the product or service as agreed. (*) b) You can change the terms if you feel it necessary.	—	—	—	.280	.381

bqs12r	X	multip. choice	Which of the following is a business expense? a) Donations to charity. b) Repairs to plumbing on the business premises. (*) c) Payment for tax advice. d) Paying for a party to which customers are invited.	—	—	—	.254	.503
bqs13r	X	multip. choice	A manufacturer must: a) Replace or repair goods proven to be faulty when purchased. (*) b) Does not need to compensate - it is the buyer's risk.	—	—	—	.117	.293
bqs15r	X	multip. choice	Collateral for a loan is required: a) To protect the interest of the lender. (*) b) To keep certain people from entering business.	—	—	—	.400	.392
bqs20r	X	multip. choice	Which of the following is a business expense? a) Proprietor pays for a haircut. b) Proprioter buys lunch. c) Proprioter pays for ann advertisement of the business. (*)	—	—	—	.117	.311

¹ Zimbabwean and South African business owners interviewed in 1998/99; ² Zimbabwean business owners interviewed in 1998/99; ³ South African business owners interviewed in 1998/99; ⁴ Zimbabwean business interviewed in 2000/01; ⁵ Zimbabwean business owners re-interviewed in 2000/01.

Scale name t1: xspef
Scale name t2: xspefs

Goal Specificity

Source: Self-developed

Content: Specificity of business goals and subgoals

	t1 ¹ All	t1 ² Zimbabwe	t1 ³ South Africa	t2 ⁴ All	t2 ⁵ longitudinal
Alpha	.686	.384	.822	.513	.627
Mean	3.149	3.247	3.054	3.181	3.450
SD	.813	.630	.951	.628	.682
N	248	122	126	280	97

Item	Re-code	Scale	Label	Corrected Item-Total Correlation				
				t1 ¹ All	t1 ² Zim	t1 ³ S.Af.	t2 ⁴ All	t2 ⁵ long
spef1 spef1s		1-5	goal specificity (goal1)	.522	.260	.710	.356	.478
spef2 spef2s		1-5	goal specificity (goal2)	.445	.194	.601	.288	.400
eval6 eval6s		1-5	goal specificity (interviewer evaluation)	.557	.232	.755	.340	.452

¹ Zimbabwean and South African business owners interviewed in 1998/99; ² Zimbabwean business owners interviewed in 1998/99; ³ South African business owners interviewed in 1998/99; ⁴ Zimbabwean business owners interviewed in 2000/01; ⁵ Zimbabwean business owners re-interviewed in 2000/01.

Scale name t1: xdiff
Scale name t2: xdiffs

Goal Difficulty

Source: Self-developed

Content: Difficulty of participants' goals (assessed by the participants and raters)

	t1 ¹ All	t1 ² Zimbabwe	t1 ³ South Africa	t2 ⁴ All	t2 ⁵ longitudinal
Alpha	.752	.599	.765	.534	.644
Mean	3.429	3.705	1.163	3.529	3.821
SD	.702	.514	.756	.613	.613
N	248	122	126	280	97

Item	Re-code	Scale	Label	Corrected Item-Total Correlation				
				t1 ¹ All	t1 ² Zim	t1 ³ S.Af.	t2 ⁴ All	t2 ⁵ long
diffs1		1-5	goal difficulty (goal1) subject's estimate	.524	.446	.503	—	—
diffs2		1-5	goal difficulty (goal2) subject's estimate	.421	.322	.401	—	—
diffr1 diffr1s		1-5	goal difficulty (goal1) rater estimate	.613	.380	.675	.329	.401
diffr2 diffr2s		1-5	goal difficulty (goal2) rater estimate	.525	.388	.544	.298	.419
eval7 eval7s		1-5	goal difficulty (interviewer evaluation)	.548	.285	.586	.419	.549

¹ Zimbabwean and South African business owners interviewed in 1998/99; ² Zimbabwean business owners interviewed in 1998/99; ³ South African business owners interviewed in 1998/99; ⁴ Zimbabwean business owners interviewed in 2000/01; ⁵ Zimbabwean business owners re-interviewed in 2000/01.

Scale name t1: xgori
Scale name t2: xgoris

Goal Orientation

Source: Self-developed

Content: Participants' goal orientation

	t1 ¹ All	t1 ² Zimbabwe	t1 ³ South Africa	t2 ⁴ All	t2 ⁵ longitudinal
Alpha	—	—	—	—	—
Mean	3.823	3.992	3.659	3.586	4.030
SD	.889	.836	.911	.803	.710
N	248	122	126	280	97

Note: No Alpha computed because it is an index.

Item	Re-code	Scale	Label	Corrected Item-Total Correlation				
				t1 ¹ All	t1 ² Zim	t1 ³ S.Af.	t2 ⁴ All	t2 ⁵ long
eval36r eval36sr	X	1-5	subject invents goals (interviewer evaluation)	.275	.246	.308	.259	.151
eval5 eval5s		1-5	goal orientation (interviewer evaluation)	.275	.246	.308	.259	.151

¹ Zimbabwean and South African business owners interviewed in 1998/99; ² Zimbabwean business owners interviewed in 1998/99; ³ South African business owners interviewed in 1998/99; ⁴ Zimbabwean business owners interviewed in 2000/01; ⁵ Zimbabwean business owners re-interviewed in 2000/01.

Scale name t1: xdetai
Scale name t2: xdetais

Detailedness of Strategy

Source: Self - developed

Content: Detailedness of strategy description (to reach business goals)

	t1 ¹ All	t1 ² Zimbabwe	t1 ³ South Africa	t2 ⁴ All	t2 ⁵ longitudinal
Alpha	—	—	—	—	—
Mean	3.239	3.297	3.183	3.130	3.430
SD	.858	.876	.840	.828	.791
N	248	122	126	280	97

Note: No Alpha computed because it is an index.

Item	Re-code	Scale	Label	Corrected Item-Total Correlation				
				t1 ¹ All	t1 ² Zim	t1 ³ S.Af.	t2 ⁴ All	t2 ⁵ long
detail1 detail1s		1-5	detailedness of description (strategy goal 1)	.551	.514	.609	.530	.455
detail2 detail2s		1-5	detailedness of description (strategy goal 2)	.551	.514	.609	.530	.455

¹ Zimbabwean and South African business owners interviewed in 1998/99; ² Zimbabwean business owners interviewed in 1998/99; ³ South African business owners interviewed in 1998/99; ⁴ Zimbabwean business owners interviewed in 2000/01; ⁵ Zimbabwean business owners re-interviewed in 2000/01.

Scale name t1: xreali

Scale name t2: xrealis

Realism of Strategy**Source:** Self-developed**Content:** Realism of strategies (to reach business goals)

	t1 ¹ All	t1 ² Zimbabwe	t1 ³ South Africa	t2 ⁴ All	t2 ⁵ longitudinal
Alpha	—	—	—	—	—
Mean	3.024	3.047	3.002	2.936	2.956
SD	.990	.902	1.072	.807	.944
N	248	122	126	280	97

Note: No Alpha computed because it is an index.

Item	Re-code	Scale	Label	Corrected Item-Total Correlation				
				t1 ¹ All	t1 ² Zim	t1 ³ S.Af.	t2 ⁴ All	t2 ⁵ long
reali1 reali2s		1-5	realism (strategies goal1)	.686	.592	.759	.604	.708
reali2 reali2s		1-5	realism (strategies goal2)	.686	.592	.759	.604	.708

¹ Zimbabwean and South African business owners interviewed in 1998/99; ² Zimbabwean business owners interviewed in 1998/99; ³ South African business owners interviewed in 1998/99; ⁴ Zimbabwean business owners interviewed in 2000/01; ⁵ Zimbabwean business owners re-interviewed in 2000/01.

Scale name t1: xplan
Scale name t2: xplans

Planfulness of Strategy

Source: Self-developed

Content: Planfulness of strategies (to reach business goals)

	t1 ¹ All	t1 ² Zimbabwe	t1 ³ South Africa	t2 ⁴ All	t2 ⁵ longitudinal
Alpha	—	—	—	—	—
Mean	2.466	2.658	2.280	2.336	2.530
SD	1.097	2.658	1.128	.835	.974
N	248	122	126	280	97

Note: No Alpha computed because it is an index.

Item	Re-code	Scale	Label	Corrected Item-Total Correlation				
				t1 ¹ All	t1 ² Zim	t1 ³ S.Af.	t2 ⁴ All	t2 ⁵ long
plan1 plan1s		1-5	amount of planning (strategies goal1)	.705	.647	.751	.615	.713
plan2 plan2s		1-5	amount of planning (strategies goal2)	.705	.647	.751	.615	.713

¹ Zimbabwean and South African business owners interviewed in 1998/99; ² Zimbabwean business owners interviewed in 1998/99; ³ South African business owners interviewed in 1998/99; ⁴ Zimbabwean business owners interviewed in 2000/01; ⁵ Zimbabwean business owners re-interviewed in 2000/01.

Scale name t1: xproac
Scale name t2: xproacs

Proactiveness of Strategy

Source: Self-developed

Content: Proactiveness of strategies (to reach business goals)

	t1 ¹ All	t1 ² Zimbabwe	t1 ³ South Africa	t2 ⁴ All	t2 ⁵ longitudinal
Alpha	—	—	—	—	—
Mean	3.012	3.176	2.853	2.712	2.876
SD	1.074	.929	1.180	.886	.994
N	248	122	126	280	97

Note: No Alpha computed because it is an index.

Item	Re-code	Scale	Label	Corrected Item-Total Correlation				
				t1 ¹ All	t1 ² Zim	t1 ³ S.Af.	t2 ⁴ All	t2 ⁵ long
proac1 proac1s		1-5	proactiveness (strategies goal1)	.726	.573	.820	.588	.711
proac2 proac2s		1-5	proactiveness (strategies goal2)	.726	.573	.820	.588	.711

¹ Zimbabwean and South African business owners interviewed in 1998/99; ² Zimbabwean business owners interviewed in 1998/99; ³ South African business owners interviewed in 1998/99; ⁴ Zimbabwean business owners interviewed in 2000/01; ⁵ Zimbabwean business owners re-interviewed in 2000/01.

Scale name t1: xactpa
Scale name t2: xactpas

Action in the Past

Source: Self-developed

Content: Action in the past (to reach business goals)

	t1 ¹ All	t1 ² Zimbabwe	t1 ³ South Africa	t2 ⁴ All	t2 ⁵ longitudinal
Alpha	—	—	—	—	—
Mean	2.686	2.547	2.819	2.390	2.536
SD	.981	.883	1.054	.759	.843
N	248	122	126	268	96

Note: No Alpha computed because it is an index.

Item	Re-code	Scale	Label	Corrected Item-Total Correlation				
				t1 ¹ All	t1 ² Zim	t1 ³ S.Af.	t2 ⁴ All	t2 ⁵ long
actpa1 actpa1s		1-5	action in the past (strategies goal1)	.604	.532	.651	.493	.545
actpa2 actpa2s		1-5	action in the past (strategies goal2)	.604	.532	.651	.493	.545

¹ Zimbabwean and South African business owners interviewed in 1998/99; ² Zimbabwean business owners interviewed in 1998/99; ³ South African business owners interviewed in 1998/99; ⁴ Zimbabwean business owners interviewed in 2000/01; ⁵ Zimbabwean business owners re-interviewed in 2000/01.

Scale name t1: xcompl
Scale name t2: xcompls

Complete Planning

Source: Self-developed

Content: Strategy is a complete, top-down plan to reach the goals.

	t1 ¹ All	t1 ² Zimbabwe	t1 ³ South Africa	t2 ⁴ All	t2 ⁵ longitudinal
Alpha	—	—	—	—	—
Mean	1.705	1.883	1.532	1.663	.850
SD	1.054	1.157	.914	.924	1.107
N	248	122	126	280	97

Note: No Alpha computed because it is an index.

Item	Re-code	Scale	Label	Corrected Item-Total Correlation				
				t1 ¹ All	t1 ² Zim	t1 ³ S.Af.	t2 ⁴ All	t2 ⁵ long
compl1 compl1s		1-5	Complete Planning (goal card 1)	.734	.722	.744	.631	.710
compl2 compl2s		1-5	Complete planning (goal card 2)	.734	.722	.744	.631	.710

¹ Zimbabwean and South African business owners interviewed in 1998/99; ² Zimbabwean business owners interviewed in 1998/99; ³ South African business owners interviewed in 1998/99; ⁴ Zimbabwean business owners interviewed in 2000/01; ⁵ Zimbabwean business owners re-interviewed in 2000/01.

Scale name t1: xcritp
Scale name t2: xcritps

Critical Point Planning

Source: Self-developed

Content: Strategy is a critical point plan to reach the goals.

	t1 ¹ All	t1 ² Zimbabwe	t1 ³ South Africa	t2 ⁴ All	t2 ⁵ longitudinal
Alpha	—	—	—	—	—
Mean	2.389	2.424	2.355	2.295	2.365
SD	1.091	.967	1.201	.814	.847
N	248	122	126	269	97

Note: No Alpha computed because it is an index.

Item	Re-code	Scale	Label	Corrected Item-Total Correlation				
				t1 ¹ All	t1 ² Zim	t1 ³ S.Af.	t2 ⁴ All	t2 ⁵ long
critp1 critp1s		1-5	Critical point planning (goal card 1)	.542	.473	.591	.412	.463
critp2 critp2s		1-5	Critical point planning (goal card 2)	.542	.473	.591	.412	.463

¹ Zimbabwean and South African business owners interviewed in 1998/99; ² Zimbabwean business owners interviewed in 1998/99; ³ South African business owners interviewed in 1998/99; ⁴ Zimbabwean business owners interviewed in 2000/01; ⁵ Zimbabwean business owners re-interviewed in 2000/01.

Scale name t1: xoppor
Scale name t2: xoppors

Opportunistic Strategy

Source: Self-developed

Content: Opportunistic strategy to reach the goals.

	t1 ¹ All	t1 ² Zimbabwe	t1 ³ South Africa	t2 ⁴ All	t2 ⁵ longitudinal
Alpha	—	—	—	—	—
Mean	2.526	2.797	2.264	2.252	2.662
SD	.990	.843	1.052	.892	.893
N	248	122	126	269	97

Note: No Alpha computed because it is an index.

Item	Re-code	Scale	Label	Corrected Item-Total Correlation				
				t1 ¹ All	t1 ² Zim	t1 ³ S.Af.	t2 ⁴ All	t2 ⁵ long
oppor1 oppor1s		1-5	Opportunistic Strategy (goal card 1)	.420	.316	.444	.552	.563
oppor2 oppor2s		1-5	Opportunistic Strategy (goal card 2)	.420	.316	.444	.552	.563

¹ Zimbabwean and South African business owners interviewed in 1998/99; ² Zimbabwean business owners interviewed in 1998/99; ³ South African business owners interviewed in 1998/99; ⁴ Zimbabwean business owners interviewed in 2000/01; ⁵ Zimbabwean business owners re-interviewed in 2000/01.

Scale name t1: xreact
Scale name t2: xreacts

Reactive Strategy

Source: Self-developed

Content: Reactive strategy to reach the goals.

	t1 ¹ All	t1 ² Zimbabwe	t1 ³ South Africa	t2 ⁴ All	t2 ⁵ longitudinal
Alpha	—	—	—	—	—
Mean	2.371	2.232	2.506	2.762	1.391
SD	1.390	1.287	1.478	1.228	1.356
N	248	122	126	280	97

Note: No Alpha computed because it is an index.

Item	Re-code	Scale	Label	Corrected Item-Total Correlation				
				t1 ¹ All	t1 ² Zim	t1 ³ S.Af.	t2 ⁴ All	t2 ⁵ long
react1 react1s		1-5	Reactive strategy (goal card 1)	.745	.676	.793	.724	.786
react2 react2s		1-5	Reactive strategy (goal card 2)	.745	.676	.793	.724	.786

¹ Zimbabwean and South African business owners interviewed in 1998/99; ² Zimbabwean business owners interviewed in 1998/99; ³ South African business owners interviewed in 1998/99; ⁴ Zimbabwean business owners interviewed in 2000/01; ⁵ Zimbabwean business owners re-interviewed in 2000/01.

Scale name t1: xnobar

Scale name t2: xnobas

Overcoming Barriers

Source: Frese, M., Fay, D., Hilburger, T., Leng, K., & Tag, A. (1997). The concept of personal initiative: Operationalization, reliability and validity in two German samples. *Journal of Occupational and Organizational Psychology*, 70, 139-161.

Content: Participants' persistence in attaining a goal when having to overcome barriers

	t1 ¹ All	t1 ² Zimbabwe	t1 ³ South Africa	t2 ⁴ All	t2 ⁵ longitudinal
Alpha	.816	.677	.820	.687	.720
Mean	.010	.014	.001	.000	.000
SD	.812	.730	.804	.720	.737
N	235	110	125	280	97

Item	Re-code	Scale	Label	Corrected Item-Total Correlation				
				t1 ¹ All	t1 ² Zim	t1 ³ S.Af.	t2 ⁴ All	t2 ⁵ long
znobar1 znoba1s		factual *	numbers of different ideas: "out of money"	.681	.584	.728	.428	.505
znobar2 znoba2s		factual *	numbers of different ideas: "broken machine"	.620	.490	.625	.472	.525
znobar3 znoba3s		factual *	numbers of different ideas: "machine"	.634	.396	.630	.499	.538
znobar4 znoba4s		factual *	numbers of different ideas: "no supplies"	.612	.374	.590	.481	.462

Note: * z-standardized.

Interviewer presents to the participant different barriers as below and the participant must find adequate solutions to overcome them.

Barriers:

- Pretend for a moment that you are out of money and that you cannot buy the necessary supplies. What would you do?
- Pretend for a moment that you are producing a product with a machine. This machine breaks down and your workers cannot fix it. What would you do?
- Pretend for a moment that your supplier for a certain Item went out of business. You are under high pressure to finish an order and he is the only one who can supply you with the necessary Item. What would you do?
- Pretend for a moment that your landlord tells you to move your shop within two months. What would you do?

¹ Zimbabwean and South African business owners interviewed in 1998/99; ² Zimbabwean business owners interviewed in 1998/99; ³ South African business owners interviewed in 1998/99; ⁴ Zimbabwean business owners interviewed in 2000/01; ⁵ Zimbabwean business owners re-interviewed in 2000/01.

Scale name t1: xactba**Scale name t2: xactbs****Activeness (Overcoming Barriers)**

Source: Frese, M., Fay, D., Hilburger, T., Leng, K., & Tag, A. (1997). The concept of personal initiative: Operationalization, reliability and validity in two German samples. *Journal of Occupational and Organizational Psychology*, 70, 139-161.

Content: How active and self-starting are participants in overcoming barriers

	t1 ¹ All	t1 ² Zimbabwe	t1 ³ South Africa	t2 ⁴ All	t2 ⁵ longitudinal
Alpha	.804	.699	.820	.687	.720
Mean	.008	.014	.000	.001	.000
SD	.799	.732	.803	.718	.737
N	235	110	125	280	97

Item	Re-code	Scale	Label	Corrected Item-Total Correlation				
				t1 ¹ All	t1 ² Zim	t1 ³ S.Af.	t2 ⁴ All	t2 ⁵ long
zactba1 zactbas1		1-5*	How much did S stay active / how much did he delegate "out of money"	.660	.533	.699	.433	.451
zactba2 zactbas2		1-5*	How much did S stay active / how much did he delegate "broken machine"	.622	.530	.639	.449	.475
zactba3 zactbas3		1-5*	How much did S stay active / how much did he delegate "machine"	.585	.437	.602	.500	.604
zactba4 zactbas4		1-5*	How much did S stay active / how much did he delegate "no supplies"	.608	.435	.628	.496	.504

Note: * z-standardized.

¹ Zimbabwean and South African business owners interviewed in 1998/99; ² Zimbabwean business owners interviewed in 1998/99; ³ South African business owners interviewed in 1998/99; ⁴ Zimbabwean business owners interviewed in 2000/01; ⁵ Zimbabwean business owners re-interviewed in 2000/01.

Scale name t1: xini
Scale name t2: xinis

Personal Initiative (Questionnaire)

Source: Frese, M., Fay, D., Hilburger, T., Leng, K., & Tag, A. (1997). The concept of personal initiative: Operationalization, reliability and validity in two German samples. *Journal of Occupational and Organizational Psychology*, 70, 139-161.

Content: Self – perceived initiative

	t1 ¹ All	t1 ² Zimbabwe	t1 ³ South Africa	t2 ⁴ All	t2 ⁵ longitudinal
Alpha	.818	.758	.857	.861	.814
Mean	3.892	4.032	3.757	4.071	3.815
SD	.792	.730	.828	.879	.886
N	242	119	123	263	90

How do the following statements apply to you?

Item	Re-code	Scale	Label	Corrected Item-Total Correlation				
				t1 ¹ All	t1 ² Zim	t1 ³ S.Af.	t2 ⁴ All	t2 ⁵ long
ini1 ini1s		1-5	I actively approach problems.	.5445	.396	.659	.599	.524
ini2 ini2s		1-5	Whenever something goes wrong, I search for a solution immediately.	.506	.549	.472	.675	.625
ini3 ini3s		1-5	Whenever there is a chance to get actively involved, I take it.	.591	.447	.698	.679	.622
ini4 ini4s		1-5	I take initiative immediately even when others do not.	.640	.559	.721	.586	.463
ini5 ini5s		1-5	I use opportunities quickly in order to attain my goals.	.610	.529	.666	.715	.672
ini7 ini7s		1-5	I am particularly good at realizing ideas.	.605	.510	.661	.671	.568

¹ Zimbabwean and South African business owners interviewed in 1998/99; ² Zimbabwean business owners interviewed in 1998/99; ³ South African business owners interviewed in 1998/99; ⁴ Zimbabwean business owners interviewed in 2000/01; ⁵ Zimbabwean business owners re-interviewed in 2000/01.

Scale name t1: xpi
Scale name t2: xpis

Personal Initiative

Source: Self-developed

Content: How self-starting, proactive and persistent are participants

2nd order scale

	t1 ¹ All	t1 ² Zimbabwe	t1 ³ South Africa	t2 ⁴ All	t2 ⁵ longitudinal
Alpha	.827	.816	.838	.715	.765
Mean	-.022	-.040	-.006	.000	.000
SD	.783	.761	.763	.657	.688
N	248	122	126	280	97

Item	Re-code	Scale	Label	Corrected Item-Total Correlation				
				t1 ¹ All	t1 ² Zim	t1 ³ S.Af.	t2 ⁴ All	t2 ⁵ long
xnobar xnobas		factual *	Participants' persistence in attaining a goal when having to overcome barriers - scale	.787	.748	.824	.634	.674
xactba xactbs		factual *	How active and self-starting are participants in overcoming barriers - scale	.816	.797	.807	.721	.780
zeval14 zeval14s		1-5*	Participants level of initiative (interviewer evaluation)	.503	.513	.526	.344	.422

Note: * z-standardized.

¹ Zimbabwean and South African business owners interviewed in 1998/99; ² Zimbabwean business owners interviewed in 1998/99; ³ South African business owners interviewed in 1998/99; ⁴ Zimbabwean business owners interviewed in 2000/01; ⁵ Zimbabwean business owners re-interviewed in 2000/01.

Scale name t1: xlearn

Scale name t2: xlearns

Learning Orientation**Source:** Self-developed**Content:** Willingness to learn from experience and foster personal development on that basis.

	t1 ¹ All	t1 ² Zimbabwe	t1 ³ South Africa	t2 ⁴ All	t2 ⁵ longitudinal
Alpha	—	—	—	—	—
Mean	3.223	3.533	2.923	2.988	3.358
SD	1.000	.9958	.912	.861	.989
N	248	122	126	280	97

Note: Alpha was only computed for scales with more than two variables.

Item	Re-code	Scale	Label	Corrected Item-Total Correlation				
				t1 ¹ All	t1 ² Zim	t1 ³ S.Af.	t2 ⁴ All	t2 ⁵ long
eval17 eval17s		1-5	Learning orientation (interviewer evaluation)	.429	.461	.348	.555	.676
learn learns		1-5	Evidence of learning from experience	.429	.461	.348	.555	.676

¹ Zimbabwean and South African business owners interviewed in 1998/99; ² Zimbabwean business owners interviewed in 1998/99; ³ South African business owners interviewed in 1998/99; ⁴ Zimbabwean business owners interviewed in 2000/01; ⁵ Zimbabwean business owners re-interviewed in 2000/01.

Scale name t1: xautor

Scale name t2: xautors

Autonomy Orientation**Source:** Self-developed**Content:** Disliking of hierarchical authority and need for autonomous action

	t1 ¹ All	t1 ² Zimbabwe	t1 ³ South Africa	t2 ⁴ All	t2 ⁵ longitudinal
Alpha	—	—	—	—	—
Mean	3.773	4.012	3.542	3.555	3.936
SD	1.111	.984	1.180	1.016	1.233
N	248	122	126	280	97

Note: Alpha was only computed for scales with more than two variables.

Item	Re-code	Scale	Label	Corrected Item-Total Correlation				
				t1 ¹ All	t1 ² Zim	t1 ³ S.Af.	t2 ⁴ All	t2 ⁵ long
autor autors		1-5	Shows autonomy orientation	.572	.335	.765	.431	.854
eval12 eval12s		1-5	Autonomous drive (interviewer evaluation)	.572	.335	.765	.431	.854

¹ Zimbabwean and South African business owners interviewed in 1998/99; ² Zimbabwean business owners interviewed in 1998/99; ³ South African business owners interviewed in 1998/99; ⁴ Zimbabwean business owners interviewed in 2000/01; ⁵ Zimbabwean business owners re-interviewed in 2000/01.

Scale name t1: xcomag
Scale name t2: xcomags

Competitive Aggressiveness

Source: Self-developed

Content: Aggressiveness in defending and fighting for market shares

	t1 ¹ All	t1 ² Zimbabwe	t1 ³ South Africa	t2 ⁴ All	t2 ⁵ longitudinal
Alpha	—	—	—	—	—
Mean	2.827	3.088	2.573	2.721	2.552
SD	1.128	.970	1.214	1.141	1.167
N	248	122	126	280	97

Note: Alpha was only computed for scales with more than two variables.

Item	Re-code	Scale	Label	Corrected Item-Total Correlation				
				t1 ¹ All	t1 ² Zim	t1 ³ S.Af.	t2 ⁴ All	t2 ⁵ long
compag compags		1-5	competitive aggressive attitude towards competitors (interview)	.515	.314	.662	.699	.685
eval16 eval16s		1-5	competitive aggressiveness (interviewer evaluation)	.515	.314	.662	.699	.685

¹ Zimbabwean and South African business owners interviewed in 1998/99; ² Zimbabwean business owners interviewed in 1998/99; ³ South African business owners interviewed in 1998/99; ⁴ Zimbabwean business owners interviewed in 2000/01; ⁵ Zimbabwean business owners re-interviewed in 2000/01.

Scale name t1: xinno
Scale name t2: xinnos

Innovativeness (Interview)

Source: Self-developed

Content: Participants' innovativeness in developing new business ideas, and competitive advantages

	t1¹ All	t1² Zimbabwe	t1³ South Africa	t2⁴ All	t2⁵ longitudinal
Alpha	—	—	—	—	—
Mean	2.271	1.980	2.645	2.057	2.292
SD	1.154	1.281	.8352	.889	.978
N	217	122	95	258	90

Note: Alpha was only computed for scales with more than two variables.

Item	Re-code	Scale	Label	Corrected Item-Total Correlation				
				t1¹ All	t1² Zim	t1³ S.Af.	t2⁴ All	t2⁵ long
inocom inocoms		1-5	Innovativeness of competitive edge	.392	.337	.495	.530	.494
inoidea inoidea		1-5	Innovativeness of business idea	.392	.337	.495	.530	.494

¹ Zimbabwean and South African business owners interviewed in 1998/99; ² Zimbabwean business owners interviewed in 1998/99; ³ South African business owners interviewed in 1998/99; ⁴ Zimbabwean business owners interviewed in 2000/01; ⁵ Zimbabwean business owners re-interviewed in 2000/01.

Scale name t1: xino
Scale name t2: xinos

Innovative Orientation

Source: Self-developed

Content: Positive attitude towards innovation

2nd order scale

	t1 ¹ All	t1 ² Zimbabwe	t1 ³ South Africa	t2 ⁴ All	t2 ⁵ longitudinal
Alpha	—	—	—	—	—
Mean	2.498	2.400	2.592	2.133	2.210
SD	1.056	1.223	.859	.710	.877
N	248	122	126	280	97

Note: Alpha was only computed for scales with more than two variables.

Item	Re-code	Scale	Label	Corrected Item-Total Correlation				
				t1 ¹ All	t1 ² Zim	t1 ³ S.Af.	t2 ⁴ All	t2 ⁵ long
xinno xinnos		1-5	Innovativeness scale (interview)	.518	.546	.480	.485	.681
eval13 eval13s		1-5	Innovativeness (interviewer evaluation)	.518	.546	.480	.485	.681

¹ Zimbabwean and South African business owners interviewed in 1998/99; ² Zimbabwean business owners interviewed in 1998/99; ³ South African business owners interviewed in 1998/99; ⁴ Zimbabwean business owners interviewed in 2000/01; ⁵ Zimbabwean business owners re-interviewed in 2000/01.

Scale name t1: xgrogo
Scale name t2: xgrogos

Growth Goal Orientation

Source: Self-developed

Content: Need to achieve business growth

	t1 ¹ All	t1 ² Zimbabwe	t1 ³ South Africa	t2 ⁴ All	t2 ⁵ longitudinal
Alpha	—	—	—	—	—
Mean	4.305	4.551	4.112	4.543	4.464
SD	.906	.727	.986	.712	.805
N	223	98	125	279	96

Note: Alpha was only computed for scales with more than two variables.

In the following, please indicate on this Scale for each pair of statement of business owners, which of the statements applies most to you.

1 exactly like A

2 more like A

4 exactly like B

5 more like B

Item	Re-Code	Scale	Label	Corrected Item-Total Correlation				
				t1 ¹ All	t1 ² Zim	t1 ³ S.Af.	t2 ⁴ All	t2 ⁵ long
grogo2 grogo2s		1-5	Business owner A: "If I earn enough money for my family, that is good enough." Business owner B: "I want my business to grow as much as possible."	.449	.372	.449	.341	.419
moti1 moti1s		1-5	Business owner A: "I just do this business as long as I cannot find another, better job." Business owner B: "I really like to be a business owner on my own: I don't want another job."	.449	.372	.449	.341	.419

¹ Zimbabwean and South African business owners interviewed in 1998/99; ² Zimbabwean business owners interviewed in 1998/99; ³ South African business owners interviewed in 1998/99; ⁴ Zimbabwean business owners interviewed in 2000/01; ⁵ Zimbabwean business owners re-interviewed in 2000/01.

Scale name t1: xachor
Scale name t2: xachors

Achievement Orientation

Source: Self-developed

Content: Participants' achievement motive

2nd order scale

	t1 ¹ All	t1 ² Zimbabwe	t1 ³ South Africa	t2 ⁴ All	t2 ⁵ longitudinal
Alpha	—	—	—	—	—
Mean	3.873	4.170	3.585	3.751	3.956
SD	.924	.786	.959	.626	.734
N	248	122	126	280	97

Note: Alpha was only computed for scales with more than two variables.

Item	Re-code	Scale	Label	Corrected Item-Total Correlation				
				t1 ¹ All	t1 ² Zim	t1 ³ S.Af.	t2 ⁴ All	t2 ⁵ long
xgrogo xgrogos		1-5	Growth goal orientation	.488	.199	.568	.149	.346
zeval19 zeval19s		1-5	achievement orientation (interviewer evaluation)	.488	.199	.568	.149	.346

¹ Zimbabwean and South African business owners interviewed in 1998/99; ² Zimbabwean business owners interviewed in 1998/99; ³ South African business owners interviewed in 1998/99; ⁴ Zimbabwean business owners interviewed in 2000/01; ⁵ Zimbabwean business owners re-interviewed in 2000/01.

Scale name t1: xrisk

Scale name t2: xrisks

Risk - Taking (Questionnaire)

Source: Gomez-Mejia, L.R. & Balkin, D.B. (1989). Effectiveness of individual and aggregate compensation strategies. *Industrial Relations*, 28 (3), 431-445. Adapted to the entrepreneurial context by: Norton, W.J. & Moore, W.T. (1998). The influence of risk assessment on venture launch or growth decisions. Paper presented at the 1998 Babson College / Kauffman Foundation Entrepreneurship Research Conference, Gent, Belgium, 20-24 May, 1998.

Content: Work related risk-taking propensity

	t1 ¹ All	t1 ² Zimbabwe	t1 ³ South Africa	t2 ⁴ All	t2 ⁵ longitudinal
Alpha	—	—	—	—	—
Mean	2.984	3.070	2.897	3.035	3.089
SD	1.246	1.224	1.266	1.207	1.352
N	242	121	121	272	90

Do the following statements apply to you?

Item	Re-code	Scale	Label	Corrected Item-Total Correlation				
				t1 ¹ All	t1 ² Zim	t1 ³ S.Af.	t2 ⁴ All	t2 ⁵ long
risk3_r risk3s_r	X	1-5	I prefer to remain on a job that has problems that I know about rather than take the risk of working at a new job that has unknown problems even if the new job offers greater rewards.	.405	.364	.448	.529	.571
risk4_r risk4s_r	X	1-5	I view risk on a job as a situation to be avoided at all cost.	.405	.364	.448	.529	.571

¹ Zimbabwean and South African business owners interviewed in 1998/99; ² Zimbabwean business owners interviewed in 1998/99; ³ South African business owners interviewed in 1998/99; ⁴ Zimbabwean business owners interviewed in 2000/01; ⁵ Zimbabwean business owners re-interviewed in 2000/01.

Scale name t1: xrisko

Scale name t2: xriskos

Risk - Taking Orientation**Source:** Self-developed**Content:** Willingness to take business risks**2nd order scale**

	t1 ¹ All	t1 ² Zimbabwe	t1 ³ South Africa	t2 ⁴ All	t2 ⁵ longitudinal
Alpha	—	—	—	—	—
Mean	2.861	2.971	2.750	2.750	3.078
SD	.879	.923	.822	.859	.991
N	242	121	121	272	90

Note: Alpha was only computed for scales with more than two variables.

Item	Re-code	Scale	Label	Corrected Item-Total Correlation				
				t1 ¹ All	t1 ² Zim	t1 ³ S.Af.	t2 ⁴ All	t2 ⁵ long
xrisk xriskos		1-5	risk-taking (questionnaire)	.206	.292	.097	.164	.386
eval15 eval15s		1-5	risk-taking (interviewer evaluation)	.206	.292	.097	.164	.386

¹ Zimbabwean and South African business owners interviewed in 1998/99; ² Zimbabwean business owners interviewed in 1998/99; ³ South African business owners interviewed in 1998/99; ⁴ Zimbabwean business owners interviewed in 2000/01; ⁵ Zimbabwean business owners re-interviewed in 2000/01.

Scale name t1: xeo
Scale name t2: xeos

Entrepreneurial Orientation (Overall)

Source: Self-developed

Content: Entrepreneurial orientation (learning orientation, autonomy orientation, competitive aggressiveness, innovative orientation, achievement orientation, and risk-taking orientation)

2nd order scale

	t1 ¹ All	t1 ² Zimbabwe	t1 ³ South Africa	t2 ⁴ All	t2 ⁵ longitudinal
Alpha	.819	.805	.840	.781	.795
Mean	-.004	.038	-.003	.002	.003
SD	.674	.691	.692	.664	.677
N	248	122	126	280	97

Do the following statements apply to you?

Item	Re-code	Scale	Label	Corrected Item-Total Correlation				
				t1 ¹ All	t1 ² Zim	t1 ³ S.Af.	t2 ⁴ All	t2 ⁵ long
xlearn xlearns		1-5	Learning orientation scale	.677	.674	.657	.588	.645
xautor xautors		1-5	Autonomy orientation scale	.521	.398	.575	.361	.234
xcomag xcomags		1-5	Competitive aggressiveness scale	.368	—	.439	—	—
xino xinos		1-5	Innovativeness orientation scale	.508	.660	.535	.512	.582
xachor xachors		1-5	Achievement orientation scale	.663	.563	.690	.665	.682
xrisko xriskos		1-5	Risk-taking orientation scale	.494	.493	.508	.494	.531
xpi xpis		*	Personal initiative	.739	.626	.817	.640	.740

Note: * z-standardized.

¹ Zimbabwean and South African business owners interviewed in 1998/99; ² Zimbabwean business owners interviewed in 1998/99; ³ South African business owners interviewed in 1998/99; ⁴ Zimbabwean business owners interviewed in 2000/01; ⁵ Zimbabwean business owners re-interviewed in 2000/01.

Scale name t1: xtmgmt

Scale name t2: n.a.

Time Management

Source: Frese, M. (Ed.). (1998). *Erfolgreiche Unternehmensgründer*. Göttingen: Verlag für Angewandte Psychologie.

Content: Participants' time management practises

	t1 ¹ All	t1 ² Zimbabwe	t1 ³ South Africa	t2 ⁴ All	t2 ⁵ longitudinal
Alpha	.850	.730	.875	—	—
Mean	3.674	4.029	3.325	—	—
SD	1.133	.810	1.290	—	—
N	244	121	123	—	—

Do the following statements apply to you?

Item	Re-code	Scale	Label	Corrected Item-Total Correlation				
				t1 ¹ All	t1 ² Zim	t1 ³ S.Af.	t2 ⁴ All	t2 ⁵ long
tmgmt1		1-5	Before every working day I reserve some time to prepare and plan my work.	.747	.675	.749	—	—
tmgmt2		1-5	I write down tasks, goals and deadlines for accomplishing them.	.714	.532	.760	—	—
tmgmt3		1-5	Every day I put down a priority list of the things to be done. I start working on the most important tasks first.	.699	.464	.773	—	—

¹ Zimbabwean and South African business owners interviewed in 1998/99; ² Zimbabwean business owners interviewed in 1998/99; ³ South African business owners interviewed in 1998/99; ⁴ Zimbabwean business owners interviewed in 2000/01; ⁵ Zimbabwean business owners re-interviewed in 2000/01.

Scale name t1: xemres

Scale name t2: n.a.

Employee Responsibility

Source: Frese, M. (Ed.). (1998). *Erfolgreiche Unternehmensgründer*. Göttingen: Verlag für Angewandte Psychologie.

Content: Responsibility given to employees, delegation and trust towards employees

	t1 ¹ All	t1 ² Zimbabwe	t1 ³ South Africa	t2 ⁴ All	t2 ⁵ longitudinal
Alpha	.742	.710	.779	—	—
Mean	2.821	2.826	2.815	—	—
SD	.990	.964	1.019	—	—
N	244	121	123	—	—

Do the following statements apply to you?

Item	Re-code	Scale	Label	Corrected Item-Total Correlation				
				t1 ¹ All	t1 ² Zim	t1 ³ S.Af.	t2 ⁴ All	t2 ⁵ long
emres2		1-5	My employees take over a lot of my responsibilities.	.509	.497	.521	—	—
emres3		1-5	My employees inspect the quality of their work themselves.	.576	.648	.514	—	—
emres5		1-5	My employees look after the quality of their products, without me having to do anything about it.	.563	.501	.641	—	—
emres6		1-5	My employees work very independently.	.498	.360	.672	—	—

¹ Zimbabwean and South African business owners interviewed in 1998/99; ² Zimbabwean business owners interviewed in 1998/99; ³ South African business owners interviewed in 1998/99; ⁴ Zimbabwean business owners interviewed in 2000/01; ⁵ Zimbabwean business owners re-interviewed in 2000/01.

Scale name t1: xmotem

Scale name t2: n.a.

Employee Motivation

Source: Frese, M. (Ed.). (1998). *Erfolgreiche Unternehmensgründer*. Göttingen: Verlag für Angewandte Psychologie.

Content: Participants' employee oriented motivation strategies

	t1 ¹ All	t1 ² Zimbabwe	t1 ³ South Africa	t2 ⁴ All	t2 ⁵ longitudinal
Alpha	—	—	—	—	—
Mean	4.121	4.219	4.025	—	—
SD	.897	.755	1.012	—	—
N	243	121	122	—	—

Note: No Alpha computed because it is an index.

Do the following statements apply to you?

Item	Re-code	Scale	Label	Corrected Item-Total Correlation				
				t1 ¹ All	t1 ² Zim	t1 ³ S.Af.	t2 ⁴ All	t2 ⁵ long
motem2		1-5	The relationship with my employees can be described as: mutual trust, respect, a certain degree of warmth and personal relationship.	.540	.361	.689	—	—
motem3		1-5	I try to increase the performance of my employees by motivating them with my own activity.	.540	.361	.689	—	—

¹ Zimbabwean and South African business owners interviewed in 1998/99; ² Zimbabwean business owners interviewed in 1998/99; ³ South African business owners interviewed in 1998/99; ⁴ Zimbabwean business owners interviewed in 2000/01; ⁵ Zimbabwean business owners re-interviewed in 2000/01.

Scale name t1: xemp

Scale name t2: n.a.

Management Techniques

Source: Self-developed

Content: Systematic use of staff oriented management techniques to motivate employees (Interview measure).

	t1 ¹ All	t1 ² Zimbabwe	t1 ³ South Africa	t2 ⁴ All	t2 ⁵ longitudinal
Alpha	.723	.609	.737	—	—
Mean	2.590	2.959	2.231	—	—
SD	.952	.809	.946	—	—
N	247	122	125	—	—

Item	Re-code	Scale	Label	Corrected Item-Total Correlation				
				t1 ¹ All	t1 ² Zim	t1 ³ S.Af.	t2 ⁴ All	t2 ⁵ long
sysmot		1-5	systematic approach to motivate	.642	.555	.666	—	—
partic		1-5	employee participation in decision making	.490	.354	.507	—	—
meet		1-5	holds meetings 1. none 2. irregular 3. monthly 4. weekly 5. daily	.536	.385	.547	—	—

¹ Zimbabwean and South African business owners interviewed in 1998/99; ² Zimbabwean business owners interviewed in 1998/99; ³ South African business owners interviewed in 1998/99; ⁴ Zimbabwean business owners interviewed in 2000/01; ⁵ Zimbabwean business owners re-interviewed in 2000/01.

Scale name t1: n.a.
Scale name t2: xhoss

Environmental Hostility

Source: Coven, J.G., Slevin, D.P., Heeley, M.B., 1999, Pioneers and Followers: Competitive Tactics, Environment, and Firm Growth, *Journal of Business Venturing*, 15, 175-210. (adapted)

Content: Perceived environmental hostility.

	t1 ¹ All	t1 ² Zimbabwe	t1 ³ South Africa	t2 ⁴ All	t2 ⁵ longitudinal
Alpha	—	—	—	.731	.646
Mean	—	—	—	4.492	4.145
SD	—	—	—	1.336	1.236
N	—	—	—	273	90

How do the following statements apply to you?

Item	Re-code	Scale	Label	Corrected Item-Total Correlation				
				t1 ¹ All	t1 ² Zim	t1 ³ S.Af.	t2 ⁴ All	t2 ⁵ long
hos1s		1-7	The failure rate of firms in my industry is high.	—	—	—	.512	.464
hos2s		1-7	My industry is very risky. One bad decision could easily threaten the survival of my firm.	—	—	—	.467	.415
hos3s		1-7	Competitive intensity is high in my industry.	—	—	—	.382	.255
hos4s		1-7	Customer loyalty is low in my industry.	—	—	—	.471	.399
hos5s		1-7	Severe price wars are characteristic of my industry.	—	—	—	.458	.418
hos6s		1-7	Low profit margins are characteristic of my industry.	—	—	—	.499	.311

¹ Zimbabwean and South African business owners interviewed in 1998/99; ² Zimbabwean business owners interviewed in 1998/99; ³ South African business owners interviewed in 1998/99; ⁴ Zimbabwean business owners interviewed in 2000/01; ⁵ Zimbabwean business owners re-interviewed in 2000/01.

Scale name t1: xenv

Scale name t2: xenvs

Environmental Hardship

Source 1: Khandwalla, P.N. (1976/77). Some top management styles, their context and performance. *Organization and Administrative Science*, 7(4), 21-51.

Source 2: Self - developed

Content: Participants' perception of the business environment

	t1 ¹ All	t1 ² Zimbabwe	t1 ³ South Africa	t2 ⁴ All	t2 ⁵ longitudinal
Alpha	—	—	—	—	—
Mean	-.002	-.003	-.001	.000	.049
SD	.656	.661	.653	.688	.735
N	247	122	125	280	97

Note: No Alpha computed because it is an index.

Can you show me on this scale how you would characterize the external environment within which your firm operates?

Item	Re-code	Scale	Label	Corrected Item-Total Correlation				
				t1 ¹ All	t1 ² Zim	t1 ³ S.Af.	t2 ⁴ All	t2 ⁵ long
zhosti1 zhosti1s (source 1)		1-7*	1. Very safe, little threat to the survival of my firm 7. Very risky, a false step can me an my firm	.406	.344	.457	.410	.428
zhosti2 zhosti2s (source 1)		1-7*	1. Rich in investment and marketing opportunities 7. Very stressful, exacting, hostile; very hard to keep afloat	.393	.347	.444	.417	.343
zcomplx zcomplxs (source 2)		1-7*	The environment can be seen as complex if a lot of things have to be taken into considera-tion and a lot of information is needed to do business (How difficult does your environ-ment make it for you to decide something?). 1. very simple 7. very complex)	.211	.381	.085	.411	.414
zhosti zhostis (source 2)		1-5*	The environment can be seen as hostile, if there is a lot of pressure from competitors. 1. very little hostile 5. very hostile	.347	.290	.396	.400	.384

Note: * z-standardized.

¹ Zimbabwean and South African business owners interviewed in 1998/99; ² Zimbabwean business owners interviewed in 1998/99; ³ South African business owners interviewed in 1998/99; ⁴ Zimbabwean business interviewed in 2000/01; ⁵ Zimbabwean business owners re-interviewed in 2000/01.

Scale name t1: xfam

Scale name t2: n.a.

Family and Business**Source:** Self-developed**Content:** Attitude towards family involvement in business

	t1 ¹ All	t1 ² Zimbabwe	t1 ³ South Africa	t2 ⁴ All	t2 ⁵ longitudinal
Alpha	.816	.782	.868	—	—
Mean	2.427	2.299	2.553	—	—
SD	1.136	1.157	1.106	—	—
N	229	114	115	—	—

Item	Re-code	Scale	Label	Corrected Item-Total Correlation				
				t1 ¹ All	t1 ² Zim	t1 ³ S.Af.	t2 ⁴ All	t2 ⁵ long
worked		1-5	working with family "worked"	.595	.530	.685	—	—
negpos		1-5	behavior described are mostly negative vs. positive	.722	.663	.824	—	—
advice		1-5	advice, to employ family members	.693	.672	.748	—	—

¹ Zimbabwean and South African business owners interviewed in 1998/99; ² Zimbabwean business owners interviewed in 1998/99; ³ South African business owners interviewed in 1998/99; ⁴ Zimbabwean business owners interviewed in 2000/01; ⁵ Zimbabwean business owners re-interviewed in 2000/01.

Scale name t1: n.a.

Scale name t2: xkinshs

Kinship Obligation

Source: Inkeles, A. & Smith, D. (1974). Becoming modern: Individual change in six developing Countries. Cambridge, MA: Harvard University Press

Content: Closeness of family ties and traditional African obligation towards the (extended) family.

	t1 ¹ All	t1 ² Zimbabwe	t1 ³ South Africa	t2 ⁴ All	t2 ⁵ longitudinal
Alpha	—	—	—	—	—
Mean	—	—	—	1.998	1.656
SD	—	—	—	.692	.682
N	—	—	—	278	96

Item	Re-code	Scale	Label	Corrected Item-Total Correlation				
				t1 ¹ All	t1 ² Zim	t1 ³ S.Af.	t2 ⁴ All	t2 ⁵ long
kinsh3s_r	X	1-3	Suppose a young man works in a factory. He has barely managed to save a very small amount of money. Now his first cousin comes to him and tells him that he needs money badly since he has no work at all. How much obligation do you think the factory worker has to share his savings with his first cousin? (1. a strong obligation; 2. a not so strong obligation; 3. no obligation)	—	—	—	.618	.676
kinsh4s_r	X	1-3	Now suppose in the story it was not his first cousin, but a distant cousin who came to the factory worker and said he had no money. How much obligation do you think the factory worker has to share his savings with his distant cousin? (1. a strong obligation; 2. a not so strong obligation; 3. no obligation)	—	—	—	.618	.676

¹ Zimbabwean and South African business owners interviewed in 1998/99; ² Zimbabwean business owners interviewed in 1998/99; ³ South African business owners interviewed in 1998/99; ⁴ Zimbabwean business owners interviewed in 2000/01; ⁵ Zimbabwean business owners re-interviewed in 2000/01.

Scale name t1: n.a.

Scale name t2: xuas

Uncertainty Avoidance

Source: Hanges, P. J., House, R. G., Dickson, M. W., Dorfman, P. W., & co-authors. The development and validation of scales measuring societal culture and culturally-shared implicit theories of leadership. Manuscript submitted for publication. (adapted for individual level measurement)

Content: Uncertainty Avoidance Values

	t1 ¹ All	t1 ² Zimbabwe	t1 ³ South Africa	t2 ⁴ All	t2 ⁵ longitudinal
Alpha	—	—	—	.582	.682
Mean	—	—	—	5.031	5.093
SD	—	—	—	.956	1.104
N	—	—	—	274	91

How do the following statements apply to you?

Item	Re-code	Scale	Label	Corrected Item-Total Correlation				
				t1 ¹ All	t1 ² Zim	t1 ³ S.Af.	t2 ⁴ All	t2 ⁵ long
ua1/R	X	1-7	Orderliness and consistency should be stressed, even at the expense of experimentation and innovation. (strongly agree - strongly disagree)	—	—	—	.285	.439
ua2R	X	1-7	Rules should cover: (Almost all situations - Very few situations)	—	—	—	.492	.545
ua3R	X	1-7	Good managers: (Provide detailed instructions on how to achieve goals - Allow subordinated freedom in how to achieve goals)	—	—	—	.291	.433
ua4R	X	1-7	People have good reason to become irritated when one wants an exception to the rule. (strongly agree - strongly disagree)	—	—	—	.281	.246
ua5R	X	1-7	People should follow one set of values. (strongly agree - strongly disagree)	—	—	—	.304	.370
ua6R	X	1-7	A person whose work is highly structured with few unexpected events: (Has a lot to be thankful for - Is missing a lot of excitement)	—	—	—	.323	.508
ua7R	X	1-7	Job requirements should be spelled out in detail so employees know what they are expected to do. (strongly agree - strongly disagree)	—	—	—	.166	.270

¹ Zimbabwean and South African business owners interviewed in 1998/99; ² Zimbabwean business owners interviewed in 1998/99; ³ South African business owners interviewed in 1998/99; ⁴ Zimbabwean business owners interviewed in 2000/01; ⁵ Zimbabwean business owners re-interviewed in 2000/01.

Scale name t1: n.a.
Scale name t2: xindis

Individualism

Source: Triandis, H.C. (1995). Individualism and Collectivism: New Directions in Psychology. Boulder, Colorado: Westview Press.

Content: Horizontal and vertical individualism

	t1 ¹ All	t1 ² Zimbabwe	t1 ³ South Africa	t2 ⁴ All	t2 ⁵ longitudinal
Alpha	—	—	—	.736	.727
Mean	—	—	—	6.877	6.684
SD	—	—	—	1.177	1.242
N	—	—	—	271	89

Do the following statements apply to you?

Item	Re-code	Scale	Label	Corrected Item-Total Correlation				
				t1 ¹ All	t1 ² Zim	t1 ³ S.Af.	t2 ⁴ All	t2 ⁵ long
hi2s		1-9	One should live ones life independently of others.	—	—	—	.364	.436
hi3s		1-9	What happens to me is my own doing.	—	—	—	.523	.463
hi4s		1-9	I enjoy being unique and different from others in many ways.	—	—	—	.314	.328
hi5s		1-9	I often do "my own thing".	—	—	—	.337	.327
hi7s		1-9	I like my privacy.	—	—	—	.316	.304
hi8s		1-9	When I succeed, it is usually because of my abilities.	—	—	—	.504	.581
vi1s		1-9	Winning is everything.	—	—	—	.368	.249
vi2s		1-9	It annoys me when other people perform better than I do.	—	—	—	.415	.296
vi3s		1-9	It is important to me that I do my job better than others.	—	—	—	.322	.170
vi4s		1-9	I enjoy working in situations involving competition with others.	—	—	—	.297	.386
vi5s		1-9	Competition is the law of nature.	—	—	—	.392	.413
vi7s		1-9	Without competition it is not possible to have a good society.	—	—	—	.316	.477

¹ Zimbabwean and South African business owners interviewed in 1998/99; ² Zimbabwean business owners interviewed in 1998/99; ³ South African business owners interviewed in 1998/99; ⁴ Zimbabwean business owners interviewed in 2000/01; ⁵ Zimbabwean business owners re-interviewed in 2000/01.

Scale name t1: n.a.
Scale name t2: xcolects

Collectivism

Source: Triandis, H.C. (1995). Individualism and Collectivism: New Directions in Psychology. Boulder, Colorado: Westview Press.

Content: Horizontal and vertical collectivism

	t1 ¹ All	t1 ² Zimbabwe	t1 ³ South Africa	t2 ⁴ All	t2 ⁵ longitudinal
Alpha	—	—	—	.747	.707
Mean	—	—	—	7.340	7.431
SD	—	—	—	1.044	1.050
N	—	—	—	270	89

Do the following statements apply to you?

Item	Re-code	Scale	Label	Corrected Item-Total Correlation				
				t1 ¹ All	t1 ² Zim	t1 ³ S.Af.	t2 ⁴ All	t2 ⁵ long
vc2s		1-9	I usually sacrifice my self-interest for the benefit of my group.	—	—	—	.391	.272
vc4s		1-9	Children should feel honoured if their parents receive a distinguished award.	—	—	—	.276	.250
vc6s		1-9	Children should be taught to place duty before pleasure.	—	—	—	.413	.376
vc7s		1-9	I hate to disagree with others in my group.	—	—	—	.324	.417
hc1s		1-9	My happiness depends very much on the happiness of those around me.	—	—	—	.387	.383
hc2s		1-9	It is important for me to maintain harmony within my group.	—	—	—	.475	.300
hc3s		1-9	I like sharing little things with my neighbours.	—	—	—	.425	.336
hc4s		1-9	The well-being of my co-workers is important to me.	—	—	—	.423	.501
hc5s		1-9	If a relative were in financial difficulty, I would help within my means.	—	—	—	.318	.243
hc6s		1-9	If a co-worker gets a prize I would feel proud.	—	—	—	.466	.423
hc7s		1-9	To me, pleasure is spending time with others.	—	—	—	.302	.312
hc8s		1-9	I feel good when I co-operate with others.	—	—	—	.490	.398

¹ Zimbabwean and South African business owners interviewed in 1998/99; ² Zimbabwean business owners interviewed in 1998/99; ³ South African business owners interviewed in 1998/99; ⁴ Zimbabwean business owners interviewed in 2000/01; ⁵ Zimbabwean business owners re-interviewed in 2000/01.

Scale name t1: xvalue

Scale name t2: xvalues

Value of the Business

Source 1: McPherson, M.A.(1998). Zimbabwe: A third nationwide survey of micro and small enterprises. Washington, D.C.: U.S. Agency for International Development.

Source 2: Self - developed

Content: Gemini index for annual profits and value of equipment if participant would sell it on the day of the interview.

	t1 ¹ All	t1 ² Zimbabwe	t1 ³ South Africa	t2 ⁴ All	t2 ⁵ longitudinal
Alpha	—	—	—	—	—
Mean	-.004	-.014	-.009	—	—
SD	.822	.812	.648	—	—
N	217	92	125	—	—

Note: Alpha was only computed for scales with more than two variables.

Item	Re-code	Scale	Label	Corrected Item-Total Correlation				
				t1 ¹ All	t1 ² Zim	t1 ³ S.Af.	t2 ⁴ All	t2 ⁵ long
zgemini (source 1)		factual *	gemini index (annual profits)	.421	.472	-.152	—	—
zequip2u (source 2)	X	factual *	Value of the business (in US\$) if sold today.	.421	.472	-.152	—	—

Note: * z-standardized.

¹ Zimbabwean and South African business owners interviewed in 1998/99; ² Zimbabwean business owners interviewed in 1998/99; ³ South African business owners interviewed in 1998/99; ⁴ Zimbabwean business owners interviewed in 2000/01; ⁵ Zimbabwean business owners re-interviewed in 2000/01.

Scale name t1: xgro
Scale name t2: xgros

Business Growth

Source: Self - developed

Content: Sales, customers, and profit growth (%) compared to the year before.

	t1 ¹ All	t1 ² Zimbabwe	t1 ³ South Africa	t2 ⁴ All	t2 ⁵ longitudinal
Alpha	.765	.761	.847	.866	.864
Mean	.002	.005	.000	.004	-.024
SD	.825	.823	.875	.894	.899
N	223	98	125	99	94

Item	Re-code	Scale	Label	Corrected Item-Total Correlation				
				t1 ¹ All	t1 ² Zim	t1 ³ S.Af.	t2 ⁴ All	t2 ⁵ long
zidcus		factual *	Customers growth 1998-99 (%)	.633	.637	.853	—	—
zidcu92s		factual *	Customers growth 1999-2000 (%)	—	—	—	.651	.643
zidsal		factual *	Sales growth 1998-99 (%)	.544	.699	.495	—	—
zidsa92s		factual *	Sales growth 1999-2000 (%)	—	—	—	.835	.834
zidpro		factual *	Profit growth 1998-99 (%)	.617	.455	.835	—	—
zidpr92s		factual *	Profit growth 1999-2000 (%)	—	—	—	.755	.753

Note: * z-standardized.

¹ Zimbabwean and South African business owners interviewed in 1998/99; ² Zimbabwean business owners interviewed in 1998/99; ³ South African business owners interviewed in 1998/99; ⁴ Zimbabwean business owners interviewed in 2000/01; ⁵ Zimbabwean business owners re-interviewed in 2000/01.

Scale name t1: xsucex
Scale name t2: xsucexs

External Success Evaluation

Source : Self - developed

Content: Business success assessed by a 3rd person (e.g., competitor, neighbor, employee)

	t1 ¹ All	t1 ² Zimbabwe	t1 ³ South Africa	t2 ⁴ All	t2 ⁵ longitudinal
Alpha	—	—	—	—	—
Mean	3.439	3.922	3.000	3.378	3.413
SD	1.292	.928	1.417	.845	.959
N	229	109	120	254	86

Note: Alpha was only computed for scales with more than two variables.

Item	Re-code	Scale	Label	Corrected Item-Total Correlation				
				t1 ¹ All	t1 ² Zim	t1 ³ S.Af.	t2 ⁴ All	t2 ⁵ long
sucex1 sucex1s	X	1-5	How successful do you think is the person in question as a business owner in comparison with his/her competitors? (1) most successful business owner (2) belongs to the 10% most successful business owner (3) belongs to the upper 25% of successful business owners (4) belongs to the more successful half of business owners (5) belongs to the less successful half business owners	.803	.554	.884	.429	.471
sucex2 sucex2s		1-5	How successful do you think is the person in question as a business owner in comparison with his/her competitors?	.803	.554	.884	.429	.471

¹ Zimbabwean and South African business owners interviewed in 1998/99; ² Zimbabwean business owners interviewed in 1998/99; ³ South African business owners interviewed in 1998/99; ⁴ Zimbabwean business owners interviewed in 2000/01; ⁵ Zimbabwean business owners re-interviewed in 2000/01.

Scale name t1: xsucobj

Scale name t2: xsucobs

Economic Business Performance**Source:** Self - developed**Content:** Overall scale of economic success.

	t1 ¹ All	t1 ² Zimbabwe	t1 ³ South Africa	t2 ⁴ All	t2 ⁵ longitudinal
Alpha	.700	.627	.728	—	—
Mean	-.004	.005	-.003	—	—
SD	.553	.527	.571	—	—
N	223	98	125	—	—

Item	Re-code	Scale	Label	Corrected Item-Total Correlation				
				t1 ¹ All	t1 ² Zim	t1 ³ S.Af.	t2 ⁴ All	t2 ⁵ long
zgemi zgeminis		factual *	gemi index (annual profits)	.247	.275	.188	—	—
zequip2u zequi2su	X	factual *	Value of the business (in US\$) if sold today	.288	.344	.206	—	—
zidcus zidcu89s		factual *	Last year's customers growth (%)	.200	.338	.174	—	—
zidsal zidsa98s		factual *	Last year's sales growth (%)	.353	.228	.449	—	—
zidpro		factual *	Last year's profits growth (%)	.377	.326	.445	—	—
znoem98 znoem00s		factual *	Current Number of employees.	.306	.310	.303	—	—
zeval45 zeval45s		1-5	Success evaluation (interviewer evaluation)	.567	.427	.651	—	—
zsucex1 zsucex1s	X	1-5	How successful do you think is the person in question as a business owner in comparison with his/her competitors? (6) most successful business owner (7) belongs to the 10% most successful business owner (8) belongs to the upper 25% of successful business owners (9) belongs to the more successful half of business owners (10) belongs to the less successful half business owners	.513	.230	.659	—	—
zsucex2 zsucex2s		1-5	How successful do you think is the person in question as a business owner in comparison with his/her competitors?	.550	.297	.633	—	—

Note: * z-standardized.

¹ Zimbabwean and South African business owners interviewed in 1998/99; ² Zimbabwean business owners interviewed in 1998/99; ³ South African business owners interviewed in 1998/99; ⁴ Zimbabwean business owners interviewed in 2000/01; ⁵ Zimbabwean business owners re-interviewed in 2000/01.

Scale name t1: xsucsub

Scale name t2: xsucus

Owners' Satisfaction with Business**Source:** Self - developed**Content:** Participants' satisfaction with success income and work and business development.

	t1 ¹ All	t1 ² Zimbabwe	t1 ³ South Africa	t2 ⁴ All	t2 ⁵ longitudinal
Alpha	.710	.633	.758	—	—
Mean	-.001	-.002	.000	1.029	.943
SD	.730	.688	.761	1.260	1.306
N	247	122	125	273	96

Item	Re-code	Scale	Label	Corrected Item-Total Correlation				
				t1 ¹ All	t1 ² Zim	t1 ³ S.Af.	t2 ⁴ All	t2 ⁵ long
zsatinc* satines		-3—3	How satisfied are you with your current income?	.505	.455	.535	.410	.370
zsatorw* satwors		-3—3	How satisfied are you with your work as a business owner?	.503	.472	.532	.410	.370
zdissuc*	X	1-5	Graphic distribution of success.	.456	.371	.516	—	—
zsucsel*		1-5	How successful are you as a business owner compared to your competitors?	.519	.355	.642	—	—

Note: * z-standardized.

¹ Zimbabwean and South African business owners interviewed in 1998/99; ² Zimbabwean business owners interviewed in 1998/99; ³ South African business owners interviewed in 1998/99; ⁴ Zimbabwean business owners interviewed in 2000/01; ⁵ Zimbabwean business owners re-interviewed in 2000/01.

Scale name t1: xsuc
Scale name t2: xsucs

Overall Success Scale

Source: Self - developed

Content: Overall scale of subjective and objective success (economic success and personal satisfaction).

	t1 ¹ All	t1 ² Zimbabwe	t1 ³ South Africa	t2 ⁴ All	t2 ⁵ longitudinal
Alpha	.793	.750	.809	—	—
Mean	.139	.152	.138	—	—
SD	.556	.518	.582	—	—
N	223	98	125	—	—

Item	Re-code	Scale	Label	Corrected Item-Total Correlation				
				t1 ¹ All	t1 ² Zim	t1 ³ S.Af.	t2 ⁴ All	t2 ⁵ long
zgemini zgeminis		factual *	gemini index (annual profits)	.235	.261	.219	—	—
zequip2u zequi2su	X	factual *	Value of the business (in US\$) if sold today	.322	.356	.243	—	—
zidcus zidcu89s		factual *	Last year's customers growth (%)	.167	.400	.118	—	—
zidsal zidsa98s		factual *	Last year's sales growth (%)	.321	.248	.369	—	—
zidpro		factual *	Last year's profits growth (%)	.343	.409	.365	—	—
znoem98 znoem00s		factual *	Current Number of employees.	.338	.307	.342	—	—
zeval45 zeval45s		1-5	Success evaluation (interviewer evaluation)	.696	.523	.785	—	—
zsucex1 zsucex1s	X	1-5	How successful do you think is the person in question as a business owner in comparison with his/her competitors? (1) most successful business owner (2) belongs to the 10% most successful business owner (3) belongs to the upper 25% of successful business owners (4) belongs to the more successful half of business owners (5) belongs to the less successful half business owners	.603	.272	.734	—	—
zsucex2 zsucex2s		1-5	How successful do you think is the person in question as a business owner in comparison with his/her competitors?	.567	.250	.666	—	—

zsatinc*		-3—3	How satisfied are you with your current income?	.570	.534	.598	—	—
zsatwor*		-3—3	How satisfied are you with your work as a business owner?	.512	.383	.591	—	—
zdissuc*	X	1-5	Graphic distribution of success.	.498	.418	.526	—	—
zsucsel*		1-5	How successful are you as a business owner compared to your competitors?	.362	.490	.321	—	—

Note: * z-standardized.

¹ Zimbabwean and South African business owners interviewed in 1998/99; ² Zimbabwean business owners interviewed in 1998/99; ³ South African business owners interviewed in 1998/99; ⁴ Zimbabwean business owners interviewed in 2000/01; ⁵ Zimbabwean business owners re-interviewed in 2000/01.

INTERRATER RELIABILITIES

**Psychological Success Factors of Small and Micro Business Owners in
Southern Africa: A Longitudinal Approach**

(T1 & T2)

INTERVIEW PROCEDURES AND QUALITY ASSURANCE

The main measurement instrument of the 1998/99 first wave (T1) of the study in Zimbabwe (n = 122) and South Africa (n = 126) and of the 2000/01 second wave (T2) of the study in Zimbabwe (n = 97 longitudinal and n = 183 additional interviews) was a structured interview of about 150 minutes. All interviews were written down and subsequently typed out. It was not possible to use verbatim transcriptions of tape recorded interviews because in most cases the surrounding noise level was too high or participants refused to be recorded. However, tape recordings were used occasionally to spot check on the quality of the written protocols. Interviewers were instructed to take down participants' statements as verbatim as possible. Every interview was coded by two raters, one of them always being the interviewer. All ratings were done on the basis of the typed protocols and a numerical coding scheme. The coding was either factual (e.g., concerning variables like the subject's age), nominal (e.g., concerning the highest degree of formal education), ordinal (e.g., whether the interviewee had a smaller, the same, or a higher number of customers in 1998 than in 1997), or required a rating on a five point Likert scale (e.g., how innovative was a certain business idea).

Interviews were carried out by the first author, student research assistants majoring in psychology, and local interviewers who were especially helpful in areas where English is not as commonly spoken. All interviewers were thoroughly trained. During a training course, they became familiar with the technical application of the interview and coding schemes as well as with the main features of the theoretical background. After practicing in a role-play setting, interviewers also practiced in vivo accompanied by an experienced interviewer who gave detailed feedback. All interviews carried out during the training phase (5 – 10 per interviewer) were excluded from data analyses. The ongoing process of quality assurance continued until the end of data collection. Meetings were regularly held to discuss difficulties and unforeseen problems. An experienced interviewer was continuously available for consulting purposes.

Directly after the interview, the interviewers filled out an evaluation sheet that was designed to capture personal views at a point in time when the impression of the interviewee was still vivid. In the following, this will be referred to as the 'interviewer evaluation'. Using

mainly five point Likert scales, the interviewer rated the interviewees on variables like personal integrity or autonomous drive of the interviewee.

Due to the high degree of standardization and extensive quality assurance procedures, we expected acceptable and satisfactory interrater reliabilities.

ASSESSMENT METHODS OF THE INTERRATER RELIABILITIES

Interview ratings

Reliability coefficients of the interview variables at T1 and T2 were computed as interrater reliabilities of two independent raters. The first rater was always the interviewer who had also written the interview protocol. Both raters made their judgments on the basis of the typed protocol.

Interviewer evaluation ratings

As mentioned above, the interviewer evaluation was designed to give the interviewer the possibility to express personal impressions of the participants and their business. However, at T1 two raters were only during $n=28$ of the interviews ($n_{\text{Zimbabwe}} = 10$; $n_{\text{South Africa}} = 18$) and could deliver double interviewer evaluation ratings. Therefore, data from another study, that was carried out with the exactly same design and measurement instruments (Namibia 98/99), were merged with the Zimbabwean and South African data for the computation of interrater reliabilities. The Namibian sample contributed $n=9$ double ratings to the overall $n = 37$.

At T2 (2000/01), double ratings of the interviewer evaluation were no longer carried out because our personnel capacities did not allow to conduct a sufficient number of interviews with two raters present in order to get a personal impression of the interviewees and their business. However, we wanted to find out if one can also gain a personal impression on the basis of the interview protocol. Therefore, we asked second raters to fill out the questionnaire on the basis of their overall impression of the interview protocol.

Reliability assessment methods

For both the interview and the interviewer evaluation, appropriate item reliabilities are intraclass coefficients (ICCs) for Likert and for factual items, Spearman correlations for ordinal items, and Cohen's kappa for nominal items. We additionally report Pearson correlations for Likert and factual items, and phi coefficients for dichotomous nominal items.

However, the latter are for information purposes only.

The ICCs can be interpreted as "a measure of the proportion of variance (variously defined) that is attributable to objects of measurement" (McGraw & Wong, 1996, p.30). According to the criteria offered by Shrout and Fleiss (1978), the appropriate ICC for the purposes of the present analyses is based on a one-way random effects ANOVA model. For the factual variables, where only the judgment of the first rater was going to be used, single measure ICCs (ICC (1,1)) were calculated. For Likert items, we intend to use mean ratings of the first and second rater for further data analyses. Thus, for the Likert items, average measure ICCs (ICC (1,2)) were computed.

Commonly, reliability coefficients of $r = .60$ and above are considered sufficiently high. We therefore set a cut-off point of $.60$ across all variables and coefficients. Variables with lower interrater reliabilities were excluded from all further data analyses.

RESULTS AND DISCUSSION

In the following, we will only refer to the appropriate measures of ICCs for Likert and factual items, Spearman correlations for ordinal items, and kappas for nominal items. However, for information reasons, Pearson correlations for Likert and factual items as well as phi for nominal dichotomous items are also reported.

Interrater reliabilities of the interview at T1 (Zimbabwe and South Africa)

Please note that in the South African sample, double ratings were only employed for Likert items and not for factual, nominal, and ordinal items. The vast majority of the interview variables yielded satisfactory reliability coefficients above $.60$ (Table 1).

Table 1: Interrater Reliabilities of the Interview 1998/99 (T1)

Variable	Label	Scale Format	Zimbabwe			South Africa		
			r	ICC	Cohen's kappa	r	ICC	Cohen's kappa
accept	do not accept profit for owner	nominal dichotomous	.721 ^c (100)		.710 (100)	h		h
actbar1	active vs. delegate "out of money"	1—5 Likert	.867 ^a (110)	.921 ^c (110)		.899 ^a (125)	.865 ^c (125)	
actbar2	active vs. delegate "machine"	1—5 Likert	.817 ^a (109)	.897 ^c (109)		.860 ^a (125)	.924 ^c (125)	

Table 1 continued

Variable	Label	Scale Format	Zimbabwe			South Africa		
			r	ICC	Cohen's kappa	r	ICC	Cohen's kappa
actbar3	active vs. delegate "supplies"	1—5 Likert	.754 ^a (104)	.854 ^c (104)		.848 ^a (123)	.912 ^c (123)	
actbar4	active vs. delegate "landlord"	1—5 Likert	.805 ^a (108)	.886 ^c (108)		.880 ^c (125)	.794 ^a (125)	
acti	activeness "info seeking"	1—5 Likert	.659 ^a (122)	.775 ^c (122)		.921 ^c (125)	.859 ^a (125)	
actpa1	action in the past strategies goal1	1—5 Likert	.741 ^a (122)	.836 ^c (122)		.925 ^c (125)	.862 ^a (125)	
actpa2	action in the past strategies goal2	1—5 Likert	.738 ^a (119)	.841 ^c (119)		.926 ^c (125)	.871 ^a (125)	
adres	gave us own address	nominal dichotomous	1.000 ^c (122)		1.000 (122)	h		h
advant	strength of advantage: compared to competitors	1—5 Likert	.660 ^a (116)	.696 ^c (116)		.742 ^a (94)	.847 ^c (94)	
advice	advice. to employ family members	1—5 Likert	.913 ^a (122)	.955 ^c (122)		.934 ^a (125)	.966 ^c (125)	
age	age of subject	factual	1.000 ^a (120)	1.000 ^d (120)		h	h	
answer	question answered to the point (competitors)	1—5 Likert	.569 ^a (118)	.677 ^c (118)		.542 ^a (93)	.513 ^c (93)	
antici	anticipation/fast detection of problems card 1&2	1—5 Likert	.615 ^a (121)	.758 ^c (121)		.748 ^a (124)	.853 ^c (124)	
approv	ask third person about success of business	nominal dichotomous	.949 ^c (122)		.948 (122)	h		h
arrog	arrogant towards other employees	nominal dichotomous	1.000 ^c (100)		1.000 (100)	h		h
autor	shows autonomy orientation	1—5 Likert	.874 ^a (121)	.904 ^c (121)		.881 ^a (125)	.936 ^c (125)	
became	when did S become formal	factual	1.000 ^a (67)	1.000 ^d (67)		h	h	
blucar	problems: blue card order	factual	h	h		h	h	
bonus1	gives bonuses	nominal dichotomous	.971 ^c (121)		.971 (121)	h		h
bonus2	gives regular bonuses (e.g. annual)	nominal dichotomous	.937 ^c (101)		.937 (101)	h		h

Table 1 continued

Variable	Label	Scale Format	Zimbabwe			South Africa		
			r	ICC	Cohen's kappa	r	ICC	Cohen's kappa
bonus3	gives bonuses on performance	nominal dichotomous	.941 ^c (101)		.940 (101)	h		h
bonus4	gives bonuses on bus. success	nominal dichotomous	.938 ^c (102)		.938 (102)	h		h
book	How do you do bookkeeping	nominal 5 categories			.932 (96)			h
bucard	has business card	nominal dichotomous	.957 ^c (98)		.956 (98)	h		h
buscyc	business cycle	nominal 3 categories			1.000 (120)			h
chacom	member of chamber of commerce	nominal dichotomous	1.000 ^c (122)		1.000 (122)	h		h
check	keeping discipline by frequent checking	nominal dichotomous	.701 ^c (121)		.659 (121)	h		h
checks	extent of checking	1—5 Likert	.832 ^a (74)	.903 ^c (74)		.816 ^a (54)	.897 ^c (54)	
club	club/society/assoc. To enhance business	nominal dichotomous	.966 ^c (122)		.966 (122)	h		h
cntrl	environment controllability	1—5 Likert	1.000 ^a (122)	1.000 ^c (122)		h	h	
compag	competitive aggressiveness	1—5 Likert	.715 ^a (119)	.834 ^c (119)		.969 ^a (122)	.984 ^c (122)	
compfr	competitors or more friends	1—5 Likert	.924 ^a (177)	.961 ^c (117)		.957 ^a (122)	.977 ^c (122)	
compl1	complete planning strategies goal1	1—5 Likert	.855 ^a (122)	.961 ^c (122)		.929 ^a (125)	.936 ^c (125)	
compl2	complete planning strategies goal2	1—5 Likert	.817 ^a (119)	.819 ^c (119)		.914 ^a (125)	.952 ^c (125)	
complx	environment: simplicity / complexity	1—7 Likert	1.000 ^a (121)	1.000 ^c (121)		h	h	
concad	concreteness (description advantage - competitors)	1—5 Likert	.610 ^a (118)	.743 ^c (118)		.719 ^a (93)	.837 ^c (93)	
concid	concreteness of ideas	1—5 Likert	.691 ^a (88)	.807 ^c (88)		.592 ^a (80)	.747 ^c (80)	
concin	concreteness of description (change)	1—5 Likert	.754 ^a (49)	.859 ^c (49)		.667 ^a (57)	.771 ^c (57)	

Table 1 continued

Variable	Label	Scale Format	Zimbabwe			South Africa		
			r	ICC	Cohen's kappa	r	ICC	Cohen's kappa
concom	concreteness of description (competitors)	1—5 Likert	.664 ^a (89)	.791 ^c (89)		.764 ^a (82)	.852 ^c (82)	
concost	concreteness of description (stealing)	1—5 Likert	.774 ^a (75)	.868 ^e (75)		.696 ^a (54)	.800 ^e (54)	
concide	concreteness of description (idea)	1—5 Likert	.569 ^a (85)	.724 ^e (85)		.689 ^a (50)	.801 ^e (50)	
coop	member of co-operative	nominal dichotomous	.922 ^c (122)		.919 (122)	h		h
corfam	employed family member belongs to core family	nominal 3 categories			.723 (76)			h
critp1	critical point planning strategies goal1	1—5 Likert	.637 ^a (122)	.776 ^c (122)		.919 ^a (125)	.978 ^c (125)	
critp2	critical point planning strategies goal2	1—5 Likert	.644 ^a (119)	.776 ^c (119)		.895 ^a (125)	.920 ^c (125)	
cus34	comparison customers 1993/1994	1—3 ordinal	1.000 ^b (47)			h		
cus45	comparison customers 1994/1995	1—3 ordinal	1.000 ^b (57)			h		
cus56	comparison customers 1995/1996	1—3 ordinal	1.000 ^b (72)			h		
cus67	comparison customers 1996/1997	1—3 ordinal	.900 ^b (102)			h		
cus78	comparison customers 1997/1998	1—3 ordinal	1.000 ^b (121)			h		
cus98a	decrease / increase of customers 1997-98/9	1—3 ordinal	1.000 ^b (98)			h		
cus98b	% decrease customers 1997-98/9	factual	1.000 ^a (98)	1.000 ^d (98)		h	h	
cus98c	% increase customers 1997-98/9	factual	.999 ^a (98)	.999 ^d (98)		h	h	
dealtp	dealt efficiently/effectively problems (1&2)	1—5 Likert	.685 ^a (122)	.811 ^c (122)		.844 ^a (124)	.915 ^c (124)	
decpro	% decrease profit 1997-1998/99	factual	1.000 ^a (97)	1.000 ^c (97)		h	h	

Table 1 continued

Variable	Label	Scale Format	Zimbabwe			South Africa		
			r	ICC	Cohen's kappa	r	ICC	Cohen's kappa
deman	less demanding	nominal dichotomous			g	h		h
detail1	detailedness of description strategies goal1	1—5 Likert	.723 ^a (122)	.839 ^c (122)		.819 ^a (125)	.900 ^c (125)	
detail2	detailedness of description strategies goal2	1—5 Likert	.749 ^a (119)	.856 ^c (119)		.768 ^a (125)	.868 ^c (125)	
difbeh	they show different behaviour	1—5 Likert	.948 ^a (118)	.923 ^c (118)		.868 ^a (125)	.930 ^c (125)	
diffic	more difficult to correct	nominal dichotomous	.849 ^c (100)		.848 (100)	h		h
diffr1	goal difficulty goal1 rater estimate	1—5 Likert	.306 ^a (122)	.489 ^c (122)		.617 ^a (125)	.764 ^c (125)	
diffr2	goal difficulty goal2 rater estimate	1—5 Likert	.226 ^a (118)	.356 ^c (118)		.651 ^a (125)	.790 ^c (125)	
diffs1	goal difficulty goal1 subject estimate	1—5 Likert	.884 ^a (121)	.924 ^c (121)		.912 ^a (125)	.954 ^c (125)	
diffs2	goal difficulty goal2 subject estimate	1—5 Likert	.840 ^a (117)	.909 ^c (117)		.894 ^a (124)	.943 ^c (124)	
disoth	keeping discipline by other means	nominal dichotomous	.756 ^c (121)		.751 (121)	h		h
dissuc	distribution of success (graph sheet)	nominal 5 categories			1.000 (122)			h
dissys	systematic approach to keep discipline	1—5 Likert	.677 ^a (122)	.809 ^c (122)		.889 ^a (125)	.941 ^c (125)	
dodiff	would do things differently	nominal dichotomous	1.000 ^c (122)		1.000 (122)	h		h
drinkf	reason for firing: drinking	nominal dichotomous	1.000 ^c (78)		1.000 (78)	h		h
dsback	digit span test backward	factual	.999 ^a (112)	.999 ^d (122)		h	h	
dsforw	digit span test forward	factual	.996 ^a (115)	.998 ^d (115)		h	h	
dtailp	detailedness: description card 1&2	1—5 Likert	.484 ^a (122)	.647 ^c (122)		.654 ^a (124)	.771 ^c (124)	
dynami	environment dynamic	1—5 Likert	1.000 ^a (122)	1.000 ^c (122)		h	h	

Table 1 continued

Variable	Label	Scale Format	Zimbabwe			South Africa		
			r	ICC	Cohen's kappa	r	ICC	Cohen's kappa
earemp	employed before (or currently)	nominal dichotomous	1.000 ^c (121)		1.000 (121)	h		h
earsel	self-employed before	nominal dichotomous	1.000 ^c (122)		1.000 (122)	h		h
ebost	employment and bus. owner at same time	nominal 4 categories			.952 (114)			h
edudeg	highest degree of formal education	nominal 10 categ.			.970 (122)			h
eduyear	years of education	factual	1.000 ^a (122)	1.000 ^d (122)		h	h	
elec	has electricity	nominal dichotomous	1.000 ^c (99)		1.000 (99)	h		h
else	this other person was (idea)	nominal 6 categories			1.000 (9)			h
empslb	employment in the same line of business	nominal dichotomous	.980 ^c (99)		.980 (99)	h		h
equip1	money spent on equipment	factual	1.000 ^a (82)	1.000 ^d (82)		h	h	
equip2	value if sold today	factual	1.000 ^a (82)	1.000 ^d (82)		h	h	
equip3	value if bought today	factual	.996 ^a (75)	.996 ^d (75)		h	h	
est	year of establishment	factual	1.000 ^a (122)	1.000 ^d (121)		h	h	
ethn	Shona or Ndebele background?	nominal 3 categories			.974 (122)			h
expman	estimated experience in management	1—5 Likert	.915 ^a (99)	.955 ^c (99)		.821 ^a (105)	.902 ^c (105)	
famem	employed / employs family members	nominal 3 categories			.938 (122)			h
feed	more than one source of info (feedback)	nominal dichotomous	.956 ^c (122)		.955 (122)	h		h
firemp	has fired employee(s)	nominal dichotomous	1.000 ^c (122)		1.000 (122)	h		h
firoth	reason for firing: other	nominal dichotomous	.920 ^c (78)		.917 (78)	h		h
formal	formal / informal sector	nominal 5 categories			.984 (122)			h
friend	environment friendliness	1—5 Likert	1.000 ^a (122)	1.000 ^c (122)		h	h	
gapor	gap / niche orientation	1—5 Likert	.820 ^a (120)	.898 ^c (120)		.929 ^a (124)	.962 ^c (124)	

Table 1 continued

Variable	Label	Scale Format	Zimbabwe			South Africa		
			r	ICC	Cohen's kappa	r	ICC	Cohen's kappa
goal1	most important goal	nominal 6 categories			1.000 (122)			h
goal2	second most important goal	nominal 6 categories			1.000 (122)			h
goal3	third most important goal	nominal 6 categories			1.000 (121)			h
golmar	marketing & sales in the foreground goal 1&2	1—5 Likert	.688 ^a (121)	.813 ^e (121)		.728 ^a (125)	.836 ^e (125)	
govint	extent of government interference	1—5 Likert	.951 ^a (122)	.974 ^e (122)		h	h	
grogol1	growth goal 1 (business owner A vs. B)	nominal 4 categories			1.000 (122)			h
grogol2	growth goal 2 (business owner A vs. B)	nominal 4 categories			1.000 (98)			h
hiemp	highest employment position	nominal 6 categories			.916 (99)			h
hosti	environment hostility	1—5 Likert	1.000 ^a (122)	1.000 ^c (122)		h	h	
hosti1	environmental hostility 1	1—7 Likert	1.000 ^a (122)	1.000 ^c (122)		h	h	
hosti2	environmental hostility 2	1—7 Likert	1.000 ^a (122)	1.000 ^c (122)		h	h	
hours	numbers of working hours/week	factual	1.000 ^a (122)	1.000 ^d (122)		h	h	
icomp	seeks info about competitors' products	nominal dichotomous	.977 ^c (122)		.977 (122)	h		h
icus	seeks info about customers' demands	nominal dichotomous	1.000 ^c (122)		1.000 (122)	h		h
idea	had innovative idea	nominal dichotomous	.980 ^c (120)		.980 (120)	h		h
ideaelse	got idea from someone else	nominal dichotomous	.895 ^c (81)		.895 (81)	h		h
iidea	seeks info about promising bus. ideas	nominal dichotomous	.971 ^c (122)		.971 (122)	h		h
imark	seeks info about market development	nominal dichotomous	.899 ^c (122)		.894 (122)	h		h

Table 1 continued

Variable	Label	Scale Format	Zimbabwe			South Africa		
			r	ICC	Cohen's kappa	r	ICC	Cohen's kappa
incpro	% increase profit (last 3 years)	factual	.998 ^a (97)	.999 ^d (97)		h	h	
indpro	increase / decrease profit (last 3 years)	1—3 ordinal	.970 ^b (98)			h		
indreg	is in an industry register	nominal dichotomous	.979 ^c (99)		.979 (99)	h		h
inocha	innovativeness of change	1—5 Likert	.905 ^a (120)	.943 ^c (120)		.601 ^a (57)	.732 ^c (57)	
inocom	innovativeness (competitors)	1—5 Likert	.854 ^a (121)	.905 ^c (121)		.773 ^a (82)	.879 ^c (82)	
inoidea	innovativeness (idea)	1—5 Likert	.849 ^a (120)	.906 ^c (120)		.834 ^a (50)	.908 ^c (50)	
iproduct	seeks info about new ways to produce	nominal dichotomous	1.000 ^c (122)		1.000 (122)	h		h
istrat	seeks info about bus. strategies	nominal dichotomous	.954 ^c (122)		.954 (122)	h		h
isupply	seeks info about economy price supply	nominal dichotomous			g	h		h
itool	seeks info about tool & equipment	nominal dichotomous	.976 ^c (122)		.976 (122)	h		h
kohle	asked someone for money 1997	nominal dichotomous	.979 ^c (100)		.979 (100)	h		h
land1	Land S operates from belongs to him/her	nominal dichotomous	.974 ^c (98)		.974 (98)	h		h
land2	Owens other land	nominal dichotomous	.960 ^c (98)		.959 (98)	h		h
lang	first language	nominal 5 categories			1.000 (122)			h
lasav	was last week low, high, or average	1—3 ordinal	.991 ^b (92)			h		
lasexp	expenses during last week	factual	1.000 ^a (91)	1.000 ^d (91)		h	h	
laspro	profit last week	factual	.999 ^a (90)	1.000 ^d (90)		h	h	
lassal	sales during last week	factual	1.000 ^a (91)	1.000 ^d (91)		h	h	
lazyf	reason for firing: laziness	nominal dichotomous	.848 ^c (78)		.847 (78)	h		h

Table 1 continued

Variable	Label	Scale Format	Zimbabwe			South Africa		
			r	ICC	Cohen's kappa	r	ICC	Cohen's kappa
learn	learning from experience	1—5 Likert	.628 ^a (88)	.765 ^c (88)		.648 ^a (80)	.782 ^c (80)	
libus1	line of business manufacturing: textiles	nominal dichotomous	.939 ^c (122)		.937 (122)	h		h
libus2	line of business manufacturing: wood	nominal dichotomous	.964 ^c (122)		.963 (122)	h		h
libus3	line of business manufacturing: metal	nominal dichotomous	.896 ^c (122)		.891 (122)	h		h
libus4	line of business manufacturing: other	nominal dichotomous	.954 ^c (122)		.952 (122)	h		h
libus5	line of business construction	nominal dichotomous	.909 ^c (122)		.905 (122)	h		h
libus6	line of business trade: retail / trade	nominal dichotomous	.962 ^c (122)		.961 (122)	h		h
libus7	line of business trade: hotels. restaurants. shabeens. bars	nominal dichotomous	.624 ^c (122)		.561 (122)	h		h
libus8	line of business services	nominal dichotomous	.982 ^c (122)		.982 (122)	h		h
libus9	line of business other	nominal dichotomous	.866 ^c (122)		.8 (122)	h		h
loan	got a loan	nominal dichotomous	.971 ^c (69)		.971 (69)	h		h
loapp	applied for loan	nominal dichotomous	1.000 ^c (122)		1.000 (122)	h		h
lobank	loan by bank	nominal dichotomous	.942 ^c (34)		.941 (34)	h		h
lofam	loan by family	nominal dichotomous	1.000 ^c (34)		1.000 (34)	h		h
lofri	loan by friend	nominal dichotomous	1.000 ^c (34)		1.000 (34)	h		h
logov	loan by government	nominal dichotomous	1.000 ^c (34)		1.000 (34)	h		h
longo	loan by ngo	nominal dichotomous	.851 ^c (33)		.841 (33)	h		h
looth	lone by others	nominal dichotomous	.897 ^c (34)		.892 (34)	h		h
meet	holds meetings	nominal 5 categories			.898 (121)			h
monav	no. of month: average sales	factual	1.000 ^a (92)	1.000 ^d (92)		h	h	

Table 1 continued

Variable	Label	Scale Format	Zimbabwe			South Africa		
			r	ICC	Cohen's kappa	r	ICC	Cohen's kappa
money	keeping discipline by money	nominal dichotomous	.930 ^c (121)		.928 (121)	h		h
monhi	no. of month: high sales	factual	1.000 ^a (92)	1.000 ^d (92)		h	h	
monlo	no. of month: low sales	factual	.993 ^a (93)	.993 ^d (93)		h	h	
months	numbers of working month / year	factual	.999 ^a (122)	.999 ^d (122)		h	h	
moti1	motivation 1 (business owner A vs. B)	nominal 4 categories			1.000 (98)			h
moti2	motivation 2 (business owner A vs. B)	nominal 4 categories			1.000 (97)			h
negpos	behaviour described mostly negative / positive	1—5 Likert	.926 ^a (100)	.960 ^c (100)		.939 ^a (107)	.969 ^c (107)	
nobar1	number of different ideas: „out of money“	factual	.953 ^a (110)	.953 ^d (110)		.970 ^a (125)	.970 ^d (125)	
nobar2	number of different ideas: „broken machine“	factual	.958 ^a (109)	.959 ^d (109)		.986 ^a (125)	.986 ^d (125)	
nobar3	number of different ideas: „no supplies“	factual	.939 ^a (105)	.939 ^d (105)		.987 ^a (124)	.987 ^d (124)	
nobar4	number of different ideas: „landlord“	factual	.955 ^a (108)	.955 ^d (108)		.969 ^a (125)	.969 ^d (125)	
nocomp	number of competitors	factual	1.000 ^a (117)	1.000 ^d (117)		h	h	
noem93	number of employees 1993	factual	1.000 ^a (46)	1.000 ^d (46)		h	h	
noem94	number of employees 1994	factual	1.000 ^a (53)	.999 ^d (53)		h	h	
noem95	number of employees 1995	factual	1.000 ^a (71)	.999 ^d (71)		h	h	
noem96	number of employees 1996	factual	.999 ^a (101)	.999 ^d (101)		h	h	
noem97	number of employees 1997	factual	1.000 ^a (120)	.999 ^d (120)		h	h	

Table 1 continued

Variable	Label	Scale Format	Zimbabwe			South Africa		
			r	ICC	Cohen's kappa	r	ICC	Cohen's kappa
noem98	number of employees 1998	factual	.999 ^a (121)	.999 ^d (121)		h	h	
noem99	number of employees 1999	factual	.992 ^a (86)	.992 ^d (86)		h	h	
noemp1	current number of employees (all)	factual	1.000 ^a (122)	1.000 ^d (122)		h	h	
noemp2	number of full-time employees	factual	1.000 ^a (122)	1.000 ^d (122)		h	h	
noemp3	no. of employees from the extended family	factual	.927 ^a (121)	.925 ^d (121)		h	h	
noemst	number of employees at start	factual	.965 ^a (79)	.965 ^d (79)		h	h	
noexp	number of examples	factual	.919 ^a (122)	.919 ^d (122)		h	h	
nofire	number of fired employees	factual	1.000 ^a (77)	1.000 ^d (77)		h	h	
nogoal	no. of subgoals (goal 1 & 2)	factual	.977 ^a (121)	.976 ^d (121)		.967 ^a (125)	.967 ^d (125)	
noissu	number of issues competitors don't have	factual	.921 ^a (122)	.921 ^d (122)		.981 ^a (125)	.980 ^d (125)	
nomin	nominated someone else as successful entrepreneur	nominal dichotomous	1.000 ^c (122)		1.000 (122)	h		h
noneg	numbers of negative statements	factual	.963 ^a (121)	.963 ^d (121)		h	h	
nopos	numbers of positive statements	factual	.989 ^a (121)	.988 ^d (121)		h	h	
noprob	numbers of problems card 1&2	factual	.984 ^a (121)	.984 ^d (121)		.793 ^a (124)	.793 ^d (124)	
oppor1	opportunistic strategies goal1	1—5 Likert	.677 ^a (122)	.806 ^c (122)		.866 ^a (125)	.929 ^c (125)	
oppor2	opportunistic strategies goal2	1—5 Likert	.663 ^a (119)	.779 ^c (119)		.856 ^a (125)	.923 ^c (125)	
ostaff	reason for firing: overstaffed	nominal dichotomous	1.000 ^c (78)		1.000 (78)	h		h

Table 1 continued

Variable	Label	Scale Format	Zimbabwe			South Africa		
			r	ICC	Cohen's kappa	r	ICC	Cohen's kappa
othfam	another family member is a business owner	nominal dichotomous	.983 ^c (121)		.983 (121)	h		h
othneg	other negative behaviours (family members)	nominal dichotomous	.841 ^c (100)		.841 (100)	h		h
othown	other business owners	nominal 3 categories			1.000 (121)			h
othpos	other positive behaviours (family members)	nominal dichotomous	.935 ^c (100)		.935 (100)	h		h
ownbus	owner of the business	nominal dichotomous			g	h		h
ownper	How much of starting capital was your own (%)	factual	.960 ^a (114)	.960 ^d (114)		h	h	
partic	employees participate in decision making	1—5 Likert	.839 ^a (122)	.913 ^c (122)		.935 ^a (125)	.963 ^c (125)	
pay67	more frequently in 1998 (pay of employees)	1—3 ordinal	1.000 ^b (20)			h		
payemp	could pay employees 1998	nominal 4 categories			1.000 (99)			h
payoft	how often did that happen	factual	1.000 ^a (20)	1.000 ^d (20)		h	h	
percinc	% of last employment income	factual	1.000 ^a (98)	1.000 ^d (98)		h	h	
perk	gives perks (free transport. lunch)	1—5 Likert	.941 ^a (122)	.97 ^c (122)		h	h	
phone	has a telephone line	nominal dichotomous	.959 ^c (100)		.958 (100)	h		h
plan1	amount of planning strategies goal1	1—5 Likert	.814 ^a (122)	.896 ^c (122)		.922 ^a (125)	.960 ^c (125)	
plan2	amount of planning strategies goal2	1—5 Likert	.791 ^a (119)	.880 ^c (119)		.880 ^a (125)	.936 ^c (125)	
planch	plans change	nominal dichotomous	.919 ^c (121)		.916 (121)	.984 ^c (125)		.984 (125)
platim	by plan covered time period	nominal 2 categories	1.000 ^c (55)		1.000 (55)	h		h

Table 1 continued

Variable	Label	Scale Format	Zimbabwe			South Africa		
			r	ICC	Cohen's kappa	r	ICC	Cohen's kappa
predic	environment predictability	1—5 Likert	.988 ^a (122)	.994 ^e (122)		h	h	
preven	preventive action card 1&2	1—5 Likert	.654 ^a (122)	.788 ^e (122)		.807 ^a (124)	.886 ^e (124)	
pricin	price increase accordingly to supplier	nominal dichotomous	.960 ^c (98)		.960 (98)	h		h
prilag	price increase lag	nominal 3 categories			1.000 (97)			h
pro34	comparison profit 1993/1994	1—3 ordinal	1.000 ^b (38)			h		
pro45	comparison profit 1994/1995	1—3 ordinal	1.000 ^b (46)			h		
pro56	comparison profit 1995/1996	1—3 ordinal	.971 ^b (62)			h		
pro67	comparison profit 1996/1997	1—3 ordinal	1.000 ^b (82)			h		
pro78	comparison profit 1997/1998	1—3 ordinal	.981 ^b (99)			h		
pro98a	decrease / increase of profit 1997-98/9	1—3 ordinal	.982 ^b (97)			h		
pro98b	% decrease profit 1997-1998/9	factual	.996 ^a (97)	.996 ^d (97)		h	h	
pro98c	% increase profit 1997-1998/9	factual	.971 ^a (97)	.971 ^d (97)		h	h	
proac1	proactiveness strategies goal1	1—5 Likert	.706 ^a (122)	.814 ^e (122)		.870 ^a (125)	.930 ^e (125)	
proac2	proactiveness strategies goal2	1—5 Likert	.721 ^a (118)	.832 ^e (118)		.852 ^a (125)	.919 ^e (125)	
proact	make sure business is well: proactiveness	1—5 Likert	.652 ^a (121)	.773 ^e (121)		.812 ^a (125)	.893 ^e (125)	
prob1	most important problem	nominal 7 categories			.989 (122)			h
prob2	second most important problem	nominal 7 categories			.980 (122)			h
prob3	third most important problem	nominal 7 categories			.990 (122)			h

Table 1 continued

Variable	Label	Scale Format	Zimbabwe			South Africa		
			r	ICC	Cohen's kappa	r	ICC	Cohen's kappa
proco1	problem oriented coping card1	1—5 Likert	.827 ^a (122)	.906 ^e (122)		.844 ^a (124)	.914 ^e (124)	
proco2	problem oriented coping card2	1—5 Likert	.761 ^a (122)	.865 ^e (122)		.837 ^a (124)	.912 ^e (124)	
promar	marketing and sales in the fore-ground card 1&2	1—5 Likert	.683 ^a (120)	.811 ^e (120)		.713 ^a (124)	.815 ^e (124)	
proout	% of profit taken out of business	factual	.994 ^a (115)	.994 ^d (115)		h	h	
react1	reactive strategies goal1	1—5 Likert	.748 ^a (122)	.857 ^e (122)		.920 ^a (125)	.859 ^e (125)	
react2	reactive strategies goal2	1—5 Likert	.827 ^a (119)	.904 ^e (119)		.916 ^a (125)	.955 ^e (125)	
realch	realism of change	1—5 Likert	.334 ^a (47)	.507 ^e (47)		.791 ^a (57)	.884 ^e (57)	
reali1	realism strategies goal1	1—5 Likert	.670 ^a (122)	.799 ^e (122)		.865 ^a (125)	.923 ^e (125)	
reali2	realism strategies goal2	1—5 Likert	.715 ^a (119)	.813 ^e (119)		.846 ^a (125)	.913 ^e (125)	
redcar	goals: red card order	factual	h	h		h	h	
reg1	reason for no registration: tax	nominal dichotomous	.962 ^c (94)		.961 (94)	h		h
reg2	reason for no registration: fear of the unknown	nominal dichotomous	.812 ^c (95)		.795 (95)	h		h
reg3	reason for no registration: too much hassle	nominal dichotomous	.853 ^c (95)		.852 (95)	h		h
reg4	reason for no registration:	nominal dichotomous	.807 ^c (95)		.789 (95)	h		h
reg5	reason for no registration: psychological barriers	nominal dichotomous	.798 ^c (95)		.778 (95)	h		h
reg6	reason for no registration: others	nominal dichotomous	.853 ^c (95)		.853 (95)	h		h
reliab	more reliable	nominal dichotomous	.808 ^c (100)		.79 (100)	h		h

Table 1 continued

Variable	Label	Scale Format	Zimbabwe			South Africa		
			r	ICC	Cohen's kappa	r	ICC	Cohen's kappa
rereg1	reason for no registration: tax	nominal dichotomous	1.000 ^c (23)		1.000 (23)	h		h
rereg2	reason for no registration: fear of the unknown	nominal dichotomous			g	h		h
rereg3	reason for no registration: too much hassle	nominal dichotomous	1.000 ^c (22)		1.000 (22)	h		h
rereg4	reason for no registration: skills	nominal dichotomous	1.000 ^c (22)		1.000 (22)	h		h
rereg5	reason for no registration: psychological barriers	nominal dichotomous			g	h		h
rereg6	reason for no registration: others	nominal dichotomous	.904 ^c (22)		.899 (22)	h		h
rules	keeping discipline by a set of rules	nominal dichotomous	.756 ^c (121)		.756 (121)	h		h
sal34	comparison sales 1993/1994	1—3 ordinal	1.000 ^b (47)			h		
sal45	comparison sales 1994/1995	1—3 ordinal	1.000 ^b (56)			h		
sal56	comparison sales 1995/1996	1—3 ordinal	1.000 ^b (72)			h		
sal67	comparison sales 1996/1997	1—3 ordinal	1.000 ^b (67)			h		
sal78	comparison sales 1997/1998	1—3 ordinal	1.000 ^b (121)			h		
sal98a	decrease / increase of sold goods 1997-98/9	1—3 ordinal	1.000 ^b (98)			h		
sal98b	% decrease sold goods 1997-98/9	factual	.983 ^a (98)	.983 ^d (98)		h	h	
sal98c	% increase sold goods 1997-98/9	factual	1.000 ^a (97)	1.000 ^d (97)		h	h	
salav	sales level: months of average sales	factual	1.000 ^a (81)	1.000 ^d (81)		h	h	
salhi	sales level: months of high sales	factual	1.000 ^a (87)	1.000 ^d (87)		h	h	

Table 1 continued

Variable	Label	Scale Format	Zimbabwe			South Africa		
			r	ICC	Cohen's kappa	r	ICC	Cohen's kappa
sallo	sales level: months of low sales	factual	1.000 ^a (87)	1.000 ^d (87)		h	h	
satinc	satisfied with current income	-3 — +3 Likert	1.000 ^a (119)	1.000 ^c (119)		h	h	
satwor	satisfied with work	-3 — +3 Likert	1.000 ^a (121)	1.000 ^c (121)		h	h	
scomp	info source: competitors	nominal dichotomous	.947 ^c (122)		.946 (122)	h		h
scoop	info source: co-operative. etc.	nominal dichotomous	.863 ^c (122)		.854 (122)	h		h
scus	info source: customers	nominal dichotomous	.967 ^c (122)		.966 (122)	h		h
selfe1	self-efficacy in % card1	factual	.882 ^a (122)	.878 ^d (122)		h	h	
selfe2	self-efficacy in % card2	factual	.990 ^a (122)	.990 ^d (122)		h	h	
selfest	business self established	nominal dichotomous			g	h		h
sfam	info source: friends/family	nominal dichotomous	.950 ^c (122)		.950 (122)	h		h
sjour	info source: professional journals	nominal dichotomous	.883 ^c (122)		.876 ^f (122)	h		h
skill	estimate of transferable skills from earlier job	1—5 Likert	.922 ^a (98)	.955 ^e (98)		.912 ^a (105)	.945 ^e (105)	
slbus	self-employed in the same line of business	nominal dichotomous	1.000 ^c (31)		1.000 (31)	h		h
smedia	info source: media & advertisements	nominal dichotomous	.930 ^c (122)		.930 (122)	h		h
sother	info source: other	nominal dichotomous	.901 ^c (122)		.901 (122)	h		h
spef1	goal specificity goal1	1—5 Likert	.567 ^a (122)	.725 ^e (122)		.825 ^a (125)	.902 ^c (125)	
spef2	goal specificity goal2	1—5 Likert	.710 ^a (120)	.830 ^c (120)		.805 ^a (125)	.889 ^c (125)	
ssupply	info source: suppliers	nominal dichotomous	.965 ^c (122)		.964 (122)	h		h
startc	starting capital	factual	.689 ^a (122)	.608 ^d (122)		h	h	
steal	steal more	nominal dichotomous	.862 ^c (100)		.853 (100)	h		h

Table 1 continued

Variable	Label	Scale Format	Zimbabwe			South Africa		
			r	ICC	Cohen's kappa	r	ICC	Cohen's kappa
stealf	reason for firing: stealing	nominal dichotomous	1.000 ^c (78)		1.000 (78)	h		h
sucoth	others say about success	1—5 Likert		.991 ^e (121)		h	h	
sucsel	how successful compared to competitors	1—5 Likert	1.000 ^a (122)	1.000 ^c (122)		h	h	
supcos	pays more / less for supplies in 1997	1—3 ordinal	1.000 ^b (96)			h		
supply	payment for supplies (last month)	factual	1.000 ^a (73)	1.000 ^d (73)		h	h	
sure1	sureness of rater (judgement of strategies goal1)	1—5 Likert	.220 (122)	.362 ^e (122)		.495 ^a (125)	.629 ^c (125)	
sure2	sureness of rater (judgement of strategies goal2)	1—5 Likert	.350 ^a (119)	.520 ^e (119)		.495 ^a (125)	.662 ^c (125)	
sysmot	systematic approach to motivation	1—5 Likert	.735 ^a (121)	.840 ^e (121)		.512 ^a (125)	.929 ^c (125)	
talk	easier to talk to	nominal dichotomous			g	h		h
target	gives targets	nominal 5 categories			.870 ^f (140)			.923 (18)
tenant	took an additional tenant 1997	nominal dichotomous	.921 ^c (97)		.918 ^f (97)	h		h
theft	stealing occurred	nominal dichotomous	1.000 ^c (122)		1.000 ^f (122)	h		h
undif	more understanding for difficulties	nominal dichotomous	1.000 ^c (100)		1.000 (100)	h		h
unemp	bus. owner because unemployed otherwise	nominal dichotomous	1.000 ^c (121)		1.000 (121)	h		h
voctra	received vocational training	nominal dichotomous	.983 ^c (121)		.983 (121)	h		h
wages	payment to workers (monthly)	factual	1.000 ^a (72)	1.000 ^d (72)		h	h	
warn	would warn friend of registration	1—5 Likert	.908 ^a (118)	.951 ^e (118)		.929 ^a (125)	.963 ^c (125)	
wldsel	would sell	nominal dichotomous	1.000 ^c (121)		1.000 (121)	h		h

Table 1 continued

Variable	Label	Scale Format	Zimbabwe			South Africa		
			r	ICC	Cohen's kappa	r	ICC	Cohen's kappa
worked	it worked (working with family)	1—5 Likert	.932 ^a (77)	.964 ^e (77)		.977 ^a (56)	.988 ^e (56)	

Note. Values in parentheses represent sample sizes.

^a Pearson's r. ^b Spearman's r. ^c Phi coefficient. ^d ICC(1,1). ^e ICC(1,2). ^f Coefficient could not be computed due to zero variance. ^g Kappa could not be computed due to uneven use of the rating categories.

^h Coefficient could not be computed because $N(\text{double ratings}) \leq 1$.

All but one of the factual variables showed ICCs near or equal 1.00, suggesting that only a very limited amount of error variance arose due to ambiguous information or misconceptions of the raters. The only factual variable with a remarkably lower, though still acceptable reliability was starting capital in Zimbabwe (startc).

Similarly, all of the ordinal and most of the nominal ratings yielded high reliability coefficients. All but one kappa coefficient for the nominal items were also well above .90. The only dropout was the variable 'line of business trade: hotels, restaurants, shabeens, bars' (libus7) in Zimbabwe.

Likert scales require more of a personal judgment of the rater than the scale types discussed above. Therefore, they are more likely to evoke interrater discrepancies. Fortunately, only six of the Likert items' reliabilities remained below .60 in one of the counts sub-samples. They were: Question answered to the point (answer) in South Africa, goal difficulty 1 and 2 (diffr1 & diffr2) in Zimbabwe, realism of change (realch) in Zimbabwe, and the sureness of the raters concerning the judgment of strategies (sure1 & sure2) in Zimbabwe. For the latter two items, the results are not surprising because they were designed for the expression of rating difficulties and rater agreement is not an issue. The rater disagreements concerning the difficulty of the participants' business goals and the realism of change are very interesting. It is likely that the second rater, who was not present during the interview, was lacking the direct impression of the business to assess the variables for the particular interviewees.

In sum, only seven of the overall 293 variables of the interview failed to reach the required level of reliability of .6 for ICC or kappa coefficients.

Interrater reliabilities of the interview at T2 (Zimbabwe longitudinal and all)

At T2, the majority of the 300 interview variables also yielded satisfactory reliability coefficients above .60 (Table 2).

Table 2: Interrater Reliabilities of the Interview 2000/01 (T2)

Variable	Label	Scale Format	Zimbabwe (longitudinal)			Zimbabwe (all)		
			r	ICC	Cohen's kappa	r	ICC	Cohen's kappa
accbs	has extra business bank account	nominal dichotomous	.950 ^c (95)		.950 (95)	.957 ^c (283)		.957 (283)
accp1s	has personal bank account	nominal 3 categories			.917 (95)			.902 (285)
accp2s	uses personal account for business	nominal 3 categories			.923 (88)			.951 (262)
ac6s	doing something about it	1—5 Likert	.990 ^a (95)	.995 ^e (95)	.985 ^a (281)	.993 ^e (281)		
ac1s	organisations t2	factual	.990 ^a (95)	.932 ^d (95)	.937 ^a (260)	.937 ^d (260)		
actba1s	active vs. delegate "out of money"	1—5 Likert	.811 ^a (97)	.895 ^c (97)	.684 ^a (284)	.813 ^c (284)		
actba2s	active vs. delegate "machine"	1—5 Likert	.654 ^a (96)	.790 ^c (96)	.599 ^a (286)	.745 ^c (286)		
actba3s	active vs. delegate "supplies"	1—5 Likert	.796 ^a (96)	.887 ^c (96)	.710 ^a (282)	.828 ^c (282)		
actba4s	active vs. delegate "landlord"	1—5 Likert	.768 ^a (96)	.866 ^c (96)	.664 ^a (283)	.787 ^c (283)		
actpa1s	action in the past (strategies goal/problem 1)	1—5 Likert	.715 ^a (96)	.817 ^c (96)	.399 ^a (276)	.452 ^{e i} (163)		
actpa2s	action in the past (strategies goal/problem 2)	1—5 Likert	.736 ^a (96)	.837 ^c (96)	.447 ^a (273)	.427 ^{e i} (273)		
adres	gave us own address	nominal dichotomous	(308) ^f		(308) ^f	(285) ^f		(285) ^f
advants	actual strength of advantage	1—5 Likert	.618 ^a (91)	.764 ^c (91)	.440 ^a (268)	.548 ^c (268)		
ages	age of subject	factual	.999 ^a (97)	.999 ^d (97)	.977 ^a (286)	.971 ^d (286)		
answers	question answered to the point (competitors)	1—5 Likert	.414 ^a (91)	.586 ^c (91)	.259 ^a (269)	.535 ^{e i} (157)		

Table 2 continued

Variable	Label	Scale Format	Zimbabwe (longitudinal)			Zimbabwe (all)		
			r	ICC	Cohen's kappa	r	ICC	Cohen's kappa
approvs	ask third person about success of business	nominal dichotomous	.861 ^c (91)		.852 (91)	.387 ^c (280)		(280) ^g
as1s	how much schooling (years)	factual	.975 ^a (93)	.975 ^d (93)		.970 ^a (283)	.970 ^d (283)	
autors	shows autonomy orientation	1—5 Likert	.876 ^a (95)	.934 ^e (95)		.686 ^a (282)	.805 ^e (282)	
becames	when did he/she become registered?	factual	.986 ^a (59)	.986 ^d (59)		.990 ^a (100)	.993 ^d (100)	
blucars	problems: blue card order	factual	h	h		1.000 ^a (7)	1.000 ^d (7)	
boexps	experience/qualification of the book-keeping person	1—5 Likert	.784 ^a (93)	.876 ^c (93)		.846 ^a (285)	.913 ^c (280)	
books	how do you do your book-keeping?	nominal 5 categories			.775 (93)			.814 (278)
books1s	How do you do bookkeeping (new)	nominal 5 categories			.775 (93)			.878 (275)
bucards	has business card	nominal dichotomous	1.000 ^c (95)		1.000 (95)	.978 ^c (285)		.978 (285)
busads	friend should(n't) invest in the same bus	1—5 Likert	.697 ^a (95)	.817 ^c (95)		.655 ^a (281)	.792 ^c (281)	
buscycs	business cycle	nominal 3 categories			1.000 (96)			.989 (278)
busplas	written business plan	nominal dichotomous	.980 ^c (97)		.979 (97)	.955 ^c (286)		.955 (286)
buys	can buy more/less for him/herself	nominal 3 categories			.962 (94)			.938 (282)
chacoms	member of chamber of commerce	nominal dichotomous	1.000 ^c (97)		1.000 (97)	1.000 ^c (286)		1.000 (286)
ch3s	new ways of doing things	nominal 4 categories			.975 (95)			.968 (285)
ci13s	qualification	nominal 4 categories			1.000 (94)			.977 (282)
clear1s	no clear strategy none 4/5 goal 1	nominal dichotomous	.319 ^c (97)		.185 (97)	.224 ^c (283)		.159 (283)
clear2s	no clear strategy none 4/5 goal 2	nominal dichotomous	.079 ^c (97)		.078 (97)	.090 ^c (283)		.073 (283)
closes	closing date	factual	h	h		1.000 ^a (7)	1.000 ^d (7)	

Table 2 continued

Variable	Label	Scale Format	Zimbabwe (longitudinal)			Zimbabwe (all)		
			r	ICC	Cohen's kappa	r	ICC	Cohen's kappa
clubs	club/society/assoc. to enhance business	nominal dichotomous	1.000 ^c (97)		1.000 (97)	.924 ^c (285)		.922 (285)
cntrls	environment controllability	1—5 Likert	.997 ^a (97)	.998 ^e (97)		.992 ^a (287)	.996 ^e (286)	
comcrs		factual	.876 ^a (97)	.877 ^d (97)		.682 ^a (287)	.810 ^d (287)	
compags	competitive aggressiveness	1—5 Likert	.805 ^a (96)	.888 ^e (96)		.786 ^a (274)	.878 ^e (274)	
compfrs	competitors or more friends	1—5 Likert	.751 ^a (96)	.847 ^e (96)		.802 ^a (274)	.890 ^e (274)	
compl1s	complete planning strategies goal1	1—5 Likert	.681 ^a (97)	.806 ^e (97)		.522 ^a (278)	.687 ^e (278)	
compl2s	complete planning strategies goal2	1—5 Likert	.719 ^a (97)	.832 ^e (97)		.552 ^a (282)	.702 ^e (282)	
complx	environment: simplicity / complexity	1—7 Likert	.993 ^a (97)	.996 ^e (97)		.972 ^a (287)	.986 ^e (287)	
concats	concreteness (description advantage - competitors)	1—5 Likert	.571 ^a (91)	.712 ^e (91)		.472 ^a (262)	.693 ^{e i} (151)	
conides	concreteness of description (idea)	1—5 Likert	.523 ^a (75)	.682 ^e (75)		.424 ^a (186)	.560 ^{e i} (92)	
concins	concreteness of description (change)	1—5 Likert	.542 ^a (52)	.700 ^e (52)		.297 ^a (171)	.559 ^{e i} (108)	
concoms	concreteness of description (competitors)	1—5 Likert	.508 ^a (62)	.667 ^e (62)		.527 ^a (200)	.790 ^{e i} (120)	
concid	concreteness of description (idea)	1—5 Likert	.418 ^a (77)	.587 ^e (77)		.451 ^a (238)	.726 ^{e i} (140)	
conf1s	confidence in leading	factual	.989 ^a (96)	.989 ^d (96)		.991 ^a (283)	.991 ^d (283)	
conf2s	confidence in negotiation (bus.)	factual	.993 ^a (96)	.993 ^d (96)		.930 ^a (285)	.927 ^d (285)	
conf3s	confidence in negotiation (cus)	factual	.995 ^a (96)	.995 ^d (96)		.925 ^a (285)	.924 ^d (285)	
conf4s	confidence in financial overview	factual	1.000 ^a (96)	1.000 ^d (96)		.990 ^a (285)	.984 ^d (285)	

Table 2 continued

Variable	Label	Scale Format	Zimbabwe (longitudinal)			Zimbabwe (all)		
			r	ICC	Cohen's kappa	r	ICC	Cohen's kappa
conf5s	confidence in own pricing	factual	.990 ^a (96)	.990 ^d (96)		.984 ^a (285)	.992 ^d (285)	
conf6s	confidence in communicating	factual	.844 ^a (96)	.839 ^d (96)		.924 ^a (285)	.923 ^d (285)	
conf7s	confidence in convincing	factual	1.000 ^a (96)	1.000 ^d (96)		.990 ^a (285)	.990 ^d (284)	
coops	member of co-operative	nominal dichotomous	.921 ^c (97)		.918 (97)	.953 ^c (286)		.952 (286)
corfams	employed family member belongs to core family	nominal 3 categories			.567 (76)			.272 (188)
critp1s	critical point planning strategies goal1	1—5 Likert	.439 ^a (97)	.612 ^c (97)		.207 ^a (283)	.452 ^{e i} (164)	
critp2s	critical point planning strategies goal2	1—5 Likert	.583 ^a (97)	.736 ^c (97)		.178 ^a (282)	.381 ^{e i} (164)	
cus01as	% decrease of customers 2000-2001	factual	1.000 ^a (2)	1.000 ^d (2)		.950 ^a (46)	.949 ^d (46)	
cus01bs	% increase of customers 2000-2001	factual	1.000 ^a (7)	1.000 ^d (7)		.999 ^a (52)	.999 ^d (52)	
cus01s	decrease/increase of customers 2000-2001	1—3 ordinal	1.000 ^b (11)			.975 ^b (126)		
cus89as	decrease of customers in 1998/9 %	factual	1.000 ^a (18)	1.000 ^d (18)		1.000 ^a (36)	1.000 ^d (36)	
cus89bs	increase of customers in 1998/9 %	factual	.995 ^a (65)	.995 ^d (65)		.975 ^a (170)	.975 ^d (170)	
cus89s	decrease / increase of customers in 1998/9	1—3 ordinal	1.000 ^b (95)			1.000 ^b (246)		
cus92as	% decrease of customers 1999-2000	factual	1.000 ^a (29)	1.000 ^d (29)		.990 ^a (77)	.990 ^d (77)	
cus92bs	% increase of customers 1999-2000	factual	.897 ^a (44)	.898 ^d (44)		.960 ^a (134)	.960 ^d (134)	
cus92s	decrease/increase of customers 1999-2000	1—3 ordinal	.972 ^b (94)			1.000 ^b (268)		
decpros	% decrease profit (last 3 years)	factual	1.000 ^a (22)	1.000 ^d (22)		1.000 ^a (71)	1.000 ^d (69)	

Table 2 continued

Variable	Label	Scale Format	Zimbabwe (longitudinal)			Zimbabwe (all)		
			r	ICC	Cohen's kappa	r	ICC	Cohen's kappa
detail1s	detailedness of description strategies goal1	1—5 Likert	.706 ^a (97)	.817 ^e (97)		.495 ^a (286)	.648 ^{e i} (166)	
detail2s	detailedness of description strategies goal2	1—5 Likert	.680 ^a (97)	.809 ^e (97)		.406 ^a (281)	.517 ^{e 1} (163)	
diff1s	goal difficulty goal1 rater estimate	1—5 Likert	.351 ^a (96)	.509 ^e (96)		.210 ^a (285)	.472 ^{e i} (168)	
diff2s	goal difficulty goal2 rater estimate	1—5 Likert	.543 ^a (96)	.640 ^e (96)		.218 ^a (286)	.410 ^{e i} (168)	
dissucs	distribution of success (graph sheet)	nominal 5 categories			.987 (96)			.979 (284)
dodiffs	would do things differently	nominal dichotomous	.929 ^c (96)		.929 (96)	.907 ^c (284)		.907 (284)
dynamis	environment dynamic	1—5 Likert	.992 ^a (96)	.996 ^c (96)		.9217 ^a (286)	.957 ^c (286)	
ebosts	employment and bus. owner at same time	nominal 4 categories			.954 (96)			.729 (280)
edudegs	highest degree of formal education	nominal 10categories			.875 (96)			.895 (278)
eduy eas	years of education	factual	.994 ^a (97)	.994 ^d (97)		.992 ^a (287)	.996 ^d (287)	
ef14s	earthquakes	nominal 4 categories			.958 (94)			.982 (302)
ef11s	earthquakes	nominal 4 categories			.980 (95)			.980 (283)
elecs	has electricity	nominal dichotomous	.859 ^c (94)		.856 (94)	.903 ^c (284)		.903 (284)
elses	this other person was (idea)	nominal 6 categories			.940 (23)			.887 (47)
equip1s	money spent on equipment	factual	.969 ^a (92)	.969 ^d (92)		.973 ^a (273)	.973 ^d (273)	
equip2s	value if sold today	factual	.983 ^a (92)	.983 ^d (92)		.984 ^a (272)	.985 ^d (272)	
equip3s	value if bought today	factual	.989 ^a (92)	.989 ^d (92)		.991 ^a (271)	.991 ^d (269)	
equip4s	sold his equipment	factual	h	h		1.000 ^a (8)	1.000 ^d (7)	
equip5s	got for it (Zim\$)	factual	h	h		1.000 ^a (4)	1.000 ^d (4)	
ests	year of establishment	factual	.986 ^a (97)	.986 ^d (97)		.967 ^a (287)	.967 ^d (287)	

Table 2 continued

Variable	Label	Scale Format	Zimbabwe (longitudinal)			Zimbabwe (all)		
			r	ICC	Cohen's kappa	r	ICC	Cohen's kappa
famems	employed / employs family members	nominal 3 categories			.949 (96)			.917 (283)
formals	formal / informal sector	nominal 5 categories			.979 (94)			(282) ^g
friends	environment friendliness	1—5 Likert	.985 ^a (97)	.993 ^e (97)		.982 ^a (286)	.991 ^e (286)	
fs3s	opinions	nominal dichotomous	.710 ^c (95)		^g (95)	.901 ^c (265)		.896 (265)
gapors	gap / niche orientation	1—5 Likert	.731 ^a (95)	.838 ^e (95)		.708 ^a (277)	.829 ^e (277)	
goal1s	most important goal	nominal 6 categories			.974 (96)			.974 (276)
goal2s	second most important goal	nominal 6 categories			.975 (96)			.961 (279)
go2s	problems facing your country (no.)	factual	.887 ^a (94)	.885 ^d (94)		.932 ^a (282)	.931 ^d (282)	
goal3s	third most important goal	nominal 6 categories			.973 (94)			.969 (277)
golmars	marketing & sales in the foreground goal 1&2	1—5 Likert	.644 ^a (96)	.725 ^c (96)		.510 ^a (278)	.763 ^{e i} (167)	
grogo1s	growth goal 1 (business owner A vs. B)	nominal 4 categories			.968 (96)			.977 (283)
grogo2s	growth goal 2 (business owner A vs. B)	nominal 4 categories			1.000 (96)			.970 (282)
hostis	environment hostility	1—5 Likert	.994 ^a (97)	.997 ^e (97)		.976 ^a (287)	.988 ^e (287)	
hosti1s	environmental hostility 1	1—7 Likert	.979 ^a (97)	.989 ^e (97)		.984 ^a (286)	.992 ^e (386)	
hosti2s	environmental hostility 2	1—7 Likert	.997 ^a (97)	.988 ^e (97)		.959 ^a (285)	.979 ^e (285)	
hourss	numbers of working hours/week	factual	.981 ^a (96)	1.000 ^d (96)		.886 ^a (276)	1.000 ^d (277)	
ideas	had innovative idea	nominal dichotomous	1.000 ^c (97)		1.000 (97)	.976 ^c (282)		.976 (282)
ideelse	got idea from someone else	nominal dichotomous	.969 ^c (75)		.969 (75)	.858 ^c (188)		.856 (188)

Table 2 continued

Variable	Label	Scale Format	Zimbabwe (longitudinal)			Zimbabwe (all)		
			r	ICC	Cohen's kappa	r	ICC	Cohen's kappa
incpros	% increase profit (last 3 years)	factual	.995 ^a (56)	.995 ^d (56)		.993 ^a (141)	.993 ^d (141)	
indpros	increase / decrease profit (last 3 years)	1—3 ordinal	1.000 ^b (92)			.981 ^b (261)		
indregs	is in an industry register	nominal dichotomous	.979 ^c (95)		.979 (95)	.954 ^c (274)		.953 (274)
inochas	innovativeness of change	1—5 Likert	.569 ^a (52)	.704 ^e (52)		.087 ^a (182)	.035 ^{e i} (172)	
inocoms	innovativeness (competitors)	1—5 Likert	.578 ^a (61)	.736 ^c (61)		.253 ^a (199)	.453 ^{e i} (118)	
inoideas	innovativeness (idea)	1—5 Likert	.568 ^a (74)	.719 ^c (74)		.295 ^a (185)	.383 ^{e i} (91)	
in7s	in what country is Moscow	nominal dichotomous	1.000 ^c (94)		1.000 (94)	.892 ^c (278)		.892 (278)
jobincs	income	nominal dichotomous	h		h	h		h
jobs	employed after closing	nominal dichotomous	h		h	1.000 ^c (7)		1.000 (7)
jobknos	knew about job when giving up	nominal dichotomous	h		h	h		h
jobnows	is still employed	nominal dichotomous	h		h	h		h
jobups	giving up for job	nominal dichotomous	h		h	h		h
kinsh1s	kinship obligation 1	1—5 Likert	.943 ^a (96)	.970 ^c (96)		.921 ^a (283)	.958 ^c (283)	
kinsh2s	kinship obligation 2	1—5 Likert	.846 ^a (96)	.917 ^c (96)		.868 ^a (286)	.929 ^c (286)	
kinsh3s	kinship obligation 3	1—5 Likert	.992 ^a (96)	.996 ^c (96)		.991 ^a (286)	.996 ^c (286)	
kinsh4s	kinship obligation 4	1—5 Likert	.956 ^a (96)	.978 ^c (96)		.980 ^a (285)	.990 ^c (285)	
kinsh5s	kinship obligation 5	1—5 Likert	.984 ^a (96)	.992 ^c (96)		.994 ^a (285)	.997 ^c (285)	
kohles	asked someone for money 1997	nominal dichotomous	.931 ^c (94)		.928 (94)	.884 ^c (274)		.884 (274)
land1s	Land S operates from belongs to him/her	nominal dichotomous	1.000 ^c (94)		1.000 (94)	.961 ^c (283)		.960 (283)
land2s	Owns other land	nominal dichotomous	1.000 ^c (94)		1.000 (94)	.971 ^c (280)		.971 (280)
lasavs	was last week low, high, or average	1—3 ordinal	.991 ^b (89)			.980 ^b (270)		

Table 2 continued

Variable	Label	Scale Format	Zimbabwe (longitudinal)			Zimbabwe (all)		
			r	ICC	Cohen's kappa	r	ICC	Cohen's kappa
lasexps	expenses during last week	factual	.745 ^a (88)	.330 ^d (88)		.748 ^a (265)	.336 ^d (265)	
laspros	profit during the last week	factual	1.000 ^a (86)	1.000 ^d (86)		.994 ^a (259)	.994 ^d (259)	
lassals	sales during last week	factual	.999 ^a (90)	1.000 ^d (90)		.980 ^a (270)	.999 ^d (269)	
learns	learning from experience	1—5 Likert	.676 ^a (79)	.677 ^e (79)		.433 ^a (238)	.573 ^{e i} (138)	
libu1s	line of business manufacturing: textiles	nominal dichotomous	h		h	1.000 ^c (5)		1.000 (5)
libu2s	manufacturing wood	nominal dichotomous	h		h	(5) ^f		(5) ^f
libu3s	manufacturing metal	nominal dichotomous	h		h	(5) ^f		(5) ^f
libu4s	manufacturing other	nominal dichotomous	h		h	1.000 ^c (5)		1.000 (5)
libu5s	construction	nominal dichotomous	h		h	(5) ^f		(5) ^f
libu6s	retail/trade	nominal dichotomous	h		h	1.000 ^c (5)		1.000 (5)
libu7s	restaurants, bars, hotels, shabeens	nominal dichotomous	h		h	(5) ^f		(5) ^f
libu8s	services	nominal dichotomous	h		h	1.000 ^c (5)		1.000 (5)
libu9s	other line of business	nominal dichotomous	h		h	(5) ^f		(5) ^f
libus1s	line of business manufacturing: textiles	nominal dichotomous	.836 ^c (97)		.823 (97)	.744 ^c (285)		.737 (285)
libus2s	line of business manufacturing: wood	nominal dichotomous	.891 ^c (97)		.890 (97)	.820 ^c (286)		.820 (286)
libus3s	line of business manufacturing: metal	nominal dichotomous	.700 ^c (97)		.699 (97)	.753 ^c (282)		.749 (282)
libus4s	line of business manufacturing: other	nominal dichotomous	.772 ^c (97)		.772 (97)	.578 ^c (285)		.565 (285)
libus5s	line of business construction	nominal dichotomous	.701 ^c (97)		.693 (97)	.676 ^c (285)		.653 (285)
libus6s	line of business trade: retail / trade	nominal dichotomous	.917 ^c (97)		.916 (97)	.728 ^c (287)		.723 (287)

Table 2 continued

Variable	Label	Scale Format	Zimbabwe (longitudinal)			Zimbabwe (all)		
			r	ICC	Cohen's kappa	r	ICC	Cohen's kappa
libus7s	line of business trade: hotels. restaurants. shabeens. bars	nominal dichotomous	1.000 ^c (97)		1.000 (97)	.676 ^c (286)		.653 (286)
libus8s	line of business services	nominal dichotomous	.836 ^c (97)		.829 (97)	.704 ^c (285)		.701 (285)
libus9s	line of business other	nominal dichotomous	.343 ^c (97)		.328 (97)	.131 ^c (286)		.120 (286)
loans	got a loan	nominal dichotomous	.958 ^c (50)		.957 (50)	.936 ^c (121)		.934 (121)
loapps	applied for loan	nominal dichotomous	.978 ^c (92)		.978 (92)	.913 ^c (280)		.913 (280)
lobanks	loan by bank	nominal dichotomous	.935 ^c (30)		.933 (30)	.961 ^c (54)		.960 (54)
lofams	loan by family	nominal dichotomous	1.000 ^c (30)		1.000 (30)	.957 ^c (57)		.956 (57)
lofris	loan by friend	nominal dichotomous	1.000 ^c (30)		1.000 (30)	.947 ^c (57)		.946 (57)
logovs	loan from government	nominal dichotomous	.850 ^c (30)		.839 (30)	.759 ^c (54)		.731 (54)
longos	loan from ngo	nominal dichotomous	.849 ^c (29)		.838 (29)	.852 ^c (52)		.852 (52)
lopros	got a loan (new categories)	nominal dichotomous	.972 ^c (50)		.963 (50)	1.168 ^c (120)		.867 (120)
loyea1s	what year loan 1	factual	1.000 ^a (30)	1.000 ^d (30)		1.000 ^a (53)	1.000 ^d (53)	
loyea2s	what year loan 2	factual	1.000 ^a (8)	1.000 ^d (8)		1.000 ^a (16)	1.000 ^d (16)	
loyea3s	what year loan 3	factual	1.000 ^a (5)	1.000 ^d (5)		1.000 ^a (8)	1.000 ^d (8)	
loyea4s	what year loan 4	factual	h	h		h	h	
mm5s	newspaper information	nominal 4 categories			1.000 (95)			.981 (282)
mm10s	interests	nominal 5 categories			.985 (95)			.981 (284)
monavs	no. of month: average sales	factual	.996 ^a (93)	.996 ^d (93)		.969 ^a (294)	.969 ^d (274)	
monhis	no. of month: high sales	factual	.982 ^a (93)	.982 ^d (93)		.961 ^a (276)	.961 ^d (276)	
monlos	no. of month: low sales	factual	1.000 ^a (93)	1.000 ^d (93)		.993 ^a (276)	.993 ^d (276)	
monthss	numbers of working month / year	factual	1.000 ^a (96)	1.000 ^d (96)		.902 ^a (278)	.899 ^d (278)	

Table 2 continued

Variable	Label	Scale Format	Zimbabwe (longitudinal)			Zimbabwe (all)		
			r	ICC	Cohen's kappa	r	ICC	Cohen's kappa
moti1s	motivation 1 (business owner A vs. B)	nominal 4 categories			1.000 (96)			.984 (283)
moti2s	motivation 2 (business owner A vs. B)	nominal 4 categories			.983 (96)			.961 (280)
much1s	how much loan 1	factual	.877 ^a (29)	.871 ^d (29)		.888 ^a (54)	.882 ^d (54)	
much2s	how much loan 2	factual	1.000 ^a (8)	1.000 ^d (8)		1.000 ^a (16)	1.000 ^d (16)	
much3s	how much loan 3	factual	1.000 ^a (5)	1.000 ^d (5)		1.000 ^a (8)	1.000 ^d (8)	
much4s	how much loan 4	factual	h	h		h	h	
names	are you Mr./Mrs. X	nominal dichotomous	(95) ^f		(95) ^f	(106) ^f		(106) ^f
ne5rs	understand way of thinking	nominal dichotomous	.969 ^c (95)		.969 (95)	.953 ^c (282)		.953 (282)
newbus	started new business	nominal dichotomous	h		h	1.000 ^c (8)		1.000 (8)
newfam s	employed additional relatives (last year)	nominal dichotomous	h		h	(4) ^f		(4) ^f
nobar1s	number of different ideas: „out of money“	factual	.937 ^a (97)	.936 ^d (97)		.898 ^a (285)	.895 ^d (285)	
nobar2s	number of different ideas: „broken machine“	factual	.823 ^a (95)	.822 ^d (95)		.859 ^a (284)	.855 ^d (284)	
nobar3s	number of different ideas: „no supplies“	factual	.878 ^a (96)	.860 ^d (96)		.884 ^a (266)	.878 ^d (266)	
nobar4s	number of different ideas: „landlord“	factual	.903 ^a (95)	.901 ^d (95)		.900 ^a (283)	.895 ^d (283)	
nocomp s	number of competitors	factual	1.000 ^a (94)	1.000 ^d (94)		.996 ^a (274)	.996 ^d (274)	
noem00 s	no. of employees 2000	factual	1.000 ^a (95)	1.000 ^d (95)		.999 ^a (256)	1.000 ^d (256)	
noem01 s	no. of employees 2001	factual	1.000 ^a (11)	1.000 ^d (11)		.987 ^a (182)	.987 ^d (182)	
noem98 s	number of employees 1998	factual	1.000 ^a (94)	1.000 ^d (94)		.999 ^a (227)	.999 ^d (227)	
noem99 s	number of employees 1999	factual	1.000 ^a (95)	1.000 ^d (95)		.998 ^a (255)	.998 ^d (255)	
noempl s	current number of employees (all)	factual	.945 ^a (96)	.872 ^d (96)		.947 ^a (278)	.883 ^d (278)	

Table 2 continued

Variable	Label	Scale Format	Zimbabwe (longitudinal)			Zimbabwe (all)		
			r	ICC	Cohen's kappa	r	ICC	Cohen's kappa
noemp2s	number of full-time employees	factual	1.000 ^a (94)	1.000 ^d (94)		1.000 ^a (274)	1.000 ^d (274)	
noemp3s	no. of employees from extended family t2	factual	.996 ^a (94)	.996 ^d (94)		.988 ^a (247)	.988 ^d (247)	
noemp4s	number of employees when closing down	factual	h	h		1.000 ^a (8)	1.000 ^d (7)	
noemp5s	number of full-time employees	factual	h	h		1.000 ^a (8)	1.000 ^d (7)	
noemp6s	no. of employees from the extended family	factual	h	h		1.000 ^a (8)	1.000 ^d (7)	
nofams	how many additional relatives	factual	h	h		h	h	
nogoals	no. of subgoals (goal 1 & 2)	factual	.838 ^a (96)	.840 ^d (96)		.869 ^a (277)	.838 ^d (277)	
nonegs	numbers of negative statements	factual	.866 ^a (95)	.857 ^d (95)		.823 ^a (248)	.817 ^d (248)	
noposs	numbers of positive statements	factual	.927 ^a (95)	.926 ^d (95)		.874 ^a (253)	.873 ^d (253)	
noprobs	numbers of problems card 1&2	factual	h	h		.917 ^a (8)	.803 ^d (8)	
opens	weekly opening hours	factual	.985 ^a (95)	.984 ^d (95)		.841 ^a (272)	.840 ^d (272)	
oppor1s	opportunistic strategies goal1	1—5 Likert	.745 ^a (97)	.741 ^e (97)		.379 ^a (284)	.484 ^{e i} (164)	
oppor2s	opportunistic strategies goal2	1—5 Likert	.601 ^a (97)	.598 ^e (97)		.400 ^a (283)	.550 ^{e i} (164)	
othowns	other business owners	nominal 3 categories			1.000 (97)			.961 (286)
ownbus	owner of the business	nominal dichotomous	1.000 ^c (97)		1.000 (97)	1.000 ^c (287)		1.000 (287)
own1s	still owns it	nominal dichotomous	h		h	(2) ^f		(2) ^f
own2s	got for it	nominal dichotomous	h		h	h		h
own3s	still owns it	nominal dichotomous	h		h	(6) ^f		(6) ^f
own4s	got for it (Zim\$)	nominal dichotomous	h		h	h		h

Table 2 continued

Variable	Label	Scale Format	Zimbabwe (longitudinal)			Zimbabwe (all)		
			r	ICC	Cohen's kappa	r	ICC	Cohen's kappa
pay67s	more frequently in 1998 (pay of employees)	1—3 ordinal	.809 ^b (20)			.643 ^b (67)		
payemps	could pay employees 1998	nominal 4 categories			.970 (90)			.890 (267)
payofts	how often did that happen	factual	1.000 ^a (19)	1.000 ^d (19)		.966 ^a (65)	.965 ^d (65)	
paynews	could pay employees 1999 (new coding)	1—5 Likert	.983 ^a (90)	.991 ^c (90)		.895 ^a (267)	.944 ^c (267)	
phones	has a telephone line	nominal dichotomous	.973 ^c (95)		.973 (95)	.965 ^c (284)		.965 (284)
plan1s	amount of planning strategies goal1	1—5 Likert	.709 ^a (97)	.828 ^c (97)		.510 ^a (286)	.702 ^{e i} (167)	
plan2s	amount of planning strategies goal2	1—5 Likert	.820 ^a (97)	.999 ^c (97)		.608 ^a (285)	.757 ^c (285)	
planchs	plans change	nominal dichotomous	1.000 ^c (96)		1.000 (96)	.954 ^c (277)		.954 (277)
platims	by plan covered time period	nominal 2 categories			1.000 (47)			.911 (101)
predics	environment predictability	1—5 Likert	.997 ^a (97)	.998 ^c (97)		.982 ^a (287)	.991 ^c (287)	
pricins	price increase accordingly to supplier	nominal dichotomous	.930 ^c (90)		.928 (90)	.918 ^c (261)		.917 (261)
prilags	price increase lag	nominal 3 categories			1.000 (89)			.976 (264)
pro01bs	% increase of profit 2000-2001	factual	.993 ^a (6)	.992 ^d (6)		.977 ^a (58)	.977 ^d (58)	
pro01as	% decrease of profit 2000-2001	factual	1.000 ^a (2)	1.000 ^d (2)		1.000 ^a (40)	1.000 ^d (40)	
pro01s	decrease/increase of profit 2000-2001	1—3 ordinal	1.000 ^b (11)			.990 ^b (127)		
pro89as	decrease of profit 1998/9 (%)	factual	1.000 ^a (23)	1.000 ^d (23)		.999 ^a (51)	.999 ^d (51)	
pro89bs	increase of profit 1998/9 (%)	factual	.998 ^a (57)	.992 ^d (57)		.967 ^a (151)	.967 ^d (151)	
pro89s	decrease / increase of profit 1998/9	1—3 ordinal	1.000 ^b (94)			.995 ^b (245)		

Table 2 continued

Variable	Label	Scale Format	Zimbabwe (longitudinal)			Zimbabwe (all)		
			r	ICC	Cohen's kappa	r	ICC	Cohen's kappa
pro92as	% decrease of profit 1999-2000	factual	1.000 ^a (36)	1.000 ^d (36)		1.000 ^a (84)	1.000 ^d (84)	
pro92bs	% increase of profit 1999-2000	factual	.993 ^a (43)	.993 ^d (43)		.994 ^a (125)	.994 ^d (125)	
pro92s	decrease/increase of profit 1999-2000	1—3 ordinal	.998 ^b (94)			.957 ^b (260)		
proac1s	proactiveness strategies goal1	1—5 Likert	.749 ^a (97)	.857 ^e (97)		.614 ^a (284)	.762 ^e (284)	
proac2s	proactiveness strategies goal2	1—5 Likert	.734 ^a (97)	.848 ^e (97)		.543 ^a (285)	.704 ^e (285)	
prob1s	most important problem	nominal 7 categories			h			1.000 (8)
prob2s	second most important problem	nominal 7 categories			h			1.000 (8)
prob3s	third most important problem	nominal 7 categories			h			1.000 (7)
promars	marketing and sales in the fore-ground card 1&2	1—5 Likert	h	h		.952 ^a (8)	.969 (8)	
proouts	% of profit taken out of business	factual	.993 ^a (89)	.993 ^d (89)		.981 ^a (272)	.981 ^d (272)	
provins	what province is your business in	nominal 3 categories			1.000 (96)			.965 (285)
react1s	reactive strategies goal1	1—5 Likert	.859 ^a (97)	.925 ^e (97)		.584 ^a (283)	.731 ^e (283)	
react2s	reactive strategies goal2	1—5 Likert	.875 ^a (97)	.934 ^e (97)		.550 ^a (282)	.703 ^e (282)	
realchs	realism of change	1—5 Likert	.692 ^a (52)	.816 ^e (52)		.488 ^a (171)	.665 ^{e i} (107)	
reali1s	realism strategies goal1	1—5 Likert	.728 ^a (97)	.835 ^e (97)		.536 ^a (286)	.723 ^{e i} (286)	
reali2s	realism strategies goal2	1—5 Likert	.743 ^a (97)	.851 ^e (97)		.450 ^a (282)	.649 ^{e i} (162)	
redcars	goals: red card order	factual	.405 ^a (93)	.268 ^d (93)		.568 ^a (276)	.995 ^{d i} (168)	
reg1s	reason for no registration: tax	nominal dichotomous	.891 ^c (95)		.891 (95)	.734 ^c (279)		.733 (279)

Table 2 continued

Variable	Label	Scale Format	Zimbabwe (longitudinal)			Zimbabwe (all)		
			r	ICC	Cohen's kappa	r	ICC	Cohen's kappa
reg2s	reason for no registration: fear of the unknown	nominal dichotomous	.520 ^c (95)		.518 (95)	.182 ^c (279)		.133 (279)
reg3s	reason for no registration: too much hassle	nominal dichotomous	.678 ^c (95)		.630 (95)	.595 ^c (278)		.579 (278)
reg4s	reason for not registering: doesn't have the skills	nominal dichotomous	.826 ^c (95)		.825 (95)	.538 ^c (279)		.519 (279)
reg5s	reason for no registration: psychological barriers	nominal dichotomous	.246 ^c (95)		.242 (95)	.167 ^c (279)		.163 (279)
reg6s	reason for no registration: others	nominal dichotomous	.736 ^c (95)		.731 (95)	.372 ^c (279)		.362 (279)
reg7s	not qualified / too small	nominal dichotomous	.626 ^c (95)		.625 (95)	.529 ^c (278)		.524 (278)
reg8s	wants to operate in low profile / from home	nominal dichotomous	.407 ^c (95)		.387 (95)	.410 ^c (278)		.385 (278)
reg9s	avoiding government interference/ monitoring	nominal dichotomous	.683 ^c (95)		.666 (95)	.547 ^c (279)		.547 (279)
reg10s	reg. process too expensive	nominal dichotomous	.863 ^c (95)		.863 (95)	.673 ^c (279)		.665 (279)
reg11s	to do illegal business	nominal dichotomous	.777 ^c (95)		.753 (95)	.675 ^c (279)		.654 (279)
reg12s	compulsory requirements	nominal dichotomous	.842 ^c (95)		.842 (95)	.565 ^c (278)		.654 (279)
relats	are you a relative	nominal dichotomous	h		h	h		h
relcors	belongs to core or extended family	nominal dichotomous	h		h	h		h
relhows	how are you related to the former owner	nominal			h			h
rel12r	be truly good w/o religion	nominal dichotomous	.979 ^c (95)		.979 (95)	.961 ^c (285)		.961 (285)
rereg1s	reason for not registering: tax	nominal dichotomous	.850 ^c (35)		.839 (35)	.811 ^c (170)		.810 (170)

Table 2 continued

Variable	Label	Scale Format	Zimbabwe (longitudinal)			Zimbabwe (all)		
			r	ICC	Cohen's kappa	r	ICC	Cohen's kappa
rereg2s	reason for not registering: fear of the unknown	nominal dichotomous	(35) ^f		(35) ^f	.321 ^c (171)		.301 (171)
rereg3s	reason for not registering: too much hassle in the process	nominal dichotomous	-.029 ^c (35)		-.029 (35)	.513 ^c (170)		.512 (170)
rereg4s	reason for not registering: doesn't have the skills	nominal dichotomous	(35) ^f		(35) ^f	.332 ^c (170)		.312 (171)
rereg5s	reason for not registering: psychological barriers	nominal dichotomous	.477 ^c (35)		.371 (35)	-.007 ^c (171)		-.007 (171)
rereg6s	reason for not registering: other	nominal dichotomous	.623 ^c (35)		.618 (35)	.384 ^c (171)		.380 (171)
rereg7s	not registered / too small	nominal dichotomous	.728 ^c (35)		.721 (35)	.668 ^c (170)		.656 (170)
rereg8s	wants to operate on low profile / from home	nominal dichotomous	(35) ^f		(35) ^f	.814 ^c (171)		.797 (171)
rereg9s	avoiding government interference/ monitoring	nominal dichotomous	(35) ^f		(35) ^f	.770 ^c (170)		.744 (171)
rere10s	reg. process too expensive	nominal dichotomous	1.000 ^c (35)		1.000 (35)	.798 ^c (171)		.793 (171)
rere11s	to do illegal business	nominal dichotomous	(35) ^f		(35) ^f	(171) ^f		(171) ^f
rere12s	compulsory requirements	nominal dichotomous	.852 ^c (35)		.842 (35)	.665 ^c (168)		.655 (168)
sal01as	% decrease of sold goods 2000-2001	factual	h	h		.924 ^a (40)	.923 ^d (40)	
sal01bs	% increase of sold goods 2000-2001	factual	1.000 ^a (8)	1.000 ^d (8)		1.000 ^a (58)	1.000 ^d (58)	
sal01s	decrease/increase of sold goods 2000-2001 t2 - rater 1	1—3 ordinal	1.000 ^b (11)			.996 ^b (126)		
sal89bs	increase of sold goods 1998/9 (%)	factual	.908 ^a (65)	.905 ^d (65)		.924 ^a (163)	.922 ^d (163)	

Table 2 continued

Variable	Label	Scale Format	Zimbabwe (longitudinal)			Zimbabwe (all)		
			r	ICC	Cohen's kappa	r	ICC	Cohen's kappa
sal89as	decrease of sold goods 1998/9 (%)	factual	1.000 ^a (15)	1.000 ^d (15)		.956 ^a (39)	.956 ^d (39)	
sal89s	decrease / increase of sold goods 1998/9	1—3 ordinal	1.000 ^b (95)			.994 ^b (244)		
sal92as	% decrease of sold goods 1999-2000	factual	1.000 ^a (29)	1.000 ^d (29)		1.000 ^a (75)	1.000 ^d (75)	
sal92bs	% increase of sold goods 1999-2000	factual	.577 ^a (51)	.539 ^d (51)		.682 ^a (135)	.654 ^d (135)	
sal92s	decrease/increase of sold goods 1999-2000	1—3 ordinal	.974 ^b (94)			.968 ^b (264)		
salavs	sales level: months of average sales	factual	1.000 ^a (84)	1.000 ^d (84)		1.000 ^a (264)	1.000 ^d (264)	
salhis	sales level: months of high sales	factual	1.000 ^a (76)	1.000 ^d (76)		.999 ^a (256)	.999 ^d (256)	
sallos	sales level: months of low sales	factual	.925 ^a (82)	.922 ^d (82)		.929 ^a (265)	.925 ^d (265)	
samacs	is the "same" person still active?	nominal dichotomous	h		h	h		h
sames	same person as 1998/99	nominal dichotomous	(93) ^f		(93) ^f	(104) ^f		(104) ^f
satincs	satisfied with current income	-3 — +3 Likert	.983 ^a (96)	.987 ^e (96)		.987 ^a (276)	.994 ^e (276)	
satwors	satisfied with work	-3 — +3 Likert	.997 ^a (96)	.999 ^e (96)		.994 ^a (253)	.997 ^e (253)	
savcls	member of savings/banking club	nominal dichotomous	.890 ^c (96)		.883 (96)	.741 ^c (273)		.735 (273)
selfess	business self-established	nominal dichotomous	1.000 ^c (97)		1.000 (97)	1.000 ^c (286)		1.000 (286)
seff 1s	self-efficacy subgoal/problem 1, (card 1)	factual	.998 ^a (97)	.998 ^d (97)		.970 ^a (284)	.970 ^d (284)	
seff 2s	self-efficacy subgoal/problem 2 (card 1)	factual	.998 ^a (81)	.998 ^d (81)		.995 ^a (257)	.996 ^d (257)	
seff 3s	self-efficacy subgoal/problem 3 (card 1)	factual	.999 ^a (56)	.999 ^d (56)		.999 ^a (165)	1.000 ^d (165)	

Table 2 continued

Variable	Label	Scale Format	Zimbabwe (longitudinal)			Zimbabwe (all)		
			r	ICC	Cohen's kappa	r	ICC	Cohen's kappa
seff 4s	self-efficacy subgoal/problem 4 (card 2)	factual	.998 ^a (97)	.998 ^d (97)		.998 ^a (284)	.998 ^d (284)	
seff 5s	self-efficacy subgoal/problem 5 (card 2)	factual	.995 ^a (77)	.995 ^d (77)		.948 ^a (245)	.948 ^d (245)	
seff 6s	self-efficacy subgoal/problem 6 (card 2)	factual	.998 ^a (47)	.999 ^d (47)		.988 ^a (134)	.988 ^d (134)	
spef1s	goal specificity goal1	1—5 Likert	.670 ^a (97)	.795 ^e (97)		.481 ^a (284)	.621 ^e (284)	
spef2s	goal specificity goal2	1—5 Likert	.300 ^a (97)	.464 ^e (97)		.339 ^a (286)	.632 ^{e i} (167)	
stills	business still exists	nominal dichotomous	h		h	1.000 ^c (5)		1.000 (5)
sucoths	others say about success	1—5 Likert	1.000 ^a (95)	1.000 ^e (95)		.987 ^a (285)	.993 ^e (285)	
sucsel	how successful compared to competitors	1—5 Likert	.994 ^a (96)	.997 ^e (96)		.975 ^a (286)	.988 ^e (286)	
supcoss	pays more / less for supplies in 1997	1—3 ordinal	.952 ^b (94)			.945 ^b (274)		
supplys	payment for supplies (last month)	factual	1.000 ^a (89)	1.000 ^d (89)		1.000 ^a (268)	1.000 ^d (268)	
sure1s	sureness of rater (judgement of strategies goal1)	1—5 Likert	.358 ^a (97)	.497 ^e (97)		.151 ^a (282)	.197 ^{e i} (163)	
sure2s	sureness of rater (judgement of strategies goal2)	1—5 Likert	.341 ^a (97)	.504 ^e (97)		.078 ^a (283)	.069 ^{e i} (283)	
takeovsa	when was the business taken over	factual	h	h		h	h	
takpays	how much did you pay for it	factual	h	h		h	h	
tenants	took an additional tenant 1997	nominal dichotomous	.889 ^c (94)		.883 (94)	.807 ^c (273)		.807 (273)
undstas	understands "overcoming barriers"	1—5 Likert	1.000 ^a (7)	.867 ^e (7)		1.000 ^a (9)	.852 ^e (9)	

Table 2 continued

Variable	Label	Scale Format	Zimbabwe (longitudinal)			Zimbabwe (all)		
			r	ICC	Cohen's kappa	r	ICC	Cohen's kappa
voctras	received vocational training	nominal dichotomous	.978 ^c (97)		.978 (97)	.921 ^c (285)		.919 (285)
wagess	payment to employees last month	factual	1.000 ^a (87)	1.000 ^d (87)		.986 ^a (268)	.986 ^d (268)	
warns	would warn friend of registration	1—5 Likert	.935 ^a (93)	.967 ^e (93)		.822 ^a (279)	.901 ^e (279)	
whys	Why closing down?	nominal 4 categories			h			.714 (6)
wldsels	would sell	nominal dichotomous	.971 ^c (94)		.971 (94)	.947 ^c (276)		.946 (276)
wlds	would sell	nominal dichotomous	h		h	1.000 ^c (8)		1.000 (8)
workeds	it worked (family members)	1—5 Likert	.889 ^a (76)	.941 ^c (76)		.849 ^a (186)	.914 ^c (186)	
zvt1s	IQ test item 1 (seconds)	factual	.990 ^a (88)	.990 ^d (88)		.985 ^a (268)	.985 ^d (268)	
zvt2s	IQ test item 2 (seconds)	factual	.991 ^a (86)	.991 ^d (86)		.989 ^a (266)	.989 ^d (266)	
zvt3s	IQ test item 3 (seconds)	factual	.997 ^a (85)	.997 ^d (85)		.987 ^a (263)	.987 ^d (263)	
zvt4s	IQ test item 4 (seconds)	factual	.995 ^a (84)	.995 ^d (84)		.970 ^a (262)	.970 ^d (262)	

Note. Values in parentheses represent sample sizes.

^a Pearson's r. ^b Spearman's r. ^c Phi coefficient. ^d ICC(1,1). ^e ICC(1,2). ^f Coefficient could not be computed due to zero variance. ^g Kappa could not be computed due to uneven use of the rating categories.

^h Coefficient could not be computed because N(double ratings) <= 1. ⁱ Based on 3 ratings.

If rater disagreement occurred, it was mainly in variables crucial to the study:

Concerning the participants goals, raters failed to agree on the goal difficulty (diffr1s & diffr2s) in the longitudinal as well as in the overall sample. To assess the difficulty of a goal in relation to the owners' situation is probably not possible for a second rater who has not seen the business. The factual order of the goals (redcars) and the specificity (spef2s) of the second goal was also not agreed on for the longitudinal sample. The order of the goals result is mainly due to rating mistakes. The rating difficulties concerning goal specificity however are rather surprising.

Regarding the strategies, rater disagreement on the sureness of the ratings (sure1s & sure2s) and on how clearly raters could identify one strategy as dominant (clear1s & clear2s) was again an issue because here raters actually expressed their difficulties in assessing the strategies. In the longitudinal, sample raters varied on how much action the participants had taken in the past (actpa1s) while in the overall sample raters varied on the assessments of the

critical point (critp1s & critp2s) and the opportunistic strategy (oppor1s & oppor2s). The latter four variables were not an issue for the longitudinal sample. For critical point planning, the difficulties are probably due to the similarity of critical point planning and complete planning. For the opportunistic strategy however, we cannot explain the low interrater reliabilities.

In the section where we asked about fruitful business ideas, reliabilities were low for both the concreteness (conides) as well as the innovativeness (inoides) of the ideas in the overall sample only. Ratings for the concreteness (concins) and the innovativeness (inochas) of future changes did also not reach satisfactory reliabilities in the overall sample. Similarly, the overall sample's ratings of an business advantage that gives the participants a competitive edge over their competitors were not reliable regarding how much of an advantage it actually was (advants), how innovative the advantage was (inocoms) and how much the participants' answers were to the point (answers). Only the latter variable was also not satisfactorily in the longitudinal sample. In summary, assessing and agreeing on innovativeness and concreteness seems to be a generally difficult task, especially because in most cases one of the raters was European and one was Zimbabwean. The understanding of what is innovative and what is concrete seems to differ depending on personal experiences and the cultural background.

All but one of the variables measuring entrepreneurial orientation had good reliabilities. The exception was learning from experience (learns) for the overall sample. It seems that rating 'learning from experience' was difficult for the raters on the basis of answers to the question what the owners would do differently in their business if they could start all over again.

Concerning business success, interrater reliability was a problem for the participants' expenses during the last week (lasexps) in both the longitudinal and the overall sample. This is probably due to rating errors where raters failed to transfer the participants answers that often referred to the last months expenses into weekly expenses. Surprisingly, the factual item increase of sales 1999-2000 (sal92bs) was a problem in the longitudinal sample.

Another area where rater could not agree was whether employed family members belonged to the core family or not (corfams). This is probably due to the differing understanding of what constitutes the core family of the local interviewers and the often European second raters (of the European interviewers and the Zimbabwean second raters, respectively). In Africa, members of the extended family are commonly regarded as close relatives (e.g., cousins are often referred to as brothers) and members of the core family.

There were also difficulties in assessing the 'other' categories of the industry items.

Especially because multiple answers were possible (many businesses belonged to more than one line of business), interviewers did not reach agreement if businesses belonged to the category ‘line of business manufacturing other’ (libus4s) in the overall sample and the category ‘line of business other’ (libus9s) in the longitudinal as well as in the overall sample.

Finally, raters varied in their assessment of the participants answers, why they do not become formal and register their business in the longitudinal sample (reg2s, reg5s, reg8s) and the overall sample (reg2s, reg5s, reg6s, reg7s, reg8s, reg9s). Similar results emerged for why the participants think others do not become formal in the longitudinal (rereg3s, rereg5s) and the overall sample (rereg2s, rereg3s, rereg4s, rereg5s, rereg6s). This is not surprising, because the ratings were based on often very short answers that were probably due to the participants reluctance to talk about the subject of their legal business status.

Interrater reliabilities of the interviewer evaluation at T1 (Zimbabwe, South Africa, and Namibia)

Reliability coefficients for the interviewer evaluation are presented in Table 3. Overall, the only Likert variables that did not reach the required level of reliability were the variables eval38 (probability of non-family members actually being family members) and eval46 (sureness of the interviewer of his or her judgment on the participant’s success). The probability of non-family members actually being family members (eval38) was generally rated rather low. The variable had restricted variance with none of the ratings exceeding 2 on a 5-point Likert scale. Variable 46 was a rating of the sureness of the interviewer of his or her judgment on the participant’s success and high rater agreement was not expected.

Table 3: Interrater Reliabilities of the Interviewer evaluations (T1), Data Sources: Zimbabwe 98/99 (n=10), Namibia 98/99 (n=9), and South Africa 98/99 (n=18)

Variable	Label	Scale Format	Reliabilities		
			r	ICC	Cohen’s kappa
eval 1	understood the questions	1—5 Likert	.742 ^a (37)	.856 ^c (37)	
eval 2	estimate of IQ	1—5 Likert	.809 ^a (37)	.895 ^c (37)	
eval 3	active / inactive interview dialogue behavior	1—5 Likert	.525 ^a (37)	.667 ^c (37)	

Table 3 continued

Variable	Label	Scale Format	Reliabilities		
			r	ICC	Cohen's kappa
eval 4	behaves actively / passively	1—5 Likert	.726 ^a (37)	.837 ^e (37)	
eval 5	goal orientation (vs. easily gets diverted from goal)	1—5 Likert	.806 ^a (37)	.895 ^e (37)	
eval 6	goal specificity	1—5 Likert	.762 ^a (37)	.868 ^e (37)	
eval 7	goal difficulty	1—5 Likert	.617 ^a (37)	.764 ^e (37)	
eval 8	externally / internally controlled	1—5 Likert	.511 ^a (37)	.677 ^e (37)	
eval 9	motivation to act	1—5 Likert	.633 ^a (37)	.775 ^e (37)	
eval 10	postpones vs. acts quickly	1—5 Likert	.688 ^a (37)	.819 ^e (37)	
eval 11	ambitiousness	1—5 Likert	.832 ^a (37)	.908 ^e (37)	
eval 12	autonomous drive	1—5 Likert	.843 ^a (37)	.917 ^e (37)	
eval 13	innovativeness	1—5 Likert	.821 ^a (37)	.903 ^e (37)	
eval 14	level of initiative	1—5 Likert	.827 ^a (37)	.905 ^e (37)	
eval 15	risk taking	1—5 Likert	.719 ^a (37)	.835 ^e (37)	
eval 16	competitive aggressiveness	1—5 Likert	.735 ^a (37)	.842 ^e (37)	
eval 17	learning orientation	1—5 Likert	.730 ^a (37)	.844 ^e (37)	
eval 18	emotional stability	1—5 Likert	.739 ^a (37)	.854 ^e (37)	
eval 19	achievement orientation	1—5 Likert	.791 ^a (27)	.882 ^e (37)	
eval 20	personal integrity	1—5 Likert	.669 ^a (37)	.806 ^e (37)	
eval 22	standard of equipment	1—5 Likert	.848 ^a (37)	.895 ^e (37)	
eval 23	interaction with employees (hostile vs. friendly)	1—5 Likert	.493 ^a (36)	.663 ^e (36)	
eval 24	authoritarianism (power distance)	1—5 Likert	.709 ^a (37)	.830 ^e (37)	
eval 25	vision for company	1—5 Likert	.733 ^a (37)	.824 ^e (37)	

Table 3 continued

Variable	Label	Scale Format	Reliabilities		
			r	ICC	Cohen's kappa
eval 26	ability to communicate vision	1—5 Likert	.727 ^a (37)	.841 ^e (37)	
eval 27	wants to look good	1—5 Likert	.479 ^a (37)	.635 ^e (37)	
eval 28	underplays vs. exaggerates his achievements	1—5 Likert	.443 ^a (37)	.623 ^e (37)	
eval 29	linkage to formal sector	1—5 Likert	.852 ^a (35)	.919 ^e (35)	
eval 30	passive vs. active coping	1—5 Likert	.664 ^a (37)	.801 ^e (37)	
eval 31	energetic behaviour	1—5 Likert	.717 ^a (37)	.834 ^e (37)	
eval 32	learned helplessness	1—5 Likert	.760 ^a (37)	.867 ^e (37)	
eval 33	externalisation of responsibility	1—5 Likert	.755 ^a (37)	.816 ^e (37)	
eval 34	3rd world business vs. 1st world business	1—5 Likert	.826 ^a (37)	.844 ^e (37)	
eval 35	interview was broken off at some point	nominal dichotomous	— ^f (37)		— ^f (37)
eval 36	interviewee seemed to invent goals he/she didn't really have	1—5 Likert	.784 ^a (37)	.881 ^e (37)	
eval 37	participant did the interview only for the money	1—5 Likert	.687 ^a (37)	.811 ^e (37)	
eval 38	probability of non-family employees actually being family	1—5 Likert	-.068 ^a (36)	-.167 ^e (36)	
eval 39	learns slowly vs. learns quickly	1—5 Likert	.820 ^a (37)	.902 ^e (37)	
eval 40	Personal Achiever	1—5 Likert	.600 ^a (35)	.748 ^e (35)	
eval 41	Real Manager	1—5 Likert	.628 ^a (35)	.764 ^e (35)	
eval 42	Idea Generator	1—5 Likert	.712 ^a (35)	.827 ^e (35)	
eval 43	Supersalesperson	1—5 Likert	.705 ^a (35)	.779 ^e (35)	
eval 44	interview was done in (language)	nominal 6 categories			1.000 (37)

Table 3 continued

Variable	Label	Scale Format	Reliabilities		
			r	ICC	Cohen's kappa
eval 45	general impression of entrepreneurial success	1—5 Likert	.809 ^a (37)	.894 ^e (37)	
eval 46	sureness of interviewer of his/her judgment (success)	1—5 Likert	.091 ^a (37)	.176 ^e (37)	
eval 47	S was motivated - including filling in the questionnaire	1—5 Likert	.544 ^a (37)	.705 ^e (37)	
eval 48	S understood the questionnaire	1—5 Likert	.613 ^a (22)	.953 ^e (22)	
eval 49	the business area was	nominal dichotomous	1.000 ^c (37)		1.000 (37)
eval 50	business is located in a growth point or business site	nominal dichotomous	1.000 ^c (37)		1.000 (37)
eval 51	subject's gender	nominal dichotomous	1.000 ^c (37)		1.000 (37)
eval 52	participant was suggested by peer as a successful entrepreneur	nominal dichotomous	.926 ^c (36)		.923 (36)
eval 53	interviewee participated in the pre-pilot study	nominal dichotomous	1.000 ^c (36)		1.000 (36)

Note. Values in parentheses represent sample sizes.

^a Pearson's r. ^b Spearman's r. ^c Phi coefficient. ^d ICC(1,1). ^e ICC(1,2). ^f Coefficient could not be computed due to zero variance. ^g Kappa could not be computed due to uneven use of the rating categories. ^h Coefficient could not be computed because N(double ratings) <= 1.

Six of the seven nominal and factual scales showed perfect, or nearly perfect interrater reliabilities. Due to zero variance, the kappa for eval35 (the interview had been broken off or not) could not be computed. None of the n=37 interviews had been coded as broken off. The remaining 50 variables of the interviewer evaluation are satisfactorily reliable.

Interrater reliabilities of the interviewer evaluation at T2 (Zimbabwe longitudinal and all)

As mentioned above, the reliabilities of the interviewer evaluation form at T2 was filled out by the interviewer and a second rater who had not seen the business. This is a

different procedure because at T1 both raters were present during the interview in order to express their personal impression of the business. At T2 we wanted to find out if one can also gain a personal impression on the basis of the interview protocol.

Table 4: Interrater Reliabilities of the Interviewer Evaluation 2000/01 (T2)

Variable	Label	Scale Format	Zimbabwe (longitudinal)			Zimbabwe (all)		
			r	ICC	Cohen's kappa	r	ICC	Cohen's kappa
eval1s	understood questions	1—5 Likert	.676 ^a (28)	.812 ^c (28)		.683 ^a (30)	.816 ^c (30)	
eval2s	estimate of IQ t2 - rater 1	1—5 Likert	.432 ^a (28)	.612 ^c (28)		.417 ^a (32)	.600 ^e (32)	
eval3s	active/inactive interview dialogue behavior	1—5 Likert	.610 ^a (28)	.764 ^c (28)		.648 ^a (30)	.792 ^e (30)	
eval4s	behaves actively vs. passively	1—5 Likert	.558 ^a (28)	.721 ^c (28)		.569 ^a (31)	.730 ^e (31)	
eval5s	goal orientation	1—5 Likert	.516 ^a (28)	.682 ^c (28)		.523 ^a (34)	.671 ^e (34)	
eval6s	goal specificity	1—5 Likert	.487 ^a (28)	.649 ^c (28)		.375 ^a (34)	.545 ^e (34)	
eval7s	goal difficulty	1—5 Likert	.404 ^a (28)	.575 ^c (28)		.456 ^a (34)	.627 ^e (34)	
eval8s	externally/internally controlled	1—5 Likert	.633 ^a (28)	.737 ^c (28)		.553 ^a (34)	.701 ^e (34)	
eval9s	motivation to act	1—5 Likert	.639 ^a (28)	.783 ^c (28)		.652 ^a (34)	.787 ^e (34)	
eval10s	postpones vs. acts quickly	1—5 Likert	.648 ^a (28)	.783 ^c (28)		.496 ^a (34)	.652 ^e (34)	
eval11s	ambitiousness	1—5 Likert	.598 ^a (95)	.744 ^c (95)		.432 ^a (282)	.572 ^e (282)	
eval12s	autonomous drive	1—5 Likert	.610 ^a (95)	.757 ^c (95)		.503 ^a (281)	.595 ^e (281)	
eval13s	innovativeness	1—5 Likert	.679 ^a (95)	.802 ^c (95)		.235 ^a (282)	.155 ^e (279)	
eval14s	level of initiative	1—5 Likert	.730 ^a (96)	.840 ^c (96)		.529 ^a (284)	.675 ^e (284)	
eval15s	risk taking propensity	1—5 Likert	.686 ^a (96)	.745 ^c (96)		.377 ^a (280)	.544 ^e (280)	
eval16s	competitive aggressiveness	1—5 Likert	.638 ^a (96)	.780 ^c (96)		.417 ^a (279)	.483 ^e (279)	
eval17s	learning orientation	1—5 Likert	.641 ^a (95)	.783 ^c (95)		.376 ^a (297)	.464 ^e (276)	
eval18s	emotional stability	1—5 Likert	.062 ^a (34)	.067 ^c (34)		-.092 ^a (47)	-.180 ^e (47)	
eval19s	achievement orientation	1—5 Likert	.647 ^a (94)	.776 ^c (94)		.460 ^a (280)	.526 ^e (280)	

Table 4 continued

Variable	Label	Scale Format	Zimbabwe (longitudinal)			Zimbabwe (all)		
			r	ICC	Cohen's kappa	r	ICC	Cohen's kappa
eval20s	personal integrity	1—5 Likert	.403 ^a (27)	.587 ^c (27)		.463 ^a (32)	.632 ^c (32)	
eval21s	estimate of time pressure	1—5 Likert	-.866 ^a (3)	-4.667 ^c (3)		-.816 ^a (184)	-3.636 (4)	
eval22s	standard of equipment	1—5 Likert	1.000 ^a (2)	.960 ^e (2)		1.000 ^a (2)	.960 ^e (2)	
eval23s	interaction with employees	1—5 Likert	h	h		h	h	
eval24s	authoritarianism towards employees	1—5 Likert	h	h		h	h	
eval25s	vision for company	1—5 Likert	.709 ^a (29)	.835 ^c (29)		.687 ^a (33)	.817 ^c (33)	
eval26s	ability to communicate vision	1—5 Likert	.574 ^a (28)	.673 ^c (28)		.529 ^a (32)	.603 ^c (32)	
eval27s	wants to look good	1—5 Likert	.251 ^a (28)	-.776 ^c (28)		.297 ^a (31)	.241 ^c (31)	
eval28s	exaggerates vs. underplays achievements	1—5 Likert	.283 ^a (28)	-.229 ^c (28)		.291 ^a (31)	.434 ^c (31)	
eval29s	linkage to formal sector	1—5 Likert	.954 ^a (28)	.975 ^c (28)		.951 ^a (32)	.974 ^c (31)	
eval30s	passive vs. active coping	1—5 Likert	.695 ^a (28)	.822 ^c (28)		.606 ^a (34)	.752 ^c (34)	
eval31s	energetic behaviour	1—5 Likert	.602 ^a (28)	.732 ^c (28)		.549 ^a (31)	.707 ^c (31)	
eval32s	learned helplessness	1—5 Likert	.708 ^a (28)	.826 ^c (28)		.669 ^a (34)	.803 ^c (34)	
eval33s	externalisation of responsibility	1—5 Likert	.647 ^a (28)	.780 ^c (28)		.766 ^a (34)	.860 ^c (34)	
eval34s	3rd vs. 1st world business	1—5 Likert	.901 ^a (28)	.911 ^c (28)		.880 ^a (31)	.890 ^c (31)	
eval35s	interview was broken off at some point	nominal dichotomous	(19) ^f		(19) ^f	(23) ^f		(23) ^f
eval36s	S invented goals	1—5 Likert	.259 ^a (28)	.391 ^c (28)		.266 ^a (29)	.400 ^c (29)	
eval37s	S did interview for the money	1—5 Likert	.664 ^a (12)	.815 ^c (12)		.675 ^a (13)	.821 ^c (13)	
eval38s	probability of non-family employees actually being family	1—5 Likert	(21) ^f	(21) ^f		(23) ^f	(23) ^f	

Table 4 continued

Variable	Label	Scale Format	Zimbabwe (longitudinal)			Zimbabwe (all)		
			r	ICC	Cohen's kappa	r	ICC	Cohen's kappa
eval39s	learns slowly vs. quickly	1—5 Likert	.557 ^a (28)	.664 ^c (28)		.503 ^a (34)	.657 ^c (34)	
eval40s	Personal Achiever	1—5 Likert	.564 ^a (96)	.715 ^c (96)		.400 ^a (286)	.568 ^c (286)	
eval41s	Real Manager	1—5 Likert	.712 ^a (96)	.828 ^c (96)		.522 ^a (284)	.687 ^c (284)	
eval42s	Idea Generator	1—5 Likert	.574 ^a (96)	.728 ^c (96)		.372 ^a (286)	.494 ^c (286)	
eval43s	Supersalesperson	1—5 Likert	.736 ^a (96)	.839 ^c (96)		.503 ^a (280)	.617 ^c (280)	
eval44s	interview was done in (language)	nominal 5 categories			1.000 (14)			1.000 (17)
eval45s	general impression of entrepreneurial success	1—5 Likert	.775 ^a (96)	.870 ^c (96)		.594 ^a (281)	.738 ^c (281)	
eval46s	sureness of interviewer's judgement	1—5 Likert	.255 ^a (95)	.407 ^c (95)		.146 ^a (276)	.256 ^c (276)	
eval47s	motivation of S (incl. filling in questionnaire)	1—5 Likert	h	h		1.000 ^a (2)	1.000 ^c (2)	
eval48s	Subject understood the questionnaire	1—5 Likert	h	h		1.000 ^a (2)	1.000 ^c (2)	
eval49s	business area	nominal dichotomous	(6) ^f		(6) ^f	(7) ^f		(7) ^f
eval50s	business is located in a growth point or business site	nominal dichotomous	.632 ^c (6)		.571 (6)	.632 ^c (6)		.571 (6)
eval51s	subject's gender	nominal dichotomous	1.000 ^c (4)		1.000 (4)	.655 ^c (8)		.600 (8)
eval52s	Interview was done at Human Resources Pvt.	nominal 3 categories			1.000 (6)			1.000 (7)
eval53s	Both raters present during interview	nominal dichotomous	h		h	h		h

Note. Values in parentheses represent sample sizes.

^aPearson's r. ^bSpearman's r. ^cPhi coefficient. ^dICC(1,1). ^eICC(1,2). ^fCoefficient could not be computed due to zero variance. ^gKappa could not be computed due to uneven use of the rating categories.

^hCoefficient could not be computed because N(double ratings) < 1.

Most reliabilities were lower at T2 (Table 4) than at T1 (Table 3). Moreover, in longitudinal sample, 10 out of 53 items did not reach satisfactorily reliabilities and in the longitudinal sample, 17 out of 53 items were not reliable – compared to two items at T1. This

indicates that physical presence is necessary in order to make the assessments of the interviewer evaluation that are meant to be an overall personal impression of the business.

CONCLUSION

In summary, the present reliability analyses yielded satisfactory results: At T1, only seven out of 293 interview variables did not reach satisfactorily interrater reliabilities in Zimbabwe and/or South Africa and only two out of 53 items of the interviewer evaluation were not reliable. At T2, 37 out of 300 interview items did not show adequate interrater reliabilities in the Zimbabwean longitudinal sub-sample and/or the overall Zimbabwean sample. All unreliable items were excluded from data analyses.

Furthermore, the low reliabilities of the interviewer evaluation at T2 imply that our procedure at T1 (where both raters had to be present for the interviewer evaluation) was adequate to capture an overall personal impression on the participants' businesses.

By and large, we can draw the conclusion that the measurement instrument as a whole (interview and interviewer evaluation) can be regarded as adequately reliable.

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MEASUREMENT OF ENTREPRENEURIAL ORIENTATION

Psychological Success Factors of Small and Micro Business Owners in Southern Africa: A Longitudinal Approach

(T1 & T2)

Measurement	Content	Rating / scale	Raters	Interrater reliability (ICC)	Interviewer-rater dependency	Interview / questionnaire item	Exemplary answers
Learning orientation							
Interview	Learning from experience	1-5 Likert	Interviewer 2 nd rater	.77 ^a .78 ^b .68 ^c	partly (1 st Rater only)	If you could start your business again as you did in the year ..., what would you do differently?	<ul style="list-style-type: none"> – Move to a location with competitive industries – Move nearer to the customers – Move to where manufacturers & products are better available
Interviewer Evaluation	Learning orientation	1-5 Likert	Interviewer 2 nd rater	.84 ^d .78 ^c	partly (1 st Rater only)	—	—
Autonomy orientation							
Interview	Preference for employment or self-employment	1-5 Likert	Interviewer 2 nd rater	.90 ^a .94 ^b .93 ^c	partly (1 st Rater only)	What would happen if somebody would pay you good money to take over your firm and would make you the manager of the firm. You would have the same income as now. Would you accept it? Why?	I would sell it. I actually think that part of our tragedy in Africa is that we hold on to everything and deny the opportunities. I can still be an entrepreneur and start another business.
Interviewer Evaluation	Autonomy orientation	1-5 Likert	Interviewer 2 nd rater	.87 ^d .76 ^c	partly (1 st Rater only)	—	—

Table continued

Measurement	Content	Rating / scale	Raters	Interrater reliability (ICC)	Interviewer-rater dependency	Interview / questionnaire item	Exemplary answers
Competitive aggressiveness							
Interview	Attitude toward competitors	1-5 Likert	Interviewer 2 nd rater	.83 ^a .94 ^b .89 ^c	partly (1 st Rater only)	What is your relationship to your competitors? -- Do you want to beat them or are you nice to them? Do you attempt to push them out of your way or do you think of your competitors more in terms of the saying "live and let live"?	When someone is in business, you always want to be on the top and beat them.
Interviewer Evaluation	Competitive aggressiveness	1-5 Likert	Interviewer 2 nd rater	.84 ^d .78 ^c	partly (1 st Rater only)	—	—
Innovative orientation							
Interview	Innovativeness of business idea	1-5 Likert	Interviewer 2 nd rater	.91 ^a .91 ^b .72 ^c	partly (1 st Rater only)	During the last two years, did you have a good or creative or innovative idea with regard to your business? What was this idea?	Yes, to expand. This place didn't look as good two years ago. I put up this shed, built a driveway, and bought the compressor. that has done a great deal for the past two years and made the business more professional.

Table continued

Measurement	Content	Rating / scale	Raters	Interrater reliability (ICC)	Interviewer-rater dependency	Interview / questionnaire item	Exemplary answers
Interview	Innovativeness of competitive edge	1-5 Likert	Interviewer 2 nd rater	.91 ^a .88 ^b .74 ^c	partly (1 st Rater only)	What do you think is your main advantage in the market in comparison to your competitors?	It's the sadza (staple food) that we are producing in relation to the market that we are targeting. There is only Western style fast food around.
Interviewer Evaluation	Innovative orientation	1-5 Likert	Interviewer 2 nd rater	.90 ^d .80 ^c	partly (1 st Rater only)	—	—
Achievement orientation							
Questionnaire	Growth goal orientation	1-4 forced-choice	—	—	—	In the following, please indicate on this scale for each pair of statement of business owners, which of the statements applies most to you. "I am satisfied as long as my business provides a living for my family and myself." "I am satisfied as long as my business keeps growing and becomes bigger."	—

Table continued

Measurement	Content	Rating / scale	Raters	Interrater reliability (ICC)	Interviewer-rater dependency	Interview / questionnaire item	Exemplary answers
Questionnaire	Growth goal orientation	1-4 forced-choice	—	—	—	"If I earn enough money for my family, that is good enough." "I want my business to grow as much as possible."	—
Interviewer Evaluation	Achievement orientation	1-5 Likert	Interviewer 2 nd rater	.93 ^d .78 ^c	partly (1 st Rater only)	—	—
Risk-taking orientation							
Questionnaire	Risk-taking orientation	1-5 Likert	—	—	—	I prefer to remain on a job that has problems that I know about rather than take the risk of working at a new job that has unknown problems even if the new job offers greater rewards.	—
Questionnaire	Risk-taking orientation	1-5 Likert	—	—	—	I view risk on a job as a situation to be avoided at all cost.	—
Interviewer Evaluation	Risk-taking orientation	1-5 Likert	Interviewer 2 nd rater	.81 ^d .75 ^c	partly (1 st Rater only)	—	—

Table continued

Measurement	Content	Rating / scale	Raters	Interrater reliability (ICC)	Interviewer-rater dependency	Interview / questionnaire item	Exemplary answers
Personal initiative							
Interview	Overcoming barriers 1	Factual count	Interviewer 2 nd rater	.95 ^a .97 ^b .94 ^c	partly (1 st Rater only)	Pretend for a moment that you are out of money and that you cannot buy the necessary supplies. What do you do?	— – I would collect from debtors. – I would re-look at the finance management. – Negotiate a short term bridging facility with the bank. – Scale down our operations, reduce expenses. – Renegotiate with our suppliers. – Borrow from someone.
Interview	Activeness 1	1-5 Likert	Interviewer 2 nd rater	.92 ^a .87 ^b .90 ^c	partly (1 st Rater only)	ditto	—

Table continued

Measurement	Content	Rating / scale	Raters	Interrater reliability (ICC)	Interviewer-rater dependency	Interview / questionnaire item	Exemplary answers
Interview	Overcoming barriers 2	Factual count	Interviewer 2 nd rater	.96 ^a .99 ^b .82 ^c	partly (1 st Rater only)	Pretend for a moment that you are producing a product with a machine. This machine breaks down and your workers cannot fix it. What do you do?	<ul style="list-style-type: none"> – I will fix the machine myself – I'd return to doing the job manual – I'd try to ask my competitors to give me a hand on the problem if they've got the same machine – I'd take it somewhere to get it fixed – I'd ask the customers to give us some time until we can produce again
Interview	Activeness 2	1-5 Likert	Interviewer 2 nd rater	.90 ^a .92 ^b .79 ^c	partly (1 st Rater only)	ditto	—
Interview	Overcoming barriers 3	Factual count	Interviewer 2 nd rater	.94 ^a .99 ^b .86 ^c	partly (1 st Rater only)	Pretend for a moment that your supplier for a certain item went out of business. You are under high pressure to finish an order and he is the only one who can supply you with this necessary item. What do you do?	<ul style="list-style-type: none"> – I will look around for the other suppliers – I would try to find it out of town. – I would try to hire that item from someone.

Table continued

Measurement	Content	Rating / scale	Raters	Interrater reliability (ICC)	Interviewer-rater dependency	Interview / questionnaire item	Exemplary answers
Interview	Activeness 3	1-5 Likert	Interviewer 2 nd rater	.85 ^a .91 ^b .89 ^c	partly (1 st Rater only)	ditto	—
Interview	Overcoming barriers 4	Factual count	Interviewer 2 nd rater	.96 ^a .97 ^b .90 ^c	partly (1 st Rater only)	Pretend for a moment that your landlord tells you to move your shop within two months. What do you do?	<ul style="list-style-type: none"> – Find an alternative place to operate from – Operate from home – Advertise that I need space – Find some other people in the same line of business and join them
Interview	Activeness 3	1-5 Likert	Interviewer 2 nd rater	.89 ^a .79 ^b .87 ^c	partly (1 st Rater only)	ditto	—
Interviewer Evaluation	Personal initiative	1-5 Likert	Interviewer 2 nd rater	.87 ^d .84 ^c	partly (1 st Rater only)	—	—

Note. ^aZimbabwe T1 (n=122). ^bSouth Africa T1 (n=126). ^cZimbabwe longitudinal T2 (n=97). ^dT1 Data Sources: Zimbabwe 98/99 (n=10), Namibia 98/99 (n=9), and South Africa 98/99 (n=18).

GERMAN SUMMARY

Psychologische Erfolgsfaktoren von Klein- und Kleinstunternehmer/innen im südlichen Afrika: Ein längsschnittlicher Ansatz

Klein- und Kleinstunternehmen sind für wirtschaftliche Entwicklung sowie für wirtschaftliches Wachstum von großer Bedeutung (z.B. Birch, 1987; Kirzner, 1997). Die Förderung eines gesunden Kleinunternehmer(innen)tums stärkt nicht nur die ökonomische Entwicklung (z.B. Seibel, 1989) und Industrialisierung (Kiggundu, 1998) auf gesamtgesellschaftlicher Ebene, sondern ermöglicht auch den sozialen Aufstieg von Individuen (Koo, 1976). Dennoch gibt es derzeit kaum kausale empirische Befunde darüber, welche individuellen psychologischen Prozesse Unternehmer/innen zu Erfolg verhelfen. Daher ist das vorrangige Ziel dieser Dissertation die Identifizierung psychologischer Erfolgsfaktoren von Kleinunternehmer/innen. Zu diesem Zweck wurde eine Längsschnittstudie an Kleinunternehmer/innen im südlichen Afrika durchgeführt.

Zum ersten Messzeitpunkt zwischen September 1998 und April 1999 wurden 248 Kleinunternehmer/innen in Zimbabwe und Südafrika anhand eines standardisierten Interviews sowie Fragebogenmessungen untersucht. Der zweite Messzeitpunkt beschränkte sich auf Zimbabwe und fand von Mai 2000 bis April 2001 statt. Die zweite Stichprobe umfasste 104 Kleinunternehmer/innen, von denen sieben ihr Unternehmen aufgegeben hatten. Somit ergab sich eine Längsschnittsstichprobe von 97 zimbabwischen Kleinunternehmer/innen.

Der Beitrag der vorliegenden Arbeit zur Unternehmer(innen)forschung besteht erstens darin, dass unsere längsschnittlichen empirischen Daten die Untersuchung kausaler Zusammenhänge erlauben. Zweitens kann unser Ansatz als Grundlage für die Entwicklung von psychologisch fundierten Förderprogrammen für Kleinunternehmer/innen dienen. Unserer Forschung liegen dabei drei wissenschaftliche Konzepte zugrunde: das Konzept der unternehme-

rischen Orientierung (Kapitel 2 & 3), das Konzept der Prozesscharakteristiken unternehmerischer Handlungsstrategien (Kapitel 3) und das Konzept des formellen und des informellen Wirtschaftssektors (Kapitel 4). Im Folgenden werden diese theoretischen Konzepte sowie die wichtigsten empirischen Ergebnisse zusammenfassend dargestellt.

Unternehmerische Orientierung: Ein psychologisches Erfolgskonzept für Kleinunternehmer/innen im südlichen Afrika

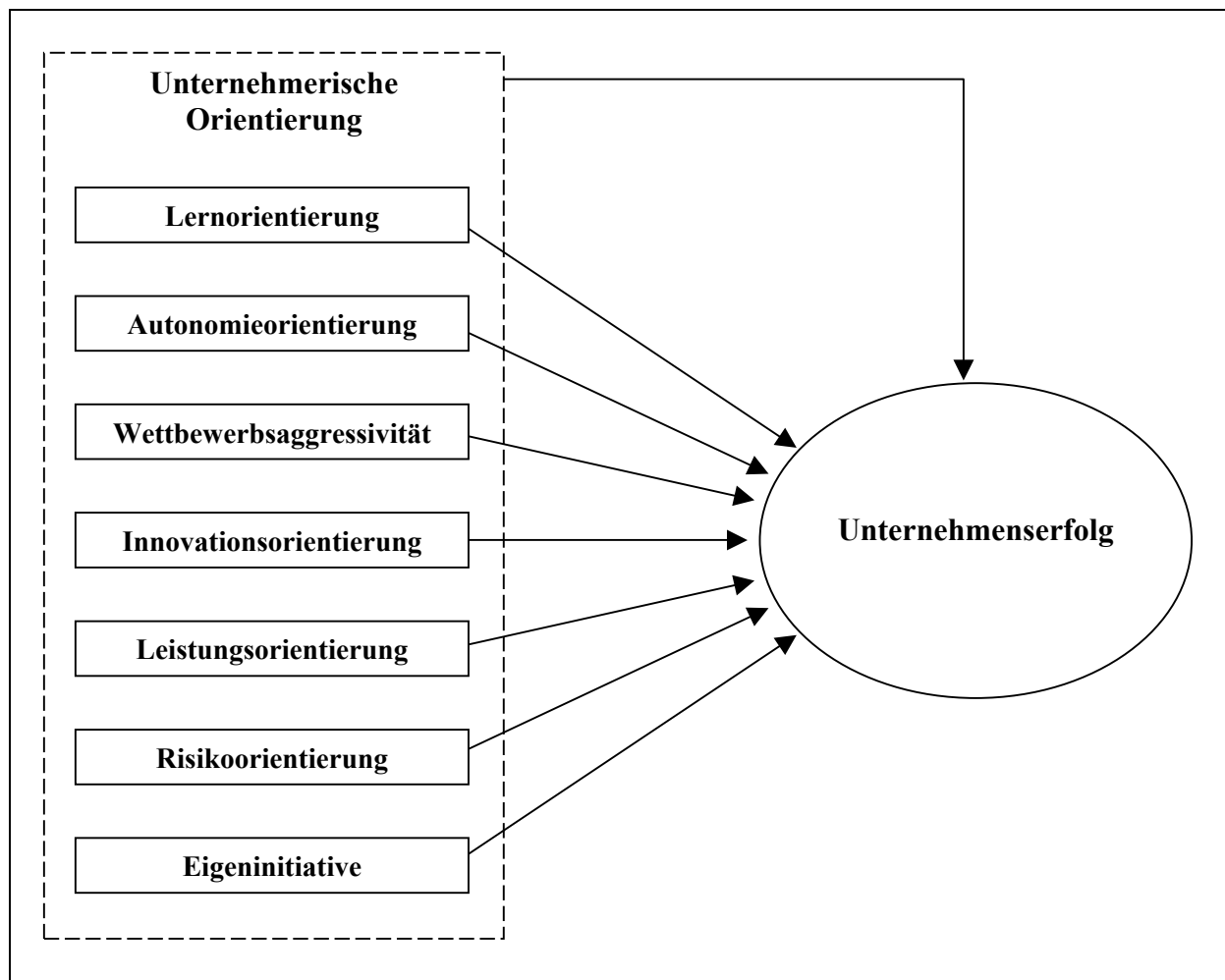
Die erste Studie befasst sich mit dem querschnittlichen Zusammenhang zwischen dem psychologischen Konstrukt der unternehmerischen Orientierung von Unternehmer/innen und dem Erfolg des Unternehmens in einer Stichprobe von N=248 Kleinunternehmer/innen aus Zimbabwe ($n=122$) und Südafrika ($n=126$). Der Ausgangspunkt des psychologischen Ansatzes zur unternehmerischen Orientierung ist das klassische Verständnis von Unternehmer(innen)tum österreichischer Ökonomen (vgl. Kirzner, 1997, Schumpeter, 1934) sowie das Konzept der unternehmerischen Orientierung von Lumpkin und Dess (1996). Nach Lumpkin und Dess (1996; vgl. auch Covin & Slevin, 1991; Miller, 1983) beinhaltet die unternehmerische Orientierung die Komponenten *Autonomieorientierung*, *Wettbewerbsaggressivität*, *Innovationsorientierung*, *Risikoorientierung* und *Proaktivität (Eigeninitiative)*. Um das gesamte Spektrum der unternehmerischen Aufgabe nach Schumpeter (1934) abzubilden, fügen wir *Lernorientierung* und *Leistungsorientierung* hinzu. Abbildung 1 beschreibt unser Modell der einzelnen unternehmerischen Orientierungen sowie deren Zusammenhang mit Unternehmenserfolg.

Die einzelnen Bestandteile der unternehmerischen Orientierung stehen in engem Zusammenhang mit den täglichen Aufgaben von Kleinunternehmer/innen. Durch den Ansatz der psychologischen Orientierung untersuchen wir daher Personenfaktoren, die näher an tatsächlichem unternehmerischem Verhalten sind als beispielsweise Traitkonzepte (vgl. Kanfer, 1992). Orientierungen sind von Traits grundsätzlich verschieden. Während *Traits* dispositionale Persönlichkeitskonzepte von hoher zeitlicher wie auch situativer Stabilität darstellen (McCrae, Costa, Ostendorf, Angleitner, et al., 2000), stehen *Orientierungen* unter dem Ein-

fluss des kulturellen Umfeldes wie auch des Situationskontexts (Thomas & Mueller, 2000). Ähnlich dem Einstellungskonzept beinhalten Orientierungen sowohl affektive (z.B. Vergnügen am Risiko), konative (z.B. Risikoverhalten) als auch kognitive (z.B. Risikoanalyse) Elemente (Eagly & Chaiken, 1993). Orientierungen unterscheiden sich von anderen personalen Konzepten wie Traits und Einstellungen in ihrer Spezifität (Frese & Fay, 2001; vgl. auch Ajzen & Fishbein, 1977). Während Traits relativ unspezifische Persönlichkeitscharakteristika (z.B. Gewissenhaftigkeit) abbilden und Einstellungen hochspezifische, wandelbare, wertende Präferenzen (z.B. hinsichtlich der Partizipation von Mitarbeitern bei der Entscheidungsfindung) repräsentieren, bewegen sich Orientierungen in einem Bereich mittlerer Spezifität.

Abbildung 1:

Unternehmerische Orientierung und Unternehmenserfolg.



Individualpsychologische Ansätze des Unternehmer(innen)tums wurden oft als zu unspezifisch kritisiert, um unternehmerisches Verhalten vorherzusagen (z.B. Gartner, 1989; Low & MacMillan, 1988). Hingegen sollten verhaltensnahe (Kanfer, 1992) Orientierungen

von mittlerer Spezifität eine höhere Vorhersagekraft für unternehmerische Leistung aufweisen als (a) die ehemals verwendeten verhaltensfernen Traits von niedriger Spezifität, wie auch als (b) Einstellungen, die zu spezifisch sind, um das gesamte Spektrum der unternehmerischen Herausforderung abzudecken (vgl. Korunka, Frank, Lueger, & Mugler, 2003; Rauch & Frese, 2000).

Ergebnisse:

Unsere Daten zeigen einen positiven Zusammenhang zwischen der unternehmerischen Orientierung von Kleinunternehmer/innen und dem Erfolg des Unternehmens. Neben dem Gesamtkonstrukt konnten als wichtigste Einzelprädiktoren die Leistungsorientierung, die Eigeninitiative und die Risikoorientierung der Unternehmer/innen identifiziert werden. Die Zusammenhänge der Lernorientierung, der Autonomieorientierung, der Wettbewerbsaggressivität sowie der Innovationsorientierung mit Erfolg ließen sich jedoch nicht oder nur marginal nachweisen. Dies ist wahrscheinlich auf kulturelle Unterschiede zwischen unserer afrikanischen Stichprobe und Stichproben aus westlichen Kulturen zurückzuführen (vgl. Thomas & Mueller, 2000).

Zudem replizieren die gefundenen Zusammenhänge zwischen dem Gesamtkonstrukt individueller unternehmerischer Orientierung und Erfolg Ergebnisse von Untersuchungen im westlichen Kulturkreis, die auf der Untersuchungsebene des Unternehmens und nicht des Individuums durchgeführt wurden (z.B. Covin & Slevin, 1986; Wiklund, 1998). Somit kann davon ausgegangen werden, dass, unabhängig von der Kultur, dem wirtschaftlichen Entwicklungsstand, und der Ebene des Untersuchungsansatzes, das Konstrukt der unternehmerischen Orientierung als Erfolgsfaktor generalisierbar ist.

Darüber hinaus haben wir auf empirischem Wege ein einfaktorielles psychologisches Konzept der unternehmerischen Orientierung erstellt, das nicht nur über das derzeit vorherrschende Verständnis der auf Firmenebene angesiedelten unternehmerischen Orientierung hinausgeht, sondern auch dem ursprünglichen Verständnis von Unternehmer(innen)tum entspricht (vgl. Kirzner, 1997; Schumpeter, 1934) und sich als vorhersagekräftig für unternehmerischen Erfolg erwiesen hat.

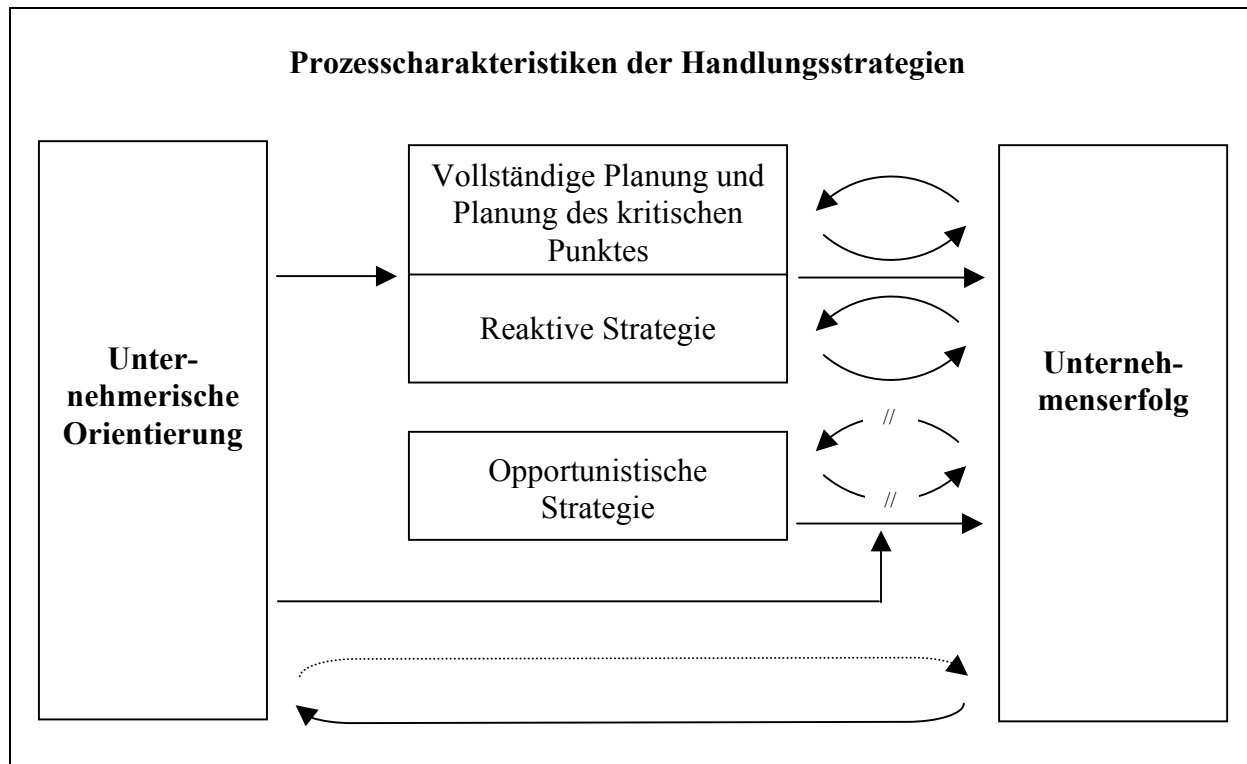
Unternehmerische Orientierung, Prozesscharakteristiken psychologischer Handlungsstrategien und Unternehmenserfolg: Eine längsschnittliche Untersuchung an Kleinunternehmer/innen in Zimbabwe

Aufbauend auf den vorangegangenen querschnittlichen Ergebnissen zur unternehmerischen Orientierung erweitert diese Untersuchung das theoretische Rahmenmodell unternehmerischen Erfolges um Prozesscharakteristiken der Handlungsstrategien von Kleinunternehmer/innen. Untersucht wurde die reziproke Determination (Bandura, 1978) zwischen unternehmerischer Orientierung sowie Prozesscharakteristiken der Handlungsstrategien einerseits und Unternehmenserfolg andererseits. Wir vermuteten kausale Effekte von psychologischen Erfolgsfaktoren auf die unternehmerische Leistung wie auch umgekehrte Einflüsse von Unternehmenserfolg auf individuelle Variablen der Unternehmer/innen. Darüber hinaus nahmen wir Mediator- und Moderatoreffekte von unternehmerischer Orientierung und Prozesscharakteristiken unternehmerischer Handlungsstrategien auf den Zusammenhang mit Unternehmenserfolg an (Abbildung 2).

Ein vollständiger psychologischer Ansatz zur Leistung von Unternehmer/innen sollte Prozesse der Selbstregulation berücksichtigen. Selbstregulation bezieht sich auf reziproke Determination (Bandura, 1978), wobei intraindividuelle Faktoren das Verhalten beeinflussen und extra-individuelle Verhaltenskonsequenzen als Feedbackinformationen dienen, die wiederum intraindividuelle Regulationsprozesse anregen (vgl. Carver & Scheier, 1982). Im Kontext von Kleinunternehmer/innen bedeutet Selbstregulation, dass die unternehmerische Orientierung und die Prozesscharakteristiken der unternehmerischen Handlungsstrategien die Unternehmensleistung beeinflussen. Im Gegenzug wirkt sich Unternehmenserfolg positiv auf die unternehmerische Orientierung und die Prozesscharakteristiken der Handlungsstrategien der Unternehmer/innen aus. Wir vermuteten daher reziprok determinierte Kausalzusammenhänge zwischen unternehmerischer Orientierung und den Prozesscharakteristiken der Handlungsstrategien (vollständige Planung, Planung des kritischen Punktes, reaktive Strategie) einerseits und dem Erfolg des Unternehmens andererseits (Abbildung 2). Von opportunistischen Handlungsstrategien erwarteten wir jedoch weder eine Auswirkungen auf die Unternehmensleistung noch erwarten wir, dass sich Unternehmenserfolg auf opportunistische Handlungsstrategien auswirkt (Abbildung 2).

Abbildung 2:

Ein Modell reziproker Determination zwischen unternehmerischer Orientierung/ Prozesscharakteristiken unternehmerischer Handlungsstrategien und Unternehmenserfolg.



// bezeichnet nicht signifikante Beziehungen.

Der gepunktete Pfeil bezeichnet eine mediierte Beziehung.

Die psychologische Handlungstheorie definiert eine Handlungsstrategie als eine Sequenz von Herangehensweisen zur Erreichung eines Zieles, die individuell reguliert werden muss, um erfolgreich zu sein (Frese & Zapf, 1994; Hacker, 1986; Miller, Galanter, & Pribram, 1960). Jede Art der Leistung ist notwendigerweise von den Handlungsstrategien des agierenden Individuums anhängig. Frese, van Gelderen und Ombach (2000) unterscheiden vier Arten der Prozesscharakteristiken von Handlungsstrategien: Die vollständige Planung, die Planung des kritischen Punktes, die opportunistische Strategie und die reaktive Strategie.

Unternehmer/innen, die *vollständig planende Strategien* verwenden, weisen eine starke Zielorientierung auf, planen lange voraus, gliedern ihren Plan systematisch und top-down, verfügen über eine breite Wissensbasis, sind hoch proaktiv und sind gering responsiv bezüglich situativer Veränderungen (Frese et al., 2000). Der vollständigen Planung ist ein umfassendes mentales Modell des Aufgabenprozesses sowie ein detailliertes Signalwissen inhärent (Frese & Zapf, 1994; Hacker, 1986), welches das Individuum befähigt, zukünftige Probleme sowie Opportunitäten vorherzusehen. Daher analysieren vollständig planende Unternehmer/innen nicht nur ihre Umwelt nach Opportunitäten, die ihre langfristigen Ziele und

Pläne komplementieren, sie antizipieren auch Problemsituationen und entwickeln back-up Pläne (vgl. Ardichvili, Cardozo, & Ray, 2003). Allerdings sind vollständig planende Unternehmer/innen wenig responsiv und passen ihre Ziele nicht sich verändernden Bedingungen an. Hohe Zielorientierung und langfristige Planung erfordern immer auch hohe persönliche (Zeit und Energie) sowie finanzielle Investitionen. Die hohen Investitionen führen dazu, dass die Unternehmer/innen ungern ihre Ziele oder die grundsätzliche Struktur ihres Planes verändern. Diese geringe Responsivität könnte sich in Situationen, in denen eine Anpassung an externe Kontextveränderungen notwendig wäre, ungünstig auswirken.

Unternehmer/innen deren Handlungsstrategien einer *Planung des kritischen Punktes* entsprechen, planen nur für den nächstliegenden, dringlichsten und wichtigsten Punkt der Zielerreichung (Zempel, 1994). Weiterführende Planung gehen sie nur an, wenn die naheliegenden, kritischen Hürden genommen wurden. Daher ist die Planung des kritischen Punktes eine iterative, lokalisierte Form der Planung (Sonntag, 1998). Im Vergleich zur vollständigen Planung sind Unternehmer/innen mit Strategien des kritischen Punktes ähnlich zielorientiert, planen aber weniger langfristig, haben eine weniger breite Wissensbasis und sind weniger proaktiv (Frese et al., 2000). Das führt zu einer höheren situativen Responsivität und zu ‚sparsamerem‘ Handeln in Bezug auf persönliche und finanzielle Investitionen als es bei Unternehmer/innen mit vollständig planenden Handlungsstrategien der Fall ist.

Die auffälligste Charakteristik einer *opportunistischen Strategie* ist die proaktive Suche, Identifizierung, und unmittelbare Umsetzung von unternehmerischen Opportunitäten. Während eine opportunistische Strategie hoch aktiv ist im Sinne der Identifikation von günstigen Gelegenheiten, ist die Proaktivität gering in Bereichen wie langfristiger Planung, back-up Planung und aktiver Beeinflussung der Umwelt. Individuen mit einer opportunistischen Strategie haben nur vage, kurzfristige Pläne, kommen von ihren Zielen ab, wenn sich bessere Opportunitäten auftun, verfügen über eine mittlere bis geringe Wissensbasis und sind hoch responsiv bezüglich Umweltveränderungen (Frese et al., 2000). Der Vorteil von opportunistischen Strategien liegt in der Ausnutzung aller vorhandenen Gelegenheiten, in ökonomischem Planungsverhalten und in flexibler Responsivität auf Bedürfnisse des Marktes. Der Nachteil ist jedoch, dass Unternehmer/innen mit opportunistischen Handlungsstrategien sich möglicherweise leicht ‚verzetteln‘, ihre Ziele aus den Augen verlieren, ihre Strategien nicht zuende führen und nicht genug Zeit und Mühe in die langfristige Entwicklung ihres Unternehmens investieren.

Im Gegensatz zu den bisher dargestellten Prozesscharakteristiken nehmen Unternehmer/innen mit *reaktiven Strategien* keine proaktive Haltung ein. Sie versuchen nicht, ihre

Umwelt zu beeinflussen, sondern lassen sich von der Situation treiben. Die Unternehmer/innen sind nicht zielorientiert, planen nicht voraus, verfügen über eine begrenzte Wissensbasis, sind nicht proaktiv und lassen ihre Handlungen hauptsächlich durch situative Zwänge bestimmen (Frese et al., 2000).

Handlungsstrategien sind unabhängig vom jeweiligen Inhalt der Strategie. Sie sind Handlungsvorlagen (van Gelderen, Frese & Thurik, 2000), die in verschiedenen Situationen angewendet werden und Individuen helfen, ihre kognitiven Kapazitäten effektiv zu nutzen (Frese & Zapf, 1994; Kahneman, 1973). Daher kann jeder strategische Inhalt mit Hilfe jeder der vier Typen von Handlungsstrategien umgesetzt werden. Soll beispielsweise die Produktpalette erweitert werden, würde mit einer vollständig planenden Strategie eine detaillierte Analyse der Kernkompetenzen und Ressourcen des Unternehmens, des Marktes und der Marketingmöglichkeiten, der Aktivitäten von Wettbewerbern, der benötigten Maschinen und Rohmaterialien sowie der langfristigen Finanzierungsmöglichkeiten durchgeführt. In Abhängigkeit von der jeweiligen Situation würde sich die Strategie des kritischen Punktes auf den dringlichsten Aspekt, zum Beispiel die Beschaffung günstiger Rohmaterialien, konzentrieren. Mit einer opportunistischen Strategie hingegen würden die Unternehmer/innen jede Gelegenheit zur Erweiterung ihrer Produktpalette unverzüglich wahrnehmen. Ein augenscheinlich gutes Produkt würde ohne vorherige Analysen eingeführt oder Maschinen würden gekauft, wenn sie günstig zu bekommen sind, ohne zu überlegen, wie man Rohmaterialien besorgen könnte. Wird schließlich eine reaktive Strategie angewendet, würde man neue Produkte nur einführen, wenn sie zum Beispiel vorher erfolgreich von einem Wettbewerber eingeführt wurden oder von den Kunden ausdrücklich verlangt werden.

Ergebnisse:

Durch unseren längsschnittlichen Untersuchungsansatz konnten reziprok determinierte Zusammenhänge im unternehmerischen Prozess aufgezeigt werden, welche die Wichtigkeit des Individuums, der Person der Unternehmer/innen, betonen. Wir fanden reziproke Determinationen zwischen Prozesscharakteristiken der Handlungsstrategien sowie der unternehmerischen Orientierung der Unternehmer/innen einerseits und dem Unternehmenserfolg andererseits. Vollständige Planung und unternehmerische Orientierung erhöhten den Unternehmenserfolg. Im Gegenzug verstärkte der Unternehmenserfolg die vollständige Planung und die unternehmerische Orientierung der Unternehmer/innen. Im Falle reaktiver Prozesscharakteristiken der Handlungsstrategien war die reziproke Determination negativ. Reaktive Strate-

giecharakteristiken führten zu Misserfolg und Misserfolg verstärkte die reaktiven Strategien der Unternehmer/innen.

Darüber hinaus konnte gezeigt werden, dass opportunistische Handlungsstrategien keinen direkten Einfluss auf die Unternehmensleistung haben. Der Zusammenhang wird jedoch moderiert durch die unternehmerische Orientierung der Unternehmer/innen: Haben Unternehmer/innen eine niedrige unternehmerische Orientierung, wirken sich opportunistische Prozesscharakteristiken der Handlungsstrategien positiv auf den Erfolg des Unternehmens aus. Sind Unternehmer/innen hingegen sehr unternehmerisch orientiert, wären sie besser beraten, ihre Handlungsstrategien mehr zu strukturieren und das Unternehmen planender anzugehen.

Ein weiteres Ergebnis zeigte, dass auch die unternehmerische Orientierung der Unternehmer/innen den Unternehmenserfolg nicht direkt beeinflusst. Die Beziehung zum Unternehmenserfolg wird durch die Mediatoren vollständige Planung, Planung des kritischen Punktes und reaktive Strategie vermittelt.

Über die verschiedenen Leistungsmasse hinweg hatten vollständig planende Prozesscharakteristiken der Handlungsstrategien den stärksten und konsistentesten Einfluss auf Unternehmenserfolg. Daher sollte es ein grundsätzliches Ziel von Förderprogrammen für Kleinunternehmer/innen sein, den Unternehmer/innen Handlungsstrategien zur vollständigen Planung zu vermitteln. Psychologische Trainingsmethoden könnten helfen, die Planungsfertigkeiten der Unternehmer/innen zu verbessern sowie ihre Proaktivität zu erhöhen und zu fokussieren. Die Auswirkungen von stärker vollständig planenden Handlungsstrategien werden sich relativ kurzfristig im Unternehmenserfolg niederschlagen. Langfristig wird der Erfolg wiederum die unternehmerische Orientierung wie auch vollständig planende Handlungsstrategien verstärken.

Eine längsschnittliche Untersuchung zur Entwicklung der Mitarbeiterzahl von kleinen Unternehmen im informellen und im formellen Wirtschaftssektor in Zimbabwe sowie eine sektorspezifische Klassifizierung von Unternehmer/innen

Während die vorangegangenen Untersuchungen sich mit allgemeingültigen psychologischen Konstrukten zur Unternehmer(innen)leistung im Afrikanischen Kontext beschäftigten, soll es nun um Inhalte gehen, die spezifischer für den Kontext von Kleinunternehmer/innen in Entwicklungsländern sind. Man unterscheidet in Entwicklungsländern zwischen Unternehmen des formellen und des informellen Sektors. *Formelle Unternehmen* sind offiziell registriert und steuerlich erfasst; *informelle Unternehmen* hingegen sind nicht registriert, werden aber in den meisten Entwicklungsländern, so auch in Zimbabwe, geduldet. Die folgende Studie untersucht die Schaffung von Arbeitsplätzen im formellen und im informellen Sektor. Darüber hinaus sollen Unternehmer/innen des formellen und des informellen Sektors anhand der individuellen Variablen Schulbildung, betriebswirtschaftliches Wissen, Übernahme von Risiken und Unsicherheitsvermeidung empirisch unterschieden werden.

In vielen Entwicklungsländern floriert der informelle Sektor und trägt zur Entwicklung einheimischer Märkte wie auch der Volkswirtschaft bei, indem er die Geldwirtschaft stärkt und Geld im Umlauf hält (Shinder, 1997). Es gibt die weitverbreitete Meinung, dass der informelle Sektor nicht nur billige, arbeitsintensive Güter und Dienstleistungen hervorbringt, sondern dass er in einem ähnlichen Maße zur Schaffung von Arbeitsplätzen beiträgt wie der formelle Sektor (z.B. ILO, 1972). Hosier (1987) bezeichnet diese Annahme als die evolutionäre Haltung.

Im Gegensatz zur evolutionären Haltung vertritt die involutionsäre Haltung (Hosier 1987) eine pessimistischere Ansicht über den informellen Sektor. Vertreter der involutionsären Haltung argumentieren, dass der informelle Sektor eine „untergeordnete vorkapitalistische“ Produktionsform ist, die immer vom formellen Sektor dominiert und über kurz oder lang zerschlagen werden wird (Hosier, 1987, p.387). Eine Förderung des informellen Sektors wird weder als Möglichkeit der Reduktion von Arbeitslosigkeit noch als gesamtwirtschaftlicher Wachstumsfaktor angesehen. Die involutionsäre Haltung geht vielmehr davon aus, dass „die Unterstützung des informellen Sektors nur dazu dienen wird, die Ausbeutung von Arbeitskraft und das Ausmaß an Armut zu intensivieren“ (Hosier, 1987, p.388, Übers. d. Verf.).

Die evolutionäre und die involutionäre Haltung sind sicherlich polarisierte Perspektiven auf das Potential des informellen Sektors (vgl. Portes, 1994, für eine detaillierte Diskussion). Da empirisch gezeigt werden konnte, dass formelle Unternehmen teilweise aus dem informellen Sektor hervorgehen (Neshamba, 1997), nehmen wir an, dass informelle unternehmerische Aktivitäten ein erster Schritt sein können, um am Wirtschaftsleben teilzunehmen. Der nächste Schritt wäre es, informelle Aktivitäten in formelle zu überführen, um die Beschränkungen des informellen Sektors zu überwinden.

Ergebnisse:

Unsere Längsschnittstudie liefert empirische Evidenz für den kausalen Zusammenhang zwischen formeller Unternehmensführung und der Schaffung von Arbeitsplätzen in einem afrikanischen Land. Formelle Unternehmen sind nicht nur größer, sie schaffen über die Zeit auch mehr Arbeitsplätze als vergleichbare Unternehmen im informellen Sektor.

Des weiteren gelang es, eine Testbatterie individueller Indikatoren zu erstellen, mit deren Hilfe wir 71% der Untersuchungsteilnehmer korrekt in vier Gruppen von in/formellen Unternehmen (konstant informell, Formalisierung, Informalisierung, konstant formell) einteilen konnten. Unternehmer/innen im formellen Sektor verfügten über eine höhere Schulbildung, ein ausgeprägteres betriebswirtschaftliches Wissen, standen der Übernahme von Risiken positiver und der Vermeidung von Unsicherheiten negativer gegenüber als Unternehmer/innen des informellen Sektors.

Schließlich fanden wir, dass 81% der formellen Unternehmen bereits bei der Unternehmensgründung dem formellen Sektor angehörten. Weitere 10% der formellen Unternehmen hatten den Formalisierungsprozess innerhalb des ersten Jahres nach der Gründung durchlaufen, und nur ein/e Untersuchungsteilnehmer/in formalisierte das Unternehmen mehr als fünf Jahre nach der Unternehmensgründung. Das lässt darauf schließen, dass in der frühen Phase der Unternehmensentwicklung Unternehmenspraktiken und Machbarkeiten ausprobiert werden und sich eine Unternehmenskultur sowie eine Managementkultur entwickelt. Danach tritt das Unternehmen wahrscheinlich in eine Konsolidierungsphase ein, und fundamentale Veränderungen wie Unternehmensregistrierung und Formalisierung werden unwahrscheinlicher.

Das ökonomische wie auch das politische Umfeld sind sicherlich Kontextgrößen, die den individuellen Erfolg kleiner Unternehmen unterstützen oder aber beeinträchtigen. Doch selbst unter den ungünstigen wirtschaftlichen Bedingungen des südlichen Afrikas konnte gezeigt werden, dass individuelle Faktoren die Leistung von Kleinunternehmer/innen beeinflus-

sen. Diese Dissertationsarbeit fand empirische Evidenz dafür, dass das Potential kleiner Unternehmen, gesellschaftliche Entwicklung und ökonomisches Wachstum voranzutreiben, erheblich davon abhängt, zu einem möglichst frühen Zeitpunkt innerhalb des unternehmerischen Prozesses (a) psychologische Erfolgsdeterminanten wie sowohl vollständig planende Handlungsstrategien als auch die unternehmerische Orientierung von Kleinunternehmer/innen zu fördern, (b) Unternehmer/innen die Werte und Praktiken des formellen Sektors nahezu bringen und (c) betriebswirtschaftliches Wissens zu vermitteln.

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