Relationships among Owner/Manager Personal Values, Business Strategies, and Enterprise Performance

by Bernice Kotey and G. G. Meredith

Abstract

The aim of the research was to test empirically the relationships among personal values of owner/managers, the strategies they adopt in operating their businesses, and the performance of their businesses. The research fills gaps in empirical research on strategy and strategic management in small firms. Unlike in existing research, a holistic approach to strategy is adopted. Data for the research were obtained from a mail survey of small furniture manufacturers. The sample was divided into clusters using Ward's minimum variance method. Differences among the clusters with respect to personal values, strategies, and performance were examined by multivariate analyses of variance using deviation contrasts. It was found that certain profiles of personal values correspond with certain strategic orientations. In conformity with previous research, an association between business strategy and enterprise performance was confirmed. Recommendations are made in the areas of government policy delivery, and financial and management assistance to small firms.

In many countries, the small enterprise sector is a major source of employment, revenue generation, innovation, and technological advancement. In some industries, small enterprises are more effective at servicing customers than large firms. The importance of the small enterprise sector to economic development cannot be overemphasized. In Australia, as in many countries, the level of economic dependence on small and medium enterprises has increased in recent years as a result of increasing layoffs in the public sector and the shedding of employees by large firms. This has led the government to place emphasis on enterprise assistance programs and policies. However, the effectiveness of these policies and programs are dependent on a thorough understanding of owner/managers and how they operate. Of particular importance are owner/managers' personality characteristics.

The literature in this area suggests that owner/managers' personalities, in particular their values and goals, are indistinguishable from the goals of their businesses (O'Farrell and Hitchins 1988; Bamberger 1983). It is also suggested that owner/managers' personal values influence the strategies they adopt in operating their businesses and, ultimately, the performance of their businesses (Thompson and Strickland 1986). However, these propositions lack empirical

Dr. Kotey is a lecturer in the Faculty of Business at Sunshine Coast University College in Australia. Her research interests include management practices of owner/managers, the psychology of the entrepreneur, women in small business, and small business policies and programs.

Professor Meredith is the director of research and DBA program in the Faculty of Business and Computing at Southern Cross University in Australia. He has published widely in several areas of small business.

support. Existing research tends to be qualitative, based on a few case studies. These studies examine a number of functional activities without assessing their coherence as a strategy. There is also a tendency to examine firms in various industry sectors, ignoring the influence of industry variables on strategy and performance. To address these areas of research, a project was carried out using data from furniture manufacturers in New South Wales, Australia.

The aim of the research was to test empirically the relationships between the personal values of owner/managers, the strategies they adopt in operating their firms, and the performance outcomes of these strategies. A model developed for the research portrays the relationships among these three variables. In particular, the model shows that certain dimensions of personal values are associated with specific strategy dimensions and with certain performance outcomes. Three propositions are drawn from the model: (1) The personal values of owner/managers are linked with their business strategies and with the performance of their firms; (2) Firms which perform above average adopt different strategies from firms with below-average performance levels; and (3) Owner/managers of firms which perform above average exhibit different personal values from owner/managers of firms with below-average performance. Hypotheses are developed from these propositions for testing based on the individual items which measure personal values, business strategy, and enterprise performance. It is expected that the validity of the propositions and relationships portrayed in the model will be supported by the results of the hypotheses tests.

Background

Business Strategy and Enterprise Performance

Research has established the important role small enterprises play in economic development (Neck 1987; Petrof 1987). This role is dependent on the individual performance of each enterprise, especially in relation to job creation, technological advancement, and revenue generation. The performance of an enterprise is determined by the business strategy it adopts (Pearce and Robinson 1985; Olson and Bokor 1995). A business strategy is an overall plan of action which defines the competitive position of a firm (Mintzberg and Quinn 1991). For example, a firm may choose to compete by producing high quality goods or by producing at low cost.

Business strategies are implemented through the major functional strategies of marketing, finance, human resource management, production, and research and development. In turn, each functional strategy is made up of several activities. Therefore, activities act as guides to the realization of the overall business strategy (Nath and Sudharshan 1994). Activities which comprise the various functional strategies center around the following:

(1) Marketing—product quality, pricing, and promotion; customer target groups; choice of distribution channels; provision of customer service and support; and identification with brand names (Johnson and Scholes 1984).

(2) Finance—capital structure; methods of raising capital; capital expenditure; levels of profit distribution and retention; working capital; and liquidity levels (Johnson and Scholes 1984).

(3) Human resource management—staff recruitment and selection; employee training, performance, and remuneration; reward and disciplinary systems; industrial relations and levels of employee participation in decision-making (Schuler et al 1992).

(4) Production—selection of suppliers; inventory and productivity levels; production technology and capacities, plant size; and

levels of efficiency in production.

(5) Research and development—new product development; new production technologies and marketing techniques; patent acquisition; basic versus applied research and levels of imitation (Johnson and Scholes 1984).

Although strategies are not explicitly delineated into functional areas in small firms, activities and decisions can be grouped into the above functional areas for analytical purposes.

The effectiveness of the overall business strategy depends substantially on how well activities in the various functional areas are integrated to form a pattern (Galbraith and Schendel 1983; Porter 1991). This pattern defines the firm's business strategy and therefore competitive position within the industry (Mintzberg and Quinn 1991). Several researchers have highlighted different business strategies by which firms compete (Miles and Snow 1978; Porter 1980; Hambrick 1983; Galbraith and Schendel 1983; Robinson and Pearce 1988; Merz and Sauber 1995). However, research in this area is limited for small firms, tending to be descriptive and centering on orientations of owner/managers to certain functional activities. These studies do not take a holistic view of strategy and lack a rigorous empirical base.

Many researchers have associated business strategies with performance, distinguishing between strategies associated with high and low performance (Smith 1967; Covin and Slevin 1986, 1988, and 1989; Covin 1991; Chell, Haworth, and Brearley 1991). Strategies which result in high performance are identified with activities that generally lead to success in the industry, that is, key success factors (Hambrick 1983). These activities are associated with initiatives in industry (Miller and Friesen 1983). Researchers have identified such initiatives to include emphasis on product quality, product and service innovations, development of new operating technologies, and discovery of new markets (Robinson and Pearce 1988). Activities associated with high-performing strategies also include emphasis on customer service and support, extensive advertising, and use of external finance (Covin 1991). Because high-performing strategies involve initiative-taking, they are often referred to as proactive strategies (Steiner, Miner, and Edmumnd 1986). All the activities of a proactive strategy are well integrated (Galbraith and Schendel 1983).

Firms which perform below average tend to follow others in the industry and to react to events in their environment. Such firms are characterized by strategies which emphasize risk avoidance and involve little innovation (Karagozoglu and Brown 1988). Strategies of low-performing firms include imitations of more successful firms in the industry, but usually fall short in some important respect (Hambrick 1983). The activities that comprise these strategies are often not well integrated and are mismatched with the demands of the environment (Hambrick 1983). They are often referred to as reactive strategies (Steiner, Miner, and Edmund 1986) because they are characterized by reactions to events rather than by initiative-taking.

In reality, the two strategies may not be so clearly distinguishable. Firms pursuing proactive strategies may sometimes conform to industry norms and adopt standardized strategies. However, they do this not out of tradition, as with low performing reactive strategies, but because that is the best strategy at the time. Strategies with varying degrees of proactiveness and reactiveness lie along the proactive-reactive continuum.

Factors which Influence Choice of Strategy

Three basic factors influence managements' choice of strategy—management, environmental variables, and the firm's internal resources (Thompson and Strickland 1993). The degree to which management and environmental variables influence business strategy has been debated by a number of researchers. Montanari (1978) stated that the greater the influence of environmental variables on business strategy, the less will be the impact of management. Qualifying support comes from Miller and Toulouse (1986) who noted that management has greatest influence in dynamic, unpredictable, and changing environments. Here, the need for change and action gives managers an opportunity to leave their personal imprints on the enterprise.

A second view states that notwithstanding the impact of the environment, management will always have some influence on strategy (Porter 1991). Porter explains that over time, managers can create and sustain competitive advantage by the continuous innovation, improvement, and upgrading of resources. In this view, managers have considerable discretion in relaxing external and internal constraints affecting their businesses. Bamberger (1983) goes further by stating that business strategies are products of managers' visions which in turn originate from their personalities.

Miller (1983) noted that managers have greater influence on business strategy in small firms, where the manager is also the owner of the firm, than in large firms. He explained that owner/managers are powerful enough to override obstacles to the successful realization of their business strategies. They have enormous impact on their enterprises through their power of ownership and face-to-face contact with employees (Miller and Toulouse 1986). The owner/manager is thus at the center of all enterprise behavior (Covin 1991; O'Farrell and Hitchins 1988). The owner/manager's influence on strategy is examined in this research in terms of personal values. There are no empirical studies which examine the link between owner/manager personal values and business strategy. It is this gap that this research seeks to fill.

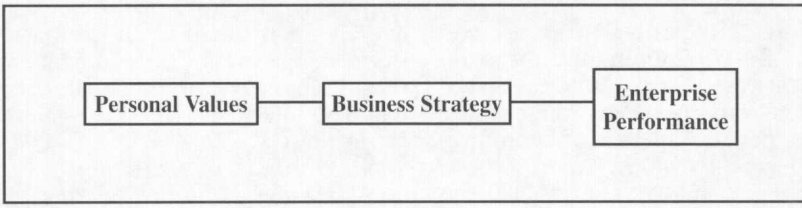
Personal Values, Business Strategy, and Enterprise Performance

Rokeach (1973) showed that personal values influence all behavior. This finding was reinforced by Kamakura and Mason (1991) who noted that the concepts of personal values and value systems have been used to predict various kinds of behavior. Bandura (1986) defined personal values as ideals that are maintained in all circumstances. They arise from experiences in life and guide behavioral outcomes (Allport 1961). Personal values involve self-awareness and consciously influence choices and behavior. They are standards against which evaluations and judgements are made (Williams 1968). Personal values are at the *core* of personality and influence all other characteristics, that is, attitudes, evaluations, judgements, decisions, and commitments (Feather 1988a). They are central to the definition of self and comparable to the foundations of a building (Feather 1988b).

Although personal values differ among individuals, people with similar personal values can be grouped to form a personal value type. Successful owner/managers have been identified with a personal value type referred to as entrepreneurial (Rokeach 1973; England 1975; Cunningham and Lischeron 1991; Silver 1988; DeCarlo and Lyon 1980; and Birch 1987). According to these researchers and writers, entrepreneurs place high value on ambition, achievement, reliability, responsibility, hard work, competence, optimism, innovation, aggressiveness, honesty, creativity, social recognition, and growth. In contrast to entrepreneurs, conservative owner/managers rate low on the above values but highly on values of equality, affection, compassion, and social protection (Rokeach 1973; England 1975).

In reality, owner/managers exhibit combinations of the two personal value types. For example, although entrepreneurs will rate highly on most entrepreneurial personal values, they can also be conservative in certain respects. There are myriad combinations of the two distinct personal value types. However, owner/managers who rate highly on most entrepreneurial personal values or on most conservative personal values can be clearly identified.

Figure 1
Association Between Personal Values of Owner/Managers, Business Strategies, and Enterprise Performance



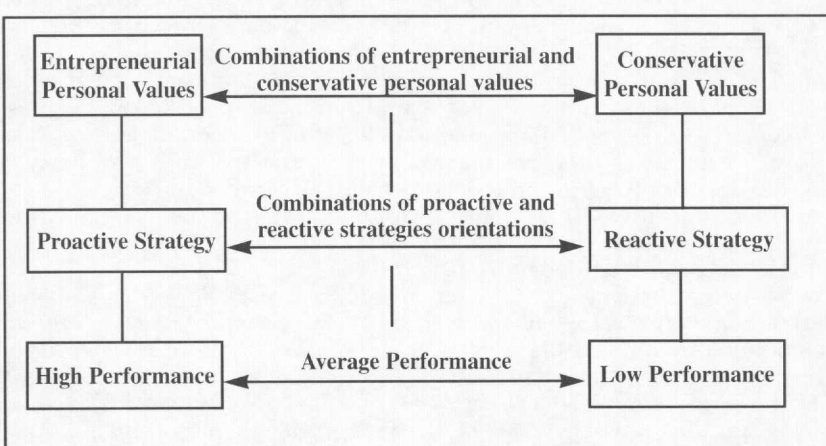
If entrepreneurial personal values are associated with a successful business operation (synonymous to above-average performance in this research), and if above average performance results from the adoption of proactive strategies, then it could be argued that proactive strategies are associated with entrepreneurial personal values. By the same logic, conservative personal values could be linked with reactive strategies and with lower performance levels. Although considerable management literature suggests that the personal values of owner/managers influence their strategies (Posner and Schmidt 1992; Freeman, Gilbert, and Hartman 1988; Andrew 1980; England 1975; and Guth and Taguiri 1965), this has not been shown empirically.

Research Model

From a review of the above literature, a model was constructed for testing based on owner/manager personal values, business strategies, and enterprise performance. The model was extended from the basic relationships among these variables (as portrayed in Figure 1) to associations among dimensions of the variables (as in Figure 2).

Figure 1 portrays the basic relationship among personal values, business

Figure 2
Association Between Dimensions of Personal Values of Owner/Managers, Business Strategies, and Enterprise Performance



strategies, and enterprise performance. Because the linking lines indicate associations rather than causalities, no arrowheads are drawn.

In Figure 2 the arrowheads denote two ends of a continuum, and the plain lines indicate associations among dimensions of the variables. According to the model, owner/managers with entrepreneurial personal values are likely to adopt proactive strategies and to achieve above-average performance levels. In contrast, owner/managers with conservative personal values would adopt reactive strategies and achieve below-average performance levels. Between the two extreme dimensions of personal values are owner/managers with varying combinations of entrepreneurial and conservative personal values. These owner/managers are likely to adopt combinations of proactive and reactive strategies leading to average or near-average performance levels.

Hypotheses Development

Hypotheses developed from the above model are based on the individual items which comprise each variable. The first set of hypotheses deals with the relationship between business strategy and enterprise performance and the second covers personal values, business strategies, and enterprise performance.

Strategies and Performance

Product. To perform above average, a firm will have to stay ahead of competitors and increase its market share (Porter 1991). Market share is increased by attracting new customers and retaining existing ones. Existing customers will remain loyal to a firm if they are convinced of the superiority of its products over those of competitors. The superiority and range of products offered by the firm will also determine its ability to attract new customers. Activities associated with market share increases will therefore include: improving existing products to meet changing customer requirements; developing new products; and emphasizing product quality (Zeithaml and Fry 1984; Robinson and Pearce 1988). As discussed in the literature review, these activities are associated with proactive strategies and are likely to be pursued by firms which seek above-average performance. In contrast, low-performing firms are likely to avoid these innovative and risk-taking activities. The following hypotheses are drawn for testing:

H_1: *Product improvement is given greater emphasis by firms which perform above average than by firms which perform below average.*

H_2: *New product development is more common with firms which perform above average than with firms which perform below average.*

H_3: *Firms which perform above average are more likely to emphasize product quality than firms which perform below average.*

Production. Production methods become obsolete over time, and firms will not be competitive if they do not adopt new production technologies (Anderson, Cleverland, and Schroeder 1989; Vickery, Droge, and Markeland 1993). New production technologies are necessary for new lines and for improvements in existing lines. However, adopting new technologies without attention to cost will leave firms vulnerable to competitors selling similar products at lower prices (Wright et al 1990). Thus to stay ahead of competitors, firms must not only offer new and superior products, but must do so at prices affordable to consumers. This requires the implementation of new and efficient production technologies and attention to employee productivity. These are activities more likely to be pursued by above-average performing firms than by below-average firms. The following hypotheses are developed for testing:

H_4: *Firms which perform above average are more likely to employ new production technologies than firms which perform below average.*

H_5: *Cost effectiveness in production is given greater emphasis in firms which perform above average than* *in firms which perform below average.*

H_6: *Firms which perform above average will be more concerned with employee productivity than firms which perform below average.*

Marketing. Existing and potential customers may not be aware of the superiority of a firm's products and its new lines unless efforts are made to draw their attention to these through advertising and identification with brand names. Also, the quality of customer services offered will determine a firm's ability to retain new and existing customers. Customer services include, among others, assistance with purchase decision, home delivery, customer credit, and prompt refunds for goods returned. The exploration and use of new marketing techniques, such as selling through retailers, will also improve the firm's ability to attract and retain customers. These activities involve initiative-taking and are more likely to be pursued by firms seeking high performance than by low performing firms. It is hypothesized as follows:

H_7: *Extensive advertising is more common with above average performing firms than with below- average performing firms.*

H_8: *Products of firms whose performance are above average are more likely to be identified with brand names than products of firms with below-average performance.*

H_9: *Firms which perform above average will place greater emphasis on customer service than firms whose performance is below average.*

H_{10}: *Firms which perform above average will place greater emphasis on customer credit than firms which perform below average.*

H_{11}: *New marketing techniques are more commonly explored by firms which perform above average than by firms which perform below average.*

Financing. Pursuit of the initiatives described above will require large amounts of capital which the owner/manager may not be able to provide solely from equity. Firms which pursue the above initiatives are thus likely to use debt financing. They are also likely to be cost effective in their choice of external funding by comparing the costs and benefits associated with alternative sources and choosing the most effective source. As mentioned in the literature, firms which perform below average tend to be risk-averse and may therefore avoid use of debt finance. It is hypothesized as follows:

H_{12}: *Firms which perform above average will use more debt financing than firms which perform below average.*

H_{13}: *Assessment of costs and benefits associated with alternative sources of external funding is more common with firms which perform above average than with firms which perform below average.*

Human Resource Management. In labor-intensive industries such as small business furniture manufacturing, improvements in employee productivity will be closely associated with effective human resource management. This includes activities such as concern for employees' job satisfaction and well being; involving employees in decision-making; and regular assessment of employees' performance. Firms which manage their employees effectively are likely to achieve better productivity levels than firms which do not. Since firms which perform above average would be concerned with productivity, they are also more likely than low-performing firms to be concerned with effective management of employees. The following hypotheses are drawn for testing:

H_{14}: *Assessment of employee performance is more common among firms which perform above average than with firms which perform below average.*

H_{15}: *Employees' well being will be of greater concern to high performing firms than to lower performing firms.*

H_{16}: Firms which perform above average will be more concerned with employee job satisfaction than those which perform below average.

H_{17}: Employees are more likely to be involved in decision-making in firms with above average performance than in firms with below average performance.

Small firms cannot afford to employ skilled managers and technical experts. However, these skills are available to them through independent consultants. Owner/managers who lack skills in specialist areas can therefore use the services of consultants. Research shows that owner/managers who seek the assistance of experts perform better than those who do not (Kent 1994). Owner/managers are also able to learn from the experiences of others in the industry by networking or attending meetings of industry associations. It is hypothesized that:

H_{18}: The use of management experts is more common among high-performing firms than among low-performing firms.

H_{19}: Owner/managers with above-average performance are more likely to network by attending meetings of industry or trade associations than those with lower-than-average performance.

In general, activities pursued by above-average firms combine together into proactive strategies. In contrast, the activities of low-performing firms do not blend so well and together portray a reactive strategic orientation.

Personal Values, Business Strategies, and Performance

As seen from the literature review, owner/managers who desire above-average performance are likely to value ambition and achievement more than those who perform below average. Achievement implies comparison with others (that is, competition) and entails some degree of aggression in expression. Achievement is fulfilled through social recognition which in turn provides the achiever some amount of power. Thus owner/managers who place above-average value on achievement will also highly value competition, aggression, social recognition, and power. In contrast, owner/managers who perform below average are likely to place lower emphasis on these values. The following hypotheses are tested:

H_{20}: Owner/managers who perform above average will place greater value on ambition than those who perform below average.

H_{21}: Achievement will be more valued by owner/managers who perform above average than by owner/managers who perform below average.

H_{22}: Lower-than-average performers will place less value on competition than above-average performers.

H_{23}: Proactive strategists will value social recognition more than reactive strategists.

H_{24}: Power will be more valued by owner/managers who pursue proactive strategies than by owner/managers who pursue reactive strategies.

New product development and adoption of new production and marketing methods are associated with creativity and innovation. Owner/managers who place above-average emphases on these activities are also likely to highly value creativity and innovation. Some degree of optimism and competence are required for the successful realization of creative ideas. Creativity and innovation also involve willingness to change (advance from the status quo) and to pursue personal growth. Change in turn involves some degree of risk-taking, as outcomes of any changes are never certain. Owner/managers who place high value on creativity and innovation are thus also likely to value competence, personal growth, risk-taking, and optimism. It is hypothesized as follows:

H_{25}: Owner/managers who pursue proactive strategies will place greater value on creativity than those who pursue reactive strategies.

H_{26}: Innovation will be more valued by owner/managers who pursue proactive strategies than by owner/managers who pursue reactive strategies.

H_{27}: Reactive strategists will place less value on personal growth than will proactive strategists.

H_{28}: Proactive strategists will value competence more than will reactive strategists.

H_{29}: Optimism will be more valued by owner/managers who pursue proactive strategies than by owner/managers who pursue reactive strategies.

H_{30}: Risk-taking will be more valued by owner/managers who adopt proactive strategies than by owner/managers who adopt reactive strategies.

Enterprise operation involves numerous relationships (such as with customers, suppliers, employees, bank managers, consultants, and competitors), the nurturing of which is important to enterprise survival and performance. Relationships are built on trust, honesty, loyalty, respect, and responsibility. Owner/managers who desire above-average performance are likely to place greater emphasis on values closely associated with building relationships crucial to their business performance. They may be contrasted, in this regard, with owner/managers who perform below average. The following hypotheses are developed for testing:

H_{31}: Owner/managers who seek above-average performance and pursue proactive strategies will place greater value on responsibility than owner/managers who perform below average and adopt reactive strategies.

H_{32}: Proactive strategists will place greater value on honesty than will reactive strategists.

H_{33}: Loyalty will be more valued by owner/managers pursuing proactive strategies than by owner/managers pursuing reactive strategies.

H_{34}: Owner/managers who pursue proactive strategies will rate trust higher than those who adopt reactive strategies.

As can be seen from the literature, values such as compassion, affection, and equality are more common with conservative owner/managers than with entrepreneurial owner/managers. In contrast, entrepreneurial owner/managers value independence or autonomy more than conservative owner/managers. In this research, owner/managers who perform below average and adopt reactive strategies are comparable to the conservatives, whilst owner/managers who perform above average are likened to the entrepreneurs. Thus, the following hypotheses are drawn for testing:

H_{35}: Compassion is more valued by owner/managers who perform below average than by owner/managers who perform above average.

H_{36}: Owner/managers who perform above average place lesser value on affection than owner/managers who perform below average.

H_{37}: Reactive strategists value equality more than do proactive strategists.

H_{38}: Proactive strategists value independence more than do reactive strategists.

Activities associated with above-average performance require hard work on the part of owner/managers. Hard work in turn requires energy. Owner/managers who perform above average and adopt proactive strategies will place greater value on hard work and on personal vitality and health than owner/managers who perform below average.

H_{39}: Hard work will be more valued by proactive strategists than by reactive strategists.

H_{40}: Reactive strategists will place lesser value on personal vitality and health than will proactive strategists.

Methodology

Measurement of Variables

Strategy. Six strategy measurement methods were identified in the literature: self-typing; objective indicators; external assessment; investigator inference; investigator inference followed by external assessment and by objective indicators; and objective indicators followed by external assessment and then by investigator inference (Conant, Mokwa, and Varadarajan 1990). This research uses the self-typing approach. Conant, Mokwa, and Varadarajan (1990) listed three methods of self-typing. The first involves asking respondents to classify their enterprises as following one of a given number of strategies (for example: defender, prospector, analyzer, or reactor). Such single-item scales are said to oversimplify the strategy concept and to be limited in their coverage of activities which comprise a strategy. The second method entails use of multi-item closed-ended scales, complemented by investigator-specified decision rules to infer the overall degree to which a firm's strategy conforms to defined strategies. This method is also criticized for oversimplification of the strategy concept and for scale inconsistencies. The third self-typing method also involves use of multi-item closed-ended Likert-type scales by which firms are classified into groups using cluster analysis. Problems with this method are that derived clusters may not be interpretable in terms of defined strategies and that the method may proliferate strategy typologies.

The two self-typing methods involving the use of multi-item, closed-ended Likert scales, decision rules, and cluster analysis were modified in this research. Items were selected as measures of strategic emphases in a number of functional areas. Strategy profiles were then established for clusters of firms based on their ratings of strategy items in these functional areas. The established strategy profiles were then identified with business strategies described in the literature. The following decision rules were applied:

(1) Firms described as pursuing proactive strategies must rate above average on at least 50 percent of the proactive activities and average on the rest. Their activities must also integrate well as a strategy. The cut-off point of 50 percent is intended to allow for the fact that proactive strategists may pursue industry norms in response to environmental variables.

(2) Firms which differ from the overall average on at most 49 percent of the strategy items are positioned somewhere between the proactive and reactive ends of the strategy continuum. They are near the proactive end if they rate above average on up to 49 percent of the proactive activities and average on the other activities. In contrast, if they rate below average on up to 49 percent of these activities, they are placed near the reactive end of the continuum.

(3) Firms which rate below average on 50 percent or more of the proactive activities are classified as pursuing reactive strategies. The 50 percent allowance covers the possibility of imitations of proactive activities by reactive firms.

The strategy instrument was adopted from Slevin and Covin (1987). Questions relating to activities described in the literature review were selected and reworded to meet levels of understanding of the research participants. Participants were asked to rate the extent to which each activity is undertaken in the operation of their enterprises on a five-point Likert scale, ranging from "never" to "always." The reliability of the strategy instrument as measured by Cronbach's alpha is 79 percent.

Personal Values. Methods adopted in the literature to measure personal values include the semantic differential technique (England 1975); the hierarchical classification method (Rokeach 1973); and measures based on indicators (Allport, Vernon and Lindzey 1960). The semantic differential technique, which requires respondents to rate each personal value item on a graphic seven-point bipolar scale, was modified in this research to conform with the measurement approach adopted for the other variables. Participants were asked to rate the importance they attach to each personal value item on a five-point Likert scale ranging from "not at all important" to "very important." The semantic differential technique was preferred to the hierarchical method as it is easier for respondents to rate than rank values. Also, rating provides an absolute measure for each personal value item, allowing profiles of personal values to be constructed for groups of owner/managers.

As with the Allport, Vernon, and Lindzey (1960) instrument, profiles of personal values were established for clusters of owner/managers based on their ratings of the personal value items. An attempt was then made to identify the profiles with the personal value types identified in the literature review. The decision rules employed are similar to those for business strategy. That is:

(1) Owner/managers who rate above average on at least 50 percent of the entrepreneurial personal value items and average on the remainder are described as having entrepreneurial personal values.

(2) Owner/managers who differ from the overall average on at most 49 percent of the personal value items are placed somewhere between the entrepreneurial and conservative ends of the personal value continuum. They are positioned near the entrepreneurial end if they rate above average on up to 49 percent of the entrepreneurial value items and average on the remainder. In contrast, if they rate below average on up to 49 percent of these items, they are placed near the conservative end of the continuum.

(3) Owner/managers who rate below average on more than 50 percent of the entrepreneurial value items are described as conservatives.

The 50 percent cut-off point allows for the fact that entrepreneurs may exhibit certain conservative values and vice versa (conservatives may exhibit certain entrepreneurial values).

Items included in the personal value instrument were drawn from the literature, many from Rokeach's (1973) and England's (1967) personal value instruments. These were reworded in response to suggestions from the pilot survey. Personal value items from Rokeach's instrument include ambition, achievement (sense of accomplishment), equality, social recognition, affection (loving), competence (capable), courage (risk-taking), honesty, creativity (imaginative), autonomy (independence), and responsibility. Cunningham and Lischeron (1991) also identified honesty, sense of responsibility, reliability, and incorruptibility as values associated with entrepreneurs. DeCarlo and Lyon (1980) explained that a free enterprise system such as found in the U.S. embodies a "spirit of entrepreneurship" because of its association with values such as hard work, ambition, courage, and individuality. Managers in the U.S. were said to place greater value on creativity and innovation than did their European or Japanese counterparts (McClenahen 1991). Birch (1987) noted that citizens of the U.S. value aggressiveness, innovation, growth, autonomy, courage, and the possibility of inequality. Another writer (Silver 1988) suggested that entrepreneurial values are developed in homes where a traditional, socially acceptable, and orderly life in terms of status is valued. He argued that mothers of entrepreneurs contribute significantly to instilling values such as achievement, competitiveness, and desire for recognition in their children. Silver (1988) explained further that values such as self-reliance (autonomy), hard work, optimism, and vitality are also associated with the upbringing of these business owners. England's (1975) personal value questionnaire included, in addition to several of the values mentioned above, others such as loyalty, compassion, trust, risk-taking, and equality. The personal value instrument employed in this research was drawn from a review of the works described above. Cronbach's alpha indicated a reliability of 83 percent for the instrument.

Enterprise Performance. To address the limitations associated with the use of financial data in measuring performance in small firms (see Holmes and Nicholls 1990; Fiorito and LaForge 1986; Chaganti, Chaganti, and Mahajan 1989), nonfinancial measures of performance were adopted following suggestions of Gupta and Govindarajan (1984) and Dess and Robinson (1984). Their performance measurement procedure involved multiplying respondents' ratings on the importance they attach to a set of performance measures by their levels of satisfaction with their firms' performance on these measures. Performance measured by this method has been found to have high reliability and validity rates and to reflect accurately the firm's objective performance (Dess and Robinson 1984).

Following this line of reasoning, rather than ask respondents to rate their firms on measures such as return on investment, return on assets, or profit margin, performance was assessed in terms of variables which generate research and government interest in small firms. Research and government interest in small firms are associated with macroeconomic objectives such as increased productivity, revenue generation, improved technology, job creation, and community development (Petrof 1987). Enterprise performance was therefore measured in terms of respondents' desire to meet these objectives (that is, the extent to which they considered these objectives important) and their assessment of the extent to which these objectives were met by their firms (that is, their levels of satisfaction with their firms on these performance items). Ratings of importance were multiplied by levels of satisfaction to arrive at a performance measure for each item. Performance profiles were developed for members of each cluster and identified with performance levels described in the literature review. Similar decision rules were employed as for business strategies and personal values. However, the cut-off point was raised for performance to provide a clearer distinction among groups. That is:

(1) Firms described as above average performers must rate above average on 75 percent or more of the performance items and average on the remainder.

(2) Firms which differ from the overall average on at most 74 percent of the performance items are classified as average or near average performers. They are positioned near the above-average end of the continuum if they rate above average on up to 74 percent of the performance items and average on the remainder. In contrast, if they rate below average on up to 74 percent of the performance items, they were placed near the below-average end of the continuum.

(3) Firms which rate below average on 75 percent or more of the performance items are classified as below-average performers.

Items measuring performance were extracted from the "goals of business organizations" section of England's (1975) value questionnaire. These items were also identified by Petrof (1987) as ways in which small and medium enterprises contribute to economic development. The reliability of the performance instrument as measured by Cronbach's alpha is 86 percent.

Data Collection

Sample. The small business furniture manufacturing industry of New South Wales, Australia, was selected for empirical study. The industry is dominated by small firms and operates in a dynamic environment. It faces intense competition from imports, low levels of demand, resource shortages, drastic technological changes, and substantial up-and-down swings (Kelly 1992; Furniture Industry Working Party [FIWP] 1991). The industry is labor-intensive, with low levels of capital investment. Many manufacturers still employ the traditional tools of trade. Manufacturing and retail costs are high due to high raw materials, labor, and occupancy costs. Furniture is priced competitively and profit levels are low (Kelly 1992; FIWP 1991).

No sampling technique was employed as the entire population was surveyed. The population consisted of 659 small business furniture manufacturers drawn from the New South Wales telephone directory. The sample was restricted by firm size, industry, and location (that is, furniture manufacturers in New South Wales employing fewer than a hundred workers). This delimitation was necessary to control the impact of environmental variables and enterprise resources on business strategy. Delimiting the sample by industry ensured that levels of competition and technological development associated with different industries were controlled. Also, delimitations by location ensured that firms included in the study faced similar state government regulations, policies, and programs; infrastructural support; demographics such as population size; and other economic conditions which influence strategy. Strategy is also affected by the life cycle stage of the firm (Thompson and Strickland 1993). Although it was not possible to control life cycle stage attained by firms in the sample, an analysis of variance indicated no significant differences between the clusters examined on number of years in business (a surrogate measure of life cycle stage) at $p \leq 0.05$.

Survey Instrument and Procedures. Data for the study were obtained by mail survey. A four-page questionnaire was employed comprising four sections. Personal details of the respondents in the first section were followed by the personal value instrument. The strategy items were covered in the third section and the performance items in the fourth. Measures taken to encourage response included printing questionnaires on colored paper to attract attention; placing relatively simple and interesting questions before difficult ones; and providing postage-paid envelopes to encourage return of completed questionnaires. Participants were assured that their responses would be treated as confidential and only aggregate responses would be reported. All questions were close-ended and required ticking or circling the appropriate answer, thus minimizing completion time. The questionnaire was pilot tested by administering it first to students and staff of the Business Faculty of Southern Cross University and then to furniture manufacturers in the Lismore shire of New South Wales. Alterations were made in accordance with issues raised by respondents to the pilot survey. The final draft was reviewed by strategic management and psychology experts at Southern Cross University.

Response. There were 224 responses in total, a response rate of about 34 per cent. Of these, 192 responded within four weeks. Thirty-two participants returned their completed questionnaires after follow-up telephone calls to all participants. A non-response analysis (Zikmund 1991) showed no significant differences between initial and subsequent respondents on all items included in the analyses at $p < 0.05$) Subsequent respondents were used as surrogates for non-respondents in the non-response analysis (Armstrong and Overton 1977).

Analytical Techniques

The sample was divided into clusters based on the performance items, using Ward's minimum variance method, which is noted by several researchers to outperform other clustering methods (Punj and Stewart 1983; Edelbrock and Mclaughlin 1980). Differences between the clusters thus identified, with respect to performance, strategy, and personal values, were determined by multivariate analyses of variance using deviation contrasts. Bonferroni tests of significance were used as post hoc measures to con-

Table 1
Results of Cluster Analysis

Cluster	Number of Cases	Percent
1	32	14.3
2	60	26.8
3	69	30.8
4	63	28.1
Total	224	100.0

trol Type 1 errors. Significant comparisons were identified if their joint univariate confidence intervals did not contain zero. Performance, strategy, and personal value profiles were established for each cluster based on ratings of items representing each variable. The decision rules were employed to assign each cluster to a dimension of each variables as described in the literature review.

Results of the Analyses

The number of clusters selected was decided according to two criteria: (1) that there were sufficient cases in each cluster to provide for reasonable power in subsequent analyses (for example, $n \leq 30$); and (2) that each cluster was significantly different from the whole sample average on at least one performance item as established by multivariate analysis of variance using deviation contrasts. Based on these criteria, a four-cluster solution was selected. Distribution of firms among the four clusters is shown in Table 1. Results of the multivariate analyses of variance are presented in Tables 2 to 4.

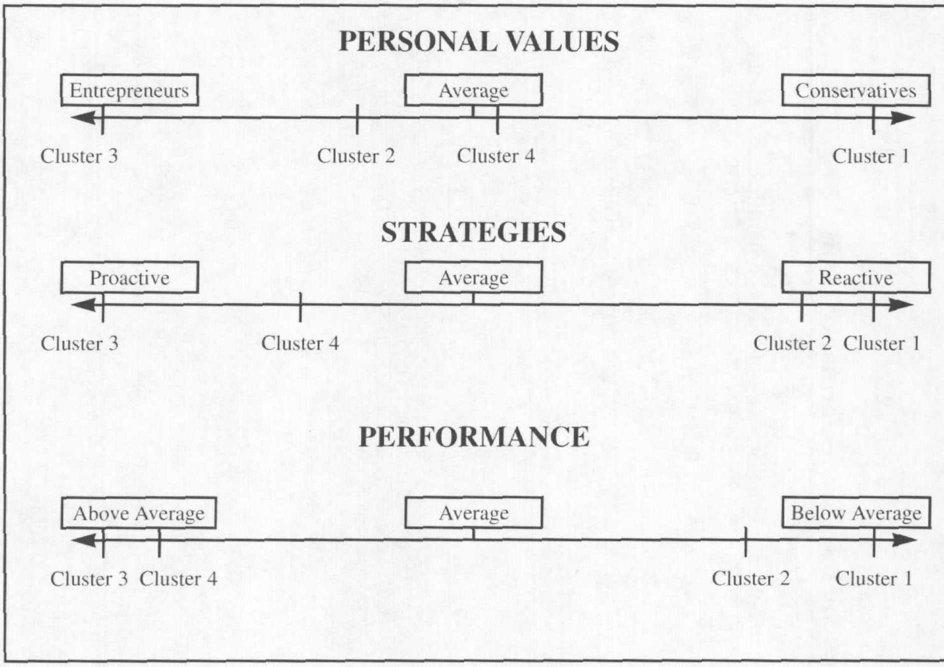
The multivariate test of significance of difference indicates overall significant differences among the four clusters on enterprise performance (Wilks' lambda = 0.11487; Approx F = 28.56762; DF =(24, 618.67,); p = 0.000). Each performance item also differs significantly among the four clusters at $p \leq 0.000$. Average ratings are close to the median (12.5) for many of the performance items. Community development has the lowest average rating (10) and business stability the highest (15). High ratings for business stability supports the fact that firms in the sample have been in business for an average of about 5 years.

Deviation contrast analyses for the performance items, presented in Table 2, show that firms in the first cluster rate lower than average on all performance items at $p \leq 0.005$. Firms in the second cluster rate below average on high productivity and business growth at $p \leq 0.005$. They also rate below average on job creation, although their rating on this performance measure is not significant at $p \leq 0.05$. Members of the third cluster rate above average on all the performance items at $p \leq 0.05$ and those of the fourth cluster are also above average on all performance items other than high profit rates at $p \leq 0.05$.

In accordance with the decision rule, firms in cluster one are classified as below-average performers and those in cluster three as above-average performers. Firms in cluster two are positioned to the right of the overall average as they rate below average on a number of performance measures. Firms in the fourth cluster are also classified as above average performers. However, they are placed after the third cluster as they rate below firms in the third cluster on many of the performance measures. The positions of the four clusters on the performance continuum are illustrated in Figure 3.

The four clusters differ significantly on all strategy items at $p \leq 0.05$, based on a multivariate test of significance (Wilks' lambda = 0.43667; Approx F = 1.3652;

Figure 3
Position of Clusters



DF = (96, 411.01); p = 0.021). On the whole, strategy items with means above the median, on a one to five scale, include product quality (4.50), customer service (4.21), product improvement (4.04), reinvestment of profits (3.81), new product development (3.72), assessment of employee performance (3.72), and use of brand names (3.68). These may represent activities crucial to survival in the dynamic small business furniture manufacturing industry. On the lower side of the median are activities such as consulting technical experts (2.19) and search for cheaper sources of financing (2.24). Low ratings on consulting technical experts supports findings that furniture manufacturers rarely make use of design specialists (Kelly 1992). Also, low ratings on search for cheaper sources of finance may reflect limitations in the availability of alternative sources of funding.

Results of the deviation contrast analysis, presented in Table 3, indicate that owner/managers in the first cluster rate below average on a number of activities, particularly on product improvement and product quality at $p \leq 0.005$. Their rating on revising marketing methods; attention to employee job satisfaction, well-being, and performance; and emphases on production efficiency and customer service are also below average at $p \leq 0.05$. Owner/managers in this cluster also rate below average on revising production methods, consulting management experts, using debt financing, providing clear personnel policies, networking, and searching for cheaper sources of financing. Their ratings on these activities are, however, not significant at $p \leq 0.05$. This cluster rates above average on "pricing products at market prices" at $p \leq 0.005$. Pricing products higher than the average market price without corresponding emphasis on product quality is

Table 2
Results of the Deviation Contrasts Analysis for Performance Items

Variables items	Cluster 1 *t*-value	Cluster 1 Significance	Cluster 2 *t*-value	Cluster 2 Significance	Cluster 3 *t*-value	Cluster 3 Significance	Cluster 4 *t*-value	Cluster 4 Significance	Mean	Std. Dev.
High productivity	-7.916	0.000**	-8.413	0.000**	13.289	0.000**	6.928	0.000**	12.28	6.16
Industry leadership	-7.894	0.000**	-1.828	0.069	9.897	0.000**	3.397	0.001**	11.24	5.82
Creating new jobs	-8.930	0.000**	-2.209	0.028	11.665	0.000**	3.518	0.001**	10.50	5.61
Business stability	-11.176	0.000**	-1.703	0.090	15.490	0.000**	2.390	0.018	14.76	6.36
High profit rates	-6.822	0.000**	0.257	0.797	10.016	0.000**	0.071	0.944	11.22	6.23
Lower cost of production	-9.114	0.000**	-1.085	0.279	11.142	0.000**	3.132	0.002*	12.98	5.49
Community development	-8.786	0.000**	-0.046	0.963	9.828	0.000**	2.890	0.004*	10.13	4.73
Business growth	-10.073	0.000**	-4.429	0.000**	16.296	0.004*	2.840	0.005*	12.35	6.02

* $p \leq 0.05$
** $p \leq 0.005$

not internally consistent (Porter 1991). This strategic orientation, coupled with low emphases on many proactive activities, explains the poor performance of owner/managers in this cluster. Also, lesser-than-average use of debt is consistent with the risk-averse strategic orientation exhibited by members of this cluster.

Owner/managers in the second cluster rate below average on reinvestment of profits, pricing products at market prices, and selling through retailers at $p \leq 0.05$. Their ratings on use of technical experts is also below average but not significant at $p \leq 0.05$. Owner/managers in this cluster are pursuing a low price strategy. However, their strategy lacks the synergistic benefits associated with emphases on related activities such as product cost (that is, production efficiency and employee productivity) and improved marketing efforts (that is, advertising, customer service, exploring new ways of marketing, and selling through retailers). These activities are important if unit costs are to be lowered and sales volume increased in consonance with the low price strategy. Low profit retention rates and relatively lower use of debt financing imply that firms in this cluster may be undercapitalized. This means working capital is limited and that production requirements and demand are not being met. This in turn explains the low ratings on high productivity and business growth. Poor performance of owner/managers in this cluster is therefore attributable to ineffective integration of activities. That is, average unit costs and low volume sales at low prices account for the low profit margins.

Members of the third cluster rate above average on revising marketing methods; assessing employee performance, productivity, and job satisfaction; and providing clearly laid down personnel policies at $p \leq 0.005$. They also rate above average on use of debt finance, search for cheaper sources of financing, adopting new production methods, product improvement, concern for employee welfare, advertising, and concern for efficiency in production at $p \leq 0.05$. Ratings on new product development, use of brand names, and networking are above average although not significant at $p \leq 0.05$. Above average emphases on many of the proactive activities indicate proactiveness in strategic orientation.

There is also internal consistency among the activities emphasized. Emphases on human resource management activities such as employee welfare, job satisfaction, performance, and productivity ensure that employees are motivated to work effectively and efficiently. This is complemented by efforts to lower unit costs (that is, concern for production efficiency) and to offer quality products at market prices (that is, product improvement, adoption of new production technologies, and average prices). These activities, in conjunction with emphasis on new product development, are consistent with marketing activities such as brand identification, revising marketing methods, and advertising aimed at creating awareness of new and superior products, attracting new customers, and increasing market share. Lack of distinction on product quality may be due to the overall high level of emphasis given to this activity by the average small business furniture manufacturer (SBFM). Capital requirements associated with these activities are consistent with the relatively greater use of debt financing by members of the third cluster and with their efforts to search for cheaper sources of financing. In addition, owner/managers in this cluster learn from experiences of other manufacturers in the industry and develop strategic alliances by networking.

Owner/managers in the fourth cluster rate above average on improving existing products, adopting new marketing techniques, and advertising products at $p \leq 0.05$. They rate below average on "pricing products at market prices" at $p \leq 0.05$. Ratings on revising production methods are above average but not sig-

Table 3
Results of the Deviation Contrasts Analysis for Strategy Items

	Cluster 1		Cluster 2		Cluster 3		Cluster 4			
Variables	*t*-value	Significance	*t*-value	Significance	*t*-value	Significance	*t*-value	Significance	Mean	Std. Dev.
Use debt financing	-2.227	0.027*	-0.330	0.742	3.063	0.003**	0.770	0.442	2.74	1.37
Search for cheaper financing	-2.150	0.033*	-1.158	0.249	2.813	0.005**	1.785	0.076	2.24	1.11
Reinvest profits	1.393	0.165	-2.536	0.012**	1.070	0.286	-0.567	0.572	3.81	1.09
Maintain large cash balances	-1.628	0.105	1.429	0.155	0.454	0.651	0.581	0.562	2.90	1.34
Revise production methods	-2.265	0.025*	1.197	0.233	2.595	0.010**	2.016	0.045	3.47	0.87
Revise marketing methods	-2.650	0.009**	0.970	0.333	3.650	0.000***	2.578	0.011**	3.21	0.85
Improve existing products	-3.762	0.000***	-0.025	0.980	2.896	0.004**	3.032	0.003**	4.04	0.83
Develop new products	1.060	0.291	-0.872	0.385	2.347	0.020*	1.823	0.070	3.72	1.13
Use brand names	-2.106	0.037*	-0.740	0.460	2.176	0.031	1.912	0.058	3.68	1.33
Involve employees in decision making	-1.155	0.250	-0.450	0.653	1.542	0.125	0.743	0.458	3.41	1.10
Consult technical experts	-0.779	0.437	-2.226	0.027*	1.660	0.099	1.930	0.055	2.19	1.24
Consult management experts	-2.293	0.023*	1.101	0.272	1.715	0.088	0.827	0.409	3.09	1.22
Use clear personnel policies	-2.161	0.032*	-1.733	0.085	3.609	0.000***	1.613	0.109	2.65	1.32
Emphasize employee welfare	-2.472	0.014**	-0.012	0.991	3.081	0.002**	0.797	0.426	2.99	1.18
Assess employee performance	-2.831	0.005**	-0.023	0.982	4.116	0.000***	0.331	0.741	3.72	1.09
Assess employee job satisfaction	-3.238	0.002**	0.175	0.861	3.618	0.000***	1.262	0.209	3.52	1.00
Advertise products	-1.889	0.061	-1.476	0.142	2.721	0.007**	2.697	0.008**	3.04	1.22
Extend customer credit	-1.202	0.231	-0.914	0.362	1.028	0.305	1.832	0.067	2.94	1.47
Sell through retailers	1.090	0.277	-2.423	0.016**	1.090	0.277	-0.230	0.818	2.79	1.53
Emphasize product quality	-3.237	0.001***	1.640	0.103	-0.387	0.699	1.619	0.107	4.50	0.71
Price products at market prices	4.624	0.000***	-2.610	0.010**	-1.563	0.120	-2.921	0.004**	3.06	0.76
Emphasize customer service	-3.082	0.0002**	-0.142	0.887	1.981	0.049	1.259	0.210	4.21	0.96
Optimize production efficiency	-2.508	0.013**	-0.433	0.666	2.855	0.005**	1.532	0.127	3.56	1.10
Maximize employee productivity	-1.775	0.078	-0.925	0.356	3.777	0.000***	-0.027	0.978	3.56	1.01
Network	-2.090	0.038*	0.114	0.909	2.226	0.027*	0.924	0.357	2.86	1.05

*** $p \leq 0.005$
** $p \leq 0.05$
* $p \leq 0.20$

nificant at $p \leq 0.05$. Owner/managers in this cluster are also pursuing a low price strategy. However, unlike those of the second cluster, these managers emphasize activities that complement this strategy. These activities include creating awareness of their products and prices through advertising (to increase sales volume), and improving their products to meet quality standards in the marketplace. Failure to emphasize activities associated with cost reduction, such as production efficiency and employee productivity, explains the average profit rates of members of this cluster. Profit margins are reduced by low prices, increased costs of advertising and product improvements, and by average unit cost of production.

Strategies of owner/managers in the first cluster are reactive, as many of the proactive activities are under-emphasized. In contrast, strategies of owner/managers in the third cluster are proactive, as they place above average emphases on many of the proactive activities. Owner/managers in cluster two are on the lower side of the overall average on a number of the proactive activities and are placed near the reactive end of the proactive-reactive continuum. Owner/managers in the fourth cluster are placed near the proactive end of the continuum, as they rate above average on a number of proactive activities and average on the others. The positions of the four clusters on the reactive-proactive continuum are as shown in Figure 3.

The multivariate test of significance of difference for personal values also indicates overall significant differences among the four clusters on personal values (Wilks' lambda 0.53415; Approx F = 1.8743; DF =(66, 529.43); p = 0.000). Overall means show positively skewed distributions for many of the personal value items. On a one to five scale, items with the highest means include honesty (4.87), trust (4.80), personal vitality (4.74), responsibility (4.70), hard work (4.70), competence (4.62), achievement (4.61), loyalty (4.60), and optimism (4.58). These are important values for staying viable in any business, and high ratings on these values are supportive of the fact that businesses in the sample have survived an average of about five years. Relatively lower ratings for aggressiveness (3.05) and power (2.94) are reflective of the national culture (England 1975; DeCarlo and Lyon 1980; Birch 1987). The mean rating for risk-taking (3.65) also supports findings that small business owners are moderate risk-takers (Brockhaus 1980; Swayne and Tucker 1973).

The deviation contrast analysis for the personal value items indicate that owner/managers in the first cluster rate below the overall average on achievement, ambition, loyalty, trust, competence, personal growth, innovation, honesty, responsibility, hard work, and optimism at $p \leq 0.005$. They are also below average on creativity at $p \leq 0.05$. Their ratings on affection, competition, compassion, independence, and personal vitality are low but not significant at $p \leq 0.05$. Members of this cluster are described as conservatives because they rate below average on more than 50 percent of the value items described as entrepreneurial.

Owner/managers in the second cluster rate above average on personal growth, affection, and trust at $p \leq 0.05$. Their high ratings on creativity and honesty and low ratings on power are just below significance at $p \leq 0.05$. They exhibit combinations of conservative and entrepreneurial personal values and are placed near the entrepreneurial end of the continuum.

Owner/managers in the third cluster rate above average on values such as ambition, power, loyalty, competence, competition, personal growth, innovation, responsibility, hard work, and optimism at $p \leq 0.005$. Their ratings on achievement, independence, aggressiveness, trust, and honesty are also above average at $p \leq 0.05$. Owner/managers in this cluster rate above average on equality, although this is not significant at $p \leq 0.05$. They are described as entrepreneurs because they rate above average on more than 50 percent of the entrepreneurial value items and average on the others.

Members of cluster four are similar to the overall average on all value items other than hard work and equality. They rate above average on hard work at $p \leq 0.005$. Their ratings on equality are low but not significant at $p \leq 0.05$. They are placed near the mid-point of the entrepreneurial- conservative scale as their ratings are similar to the overall average on many of the personal value items.

Discussion

Clusters One and Three

In this section, clusters are compared in pairs to determine the extent to which they support the hypotheses. Ratings of owner/managers in the first and third clusters provide support for many of the hypotheses. Activities such as product improvement, new product development, adopting new production methods, emphases on employee productivity and production efficiency are more common with owner/managers in the third cluster (above-average performers) than with owner/managers in the first cluster (below-average performers). Product quality is less emphasized by owner/managers in the first cluster than by owner/managers in the third cluster. Marketing and financing activities such as advertising, use of brand names, exploring new marketing methods, use of debt financing, and search for cheaper sources of financing are given greater emphases by the above average performers (cluster three) than by the below-average performers (cluster one). Owner/managers in the first cluster are less concerned with customer service (an important activity for surviving in the industry) than owner/managers in the third cluster. Hypothesis 10 is not supported by the results—there are no differences between the two clusters on extending customer credit. The low overall rating (2.94) on this activity may imply that the large working capital investment required for furniture production makes it impracticable to provide extensive credit to customers.

Activities dealing with human resource management such as concern for employee welfare, job satisfaction, and performance, and providing clear personnel policies are more common with members of the third cluster than with those of the first cluster. Owner/managers in the third cluster also give greater attention to networking than those in the first cluster. There are no differences between the two clusters on the extent to which they involve employees in decision-making. Both clusters rate similar to the overall average (3.41) on this activity. Reluctance to involve employees in decision-making may be explained by owner/managers' desire for independence and control (Blais and Toulouse 1990). Owner/managers in the first cluster do not consult with management experts as often as those in the third cluster, supporting Hypothesis 18. However, ratings of owner/managers in the third cluster on this activity are similar to the overall average (3.09). Again, desire for independence and control as well as the cost of employing these services may explain a reluctance to use management consultants more often.

Comparisons of owner/managers in the first and third clusters also provide support for many of the hypotheses associated with personal values. Owner/managers in the third cluster (the above-average performers and proactive strategists) place greater value on achievement, ambition, aggressiveness, power, and competition than owner/ managers in the first cluster (below-average performers and reactive strategists). Also, innovation, personal growth, optimism, and competence are more valued by members of cluster three than by members of cluster one. Creativity is rated lower by owner/managers in the first cluster than by owner/managers in the third. Both clusters rate similar to the overall average on social recognition and risk-taking. Low overall ratings on these two value items are reflective of the national culture. High achievers are not given as much recognition in Australia as in countries such as the U.S., a phenomenon referred to as the "tall poppy syndrome" in Australia. Since owner/managers in the third cluster use more debt financing than those in the first cluster, it was expected that they would place greater value on risk-taking. Perhaps risk-taking is not highly valued by owner/managers but arises as a consequence to their entrepreneurial values and pursuit of proactive strategies. The overall average rating on risk-taking (3.65) supports findings that entrepreneurs are moderate risk-takers (Swayne and Tucker 1973). Responsibility, honesty, trust, loyalty, independence, and hard work are more valued by owner/managers in the third cluster than by owner/managers in the first. However, Hypotheses 35, 36, and 37 are not supported by the results of the analyses. Members of the first cluster rank values associated with compassion and affection lower than do those of the third cluster. Also, members of the third cluster value equality more than the first. These three value items may be positively related to attitude to employees and reflected in human resource management practices. Owner/managers in the third cluster, however, did not differ from the overall average on compassion and affection. Also, those in the first cluster rate similar to the overall average on equality. High overall average ratings on these value items are reflective of the national culture. England (1975) found that Australian managers are more humanitarian than their counterparts in other countries.

Clusters Two and Three

Many of the hypotheses are also supported by comparing the second and third clusters. The second cluster is positioned close to the below-average end of the performance continuum. Performance levels of owner/managers in this cluster contrast with the above-average performance levels of the third cluster. Owner/managers in the second cluster rate similar to the overall average on activities such as product improvement, revising production methods, emphases on production efficiency and employee productivity, exploring new marketing methods, and advertising. They also rate averagely on the human resource management activities. In contrast, these activities are rated above average by owner/managers in the third cluster. Other activities which distinguish the two clusters from each other include reinvestment of profits, use of technical experts, selling through retailers, and product pricing. Members of the second cluster rate below-average on these activities compared with the average and above-average ratings of members of the third cluster. As a whole, activities of the third cluster are more consistent and integrate better as a strategy than those of the second cluster.

Fewer of the hypotheses associated with personal values are supported by comparing owner/managers in the second and third clusters. Both place high values on trust, personal growth, and honesty. Owner/managers in the second cluster are more affectionate and creative but have less value for power than those in the third cluster. They are more humanitarian than members of the third cluster. High ratings on creativity and personal growth indicate that owner/managers in the second cluster have entrepreneurial potential and may improve performance if assisted with management of their firms.

Clusters One and Four

Members of the fourth cluster achieved higher performance levels than those of the first cluster. Comparisons of the two clusters support some of the hypotheses. Average ratings of owner/managers in the fourth cluster on many of the strategy and personal value items contrast with below-average ratings of the first cluster. The two clusters rate similar to the average SBFM on profit retention, involving employees in decision-making, selling through retailers, new product development, and consulting technical experts. Ratings on involving employees in decision-making are

Table 4
Results of the Deviation Contrasts Analysis for Personal Value Items

Variables	Cluster 1		Cluster 2		Cluster 3		Cluster 4			
	t-value	Significance	*t*-value	Significance	*t*-value	Significance	*t*-value	Significance	Mean	Std. Dev.
Achievement	-3.235	0.001***	0.766	0.445	3.033	0.003**	1.173	0.242	4.61	0.56
Independence	-2.086	0.038*	0.625	0.533	2.784	0.006**	-0.222	0.824	4.46	0.62
Ambition	-3.308	0.001***	-0.133	0.894	3.572	0.000***	1.702	0.090	4.13	0.92
Aggressiveness	-0.791	0.430	-1.576	0.117	2.769	0.006**	0.117	0.907	3.05	1.40
Equality	-0.796	0.427	2.082	0.039*	0.482	0.630	-2.185	0.030	3.89	1.09
Power	-0.930	0.353	-2.345	0.020*	3.367	0.001***	0.551	0.582	2.94	1.15
Creativity	-2.611	0.010**	2.198	0.029*	1.102	0.272	0.624	0.533	4.38	0.81
Vitality	-2.288	0.023*	1.133	0.259	1.755	0.081	0.595	0.553	4.74	0.57
Social recognition	-1.187	0.237	0.170	0.865	1.669	0.097	-0.014	0.989	3.53	1.06
Compassion	-2.294	0.023*	1.102	0.272	1.383	0.168	1.012	0.313	4.16	0.92
Loyalty	-4.702	0.000***	1.781	0.077	3.507	0.001***	1.905	0.058	4.60	0.72
Trust	-4.612	0.000***	2.447	0.015**	2.960	0.003**	1.607	0.110	4.80	0.54
Competence	-3.878	0.000***	1.683	0.094	3.677	0.000***	0.550	0.583	4.62	0.63
Competition	-2.396	0.018*	-1.836	0.068	4.885	0.000***	0.764	0.446	3.82	0.93
Risk-taking	-0.746	0.456	-0.120	0.904	1.474	0.142	-0.196	0.845	3.65	0.85
Affection	-2.413	0.017*	2.811	0.005**	0.403	0.687	0.367	0.714	4.12	0.90
Personal growth	-4.620	0.000***	2.622	0.009**	3.516	0.001***	0.868	0.386	4.31	0.85
Innovation	-4.642	0.000***	1.514	0.132	3.808	0.000***	1.791	0.075	4.34	0.76
Honesty	-3.910	0.000***	2.191	0.030*	2.874	0.005**	0.870	0.356	4.87	0.44
Responsibility	-5.868	0.000***	1.356	0.177	6.016	0.000***	1.643	0.102	4.77	0.49
Hard work	-5.765	0.000***	0.293	0.770	5.396	0.000***	3.247		4.70	0.54
Optimism	-4.002	0.000***	0.519	0.604	3.934	0.000***	1.726	0.086	4.58	0.65

*** $p \leq 0.005$
** $p \leq 0.05$
* $p \leq 0.20$

common to all clusters. Activities such as consulting with technical experts and selling through retailers have low overall average ratings and do not appear to have a strong influence on performance in the small business furniture manufacturing industry. Thus the two clusters differ on activities critical to survival in the industry. Also, product prices are lower for the fourth cluster than for the first cluster. Compared with the high price, low quality strategies of the first cluster, activities undertaken by owner/managers in the fourth cluster combine into more coherent strategies. In terms of personal values, owner/managers in the first cluster rate lower than those of the fourth cluster on many of the items. Ratings of the two groups on risk-taking and social recognition are similar to the overall average and to ratings of the other two clusters. Members of clusters one and four also place average values on aggressiveness and power, portraying general Australian values.

Clusters Two and Four

Clusters two and four are positioned within the two ends of the performance, strategy, and personal value continuum. However, firms in the fourth cluster rate higher than those of the second cluster on all performance items other than high profit rates. The fourth cluster is positioned at the above-average end of the performance continuum and the second cluster, the below average end. The two clusters can therefore be compared. However, comparisons of the two clusters do not support many of the hypotheses as both rate similar to the overall average on many of the strategy and personal value items. Members of both clusters pursue low price strategies. However, activities of owner/managers in the fourth cluster are more coherent as a strategy than those of owner/managers in the second cluster. Owner/managers in the fourth cluster place greater emphases on product improvement, advertising, and revising marketing methods. Conversely, the second cluster has lower profit retention rates and makes lesser use of technical experts. Thus, unlike members of the second cluster, those of cluster four complement their low price strategies with efforts to improve and market their products. Both clusters need greater emphasis on reducing production costs in order to maximize returns from their low price strategies.

In terms of personal values, members of the fourth cluster place greater value on hard work. In contrast, members of the second cluster are more humanistic and entrepreneurial. They place greater value on trust, honesty, creativity, personal growth, and affection and lesser value on power. Since owner/managers in the fourth cluster have higher performance levels and are more proactive in strategic orientation, it was expected that they would exhibit more entrepreneurial values than the second cluster. However, comparisons of the two clusters indicate that owner/managers who place within the two ends of the strategy and personal value continuum are not clearly distinguishable.

In general, comparisons of clusters on opposite ends of the performance continuum provide support for many of the hypotheses, thus supporting the propositions. The research therefore shows that personal values of owner/ managers, the strategies they adopt in operating their firms, and the performance outcomes of their businesses are empirically related. Further, owner/managers with above-average performance pursue proactive strategies and have entrepreneurial values. In contrast, below average performers are reactive in strategic orientation and have conservative values.

Policy Implications

The research findings have implications for the delivery of programs, financing, and management assistance for small enterprises, as well as for entrepreneurial development. Although it would be impractical to formulate policies and to design assistance programs for different personal value types, the *delivery* of assistance programs can be specially tailored to personal value types. Entrepreneurial owner/managers are more likely to take advantage of assistance programs. They should be encouraged to pursue their objectives of growth, technological advancement, and/or industry leadership. However, their proactive decisions should be scrutinized to ensure that these decisions do not lead to failure. Delivery of assistance programs will be most effective through bank managers and accountants. These are the people most likely to be consulted by conservative owner/managers. Caution should be exercised in encouraging too rapid a growth. This is because conservative owner/managers may not be capable of managing growth. Assistance should be focused on the day-to-day management of their firms to ensure viability.

Business strategies and performance levels should be used to screen firms seeking financial assistance. Entrepreneurs are likely to require financial assistance in pursuit of new product development and/or improvement in production technologies and marketing techniques. They are also likely to be able to manage their debts effectively. Financial assistance to conservative owner/mangers should be accompanied by management and technical assistance.

Management consultants should take account of differences in personal values in dealing with their clients. Entrepreneurial owner/managers are likely to approach consultants with ideas for growth and development. These ideas must be critically assessed to ensure feasibility before implementation is encouraged. Conservative owner/managers are likely to require assistance with the management of their businesses.

The research also has implications in the area of networking. Networking will be effective if targeted to groups. Whereas conservative owner/managers may gain from interacting with entrepreneurs, the opposite may not hold. Entrepreneurs may gain little from interacting with conservatives, as entrepreneurs would have already dealt with (by solving or avoiding) the micro-level problems that plague conservative owner/managers. Also, the business strategies of entrepreneurs may be too sophisticated for conservatives to emulate at their levels of management. Networking would be more effective if it involved entrepreneurs interacting with other entrepreneurs and conservatives with other conservatives. This dichotomy will occur naturally, as entrepreneurs will embrace a networking program without much encouragement. Conservatives, in contrast, will have to be encouraged to join a networking group. They could be encouraged to form their own networking groups and to draw from experiences in the entrepreneurial group.

Conservative owner/managers should not be pushed into pursuing growth objectives. However, if they desire growth, they should be encouraged to develop any latent entrepreneurial values. These include ambition, achievement-orientation, creativity, and reliability. They will also require managerial training to enable them to improve their management skills.

Owner/managers with entrepreneurial potential such as those in clusters two and four are open to change and can be easily encouraged to improve their performance through improvements in strategy. Owner/managers in these categories will be more receptive to entrepreneurial development programs.

Conclusion

The research indicates that owner/manager personal values, business strategies, and enterprise performance are empirically related. The research also demonstrates that high performers are proactive in strategic orientation and exhibit entrepreneurial personal values. In contrast, lower-than-average performers are reactive in strategic orientation and exhibit conservative personal values. Between these two extreme groups are owner/managers with varying degrees of entrepreneurial values who adopt combinations of proactive and reactive strategies and achieve average or near-average performance. The research shows that more use should be made of personal values when considering development of the small enterprise sector.

Limitations

Although an association between personal values, strategies, and performance is indicated, it is not possible to infer causality. That is, the research does not indicate the direction of associations among the three sets of variables. Further research is required to clarify the direction of relationships implied in this research. Also, the self-report, single administrative nature of the data may pose limitations to the relationships portrayed. Responses were vulnerable to response consistency bias, as respondents could have consistently rated all variables either high or low. Future research should address the issue of response consistency bias in questionnaire design.

References

Allport, G. W. (1961). *Patterns and Growth in Personality*. New York: Holt, Rhinehart and Winston.

Allport, G.W., P.E Vernon, and G. Lindzey (1960). *A Study of Values: A Scale for Measuring The Dominant Interests in Personality*. Boston, Mass.: Houghton Mifflin.

Anderson, J.C., G. Cleverland, and R.G. Schroeder (1989). "Operations Strategy: A Literature Review," *Journal of Operations Management* 8 (2), 133-158

Andrew, K. R. (1980). *The Concept of Corporate Strategy*. Homewood, Illinois: Richard D. Irwin.

Armstrong, J.S., and T.S. Overton (1977). "Estimating Non-Response Bias In Mail Surveys," *Journal of Marketing Research* (August), 396-402.

Bamberger, I. (1983). "Value Systems, Strategies and Performance of Small- and Medium-Sized Firms," *International Small Business Journal* 1(4) (Summer), 25-39.

Bandura, A. (1986). *Social Foundations of Thought and Action*. Englewood-Cliffs, New Jersey: Prentice Hall.

Birch, D. L. (1987). "Yankee Doodle Dandy," *Inc*. 9 (July), 33, 36.

Blais, Roger A., and Jean-Marie Toulouse (1990). "National, Regional or World Patterns of Entrepreneurial Motivation?" *Journal of Small Business and Entrepreneurship* 7(2), January-March, 3-20.

Brockhaus, R.A. (1980). "Psychological and Environmental Factors which Distinguish the Successful From the Unsuccessful Entrepreneur: A Longitudinal Study," *Academy of Management Proceedings*, 368-372.

Chaganti, R., R. Chaganti, and V. Mahajan (1989). "Profitable Small Business Strategies Under Different Types of Competition," *Entrepreneurship Theory and Practice* 13 (3), 21-35.

Chell, E., J. Haworth, and S. Brearley (1991). *The Entrepreneurial Personality: Concepts, Cases and Categories*. London: Routledge.

Conant, J.S., M.P. Mokwa, and P.R. Varadarajan (1990). "Strategic Types, Distinctive Marketing Competencies and Organisational Performance: A Multiple Measures based Study," *Strategic Management Journal* 11, 365-383.

Covin, J.G., and D. P. Slevin (1986). "The Development and Testing of Organizational Level Entrepreneurial Scale," in *Frontiers of Entrepreneurship Research*. Ed. R. Ronstadt, J. Hornaday, R. Peterson, and K. Vesper. Wellesley, Massachusetts: Babson College, Center for Entrepreneurship Studies, 623-239.

—— (1988). "The Influence of Organizational Structure on the Utility of an Entrepreneurial Top Management Style," *Journal of Management Studies* 25 (3), 217-234.

—— (1989). "The Strategic Management of Small Firms in Hostile and Benign Environments," *Strategic Management Journal* 10, 75-87.

Covin, J. G. (1991). "Entrepreneurial Versus Conservative Firms: A Comparison of Strategies and Perfor-

mance," *Journal of Management Studies* 28 (5), 439-462.
Cunningham, J. B., and J. Lischeron (1991). "Defining Entrepreneurship," *Journal of Small Business Management* 29 (1), 450-61.
DeCarlo, J.F., and P.R. Lyon (1980). "Towards a Contingency Theory of Entrepreneurship," *Journal of Small Business Management* 18 (3), 37-42.
Dess G. G., and R.B. Robinson (1984). "Measuring Organizational Performance in the Absence of Objective Measures: The Case of Privately-Held Firm and Conglomerate Business Unit," *Strategic Management Journal* 5, 265-273.
Edelbrock, C., and B. McLaughlin (1980). "Hierarchical Cluster Analysis Using Interclass Correlations: A Mixture Model Study," *Multivariate Behavioural Research* 15, 299-318.
England, G. W. (1975). *The Manager and His Values: An International Perspective from the United States, Japan, Korea, India and Australia*. Cambridge, Massachusetts: Ballinger Publishing Co.
Feather, N. T. (1988a). "From Values to Actions: Recent Application of the Expectancy-Value Model," *Australian Journal of Psychology* 40 (2), 105-124.
—— (1988b). "The Meaning and Importance of Values: Research with the Rokeach Value Survey," *Australian Journal of Psychology* 40(4), 377-390.
Fiorito, S.S., and R.W. Laforge (1986). "A Marketing Strategy Analysis of Small Retailers," *American Journal of Small Business* 10(4), 7-17.
Freeman, R.E., D.R. Gilbert, and Hartman (1988). "Values and the Foundations of Strategic Management," *Journal of Business Ethics* 7, 821-834.
Furniture Industry Working Party (FIWP) (1991). *The Australian Furniture Industry*. A paper for the Furniture Industry Forum held at the Flemington Racecourse. Melbourne: Australian Manufacturing Council.
Galbraith, C., and D. Schendel (1983). "An Empirical Analysis of Strategy Types," *Strategic Management Journal* 4, 153-173.
Gupta, A. K., and V. Govindaraja (1984). "Business Unit Strategy, Managerial Characteristics, and Business Unit Effectiveness at Strategy Implementation," *Academy of Management Journal* 27, 25- 41.
Guth, W. D., and R. Taguiri (1965). "Personal Values and Corporate Strategy," *Harvard Business Review* 43(5), 123-132.
Hambrick, D. C. (1983). "High Profit Strategies in Mature Capital Goods Industries: A Contingency Approach," *Academy of Management Journal* 26(4), 687-707.
Holmes, S., and D. Nicholls (1990). *Small Business and Accounting*. Sydney, Australia: Allen and Unwin.
Johnson, G., and K. Scholes (1984). *Exploring Corporate Strategy*. London: Prentice-Hall International.
Kamakura, Wagner A., and Jose Mazzon (1991). "Values Segmentation: A Model for the Measurement of Values and Value Systems," *Journal of Consumer Research* 18 (September), 208-217.
Karagozoglu, N., and W. Brown (1988). "Adaptive Responses by Conservative and Entrepreneurial Firms," *Journal of Product Innovation Management* 5, 269-281.
Kelly, T. (1992). *The Australian Furniture Industry, Structure, Strategy and Design*. Unpublished Master's Dissertation, University of Technology, Sydney, Australia.
Kent, P. (1994). "Management Advisory Services and the Financial Performance of Clients," *International Journal of Small Business* 12(4), 45-58.
McClenahen, D.C. (1991). "People (Still) The Competitive Advantage," *Industry Week* 240 (May 6), 54-57.
Merz, Russell G., and Matthew Sauber (1995). "Profiles of Managerial Activities in Small Firms," *Strategic Management Journal* 16 (7), 551-564.
Miles, R. E., and C.C. Snow (1978). *Organizational Strategy, Structure and Process*. New York: McGraw-Hill.

Miller, D., and J.M. Toulouse (1986). "Chief Executive Personality and Corporate Strategy and Structure in Small Firms," *Management Science* 32(11), 1389-1409.

Miller, D. (1983). "The Correlates of Entrepreneurship in Three Types of Firms," *Management Science* 29, 770-791.

Miller, D., and P.H. Friesen (1983). "Strategy-Making and Environment, The Third Link," *Strategic Management Journal* 4, 221-235.

Mintzberg, H., and J. Q. Quinn (1991). *The Strategy Process, Concepts, Contexts, and Cases*. Second edition. Englewood Cliffs, New Jersey: Prentice-Hall.

Montanari, J. R. (1978). "Managerial Discretion: An Expanded Model of Organizational Choice," *Academy of Management Review* 9, 128-137.

Nath, D., and D. Sudharshan (1994). "Measuring Strategic Coherence Through Patterns of Strategic Choices," *Strategic Management Journal* 15, 43-61

Neck, P.A. (1987). "Policy Issues," in *Small Enterprises Development: Policies and Programs*. Ed. Phillip A. Neck and Robert E. Nelson. Management Development Series No. 14, Second Revised Edition. Geneva, Switzerland: International Labour Office.

O'Farrell, P.N., and D.W.N. Hitchins (1988). "Alternative Theories of Small-Firm Growth: A Critical Review," *Environment and Planning* 20, 1365-1382.

Olson, Philip D., and Donald Bokor (1995). "Strategy Process-Content Interaction: Effects on Growth Performance in Small Start-up Firms," *Journal of Small Business Management* 33(1), 34-44.

Pearce, J. A., and R.B.J. Robinson (1985). *Strategic Management: Strategy Formulation and Implementation*. Homewood, Illinois: Richard D. Irwin, Inc.

Petrof, J.C. (1987). "Small Enterprises and Economic Development: The Case for Government Intervention," in *Small Enterprises Development : Policies and Programs*. Ed. Phillip A. Neck and Robert E. Nelson. Management Development Series No. 14, Second Revised Edition, Geneva, Switzerland: International Labour Office.

Porter, M.E. (1980). *Competitive Strategy: Techniques for Analysing Industries and Competitors*. New York: Free Press.

—— (1991). "Towards a Dynamic Theory of Strategy," *Strategic Management Journal* 12, 95-117.

Posner, B. Z., and W.H. Schmidt (1992). "The Values of American Managers Then and Now," *Management Review* (February), 37-40.

Punj, G., and D.W. Stewart (1983). "Cluster Analysis in Marketing Research: Review and Suggestions for Applications," *Journal of Marketing Research* (May), 135-146.

Robinson, R. B., and J.A. Pearce (1988). "Planned Patterns of Strategic Behaviour and Their Relationship to Business-Unit Performance," *Strategic Management Journal* 9, 43-60.

Rokeach, M. (1973). *The Nature of Human Values*. London: The Free Press, Collier MacMillan Publishers.

Schuler, R.S., P.J. Dowling, J.P. Smart, and V. L. Huber (1992). *Human Resource Management in Australia*. Second Edition. Australia: Harper Educational Publishers.

Silver, D. A. (1988). "A Portrait of the Entrepreneur," *Accountancy (UK)* 102 (February), 77-80.

Slevin, D. P., and J.G. Covin (1987). "The Competitive Tactics Of Entrepreneurial Firms In High and Low Technology Industries," in *Frontiers of Entrepreneurship Research*. Ed. N.C Churchill, B.A. Kirchhoff, O.J. Krasner, and K.H. Vesper, Proceedings from the 7th Annual Babson College Entrepreneurship Research Conference. Wellesley, Massachusetts: Babson College.

Smith, N.R. (1967). *The Entrepreneur and His Firm: The Relationship Between the Type of Man and Type of*

Company. East Lansing, Michigan: Michigan State University Press.

Steiner, G.A., J.B. Miner, and R.G. Edmund (1986). *Management Policy and Strategy: Text, Readings and Cases*. Third Edition. New York: Macmillan Publishing Co.

Swayne C., and W. Tucker (1973). *The Effective Entrepreneur*. Morristown, New Jersey: General Learning Press.

Thompson, A. A., and A.J. Strickland III (1993). *Strategic Management, Concepts and Cases*. Fifth Edition. Homewood, Illinois: Richard D. Irwin, Inc.

—— (1986). *Strategy Formulation and Implementation: Task of the General Manager*. Plano, Texas: Business Publications, Inc.

Vickery, S.K., C. Droge, and R.E. Markeland (1993). "Production, Competence, and Business Strategy: Do They Affect Business Performance?" *Decision Science* 24(2), March/April, 435-455.

Williams, R. M. (1968). "Values," in *International Encyclopedia of Social Sciences*. Ed. D. Sillis. New York: MacMillan, 203-207.

Wright, P., M. Kroll, B. Kedia, and Pringle (1990). "Strategic Profiles, Market Share and Business Performance," *International Management* (May/June), p. 23-28.

Zikmund, W.G. (1991). *Business Research Methods*. Third Edition. Orlando, Fla.: The Dryen Press.

Zeithaml, C. P., and L.W. Fry (1984). "Contextual and Strategic Differences Among Mature Business in Four Dynamic Performance Situations," *Academy of Management Journal* 27, p. 841-860.