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## Expanding the scope of methodologies used in entrepreneurship research

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**Abstract:** If we accept that entrepreneurs are influenced by culture, then the simplest possible unit of research for understanding entrepreneurship is not the entrepreneur. Nor is it a laboratory study of individuals nor even a field study comparing entrepreneurs, but rather it is useful to have a case study in which the important aspects of environment are analysed and understood. It is doubtful, then, that a mail survey or even interviews could be sufficient for a researcher to truly gain a holistic understanding of the entrepreneurial process.

**Keywords:** research methodology; qualitative methods; entrepreneurship.

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This paper discusses an alternative to the traditional hypothetico-deductive approach. It recommends the application of a more inductive approach, making use of more non-quantitative data. Having traced the successful development and implementation of qualitative methods in other social sciences, including anthropology and sociology, we demonstrate that the use of inductive and non-quantitative research is a useful strategy, applicable to research in small business and entrepreneurship as well. Advantages of qualitative (as opposed to quantitative) research, include the ability to learn directly from the research subject, thereby reducing measurement errors common in survey studies which often need to make assumptions. The result is a deeper holistic understanding. Such an approach, because of the interaction between researcher and subject, also reduces Type III error (asking the wrong question) and Type IV error (solving the wrong problem). Effective in yielding internal validity, a qualitative approach can also be used to verify validity of quantitative research.

## **1 The entrepreneur and the environment**

According to Cantillon (1756), the entrepreneur is the one who takes the risk of *being self-employed*. Knight (1921) described the entrepreneur as a taker of *non-quantifiable risks*, and profits as a reward that owner-managers receive for bearing risk. Weber (1930) described entrepreneurship as the expression of *cultural values*. Schumpeter (1931) emphasised the *innovative* nature of the entrepreneur, an individual experimenting with new combinations. McClelland (1961) interpreted entrepreneurship as the expression of *high need for achievement*. Hagen (1962) saw entrepreneurship not as a goal in itself, but as a means *to obtain recognition in compensation for social marginality*. Barth (1967) described the entrepreneur as a *social agent for change*.

Considerable research has been done on the *personality* of the entrepreneur. Examples include Begley and Boyd (1987), Brockhaus (1982), Brockhaus and Horwitz (1986), Gasse (1977), Kets de Vries (1977), Sexton and Bowman (1985) and Sexton and Upton (1990). Whereas much of this behavioural literature suggests the entrepreneur usually has certain characteristics which are innate, to others including Gibb (1986) and Knight (1987), entrepreneurial behaviour can be learned.

Summarising the resolutions of an international summit of leading researchers on entrepreneurship, Leighton (1988) concluded that “studying entrepreneurs as individuals is a dead end” and “environment, culture, etc., the context of entrepreneurial behaviour is important” (p.74). Shapero and Sokol (1982), Shapero (1984) and Peterson (1988) had given credibility to the concept that the environment may encourage or discourage entrepreneurial activity. Dana (1990), Gasse and Neff (1990), Soon and Huat (1990), Giamartino (1991), Dana (2002), and Bjørklund (2004) are examples of entrepreneurship research conducted in contexts where sensitivity to the cultural environment is important.

A methodological difficulty in conducting such research is that North American-style questionnaires may be ambiguous in foreign environments, and another problem with questionnaires is that their low response may yield data which is non-representative of some environments. Telephone surveys also have limitations as in some areas of the world very few people have phones. Furthermore, the conceptual tools with which an investigator approaches research, influences what is observed. To help avoid selective observation, a non-reactive mode of inquiry is necessary. The objective of this paper is to promote naturalistic inquiry; we believe that qualitative/non-quantitative empirical data

resulting from naturalistic inquiry may help researchers and policy makers better understand entrepreneurship in the context of its environment.

## **2 Research and its purpose**

Considerable research is taking place to learn about entrepreneurs and their activities. Having recognised the social and economic value of entrepreneurial activity, various governments around the world have been trying to foster entrepreneurship. Australia (Meredith, 1984), Canada (Dana, 1988) and the UK (Gibb, 1986–1987) are among the classic examples.

Loucks (1988) pointed out, however, that entrepreneurship is culture-bound and that policy on entrepreneurship is therefore culture-specific. Replicating a US-developed conceptual framework is ethnocentric, as this will not function effectively in all environments. Applying a universal framework across varied cultures would be naive. If policy-makers are to formulate policies which will actively create entrepreneurs and increase the wealth of nations, then research is necessary to understand the values and aspirations of cultures and their people, before imposing a policy on them.

The research which needs to be done cannot be conducted using mail questionnaires, surveys or brief interviews. Whereas traditional research in small business tried to discover *why* entrepreneurs do what they do, future research should focus on *how* they do it, and *how* others can be encouraged to succeed as well. How is business conducted in various environments? How do individuals from different cultures perceive opportunity? How can entrepreneurship be fostered in different environments? Wortman and Roberts (1982) suggest that whereas quantitative research designs typically answer *why* questions, “in employing the qualitative approach, the focus is on how (...) rather than why” (pp.2, 3).

## **3 Ontology and epistemology**

According to the positivists, reality can be observed objectively. Yet, we can argue that the researcher influences the research by virtue of selecting hypotheses, thereby restricting the outcome of the research to either supporting or disproving each hypothesis. Findings which are not directly linked to the predetermined hypotheses are usually ignored. Although this approach is ideal for some research in some fields (e.g., engineering), in others (e.g., social science research of cross-cultural nature) a positivist approach may lead to applying incorrect theories and methods and consequently a Type III error. The alternative perspective, that of the idealists, is that reality is subjective, and relative; reality is a social interpretation, a function of environment and other factors.

The structuralists see social systems as stable, and change as a crisis which threatens status quo. In their view, structure controls the behaviour of individuals. The entrepreneur, however, is described by Schumpeter (1931), Barth (1967) and others as an agent of change. To the functionalists, each individual in society adapts and functions according to the needs of the social system.

A dominant methodological approach in sociology is termed symbolic interactionism. It considers the individual as conditioned by the environment as well as causing change within it. The focus is on interaction of elements.

#### **4 Non-quantitative research designs**

Pasquero suggested that quantitativists often let themselves be carried away by strict but limited methods and by unrealistic assumptions, so they “miss a true understanding of real-world behaviours in alien cultures” (1988, p.184). Indeed, the dominant paradigm in the administrative sciences is positivist, with hypothetico-deductive methodology, imitating that of the pure sciences. It involves pre-selected constructs in an attempt to obtain meaningful quantitative data which is easily analysed by means of sophisticated statistical software. Survey results are analysed relative to an average. However, Kuhn (1962), Von Bertalanffy (1968), Tinker et al. (1982), Morgan (1983) and Berry (1986), among others, emphasise that hypotheses are value-laden, and this limits research findings. Furthermore, surveys and short interviews run the risk of obtaining socially desirable responding, with respondents presenting themselves favourably regarding current social norms (Adair, 1984; Arnold et al., 1985; Crowne and Marlowe, 1960; Golembiewski and Munzenrider, 1975; Lopez, 1982; Rahim, 1983; Zerbe and Paulhus, 1987). Numerous studies have raised concerns about the contamination of research findings, by such socially desirable responding (Golembiewski and Munzenrider, 1975; Thomas and Kilmann, 1975; Stone et al., 1979; Arnold and Feldman, 1981; Rosenkrantz et al., 1983).

An alternative to traditional, positivist, hypothetico-deductive quantitative research, is the holistic-inductive qualitative option which is already the dominant paradigm in anthropological research. It relies on naturalistic inquiry, i.e., the research setting is naturally occurring with no manipulation by the researcher (Willens and Rausch, 1969).

Qualitative methodology is based on personal observation of situations, events, individuals, interactions and transactions, as well as document analysis (including quantitative records) and open-ended interviews yielding in-depth and oral testimonies. Qualitative data thus includes thick description (Geertz, 1973), and direct quotations from people about their attitudes, beliefs, thoughts, intentions, actions and experiences.

While a hypothetico-deductive methodology imposes the researcher’s values (e.g., predetermining which variables are worth measuring, i.e., what to ask on a survey), in contrast, a holistic-inductive design allows the researcher to be open to whatever emerges from the data (Patton, 1982). Whereas qualitative data may be reduced to quantitative codes for statistical analysis, the conversion of quantitative findings into detailed qualitative descriptions would be more difficult.

##### *4.1 Type of design*

Hypothetico-deductive methodology involves a structured and predetermined formal design. The survey questionnaire, for example, has pre-set questions. In contrast, the holistic-inductive approach requires a flexible design which is in constant evolution. Since the researcher does not impose a priori categories or hypotheses, but rather attempts to understand phenomena based on field research, new questions must constantly be formulated. The researcher is inspired by observations, to seek more

answers, which in turn inspire new questions. This allows the researcher to acquire an understanding of the environment for entrepreneurship, as well as the entrepreneur as an individual.

Hypothetico-deductive research is designed to test pre-formulated hypotheses. Variables have been defined. Such a design is a cost-effective efficient means of obtaining quantitative data from a large sample size for the purpose of statistical analysis. The alternative flexible design of qualitative research is more appropriate for yielding new theories. While a survey may be designed to test hypotheses about an entrepreneur, qualitative research may be better suited to understanding the entrepreneur's interaction with the environment.

#### *4.2 Research strategy*

The strategy of using case studies in research involves the thorough study, in depth and detail, of a limited number of objects, individuals or environments. Ideally, data collection in such research should include observation and interviews, as is done in ethnography. In contrast to ethnography, however, most entrepreneurship case studies have not researched intensively environmental explanatory variables such as culture. Small business and entrepreneurship research often focuses on the firm or the entrepreneur. A quantitative strategy often limits the researcher's ability to study context and environment. Adopting an ethnographic approach in non-quantitative research would enhance our knowledge and understanding of such pertinent and critical factors. As noted by Bherer et al. (1989) among others, exploratory research in developing fields requires more specialised instrumentation and different strategy than classical research of phenomena in familiar domains. Crozier and Friedberg (1977), for example, suggest a strategy involving an inductive approach with qualitative interpretation which leads the way to an understanding of culture and society.

A fundamental advantage of a non-quantitative strategy in research is its flexibility. A research plan serves as a basis for the researcher, but it is constantly modified, adapting to the constraints and opportunities which the researchers encounter in their operating environment. In quantitative research, a survey must be finalised and printed before researching the respondents. With a non-quantitative ethnographic strategy, the researcher may formulate each question based on each individual respondent's personal experiences and willingness to answer. *Non-quantitative research strategy is interactive*, as is the relationship between an entrepreneur and the environment of the firm. The non-quantitative researcher may consider the following strategy while keeping in mind the possibility at any time, to return to previous steps and modify them:

- Development of a 'loose evolving framework' (Patton, 1987), according to research objectives (this might involve formulating some possible research questions).
- Pre-testing on the field to test viability of project.
- Data collection including observation of interaction and in-depth interviewing.
- Preparation of 'site summaries', resumes of preliminary analysis, as described in detail by Miles (1979).

- Evaluation of gathered data. Denzin (1978) recommends triangulation, i.e., the obtaining of identical data from several independent sources, such as to test for internal coherence.
- Exhaustive and exclusive coding of emerging categories.
- Rigorous analysis.
- Interpretation of results.
- Triangulation of theories.
- Analysis of validity and generaliseability.
- Communication of results.

The qualitative researcher must be alert as well as flexible. The mission includes multiple qualitative aspects involving recording interactions, verbal and non-verbal communication, attitudes, facial expressions, etc. The purpose is to understand the entrepreneur's motivations and perception of opportunities and constraints in a given environment. Documents (such as letters and contracts) are also useful. Quantitative data may also be obtained to verify and confirm findings.

### 4.3 *Sampling*

While quantitative methods may be ideal to study an average, qualitative research may focus instead on marginals. A quantitative approach may have as purpose to understand the 'typical' entrepreneur by means of a large sample (n) and parametric distribution. In contrast, qualitative research need not have a large sample. The researcher may opt to:

- (a) to concentrate on a very small sample of individual entrepreneurs; or
- (b) take a comparative approach (although not everything is necessarily comparable).

Option (a) may retain more richness when it comes to description. (A further concern in comparative research is standardisation of instrumentation.) A limitation of option (a) however, is that although it yields high internal validity, external validity may be limited. Yet, there may be nothing wrong with that. As summarised by Mook, "misplaced preoccupation with external validity can lead us to dismiss good research for which generalisation ... is not intended or meaningful" (1983, p. 379). In fact, it may be useful to have local or regional research yielding local or regional theories. In such cases, global generaliseability to other populations or cultures is not applicable or desirable.

Adler (1984) points out the dangers of selecting research populations opportunistically. In selecting respondents within a population, the quantitative researcher selects a representative sample. In sampling for non-quantitative research, a small sample size may not have a parametric distribution. Ethnographically derived data being rich in qualitative detail, a parametric distribution is not necessary; nor is statistical manipulation.

#### *4.4 Data collection and analysis*

The technique of being a participating observant, as is often encouraged in the field of anthropology, is an ideal means of grasping an understanding of entrepreneurship and its social context. This technique seeks to comprehend human behaviour and the catalysts to various activities. Rather than observe an environment from outside it, the researcher's approach is to interact with its players, observing and recording their respective behaviours. Being immersed in the same host environment in which the entrepreneur functions, the researcher can better understand motivations and responses to stimuli, e.g., an entrepreneur's reaction to an opportunity given existing risks and constraints.

A survey, being relatively short and non-interactive, is easy to conduct. In contrast, lengthy field interviews require a substantial time commitment from respondents. Participatory observation facilitates the task of determining who to approach, and how and what to ask.

As contacts are established, participatory observation involves information from various sources, not only entrepreneurs. Informants can be helpful identifying entrepreneurs, their role in the community, the nature of entrepreneurial activities and their products as perceived by the consumers, etc. As the researcher becomes accepted into a community, individuals may become increasingly open, thereby relaying more information than they would otherwise. Loosely structured, evolving interviews are then easier to conduct, and the researcher's familiarity with subjects makes it simpler for the researcher to eliminate data from less reliable sources, and build a global picture from the data which triangulation has confirmed reliable.

As expressed by Yin (1981), the most challenging aspect is that a variety of sources are relevant. The researcher is faced with a choice of sources any combination of which may be used simultaneously. Documents are useful for verification and added reliability. A fundamental difference between data collection in qualitative research from that in quantitative research is that in the case of qualitative research, hypotheses arise from the data and are used to modify further data collection.

In contrast to hypothetico-deductive research which tests existing hypotheses, the analysis of qualitative data derived from inductive research helps yield new theories.

Inductive analysis means that the patterns, themes, and categories of analysis come from the data; they emerge out of data rather than being decided prior to data collection and analysis. (Patton, 1987, p.150)

That which is referred to as semiotic technique of analysis (common in sociology) is based on the perspective of the community studied. Rather than study 'foreign' entrepreneurs from a North American or western perspective, this approach considers the outlook of those studied, taking into account their standards and their environment.

## **5 Toward future research**

This paper has attempted to borrow ideas from sociology, and to adapt them to administrative sciences. Its purpose was to encourage more qualitative research with holistic inductive designs, to complement the many quantitative studies in management. In contrast to the hypothetico-deductive approach which requires the specification of main variables prior to data collection, the effective qualitative researcher is inspired by

investigating processes, interaction and context, never taking for granted the meanings of words, concepts or behaviour.

The methodological mandate to be contextually sensitive, inductive, and naturalistic means that researchers must get close to the phenomenon under study. The institutional researcher who uses qualitative methods attempts to understand the setting under study through direct personal contact ... through physical proximity for a period of time and through the development of closeness. (Patton, 1982, p.10)

Given its evolving research design and flexibility, qualitative research seems especially appropriate for exploratory studies in entrepreneurship research. Its use could help in generating new theories to help formulate better policies for the future.

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