

Managerial Discretion

Exploring the Black Box of Demographic Research

Abstract

The strategic leadership research stream is dominated by the predominantly instrumental approach of the upper echelons research stream. In recent years this research stream has been criticized for failing to develop *from* an exploration of whether relationships exist between managers' background characteristics, their strategic choices and firm performances *to* an exploration of how managers' characteristics influence outcomes. In this paper we build on the existing work in the stream by suggesting a way forward through the development of discretion as a pivotal concept in the exploration of the black box of demographic research. Specifically we separate the concepts of perceived, enacted, and actual discretion and locate them in a theoretical framework that sets an agenda for future research.

Key words

choice, cognition, demographics, discretion, leadership, upper echelons

Introduction

Strategic leadership research has been a very active vein of study and researchers have extensively embraced the concept of upper echelons developed by Hambrick and Mason (1984). Upper echelons is somewhat unusual in that it provides researchers with both a theory and a method and this has undoubtedly shaped the research stream that developed. The research stream has largely followed the prescribed formula of using executive demographic data as a proxy for a presumed underlying theoretical explanation based in the psychology of cognition and selective perception. In the operationalization of the theory researchers relate demographic variables to firm outcomes and in the process ‘black-box’ the psychological basis of the theory. The resulting research stream is instrumental in nature and explains relationships between executives’ demographic characteristics and firm outcomes. The results have been both interesting and supportive of the theory’s central proposition.

If the objective of upper echelons researchers was to simply explain that their propositions had been supported then perhaps the story would end there. The task of management researchers is however more arduous, and there is a responsibility to go beyond explaining *what* and to explore and develop the theory of *how*. While the success of upper echelons is in some part explained by its provision of a robust method which facilitates the exploration of *what*, the strength has at the same time stifled the development of the theory and an exploration of *how*. Consequently, researchers have accepted the positive findings associated with their operationalized measures of demographics and performance while largely failing to engage in the iterative process (Lawrence, 1997) of theory building that good theory requires (Whetten, 2002). While the theory and method of upper echelons are elegantly integrated in the original paper (Hambrick and Mason, 1984) researchers must not confuse success based on the instrumentality of the demographic method with their responsibility to develop the underpinning theory. While research using demographic proxies continues to have instrumental value there is a defined need to match the enthusiasm for such research with an enthusiasm for the development of the theory. In this article we present our exploration of the black-box and the introduction of managerial discretion as a step on the journey of iterative theory building.

Strategic leadership research

The strategic leadership research stream has done much to identify important relationships between demographic characteristics and firm outcomes. However, the output from the strategic leadership research stream has not provided us with significant insights into how these characteristics matter. In this paper we explore the development of the strategic leadership stream of research and address some of these challenges. Rather than suggest the suspension or replacement of this research stream as others have done (Boal and Hooijberg, 2001), we propose its continued development with a shift in emphasis from the identification of relationships, which it has achieved admirably, to an explanation of relationships – that has yet to follow. Indeed Hambrick (2007) acknowledges that while we know that for example long-tenured CEO's cease to make adaptive changes we do not know why. In our approach for this article we concentrate on developing an understanding of how the concept of managerial discretion can be used to develop theory within the black-box which "still remains largely a mystery" (2007:337). While managerial discretion is not a new concept, it has rarely been addressed in the literature and certainly our treatment of it is novel. So rather than replace the existing concept we build on what has gone before and identify the pivotal role of discretion in exploring the black-box of demographic research.

Managerial discretion

The concept of managerial discretion was introduced by Finkelstein and Hambrick (1987) as a means of bridging the apparently dichotomous divide between theories of strategic choice and agency on the one side and population ecology on the other side. Child's (1972) work on strategic choice was originally characterized as a counter balance to the prominent population ecology perspective (Hannan and Freeman, 1977; Lieberman and O'Connor, 1972). This dichotomous nature of strategic choice and population ecology has blurred over time and Child (1997, p. 44) has argued that strategic choice now "regards both the relation of agency to structure and to environment as dynamic in nature". By accepting this shift in emphasis the challenge ceases to be the understanding of whether it is managers, structure, or environment that shape outcomes; but rather, to explain how outcomes are shaped and the ways in which the influences interact. The emphasis therefore shifts from a focus on what elements influence outcomes, to a focus on how the elements interact dynamically to shape outcomes.

Hambrick and Finkelstein (1987) addressed the challenge of a blurring division between strategic choice and population ecology as explainers of firm outcomes, through the development of a model that explained outcomes as a function of managerial discretion. In their model, managerial discretion is the result of the tripartite influence of the task environment, internal organization, and managerial characteristics (see Figure 1). They posit that these influences shape the discretion available to an executive. Thus, in some cases environment conditions shape discretion available to executives (Hambrick and Abrahamson, 1995) where in other cases managers' characteristics (Boone and De Brabander, 1996; Miller and Droge, 1986) are the defining force.

While the multi-level multi-unit of analysis complexity of this discretion model make it a difficult research proposition; it is nevertheless an important conceptual addition to our understanding of the real world interplay of selection, evolution, choice and adaptation. Perhaps most importantly, for our purposes, it identifies managerial characteristics as constraints to action. Viewed in this way, managerial characteristics are antecedents of Whittington's (1988) notion of 'action determinism'. Action determinism proposes that even in the absence of external constraints (for example task environment and internal organization) managers do not have truly free choice. Their choices are in some way determined by their "built-in preference and information processing systems" (Whittington, 1988, p. 524). That is, managers bring to any situation an inherent bias that they may or may not be aware of. This is an important addition, because given this understanding one views strategic choice and population ecology no longer as a dichotomy of voluntarism and determinism; nor as a scale with voluntarism (choice) on one pole and determinism (environment and organization) on the other; rather it becomes framed as the interplay of deterministic human action, shaped by the managers' biases, and deterministic (multi-level) external selection.

Defined in this way discretion is not simply a consequence of the human, organization and environment constraints. Discretion is the result of a process through which environment and organization determinants are interpreted by the manager. The interpretation that results – the manager's perceived discretion – is

unique to the manager and shaped by their cognitive style and experience. As described in Figure 1b external forces do not act directly on discretion, they are mediated through the manager's personal characteristics.

Insert Figure 1 about here

In other words, different managers will interpret the same 'situation' in different ways based on their individual cognitive and experiential characteristics. This is an important piece of the strategic leadership puzzle because it goes beyond the 'do managers matter' debate of strategic choice versus population ecology and moves towards answering questions about 'how managers matter'.

HOW MANAGERS MATTER?

The upper echelons perspective (Hambrick and Mason, 1984) has its roots in the behavioral theory of the firm (Cyert and March, 1963; March and Simon, 1958) and the principle underlying theoretical framework is shown in Figure 2 below.

Insert Figure 2 about here

Central to this theory is the understanding that managers make choices, not on the basis of full information, but on the basis of partial information gleaned from the environment. In conditions of uncertainty, time pressure, and information overload, managers will selectively perceive or filter environmental stimuli as they create "their perception" (Hambrick and Mason, 1984, p. 195) or "construed reality" (Finkelstein and Hambrick, 1996, p. 42).

The research model developed to explore the strategic choice model (see Figure 3 below) became a popular framework for researchers in the strategic leadership stream. There is now a significant body of research supporting the relationship between manager's background characteristics and both strategy and firm

performance; including the relationship between top-management team characteristics and firm performance (Eisenhardt and Schoonhoven, 1990), strategic change (Cho and Hambrick, 2006), and the ability to avoid crisis (Finkelstein and Hambrick, 1990; Greening and Johnson, 1996; Norburn and Birley, 1988; Thomas, Litschert and Ramaswamy, 1991), top-management team tenure and strategy (Finkelstein and Hambrick, 1990; Gabarro, 1987; Wiersema and Bantel, 1992), the effect of experience on potential technological alliances (Tyler and Steensma, 1998), functional background and successful strategy implementation (Gupta and Govindarajan, 1984; Miles and Snow, 1978), and even in non-business fields looking at the relationship between the characteristics of bishops and ordination outcomes (Yuengert, 2001).

Although much less numerous there have been studies confirming the relationship between the psychological characteristics of managers and both firm strategy and firm performance. These studies have mainly used experimental approaches and support relationships between Jungian type and capital investment appraisal decisions (Nutt, 1986), cognitive complexity and the pace of evaluation (Wally and Baum, 1994), need for achievement and organizational structure (Miller and Droge, 1986) and locus of control and firm performance (Boone and De Brabander, 1996; Boone, van Olfen and van Witteloostuijn, 1998). There have also been a few notable field studies supporting relationships between locus of control and strategy, structure and environment (Miller, Kets de Vries and Toulouse, 1982), manager's neuroses and organizational dysfunctionality (Kets de Vries and Miller, 1984) and locus of control to firm performance (Miller and Toulouse, 1986), and in an archival study – leader personality and organizational performance (Peterson, Martorana, Smith and Owens, 2003). These latter notable studies are important as they directly address the underlying psychology that is posited to influence firm outcomes, but these studies are rare (Carpenter, Geletkanycz and Sanders, 2004) by comparison with their demographically based counterparts.

Insert Figure 3 about here

Exploring the black box of upper echelons research

The addition of demographic variables to strategic leadership research through the upper echelons framework (Hambrick and Mason, 1984) provided access to a broad range of research issues, but, at the same time left significant gaps. Stubbart (1989) identified managerial cognition as the missing link in

strategic leadership research. Based on anecdotal evidence that “few researchers in strategic management accept consciously the economists model of think-alike managers”, he made a call for more research into “how strategic managers think?” (Stubbart, 1989, p. 326). Stubbart’s (1989) work leaves two concepts central to the strategic leadership research agenda. One, the need to accurately represent the cognitive maps of strategic leaders and two, to account for both goal oriented behavior and the effects of personal preferences, both of which demand research that pushes beyond a purely instrumental approach.

When Hambrick and Mason (1984) developed the upper echelons research framework and in doing so replaced cognitive bases and values with demographic proxies (see Figure 3 above) they placed the process of selective perception and managerial cognition neatly into what became known as the black-box of organizational demography (Lawrence, 1997) (See Figure 4 below). The operationalized model shown in Figure 4 (part b) holds strategic choice as the dependent variable. However, the process detail of Figure 4 (part a) has been collapsed into a causal arrow in Figure 4 (part b), and cognitive base and values have been replaced with the proxy of observable characteristics in the form of demographic measures.

This resulted in an instrumental stream of research, primarily concerned with prediction and with only a passing concern for explanation. This does not appear to have been the authors (Hambrick and Mason, 1984) intention, as they warned of the macro bias in their framework and Hambrick (in “Cannella, 2001) among others (Boal and Hooijberg, 2001; Lawrence, 1997; Markóczy, 1997; Priem, Lyon and Dess, 1999) continues to call for further research to explore the black-box.

Insert Figure 4 about here

The upper echelons research stream that followed Hambrick and Mason's (1984) upper echelons framework, deals extensively with observable managerial characteristics (proxies for psychological characteristics) as the independent variable with both strategic choice and firm performance as dependent variables. The process through which psychological characteristics influence strategic choice and firm performance is largely unexplored.

Central to upper echelons theory (Hambrick and Mason, 1984, p. 195) is an implicit assumption that selective perception (Dearborn and Simon, 1958) and bounded rationality (Simon, 1957) are at play. At the time of writing upper echelons theory (Hambrick and Mason, 1984) the seminal work on selective perception was Dearborn and Simon's (1958) supporting research. However, subsequent replication studies have found little support for the theory of selective perception (Beyer, Chattopadhyay, George, Glick, Ogilvie and Pugliese, 1997; Waller, Huber and Glick, 1995; Walsh, 1988) and some doubt has been cast on the original findings of Dearborn and Simon (Walsh, 1988). Others have raised different concerns in relation to the instrumental nature of strategic leadership research (Lawrence, 1997) with several even going as far as calling for a moratorium on the use of demographic variables as proxies for psychological constructs (Boal and Hooijberg, 2001, p. 523; Markóczy, 1997; Priem et al., 1999).

Researchers must remain cautious to observe prior work which shows that while demographic characteristics have proved to be good predictors in macro organizational studies, the results are less than conclusive when used in more micro studies that deal with specific cognitive characteristics (see Table I below). While we know that demographic characteristics do matter to firm performance, we still know little about how they matter.

Insert Table I about here

The question therefore arises as to how we begin to explore the black box in a more meaningful and ultimately useful way. Harrigan (1983) suggested a more fine-grained approach was needed to explore the richness and complexity that lies within the black-box. Certainly multi-method approaches will be important and qualitative studies will aid the development of new theory to be tested for generalizability. There are however within the field of strategic leadership and more specifically within the upper echelons, management discretion, and the strategic leadership frame, several outstanding questions relating to managerial cognition that still require answers and we frame an approach to address these questions in the context of managerial discretion.

Managerial Discretion

Hambrick and Finkelstein (1987, p. 371) propose that discretion, defined as “latitude of managerial action” is the integrating concept that bridges both population ecology and strategic choice perspectives. The addition of a theory of managerial discretion expands the remit of upper echelons theory beyond the confines of strategic choice (Child, 1972) and action determinism (Whittington, 1988). It embraces a wider framework that seeks to explain why some managers have more discretion or latitude of action than others, and why managers have more discretion at some times than others. This is a more complete model describing how the nature of the organization, the environment and the leader, through a process of interplay, influence and strategic decisions ultimately affect firm performance.

The greater utility of this model also brings with it additional complexity for the researcher. Hannan and Freeman (1977, p. 933) used the analogy of bioecology levels of analysis (individual, population and community) and warn that the choice of unit “involves subtle issues and has far reaching consequences for research activity”. They identify at least five levels that face the organization researcher including member, subunits, individual organization, populations of organizations, and communities (populations of populations of organizations).

Recognizing and identifying these levels is an important part of discretion research and Hambrick and Finkelstein’s (1987) discretion model engages three levels, namely individual, organization, and task environment. The difficulties that arise from this approach do not mean that this type of multi-level research is not possible, as its careful application can lead to interesting and potentially more insightful results (Thomas, Shankster and Mathieu, 1994), but such applications are both rare and complex.

The development of the discretion framework also provided researchers with other obstacles. Hambrick and Finkelstein (1987, p. 400) noted that “the direct measurement of discretion will be extremely difficult”. Today the issue of measurement remains as one of the most contentious issues in the strategic leadership area. Significant disagreement exists about what to measure (Boal and Hooijberg, 2001; Daniels and

Johnson, 2002; Hodgkinson, 2002), and the meaning and validity of the measures (Markóczy, 1997; Priem et al., 1999).

There are many different dimensions that can and should be considered as we explore the black-box. One such dimension is discretion. Discretion as it stands in the literature provides an important explanation of the interplay of situational and managerial characteristics, yet research has almost exclusively focused on situational discretion. This paper develops and expands the concept of managerial discretion to include, perceived, enacted, and actual discretion.

Cognition

Before providing a further exploration of discretion we need to consider cognition. Human cognition is a complex phenomenon and far too extensive to be completely reviewed here. The seventy seven different labels Walsh (1995, p. 284-285) found associated with management descriptions of cognition is an example of the diversity within the field.

Finkelstein and Hambrick (1996, p. 57) in a spirit of “theories are always in process” (Lawrence, 1997, p. 18) expanded their concept of manager’s cognitive models and divided the manager’s cognitive model into three elements ranging from the most basic to the most complex, namely cognitive content, cognitive structure, and cognitive style, although no further description or elaboration of the concepts has followed.

Cognitive content relates directly to their earlier upper echelons (Hambrick and Mason, 1984) notion of cognitive base; the knowledge a manager brings to a situation. This is knowledge that has been simplified to the extent that it no longer gets conscious consideration. Cognitive content could be construed as a rule, a value, a fact, an object or a concept. The common characteristic is that it has a relatively unambiguous singularity in meaning for the owner.

Cognitive structure is a higher order concept and is the means by which cognitive content is arranged; it is a component of the earlier notion of values encompassing the beliefs about causality that a manager brings to a

situation. The difference between cognitive content and cognitive structure is “not easy to make in definitive terms” (Scott, 1962:405), largely because they have an embedded hierarchical relationship and this perhaps explains why there has been little development of it in the business and management literature. We have identified three seminal works in the psychology field which address the differences. Tolman (1948) uses the terms strip-map and comprehensive-map to describe the difference between a relatively simple understanding or single-path response capability in contrast to a broader multi-path capability and these related directly to the concept of cognitive content which has a singular meaning and cognitive structure is more complex. For Tolman (1948:193) the differences emerge when the environment changes, in which case the comprehensive map is more likely to be adaptable to the new situation. In a separate development Hebb (1949) proposed a theory of cell assembly, describing from a neurological perspective how, when cells become connected in groups these groups or assemblies can in turn be assembled and re-used in more complex structures, thus presenting a neurological description of the hierarchy of knowledge structures. This lead was taken up by Hayes-Roth (1977:263) who advanced the concept and developed knowledge assembly theory which proposes that “lower order cogits of an information structure are acquired, strengthened, and associated during learning”. These lower order cogits are the equivalent of knowledge content in our framework. For example profit margin could be a lower order cogit in a knowledge assembly of firm performance and it is the ability to use building blocks in this manner that allows managers to tackle complex issues. Cognitive content therefore provides the building blocks for the more complex cognitive structure, although the definition of what is cognitive content and cognitive structure is not absolute but, rather is relative to the level of knowledge structure being examined. The ability of the researcher to focus attention up or down these levels in any meaningful way will be influenced by the level of unitization of knowledge the manager has reached and the plasticity of these unitized knowledge content units.

Cognitive style interacts with, but is different to cognitive content or structure. Cognitive style has resonance with the earlier notion of values (Hambrick and Mason, 1984), it is however a much wider concept and includes the preferences a manager has for collecting and processing information. Potentially it has many more facets including locus-of control (Rotter, 1966), Jungian preferences such as those assessed by the Myers-Briggs Type Indicator (Myers, McCaulley, Quenk, and Hammer, 1998) and broad personality traits

such as the 'Big Five' (Norman, 1963) which can be assessed with, for example, the NEO instruments (which were developed explicitly to operationalize the Big Five personality traits and are described in "Costa and McCrae, 1992). Because cognitive style influences the information attended to, the means of processing that information and the preference for the value placed on particular types of information, it will affect how knowledge is assembled. Therefore cognitive structure is directly affected by cognitive style.

Our particular use of cognitive structure must take into account the ability of managers to influence the causal relationship they 'know' to exist. It is not enough for us to declare that a manager's cognitive structure indicates, for example, a belief that efficiency influences profit. As researchers of strategic leaders we must go beyond the instrumental explanation and identify the agency of the manager to influence that relationship and ultimately firm performance. The first step in understanding that agency is to identify the belief the manager has about their ability to influence the relationship between efficiency and profit or in other words their perceived discretion to act. Perceived discretion is therefore a pivotal outcome of the interaction of cognitive content and cognitive style.

While this three-element model of cognition is not sufficient to explain the full gambit of human cognition, it does provide a useful conceptual frame for disaggregating the broader concept. The elements are closely related, influence each other and ultimately affect the decisions and actions of managers. As they stand they provide a useful frame of reference for managerial cognition scholars exploring the black-box.

Using these definitions cognitive content and cognitive style are antecedents of cognitive content. Cognitive structure, or at least part of a manager's cognitive structure is the perceived discretion to act in a context. Thus, in the exploration of the black-box we propose a more explicit formulation of cognition and discretion within the upper echelons research framework and this framework is described Figure 5 below.

Insert Figure 5 about here

Enacted Discretion and Firm Performance

Explanation of firm performance is a key outcome in strategy research. In strategic leadership research our goal is to describe how managers matter in relation to this performance. In the framework we described above, firm performance is the result of enacted discretion. That is, the interplay of constrained managerial choices and situational factors enacted in a dynamic and iterative process of engagement. Enacted discretion is a dynamic process of managerial engagement with the environment and as such can only be assessed retrospectively. To understand the discretion that is actually available, one needs to act in order to allow others to react and so on. This temporal aspect to enacted discretion creates opportunities for researchers to conduct retrospective field studies but poses challenges for collecting data on some of the independent variables associated with managerial characteristics. While demographics may be readily identified from historical records, data on psychological characteristics are not readily available - although they have been assessed from archival data (Peterson et al., 2003). Retrospectively capturing the motivations of managers will also prove to be a considerable challenge. Despite the challenges, we feel that an understanding of the effect of differentially enacted discretion on firm performance is an essential piece of the discretion puzzle.

Strategic choices

In the context of the framework proposed, strategic choice is an interplay of managers cognitive structures or belief systems and their motivations for the future. Potential motivations may include the need for power or control, personal achievement or risk limitation. In all circumstances the motivation to make specific choices will be driven by some balance of desire between achieving personal goals and organizational outcomes.

Cognitive structure

We use the term cognitive structure to indicate more than a collection of knowledge (cognitive content) or even a particular theme or style associated with that knowledge. It includes components of knowledge and style but represents that output of that knowledge and style in an ordered and structured way. By exploring the ordering and structuring of this knowledge, managers belief's of causal and predictive relationships that apply to their situation can be better understood. Because of the importance of managerial agency in strategic

leader research we go beyond the managers beliefs about the relationships and extend the challenge to also understand the managers beliefs in relation to their discretion to influence these causal relationships, which we call perceived discretion.

The means of assessing, understanding or capturing cognitive structure are varied, and appropriate methods are decided in the context of the research question. Cognitive structure captures the beliefs of managers in relation to a specified domain and can be easily represented in the form of a cognitive map or matrix. The term belief system has been used to describe these maps, but given the complexity of a human belief system it seems far too grandiose a title for such a meager representation.

Proxies for Cognitive content, cognitive style, and cognitive structure

The framework proposes experience as the antecedent (and suitable proxy) of knowledge and assumptions. Given the ease with which demographic measures of experience can be obtained this will continue to provide a rich source of research opportunities. Psychological predisposition is proposed as antecedent (and suitable proxy) to preferences in the way we make sense of our experiences. Psychological predisposition is quite a broad concept and is intended to capture the manager's current cognitive and emotional state. It may encompass not only inherent psychological characteristics, but also broader aspects such as tolerance for ambiguity, future aspirations and motivation. It will be of significant interest to researchers to identify how these factors differentially explain manager's perceived discretion, strategic choices and enacted discretion. While early leadership research suffered from a lack of psychological measurement instruments, the past 20 years has seen the development of significant and robust instruments across the whole gambit of psychological predisposition and is now so sufficiently developed as a field that if more distant proxies are used it is incumbent on researchers to explain their decision in that light.

Perceived discretion is a manager's understanding of their ability to influence a causal relationship and while there may be many proxies such as number and type of options espoused, we believe there is merit in examining as directly as possible the managers cognitive structure and perceived discretion. Cognitive

mapping techniques are wide and varied and there is now an extensive array of both nomothetic and ideographic approaches suited to the quantitative and qualitative research traditions.

The significance of a live context

The framework in Figure 5 above addresses three issues that are key to the further development and understanding of strategic leadership. The framework presented maintains its base in the behavioral theory of the firm (Cyert and March, 1963; Simon, 1957) and consequently the first issue to be addressed is the situation or context in which the relationships are examined. From a strategic management perspective researchers are interested to find the relationship between personal characteristics and choice under conditions of bounded rationality. While the seminal study of Dearborn and Simon (1958) and further studies by Walsh (1988) and Beyer et al. (1997) all test relationships it can be argued that none of the studies were conducted under conditions of bounded rationality. In real situations, senior managers making strategic decisions are aware that they are dealing with uncertain conditions and without all of the facts. However managers taking part in experimental studies may conclude that they are in fact dealing with full information because the documented case is fictional and no other information exists,

- be less involved and more objective in their findings than they would be in a real organizational setting because one, they are not expected to implement the outcomes of their decisions and have little emotional investment and two, they need not consider the implications of the decision on their personal goals or career,
- feel they need not make significant judgments about trade-offs between search time and information quality.

For example they would be aware that they are not in a genuine competitive setting and may feel certain that others completing the study will be dealing with identical information within a similar time frame, a luxury not afforded to executives in the uncertain world of strategic decision making.

If attempts are made to measure selective perception and choice experimentally, then it is necessary to replicate real life situations, or the pressures associated with those conditions. That is, it is necessary to

ensure that managers are making decisions under fully loaded conditions, as the stress affects cognitive functioning and selective attention (Chajut and Algom, 2003). Tests of selective perception and choice are valid only under the range of conditions described above which, given the extreme nature of strategic decisions and their attendant consequences, will be difficult to replicate in experimental conditions. In fact researchers may need to closely observe or take part in decision-making processes to fully assess these relationships. Hambrick (2007) has suggested an experimental approach to this problem may be possible through the development of a bounded rationality simulation or game, but as yet no one has risen to the challenge.

Separating choice and discretion

A second issue to address is that the upper echelons model (Hambrick and Mason, 1984) assumes perception leads directly to choice. This however, presupposes that the optimal choice for the firm is the optimal choice for the manager. A more realistic view is that managers make choices that to differing extents satisfy the organizations needs and their personal goals. Managers who recognize this trade off may see the decision making process as a politicized power play which according to McClelland (1970) has a range from a personal 'I win you lose' concern to a concern for group goals. Thus, while managers may perceive a range of options their own personal orientation, values and motivation will effect where they make their choice within that perceived range.

The important dimension of the above observations is the clear separation of discretion and choice.

Discretion limits choice through the framing of a *perceived range of possible action alternatives*, but not to the extent of eliminating choice. Which of the perceived range of action alternatives is ultimately selected will be the result of a more complex *context specific and goal dependent process*. The framework presented is therefore concerned with the range of possible actions cognitively available to a manager as well as the enacted choice among those alternatives.

Perceived and enacted discretion

A third issue to be addressed is the need to integrate Hambrick and Finkelstein's (1987) discretion model. Earlier we discussed discretion as a consequence of action (individual) determinism, organizational determinism and environmental determinism. While the simplicity of this model is attractive it nevertheless avoids dealing with the multi-level complexity of the discretion concept. We suggest the following common terms as a satisfactory representation of the levels to be considered although they are neither discrete nor absolute; individual, group, organization, industry and global economy. The complete development of the issues raised by the multi-level nature of the framework is beyond the scope of the paper. We do however want to emphasize that while research on perceived discretion may be carried out at the level of the individual, research on enacted discretion automatically brings with it organizational level issues and possibly also industry and global economy issues. We note that Hambrick and Finkelstein's (1987) original representation of the discretion framework was intended only to provide an understanding between the apparently opposing views of strategic choice and population ecology. Because of that focus it dealt with a single concept of discretion as directly consequential to organizational, environmental and managerial influences.

Despite the fact that discretion in choice can only be exercised within the limits of its perception there has been little research on this specific topic. Certainly the concept of a cognitively constructed frame of reference limiting choice is not new. Kelly (1963, p. 19, 22) recognized the hierarchical nature of the concept when he wrote that "if one accepts all the usual superordinating constructions of the situation, he may, indeed, find his course of behavior determined with very little latitude left to him" and that "the man whose prior convictions encompass a broad perspective, and are cast in terms of principles rather than rules, has a much better chance of discovering... alternatives". In other words our construed cognition of the situation creates the limits for our actions.

Carpenter and Golden (1997, p. 189) discuss the need to recognize the limits of situational determinants of discretion because "managers may differentially interpret common strategic situations". That is "cognitions are thought to mediate stimulus-response relationships" (Carpenter and Golden, 1997, p. 189). In their study,

Carpenter and Golden (1997) asked subjects to assess the level of discretion they believed they had in a set of predetermined circumstances. In circumstances where industry experts identified low discretion, the study reported that internals on Rotter's (1966) locus-of-control scale identified greater perceived discretion than externals thus supporting the view of differential interpretation based on psychological characteristics. They note that the study provides "preliminary empirical support for Hambrick and Finkelstein's (1987) theorizing that individual differences are associated with differences in managerial discretion" (Carpenter and Golden, 1997, p. 202).

In Figure 5 above, following Carpenter and Golden's (1997) guide that discretion can only be acted on if perceived, we separate the discretion concept into two components, labeled perceived discretion and enacted discretion. We do this to more accurately represent the intermediate steps between environmental stimulus and firm performance. We propose that at the individual level, environmental stimuli are processed by the manager who then develops an understanding of the situation. This understanding of the situation is a consequence of the objective reality as mediated by personal factors. This understanding of the situation dictates what is possible from the manager's perspective. These possibilities create the limits of action that the manager can consider. It therefore represents the outer limits of their perceived discretion, and contains within it, the range of possible actions that the manager can conceptualize.

Within the perceived discretion of a manager there will be different categories of possibility constructed along lines of risk, security, potential etc. The actual choices made by managers may therefore be more influenced by their categorization of the possibilities and their goals orientation as it relates to these categories.

Enacted discretion

Following the above line of thought enacted discretion can only be defined in action. Enacted discretion is the result of choices as enacted in their context. Enacted discretion is therefore equivalent to performance or practice. Technically we might conclude that learning takes place when perceived discretion differs from enacted discretion, in other words when things don't happen the way they should (that is outcomes either

exceed or do not meet expectations). However this objective knowledge of firm performance must also be processed through the individual lens of the manager and the quality of that lens will determine the quality of the learning experience.

The ability to enact discretion, at least the broad ranging discretion that leaders at the strategic apex must enact, has as significant power and political influence component (Drummond, 1993; Pettigrew and McNulty, 1995; Pfeffer, 1992). Indeed it is Pfeffer's thesis (1992, p. 7) that "problems of implementation are, in many instances, problems in developing political will and expertise". The relationship between strategic choice and enacted discretion is therefore mediated by the application of power and politics.

Enacted discretion is a dynamic concept, it involves the skill to negotiate the implementation of choices as they interact with the situational constraints. Therefore managers more skilled at implementation and influence will have broader enacted discretion ranges than less skilled managers. Managers who find themselves in similar situations, even given similar motivations, will find that they are differentially constrained by their ability to apply power and political acumen.

LEVELS OF DISCRETION CONSTRAINT

A more descriptive representation of the proposed research framework is presented in Figure 6 below. At the first level, perceived discretion, is driven by the manager's experience and psychological predisposition. When presented with input stimuli in the form of a set of circumstances the manager, through a range of cognitive and emotional responses, produces a perceived range of possible actions. This represents the set of all possible options the manager perceives to be available in the circumstance. The perceived range of options is influenced both by the manager's experiences to date and psychological predisposition. At this level the constraints to possible action that exist are only those that exist in the manager's mind.

Insert Figure 6 about here

At the next level the manager makes strategic choices. That is, the manager chooses preferred actions, based on the understanding of the perceived range of possible action alternatives developed at the previous level. It would seem appropriate that managers would make strategic choices that deliver outcomes which they perceive to be possible. That is the choice flows directly from and is a neat subset of the options developed at the previous level. While this would make for a neat model and fit our standard notion of a funnel it may not necessarily be true in action. A manager may make a choice without understanding the possible outcome or even believing it to be possible. They may in fact make a choice and take action just to see what happens. They may indeed make non-rational choices driven by processes other than the cognitive understanding of the possibilities available to them and in some cases deliver firm performance beyond their perceived discretion.

At the third level managers take actions which create reactions. This results in an interaction between the manager, the organization and the broader environment. It is particularly important at this point to recognize the iterative and dynamic nature of these processes. At the level of strategic decision making it will rarely if ever be the case that a single set of possibilities is perceived, a single choice made and a single action taken. Each action creates a new understanding of what is possible in practice, the enacted discretion which, if learning occurs, will influence the manager's perceived discretion and in turn alter the choices to be made in the next iteration.

TOWARDS A RESEARCH AGENDA

We believe that this exploration of the black-box and the proposed framework, opens up many new interesting and important lines of research. We have grouped these into three strands: antecedents of perceived discretion, antecedents of strategic choice and antecedents of enacted discretion, all of which are based on the exploration of the framework proposed in Figure 7 below. Each set leads to different road map for exploration.

Insert Figure 7 about here

The traditional operationalization of upper echelons research involves the treatment of manager's observable characteristics as proxies for psychological characteristics (Finkelstein and Hambrick, 1990; Hambrick, Seung Cho and Chen, 1996). While this approach has provided great utility for macro instrumental research which helps answer the question 'do managers matter?', it has not led researchers to a greater understanding of 'how managers matter?'. To help formulate answers to the latter question we propose three approaches that will help illuminate this area.

Strand 1: Antecedents of perceived discretion

Research into perceived discretion has been notably absent from the literature, with the exception of Carpenter and Golden (1997). To address this issue we suggest work to identify the impact of differential influences on perceived discretion. We suggest that researchers consider addressing the following areas.

What type of experience influences perceived discretion?

What psychological predispositions influence perceived discretion?

What are the differential effects of psychological predisposition and experience on perceived discretion?

Are there particularly influential combinations of psychological factors and experience that influence perceived discretion?

Strand 2: Antecedents of strategic choice

There have been studies examining different aspects of influence on strategic choice, such as the examination of the influence of personality type (Nutt, 1993; Stumpf and Dunbar, 1991), personal values (Verplanken and Holland, 2002) and external relationships (Geletkanycz and Hambrick, 1997) on choices. We believe that further exploration of these areas holds many further opportunities. In particular it will be

helpful to build research that helps explore the black box in a more structured way so that theories may be continually developed and refined.

In continuation of the strategic leadership tradition we support the continued exploration of the relationship between observable characteristics of managers and the strategic choices they make. However, we do not support the continuation of research that claims observable characteristics as proxies for psychological predispositions without further research to support such relationships. While we are clear that there are relationships between observable characteristics and both choices and outcomes, we now need to develop our understanding of the process that underpins those relationships.

Most particularly, for research into strategic choices we need to emphasize the need for fully loaded cognitive conditions. The strategic leadership research stream is built on the foundations of the behavioral theory of the firm (Cyert and March, 1963; March and Simon, 1958). It is posited that managers operating in ambiguous circumstances with limited information, time and resources for solution searches will create the conditions necessary for behavioral rather than objective components of decisions making to emerge. Clearly then, research must try to emulate these conditions. Asking managers to identify the best or preferred option in lightly loaded cognitive conditions equates more to perceived discretion, that is something they could, rather than something they will do. Existing research has not emphasized the need for fully loaded cognitive conditions and the effect of, for example, stress on selective attention (Chajut and Algom, 2003). In general research has provided very limited support for the relationship between manager's characteristics and their selective attention (Beyer et al., 1997; Waller et al., 1995; Walsh, 1988).

To fully understand strategic choices we believe researchers need to examine the actions that managers have taken rather than those they might take. The question is one of defining when a choice is actually made, that is, when the point is reached in a manager's mind that they will definitely take one particular course of action rather than another. We suggest that from a research perspective this is most appropriately identified as the moment an action is taken.

In the development of our understanding of this arena we suggest two approaches to researching this strand.

Approach 1: The effect of perceived discretion on strategic choices.

Understanding the effect of perceived discretion on strategic choices will require an examination of the following:

Is a broad range of perceived discretion antecedent to a heterogeneity of choices?

Do managers with limited perceived discretion make more focused choices?

Are managers limitations to choice uniform or are managers particularly constrained by focal limitations to their perceived discretion (that is things they fundamentally perceive cannot be negotiated) that limits their choices?

Approach 2: Differential influences on strategic choice

Understanding the differential influences of perceived discretion and motivation on strategic choices will require an examination of the following:

Is perceived discretion (could do) or motivation (want to do) the stronger driver of strategic choice? In what circumstances?

What level of motivation is already accounted for in the concept of perceived discretion?

Do managers simply avoid formulating some possibilities they are not motivated to choose?

Where managers have similar perceived discretion, does motivation account for the difference in choices or vice versa?

Where managers have similar perceived discretion can key experiences account for the difference in choices or vice versa?

Strand 3: Antecedents to enacted discretion

Although we do not believe this to be the complete set of relationships to be uncovered, the final exploration we urge is an understanding of the impact of strategic choices, situational factors (situational discretion) and implementation skills on enacted discretion. The framework in Figure 7 above identifies enacted discretion as an outcome of perceived discretion further constrained by choice and situational discretion; this is broadly

in line with Hambrick and Finkelstein (1987). For the sake of clarity we have omitted from the framework the additional influence which comes into play when the framework is viewed as a dynamic iterative process. In an iterative and dynamic process we must account for the effect of the manager's skill in negotiating the implementation of their choices. We can readily conceive of a situation where managers having made similar choices and finding themselves in similar organizational and environmental conditions will, after many iterations, find themselves drifting towards different ultimate outcomes as their experiences, perceptions and choices diverge.

The exploration of enacted discretion will help to expand our understanding of how some managers have greater freedom to act despite the fact they appear to have the same perceived discretion as others in the situation with them. We posit political skill as a key determinant of differences in enacted discretion (Drummond, 1993; Pettigrew and McNulty, 1995; Pfeffer, 1992). There are notable studies exploring this area such as Pitcher and Smith's (2001) multi-method research. There are also other approaches that posit the effect of emotional intelligence (Cooper and Sawaf, 1997; Goleman, 1995; Goleman, 1996; Goleman, Boyatzis, and McKee, 2002) although research here has been minimal in organizational contexts of senior executives (Dulewicz and Higgs, 2000). All of the above raise questions as to the nature of political skills. Are they consequences of experience, consequences of cognitive or emotional characteristics or abilities, or are there other key process not accounted for.

To help explore the area further we suggest the following tentative questions:

In what ways does perceived discretion and strategic choice explain the differential in enacted discretion?

Are those with more focused choices and limited perceived discretion more or less effective in a given situation?

Do particular experiences explain differentials in enacted discretion?

Do particular cognitive or emotional abilities explain the differentials in enacted discretion?

CONCLUSION

The strategic leadership research stream has been an influential part of strategy research and a key component in re-balancing the streams of population ecology and strategic choice. The identification of key relationships between the observable characteristics of managers and their choices and firm performance has provided clear support for the proposition that managers do matter. The instrumental nature of the stream has however meant that we have researched little about how managers matter. We do not go as far as calling for a moratorium on the use of demographics as proxies for psychological characteristics, we do however call on researchers to support their claims for demographic surrogates as research has clearly shown these proxies may indeed carry far too much noise (Markóczy, 1997).

Our aim in this paper is to begin the process of providing a framework for exploring the black-box (Lawrence, 1997) of demographic research. To exhort researchers to explain not only that managers do matter, but also how managers matter. Our framework identifies perceived discretion as the pivotal concept in this explanation. We are ourselves already working on the empirical testing of some elements of this framework that will help explain the relationships between psychological characteristics, observable characteristics and perceived discretion. We urge others to take on the challenge of developing this field and to ensure that the excellent work developed over more than two decades of upper echelons research is built upon as it moves into a further phase of development.

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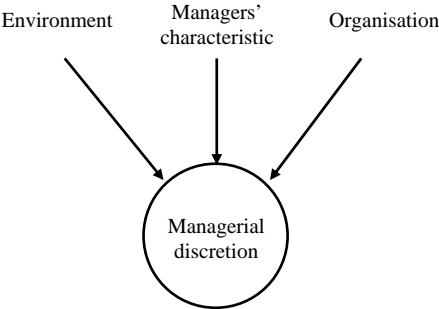
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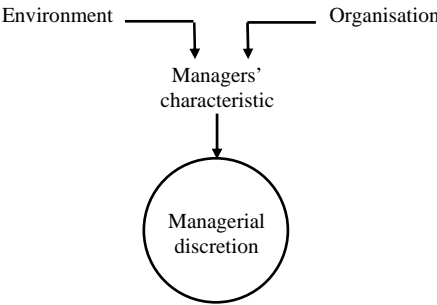
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Figure 1: Managerial discretion

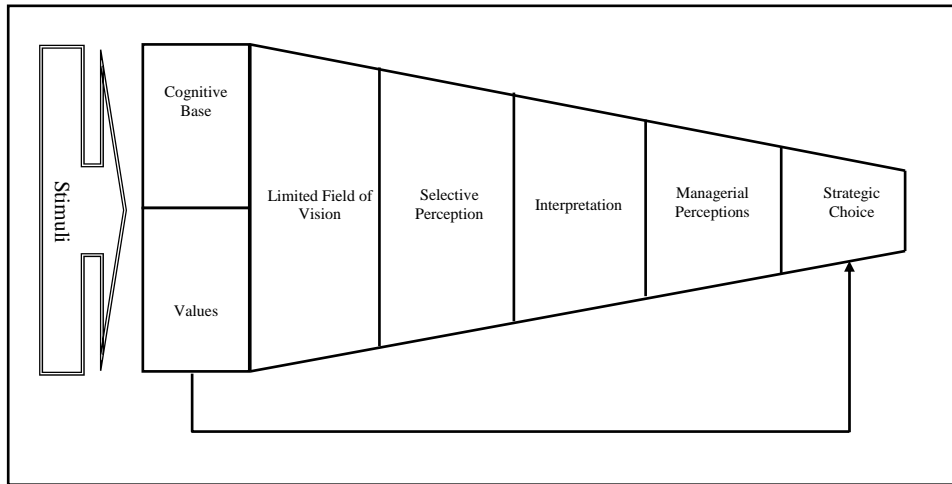


a) Source: Adapted from Hambrick and Finkelstein, 1987



b) Source: Compiled by the authors

Figure 2: Strategic choice under conditions of uncertainty



Source: Adapted from Hambrick and Mason (1984: 195)

Figure 3: An upper echelons perspective of organizations

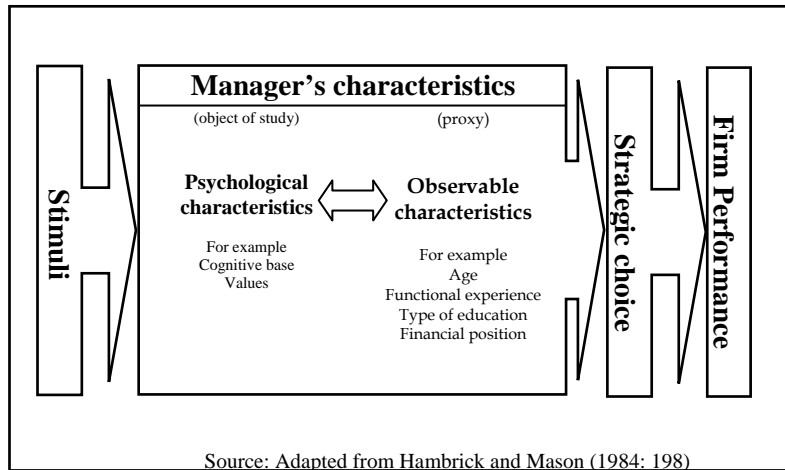


Figure 4: The "black box" in upper echelons research

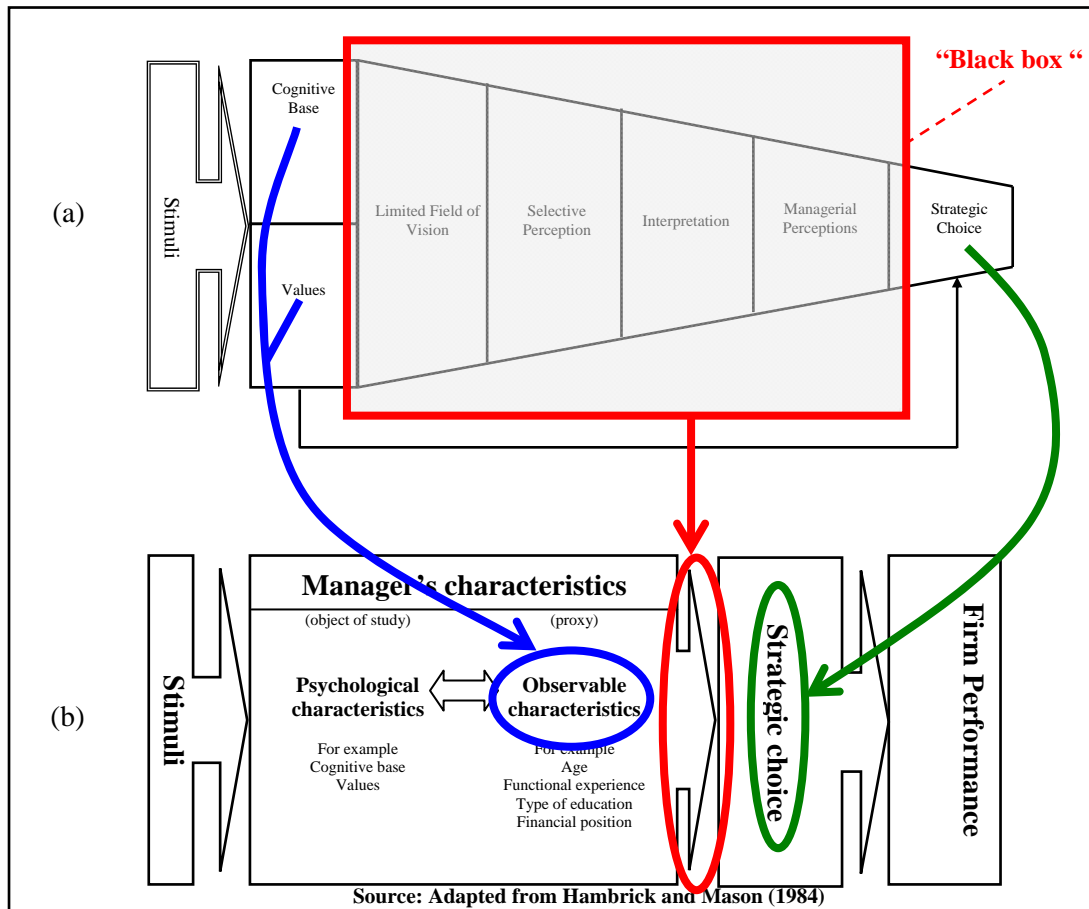
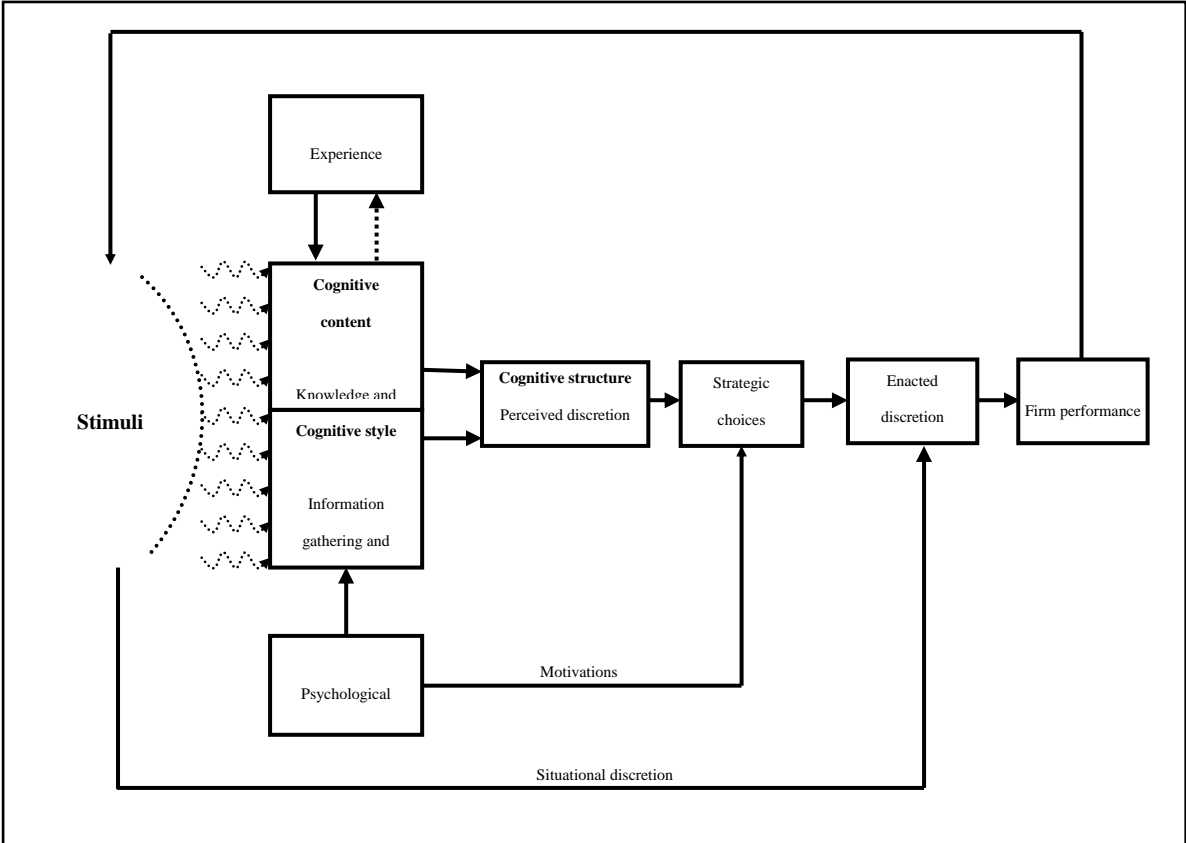
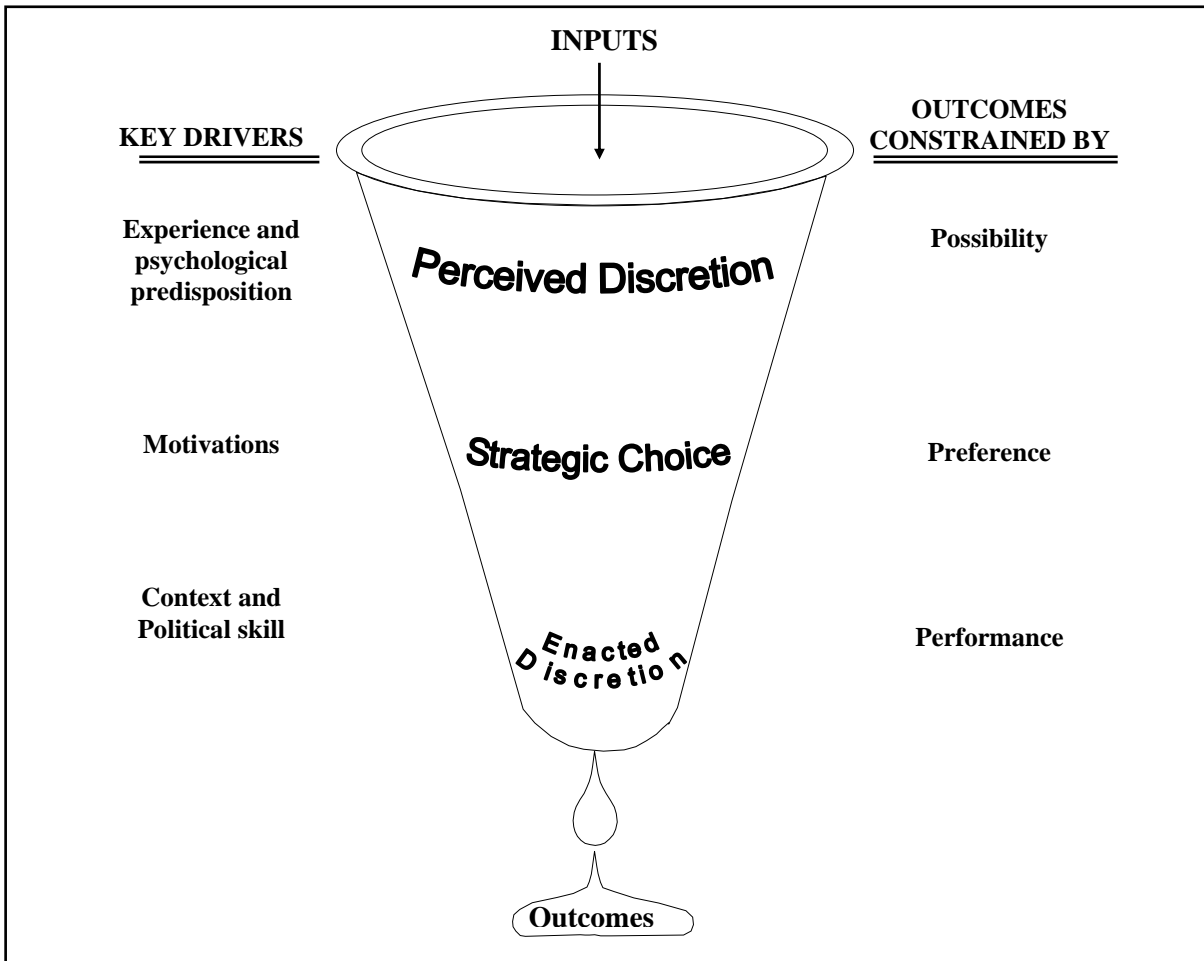


Figure 5: Perceived, situational and enacted discretion



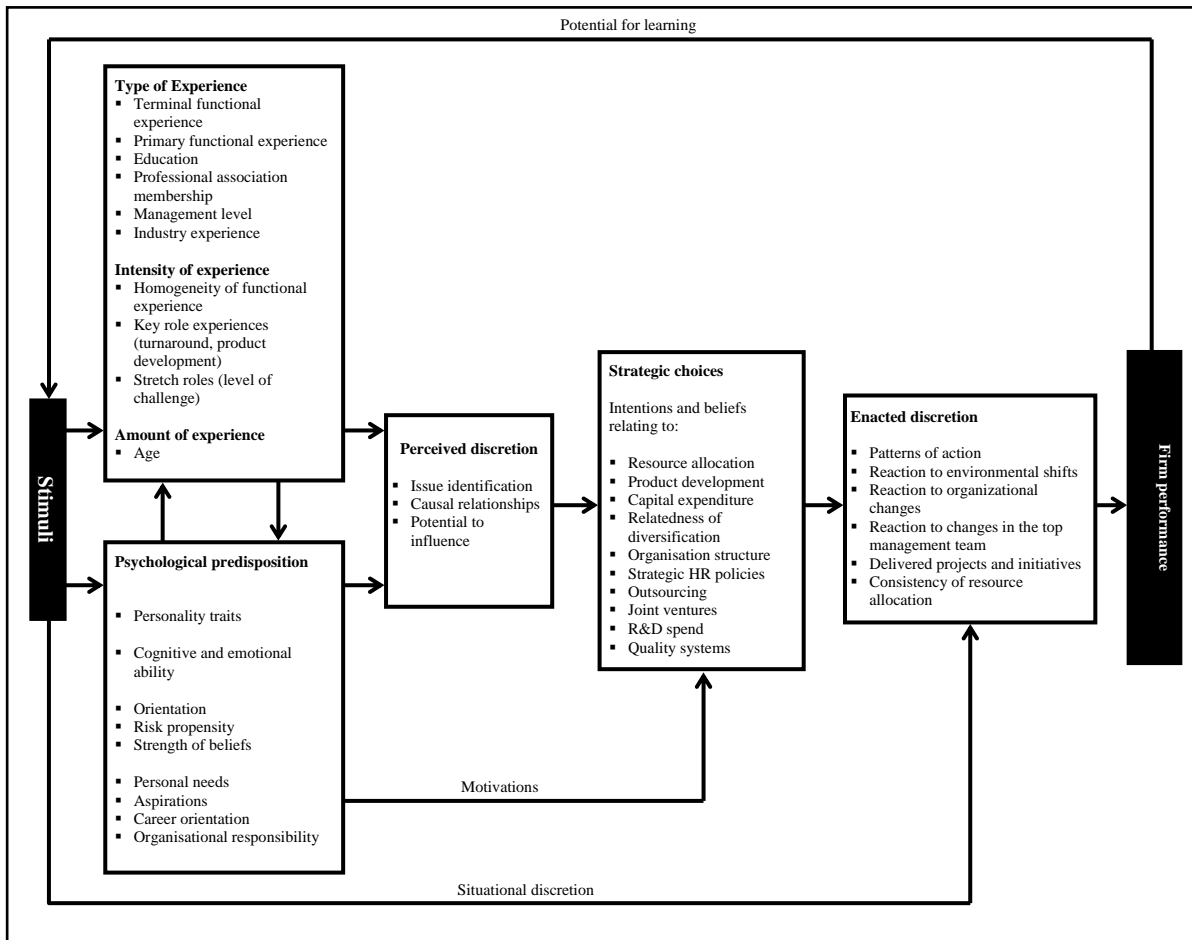
Source: Compiled by the authors

Figure 6: The managerial discretion funnel



Source: Compiled by the authors

Figure 7: An operational framework for discretion research



Source: Compiled by the authors

Table I**Summary of findings on demographic to cognition relationships**

Study	Independent variable	Dependent variable	Finding
Dearborn & Simon, 1958	Functional experience	Selective perception	Significant (Walsh (1988: 889) asserts that the data does not support this finding)
Walsh, 1988	Functional experience	Belief structure (Cognitive content)	Null
	Belief structure (Cognitive content)	Information processing (Selective perception)	Minor
Thomas et al., 1994	Experience	Strategic and political issue interpretation	Null
	Role	Strategic and political issue interpretation	Null
	Type of education	Strategic and political issue interpretation	Null
	Tenure	Strategic and political issue interpretation	Null and significant respectively
	Level	Strategic and political issue interpretation	Null and significant respectively
	Experience	Strategic and political issue interpretation	Null
Sutcliffe, 1994	Tenure	Accurate perception of environmental munificence and instability	Null and significant respectively
Beyer., 1997	Functional experience	Belief structure (Cognitive content)	Null
	Functional experience	Selective perception	Null

Source: Compiled by the authors